## C IVIL and NATURAL

H I S T O R Y

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## CIVIL and NATURAL

## H I S T OR Y

O F

## $\mathcal{F} A \quad M \quad A \quad I \quad C A$.

## In Three PARTS.

## CONTAINING,

I. An accurate Defcription of that Ifland, its Situation and Soil; with a brief Account of its former and prefent State, Government, Revenues, Produce, and Trade.
II. A Hiftory of the natural Productions, including the various Sorts of native Foffils; perfect and imperfect Vegetables; Quadrupedes, Birds, Fifhes, Reptiles and Infects; with their Properties and Ufes in Mechanics, Diet, and Phyfic.
III. An Account of the Nature of Climates in general, and their different Effects upon the human Body; with a Detail of the Difeafes arifing from this Source, particularly within the Tropics.

## In Three DISSERTATIONS.

The Whole illuftrated with Fifty Copper-Plates :
In which the moft curious Productions are reprefented of the natural Size, and delineated immediately from the Objects.

- By PATRICK BROWNE, M. D.

> L O N D O N:

Printed for the AUTHOR; and fold by T. Osborne, and J. Shipton, in Gray's-Inn. mpccivr.

2ui maris atque telluris Aupendas metamorphofes contemplari cupit, vix ullibi terrarum reperiet commodiorem occafionem. Lin. Orat.

## CATALOGUE of the AUTHORS

Whofe Names are abbreviated in this W ORK.

Alpin.
Art.
Barr.
C. B.
B. P.

Boerh.
Bona.
Bont.
Breyn.
Bur.
Butt.
Cates.
Com.
Dale.
Edw.
Flo. Lap.
Flor. Virg.
Gron. Fl. Virg.
Gron. Muf. Ich
Gualt.
Hern.
Hill.
H. M.
H. C.
H. Elt.

Houft. apud Miller.
Jonft.
Kæmp.
Klein.
Lin.
L. Flo. Lap.
L. G.
L. H. C.
L. Mat. Med.
L. Muf. C.
L. Sp. Pl.
L. Syft. Nat.
L. Ora.

Lift.
Mart.
Mich.

PROSPER Alpinus de plantis Ægyptiacis Petri Artedii, \&c. Opera Ichthyologica omnia
Effay fur L'Hiftoire Naturelle, \&cc. par Pierre Barrere
Cafpari Bauhini Theatrum Botanicum
Pinax
Herm. Boerhaave Index alter Plantarum, \&c.
Philippi Bonani recreatio mentis \& oculi, \&c.
Indiæ orientalis res naturalis \& medica, authore Guil. Bontio
Jacobi Breynii exoticarum plantarum centuriæ
Joh. Burmanni Thef. Zeylonicum Decades Africanæ
D. G. Buttneri Plantæ cunonis

The Natural Hiftory of Carolina, by Mark Catefby
Cafpari Comelini plantæ rariores exotica
Samuelis à Dale Pharmacologia, \&cc.
A Natural Hiftory of Birds, by George Edwards Flora Lapponica, Car. Linnæi
Flora Virginica, \&c. Joh. Fred. Gronovio authore Idem
Laur. Theo. Gronovii Mufeum Ichthyologicum Index teftarum Conchiliorum in Mufeo Nicolai Gualtieri
Francifci Hernandes nova plantarum,\&c Mexicanarum Hiftoria
The Natural Hiftory of Minerals, \&c. by John Hill
Hortus Indicus Malabaricus, per Hen. Van Rheede, \&c.
Hortus Cliffortianus, \&cc. per Car. Linnæum
Hortus Eltamenfis, \&cc. per Jo. Jac. Dillenium
The Gardner's Dictionary, by Philip Miller.
Joh. Jonftoni Icones Pifcium, \&cc.
Engelberti Kæmpferi Amœnitates exotica
Joh. Theod. Klein miffi, varii
Caroli Linnæi opera varia
Car. Linnæi Flora Lapponica
Car. Linnæi genera plantarum
Hortus Cliffortianus, authore Carolo Linnæo
Materia Medica Caroli Linnæi
Mufa Cliffortiana, per Car. Linnæum
Caroli Linnæi fpecies plantarum
Caroli Linnæi Syftema Naturæ, \&c.
Caroli Linnæi Orationes variæ
Martini Lifteri Hiftoria five Synopfis methodica Conchiliorum
Petri Martyris Decades Americanæ
Petri Ant. Michelii nova plantarum genera

## A LISTOF A U THORS, etc.

Muf. Ich.
Muf. Zey.
Ovid.
Pet. Gaz. Pif.

Pk. \& Pluck. Plum.

Pl. fil.
Rai.
Roy.
Rumpt.
Slo. Cat.
Slo. H.
Theo.
Thez. Zey. Tour.
Traph.
Virg.
Will.

Mufeum Ichthyologicum Lâur. Theo. Gronovii
Mufeum Zeylonicum, authore Paulo Hermanno.
Pub. Ovidii Nafonis Halieuticon, per Colinæum 1545
Gazophylacii naturæ \& artis Decad. V. authore Jac. Petiver.
De Indiæ utriufque re medica \& naturali, \&cc. authore Gulielmo Pifo
Leon. Pluckenetii Phytographia, i, 2, $3 \& 4$.
Caroli Plumeri, nova genera; icones, \& fecies plantarum Americanarum
Caroli Plumeri tractatus de filicibus Americanis
Joh. Raii Hiftoria Plantarum
Adriani Royeni flora Leydenfis
——Rumphii Thefaurus Imaginum Pifcium teftaceorum
Catalogus Plantarum, qua in Infula Jamaica, \&c. authore Hans Sloane, M.D.
A Voyage to the Iflands of Madeiras, Nevis, St. Chriftopher's and Jamaica, \&c. by Hans Sloane, M. D.
Theophrafti Erefii Hiftoria Plantarum
Thefaurus Zeylonicus, Johanne Burmanno authore
Jof. Pitt. Tournefortii Inftitutiones Rei Herbarix
A Difcourfe of the State of Health, \&c. by Thomas Trapham
P. Virgilii Maronis Opera

Francifci Willoughbeii Icthyographia nova, \&c.

HIS.ROYAL HIGHNESS

## George William Frederick

## PRINCE of $W A L E S$.

PARDON me, Illustrious Prince, if, at this time, when the moft important fcenes engage your attention, I attempt to lay before you the Civil and Natural State of a Colony, which an extenfive trade and a commodious fituation have long rendered the object both of the care and munificence of the Crown; and endeavour to fend it into the world, under the patronage of a Prince whofe eminent virtues now engage the thoughts and attention of the moft confiderable part of mankind, as well independent as allies and fubjects to your Royal Family.

Natural hiftory, on which fo many neighbouring princes now beftow their attention, has been long encouraged and happily cultivated in thefe realms, under the aufpicious influence of your Royal Anceftors: and as every attempt to advance our knowledge in the works of nature, and to promote the general welfare
D E DICATION.
of mankind, meets with your gracious approbation, deign, Great Prince, to accept thefe endeavours: and that you may ever difplay that wifdom, moderation, and juftice, fo confpicuous in all your Royal Family, and long continue a bleffing to thefe kingdoms, is the ardent prayer of

# Your Royal Highness's 

Humble Servant,
Moft Devoted
msilitw ept3i, antasstì.


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## PREFACE.

THE Ifland of Jamaica, whole Civil and Natural Hifory is the fubject of the following 乃Beets, bas been now known and inbabited by Europeans above two bundred and forty years, is of a confiderable extent, productive of many ueful Articles of Commerce, bas been the fcene of various and fingular events; and fill continues to Jupply us with a neceffary appendage to our prefent refned manner of living. Thele are well known circumfances; and that the wealth of many, the fubffitance of multitudes, the extent of our Navigation, the Revenues of the Crown, and in flort the Emolument of the whole Nation, are deeply interefted and augmented by the perpetual intercourfe with this diftant Ifland, is univerfally allowed: Yet how fmall a Part either of thofe who inhabit it, or of thofe who by one means or other draw the principal part of their fubfiftence, wealth, and affuence from this fruitful fpot; know any thing of the Ifand in general, its productions, advantages, or inconveniencies; or give themjelves any pain in confidering whether the former nay be improved, or by what means the latter may be remedied, or removed.

And indeed were any dijpofed to do either, what grounds bave they at prefent to proceed upon? For, tho' many amongf thofe who bave reforted thither, bave been diftinguibed for their Talents and Learning; for their Curiofity and Abilities: the Arts of Government, or the means of acquiring Wealth and Power, bave generally occupied their thoughts; or the love of eafe and pleafure, to which the Climate but too much dippofes even the mof determined minds, bave diffipated the beft efablibed Refolutions; and in confequence, fcarcely any thing bas been
attempted towards exbibiting a juft idea of this Ifand, confdered both in a Civil and Natural Light; except what bears the evident marks of Imbecility, Inattention, or erroneous Information.

Happy in a large 乃are of bealth and Arength; emured to the Climate; and with a mind frongly difpofed to the cultivation of Natural Knowledge; I Saw with regret, bow greatly the Hifory of this Ifland was neglected; and determined to lofe no opportunity to inform mylelf of every particular, that might enable me to give the moff fatisfailory Account, both of the paft and prefent State of the Ifland; and during feveral years refidence upon the Jpot, it was the employment of every leijure bour to collect the mof autbentic Materials for this purpofe. As a Pbyjcian, the nature of the Diferfes that appear there, drew my principal attention: As a Naturalift, the various productions of the Earth claimed my peculiar care; and as a Member of the Community, and a Subject of Great Britain, I took the liberty to enquire into the nature of its government, and whatever elfe refpecting it, might tend to afford fatisfaction to mankind in general.

I have not indeed difpofed my obfervations in the order above mentioned; there are more Men than Naturalifts, and perbaps, more of thefetban Phyficians; I bave for this reafon followed that order that Jeerincd the mof natural, and placed, as far as I could, fubjects akin together. In the part which treats of the Civil State of the Ifland, I own I have been the moft brief. The lives of the Governors; the civil and military tranfactions; and various other particulars, would bave made no improper part of fuch a woork; but this would take up a large Jbare of my time on a fubject to me not fo materially interefing; and of confequence, bindered me from purfuing that part to which I found myself more equal; more frongly inclined; and in wwhich I thoudbt my refearches more likely to tend to public advantage. The Natural Hiftory is therefore by much the nioff extenfive part; the productions are both numerous and curious; and contains great numbers of articles whereof many bave been left wholly unnoticed, while others were but imperfectly or inaccu. rately reprefented to us. Sir Hans Sloane batb not collected above 800 Species of plants in all is travels: In Jamaica alone, I bave examined and defcribed about twelve bundred, befdès Foffls, Infects, and other productions; many of which be makes no mention of. It muft be owned, neverthelefs, to bis praife, that bis woorks, inaccurate as they are, upon the whole, bave done both the Author and bis Country credit.

In refpect to the difcafes, the Duty of my profefion; the uncommon Appearances of many; the Violence of the Jymptoms, and fatal Confe-
quences that often attend' 'em, bad generally rendered them the principal objects of my Study: frequent opportunities gave me an occafion of enquiring more Ariclly into their Courfes and Caufes; and the neglect or inaccuracy of former Writers; the confufed and imperfect Notions generally recived of the mof dangerous and defructive of them; and the pernicious Methods of practice, now, too frequently in ufe among the generality of our American practitioners, engaged me to communicate my Objervations; which I bave difpofed in a few Difertations, to avoid prolivity, or too frequent repetitions.

The Diverfaty of Subjects treated of in the courfe of this work, has fubjected it to a great number of Parts and Subdivifons; The firf of thele gives an account of the Civil State of the IJland; and for greater conveniency is divided into two Parts or Cbapters: The Firft contains a brief Hifory of the former flate of that place, contimued down to the thorough Efablifoment of the Colony; and the Second includes its prefent State; with a more circumfantial Account of its Tride, Imports, Exports, Revenues, and Curiofities.

The Second Part of the work is a regular Hifory of the Natural. Productions; and, as it is by far the moft confiderable, we have diwided it into Three Books; and theele again into Claffes and Sections, according to the naturalorder of the Subject. The Firft of thoje (befide a Catalogue of the native Foffls of Jamaica, with fome Remorks on many of the Particulars) contains a New General Metbod of clajjing native Foffils. In the Second Book, we give an account of the vegetable productions of that Ifland, which we have difpofed chiefly according to the Syfem of Linneus; and bave added the UJes and Properties of each, as far as they bave been yet afcertained; as well as the Methods of Cultivating, and ManufaEluring fuch as we bave ob-. ferved to furnifb any valuable or ufeful commodity. The Third contains an account of the Animals cbiefly obferved in and about the Ifland; and theefe are claffed nearly according to the Syferm of Linneus alfo; but where that feemed forced or unnatural, we have followed another method, in which we bave endeavoured to be guided folely by natural appearances.

The Third Part of the work is made up of a few Difertations, containing fome ufeful remarks and obfervations on the Nature of Climates in general; the Diverfity of Atmoppheres; and the differentDi/pofitions of the buman macbine in each; with an account of the Diforders arifing peculiarly from them, in every age, fex, and climate; and particularly, of the yellow and remittent Fevers.

The whole is illufrated with fifty odd copper-plates delineated immediately from nature by the accurate Ehret, in which we bave been careful to reprefent the mof curious and uncommon productions of every fort, now obferved in that place; befides a map of the Ifland, and a large draught of the barbours of Port-Royal and Kingfton: It is interjperfed with fuch remarks and obfervations as I could find well grounded or attefted, and likely to prove of any fervice to mankind; without incumbring any part thereof with tedious relations, or ufelefs quotations; and I bope by thefe means to render it an agreeable entertainment to the lovers of Natural Hifory in general; profitable to fucb as live in thofe parts in particular; and uJeful to fuch as may be induced to vijtt, or practije in, the like climates.


## T H E

## Civil and Natural HISTORY

# 0 F <br>  <br> $\mathbf{P a R}_{\mathrm{A}}^{\mathrm{R}} \mathrm{I}$. <br> Containing the Civil State of that Ifland. 

## C H A P. I.

Of the former State of Jamaica.

THE Illand of Jamaica (one of thofe fituated near the main continent of America) is of ani irregular oblong form, and adorned with a ridge or chain of lofty mountains, which in its irregular difpofition, from the moft eaftern point weftward, occupies the middle part of the country; and by its various appendages, inlets, and declivities, forms thofe fruitful vales and frequent rifing grounds between the mountains and the fea, which we find every where fupplied with fprings, rivulets, and large currents, that flow from different parts of the main ridge, and continue their winding fteepy courfes to the fea.

It lies between 17 degrees 31 minutes and a half, and 18 degrees thirty two minutes and a quarter north latitude ; and extends from 75 degrees 40 minutes and three quarters, to $7^{8}$ degrees 20 minutes and three quarters weft longitude (a); being about a hundred and feventy two miles in length, and fifty eight over where broadeft. It is fituated a little to the eaft of the entrance into the galph of Mexico, having the ifland of Cuba to the north; Fucatan and the gulph of Honduras to the weft; Hijpaniola and the Caribbee Iflands to the eaft; and that part of the main land called Granada, now a province of the kingdom of Santa Fee, to the fouth, at the diftance of about a hundred and fifty leagues.

This Illand was firft difcovered by the famous Cbriftopber Colon (b) or Columbus,
(a) See the Philofophical Tranfactions.
(b) I have extracted the following account from the Decades of Peter Martyr, whom I look upon as one of the moft accurate writers of the affairs of America. Chrifopher Colon (fince commonly called Columbus) was a native of Nervi in the territory of Genoa. He was bred to the fea, but at what time or upon what occafion he had conceived a notioh of thofe remote lands, is uncertain: It is, however, well known, that, on this occafion, he had made frequent unfucceffful applications to the feveral Princes of Europe before he received any encouragement. But the King of Spain was at length perfuaded to favour his project, and fupplied him with three fhips and about 220 men , with which he failed
in the year 1494, then on his fecond voyage in the fe parts, and at that time at fea, chiefly with a defign to obferve the ifland of Cuba; taking it to be a part of the main continent, of which the natives of Hipaniola had already given fim haturigence. But the veffel proving leaky, and being no longer able to keep the feas with fafety, he put in at Cbireras, on the north fide of this inland, and landed foon after, though the natives at firft made fome thew of refiftance. He then called this illand St. Jogo, and was obliged to continue there until he had put his veffel in tolerable order to venrure to fea again; during which time the people lived in great friendhip with the natives, in whofe poffettion the ifland fill continued until the year 1509; when Don Diego Columbus, fon to Cbriftopher, (then Admiral in thofe feas) fent Fuan de Efguibello with a party of men to invade the place; the other conquefts and fettlements being at that time under the goverpment and direction of Don Nicuefa and Ojeda, both appointed from home, and now in high difputes about this ifland, from whence they were generally fupplied with provifions on emergent occafions. This party landed, and foon made a conquelt of a place, where they were always received in a friendly manner, wheriever either chance or neceflity had driven them upon the coaft ; and for many years after the Ifland continued in the poffeffion of the Spaniards (c), though much neglected on account of their other conquefs, and not unfrequently infulted or invaded (d) by other nations.

The firft improvement undertaken here by the Spaniards was the town of Mellila, which was built about Port Maria, on the north fide of thisifland; but the fituation not proving to their fatisfaction, they removed fome leagues more to the weft, and buit the famous town Serilla, the ruins of which are fill to be fean on the brow of the hill immediately above St. Anne's Bay. But as the colony grew more popu-

[^0]
## O F J A M A I C A.

lous, they flretched towards the fouth part of the Inand, where they buit the fimous town of la Vega, from which the defcendants of Columbus are lid to bave the titles of Dukes conferred upon them. Thistown profpered better th.n etituer of the others, and increafed fomuch, that in 1655 it confilted of no lef that 1700 houfes. two churches, two chapels, and an abbey; at which time the Eraliby (failing in their attempt upon St. Domingo) made a deicent upon, and conquatul the Y1land. But the commanders returned home foon after, leaving a con fiderable pirt of their furces (e), under the command of Colonel Fortefoue, to guard and fecure the place; and were both, after a hearing or two, ordered to the tower for their milcarr age at llijpasiola. To give a more perfect account of this revolution, we muat now look back a little time into the ftate of affairs in England.

Cromzell, who had raifed himfelf to the head of affairs at home, where he now goversed almont without controul, had no fooner fixed himflf by the ack of government, and fettled the general diturbances of the mation to his fatisfaction, than he determined to employ fome of thofe in whom he fufpected he hat the leaft reafon
 more upon the nation in general, or at leaft to fcreen his private defigns the better, he ordered a fleet of feventeen men of war, with many tranfport veffiels to be got in readinefs, the command of which was given to Admiral Pen; and an army of between fix and feven thoufand regulars, under the command of General Venables. With this armada they failed for Barbadoes, where the fhips were ordered to rendezvous and the commanders to open their influctions: they arrived there about the 14th of February, 1654, and recruited with fuch fuccefs that they foon augmented the foldiery to the number of ten or twelve thoufand ( $(\%)$, with which they failed down to Hippaniola. They made that ifland the 1 oth of April, and foon after landed within a few leagues to the weft of St. Domingo, from whence they marched dircotly towards the town: but the foldiers being difheartened by a previous proclamation (b), which deprived them of all hopes of plunder, were foon repulfed by a handful of Mulatoes; and after having loft five or fix hundred men, with fome brave officers, they left off all thought of conqueft, reimbarked, and fell down to $Y$ aimaica, where they landed, (i) on the roth of May 1655 ; but marched followly towards the capital St. Fagode la Vega (whichothen was very tich and popitous) that the Spaniards had retired, and carried moft of their valuable effects with them to the woods ( $k$ ), before the Englifb came up to the town.

Cromzell having had early intelligence of this conqueft, fent out a freß reinforcement of near three thoufand men ( $l$ ), with twelve men of war; and refolved to mifs on opportanty of fapporting this sew acquiftion, which now inded ferved him as another Siberia; for the fiequent diturbances raired by the Catyalici Party, and the refolution with which many had denied, of refolved not to fubmit to the authority of his Major Generals, pat him under a necefticy of getting rid of fome of them, who were frequently afterwards (during his ufurpation) tranfpoted to this Illand, where, with the troops already ftationed there, they became the firft Englifb fettlers.

The Spaniards, who had not yet deferted the Jfland, concealed themrelves in the woods and inland parts; from whence they made frequent excurfions, and killed fuch ftragglers and lonely perfons as they could mect with. But being at length weary of their quarters in the mountains, and having no hopes to dillodge the Englifs, they retired
(e) About 3000 men.
(f) See Ludlow's Memoirs.
(g) See Echard's Hiftory of England; Ludlow's Memoirs; Hickeringill, and the Memoirs of the late affairs of England; Lond. printed 1682.
(b) See Ecbard's Hiftory of England.
(i) It is thought they landed oppofite to Port-Royal; but I could not learn the place with any certainty.
(k) See Hickeringill.
(l) Under the command of Major Sedgowick and Colonel Humphrys.
to the north fide of the Illand; and, with a fupply of about thirty companies well provided with arms and ammunition, which foon after arrived there from Cuba and the Main, fortified themfelves at Rio Neuvo. But the Englijh, then under the command of Colonel D'Oyly, having early intelligence of the arrival of this reinforcement, marched directly towards them, and forced them in their intrenchments, tho' the Spaniards at that time were more than double their number. Upon this and other ill fucceffes, they retired to Cuba, leaving many of the Negroes and Mulatoes to keep poffeffion of the place, and to prevent the conquerors from fettling in the country parts : thefe people continued very troublefome for a time, but the Englifh, who were not themfelves ufed to the woods, at length called in fome of the Buccaneers to their affiftance, and foon after brought them under fubjection.

The French fettlers at Tortugo, who, about this time, were much neglected by the government at home, then under a minority, and too frequently prefled by the Spaniards abroad, refolved to provide for themfelves; and foon after became a fet of land and fea robbers, in the practice of which they continued for many years: nor did their then governor de la Place ( $m$ ), in the leaft, difcourage proceedings whereby he became a confiderable gainer.

The government of Englandfalling againintoconfufion, upon the death of the vigilantCromwel, the affairs of 'f amaica were much neglected, and the ifland, on that account, was frequently reforted to by the pirates of Tortugo, who were now grown a very formidable body; and the people, at this time under little or no reftraint, encouraged by the example of thofe who had frequently brought in immenfe riches with impunity, foon gave in to the fame methods; fo that the place became another colony of pirates, which far exceeded the former both in numbers and refolution; and with whom they ftill continued in friendihip, frequently uniting their forces upon occafion.

In this flate did the greateft part of the inhabitants of Jamaica continue for many years; chiefly under the command and guidance of the famous $\operatorname{Margan}(n)$, who, with his numerous followers, had brought in fuch a vaft booty, that the illand continued for many years one of the moft wealthy fpotsin the world, for the number of its inhabitants. Thefe people were not fatisfied with what plunder they met with at fea only; they frequently landed in great numbers, and ranfacked the moft flourihing Spani/b fettlements: nor were thofe fituated even on the coalt of the fouth fea free from their daring attempts, which reached the opulent and populous city of Panama, in 1670; from whence they brought immenfe fums of money, as well as other valuable treafures.
King Cbarles II. being at length feated on the throne of England, put on an early refolution to promote the welfare of an ifland, which was likely to prove very

[^1]ferviceable to thecrown, tho' the confufion of the affairs at home, and the then urgent war with the Dutch bad wholly prevented the execution of his deffgns for a time. But the nation being at length quieted and the Dutch war at an end, his majefty refolved to act more vigoroully in thofe parts and to ufe every means likely to reftrain the licentioufnefs of the pirates, who ftill continued their depredations under Colonel D'Oyly, Lord Windfor, Sir Cbarles Littleton, and Sir Tbomas Muddeford, whom he appointed Governors fuccellively, during the troubles at home; and to this he was frill the more inclined from the frequent complaints of the Spaniards, whofe fufferings were now daily laid before him.

With this view Lord Vaugban was appointed Governor, and fent out to Famaica with orders for Colonel Lynch, who then governed in the abfence of Sir Thomas Muddeford, to appear at court and anfwer to the complaints of the Spani, $\boldsymbol{m}_{\text {a mbaflador. }}$

This nobleman was no fooner arrived in Yamaica than he began to put the orders of his majefty in execution; and with fuch vigour as foon put a flop to the proceedings of the pirates, whereof great numbers, with their chicftain Morgan, became induftrious fettlers; while others, unwilling to depart from a courfe of life to which they had been now long ufed, or, it may be, diffident of the clemency of their prince, retired to Tortugo, where they continued the fame practices for feveral years after.

But in proportion as piracy was fuppreffed in this illand, the people, who were become extremely wealthy by their former practices, began to murmur and complain of the defpotic power to which they were ftill expofed; which, however gracious or mild, could not but be difagreeable, as it was a form of government no ways confiftent with the Englifb conftitution. In this fituation, however, they continued until the latter end of the year 1680, when his majelly king Cbarles the Second was gracioufly pleafed to grant them a charter or commiffion under the great feal of England, conftituting and ordaining a regular form of government for the illand ; which was foon after difpatched to the Right Honourable Cbarles Howard, Earl of Carlifle, appointed Governor the year before.

By this grant or charter the government was lodged in the hands of, i/t, the Governor or Captain-General, who is appointed by, and reprefents his majefty. He is vefted with both the ecclefiaftical and military power, as well as civil; and continues during his Majefty's pleafure.
$2 d y y$, In the council, which is alfo appointed by his Majefty, and generally confifts of twelve perfons of the beft rank and fortunes in the ifland. This body reprefents the houfe of Lords in England, both in power and proceedings; nor do they interfere judicially in matters of property, unlefs it be in fuch cafes as are brought before them by writs of error out of the grand court, or by appeals from the Court of Admiralty.
$3 d y$, In the affembly, which in power and proceeding reprefents the Houfe Commons in England. The members of this body ufed to be chofen by the votes of the freeholders, who returned three reprefentatives for each of the town-parihes, (formerly only two) viz. 1. Port-Royal, and, 2. St. Catharine's; and two for each of the other parifhes (then only thirteen) viz. I. St. Thomas in the Eaft, 2. St. Davids, 3. St. Andrews (which contained the prefent parifh of Kinglion, 4. St. Thomas in the Vale, 5.St. Jobn's, 6: St. Dorotby's, 7. Vere, 8. Clarendon, 9. St. Elizabeth's (which contained the prefent St. Elizabetb's, Wefmorland and Hanover, ) 10. St. Fames's, 11. St. Anne's, 12. St. Mary's, and 13. St. George's, which with the parih of St. Thomas in the Eaft, contained the prefent parih of Portland;) making up thirty-two members in all, which was the number of the firfaffemblies of that illand.

Thefe threetodies, in which the fupreme power is lodged fince that time, are, by the charter, authorized to make and ordain fuch laws and regulations as they think receffary for the becter government of the community, and profperity or welfare of the colony; and they are generally in force for one year, or until his majefty's pleafure be known, who aliways inturces or makes void all the acts paffed by them,
as he finds them to tend more or lefs to the real intereft of the colony, or to interfere with the laws or interefts of the mother country. The affembly however is called, prorogued and diffolved, as the Governor pleafes, who gives the negative, or affents to the immediate force of all the bills they pafs.

With this charter his Majefty has been alfo pleafed to favour the illand with a mace, which is carried before the Governor upon occafions; and with a broad feal, in which he was pleafed to appoint them the following arms, viz. a crofs gules, charged with five pine apples, in a field argent. Supporters, two Indians phumed and condal'd. Creft, An Alligator vigilant. The infcription in the orle,

## Ecce alium ramos porrexit in orbem, Nec sterilis est crux.

His majefty was alfo pleafed to appoint a Court of Equity in this ifland, where the Chancellor (which power has been hitherto lodged in the Governor, for the eafe and fecurity of the people) fits more or lefs frequent, according to the number of actions depending; which fometimes engage him for days fucceffively, while at other times he fcarcely fits above once a month. In this court matters of great importance are often decided with fatisfaction; tho' the lawyers, who are generally vexatious and expenfive in that illand, frequently find means to protract the fuits, and thereby often evade the purpofe of the inftitution: and happy is the Chancellor, who is not fometimes miffed by their ignorance or partiality, which, I am afraid, has been often the caufe of complaints, and expenfive appeals from that court.

Courts of Judicature have been alfo inftituted very early in this ifland, and by timely laws and regulations appointed to be held quarterly at St. Jogo déla Vega. Thefe in power and proceeding refemble the King's Bench, Common Plens, and Affizes, in England, and are held under a Chief Juftice, who is commiffioned by the Governor, and endowed with a falary of $120 \%$ per annum; but his poft is uncertain, being commonly difcharged, as well as commiffioned, at the Governor's pleafure. In the execution of this office however there are many other magiftrates appointed for his affiftants, who have no recompence befides the honour of ferving their country, which I believe they always perform with integrity, as far as they are acquainted with the nature of the laws. But really there are not many of them fufficiently verfed in thefe, which with the ignorance of the attorneys, and general tendency of the men in bufinefs, occafions more law-fuits in that colony, than could be reafonably expected among fuch a number of people; there buing feliom lefs than eight hundred new actions every court for fome years paft.

Here petty courts have been alfo inftituted, in the nature of Court-Barons, which are held quarterly in every precinct ; and in thefe the Cuftos, who fits as Judge, with two of the neighbouring Juftices, his affiftants, hear and formally determine all actions within the precinct, not exceeding twenty pounds.

They have a Court of Admiralty alfo in this inland, where matters litigated between mariners, or trefpaffes committed at fea, which cannot be fo eafily redreffed at common law, are determined: but the Judges of this court have been hitherto appointed by the Governors.

A Marfhal or Provoft-marfhal (a) has been alfo appointed here; who with his deputies and under deputies are the executive officers of Juftice, and in power and function reprefent the fheriffs, under-fheriffs and jailors in England. Many other offices have been likewife inflituted here for the greater conveniency of bufinefs,

[^2]and order and fecurity of the feveral branches of the revenue, fuch as the Secretaries, Receiver-generals (a), Commiffiners, Controllers, and naval officers, \&cc.

The inand was no fooner fettled under this agrecable form of govermment than it began to profper; the fettlers became daily more numerous and began to carry their induftry further into the country; the woods began toopen, and the lands to yield the recompence of the labourers toil in cvery field; the parih of St. Katberine's was already open and well inhabited; the fettlements in St. Dasid's, St. Androw's, Vere, and Claveidion were very thick, and the marks of induftry beginning to appear in the moft remote parts of the illand; to which the wealth of Port Royal, the feat of the moneyed-men, and the trade lately eftablifhed there by the Affiento contract (b), had greatly contributed. Port Royal was then probably the richeft fpot of its fize in the world, nor could any people live more at their eafe, or in greater luxury, than the inhabitants of St. Fago de la Vega, or Spanib-toron; when, on the 7 th of $\mathcal{F}$ une, 1692, a moff terrible earthquake (c) came on, which in a very little time deftroyed that famous and opulent town the greatelt part of its houfes, wealth, and inhabitants being buried in the common ruin, many fathoms under water. Nor was the defruction of Port Royal the only misfortune the ifland had fuftained by this dreadful fhock; moft of the heavy buildings were every whore deftroyed; the fhattered mountains ruined many of the neighbouring fettlements in their fall; and a general ficknefs enfued, which fwept away numbers of thofe that efcaped the firtt calamity. The terror with which people were ftruck on this dreadful occafion, put every thought of order and indunty out of the minds of the remaining few, nor was any thing butconfufion and diforder to be feen throughout the ifland; fuch as efcaped the deffruction of Port Royal could no longer think of refiding there, and the generality of thofe who had depended before on their growing fettlements, now reduced to the ftate of beginning fettlers, could find no means of reftoring the ufual order to their affairs; by which the in and was again laid almoft defolate.

But as thofe who efcaped the common calamity began to recover from the fright, they endeavoured to regulate their affairs, and to renew that £pirit of induftry which had formerly manifefted itfelf in every fettlement, and furnifhed the vigilant and laborious with affluence; moft of the principal people who had efcaped the fate of Port Royal, and the greater part of thofe who depended on their credit and friends in Enyland, having refolved to fettle on fome part of the main land, which they wifely judged to be more fafe, and nearly as convenient as the former. This gave the firft rife to the fettlement of the town of King/ton, which, for conveniency, regularity
(a) The 畐ecciver of his Majeny's Revenues in that Ifland, was, by a late regulation, alfo appointed Receiver of the public duties ; but the law has not yet obtained the royal affent.
(b) This contract was made in $\mathbf{x 6 9 0}$, and managed for many years by Don Gago dol Capclio, who was knighted by king William, and generally known by the name of Sir 'Jancs Caflecl: he refided many years in that ifland, and built a very fpacious and well fortified houfe about a mile or two to the caft of the harbour of King fon; but it is now in ruins.
(i) At this time the inand of famaica was in a very flourifhing condition; the white inhabitants were very numerous, and computed to amount to 16000 fouls at leaft; of thefe St. Katherine's was deemed to maintain 6270, Port Royal 3500, St. Jobr's 996, St. Andrew's 1552, Clarendon 1430, St. David's $9^{69}$, St. Thamas in the Eaft 590, and the more remote fettlements about 2000.

The earthquake came on between II and 12 at noon, and in lefs than three minutes fhook down or funk nine tenths of the opulent and populous town of Port Royal. The wharfs firft gave way, and foor after the greateft part of the town; while the remainder was overflown to the upper rooms. This was no fooner over than the flreets began to gape, and fwallowed up numbers of thofe that thought to feek for fafety in the open air; of whom feverad were again returned, fome by the fame, and fome by difunt anctures, either in the town or in the harbour indiferiminately. Nor was Port Royal the only place that feit the effects of this dreadful fhock, which was fo univerfal as to be felt in many very diftant parts of the world; the mountains rumbled, cracked and opened in feveral places; thofe at the entrance of Satecos-mitu ur whofe interval yields a paffage to the Rio Cobie, were clofed together, and the courfe of that large river left dry to the fea for fome days: and, on the north fide of this infand, a fpace of about 1000 acres, with its fettlements and inhabitants, was alfo funk under water. There was no lefs than 3000 people loft by this dreadful fhock, and a general ficknels enfued, which, with the other miferies the conftant companions of fo univeral a diforder, left the ifand almont defolate.
and fituation, furpaffes moft towns in that part of the world; and whofe fpacicus and commodious harbour can be hardly excelled in any country. But as many of the principal people ftill continued in that part of Port Royal that remained as yet undeftroyed, this new fettlement did not go on fo profperoully until the fire in 1702-3 had made their refolutions unanimous, and fixed that both the place of trade and the refidence of the moneyed men.

The planters had, by this time, recovered themfelves from the confufion into which they were thrown by the late dreadful earthquake; and thofe among the trading people, who had already amaffert wealth enough to fare fome from bufinefs, refolved to puth the land-intereft, either by becoming planters themfelves, or lending their money to fuch as were already engaged in that way, and wanted neither induftry nor management to put it to the beft advantage. From thistime the ifland began to be again reforted from all parts, induftry to be revived, and the fettlements to advance with the ufual appearance of fuccefs and care; to which the great refort of young adventurers, whofe moderate fortunes could, in no other part, promife them to raife a foundation for their families fo foon, had contributed much; as well as the importation of induftrious fervants, whofe heneft labours have frequently raifed confiderable fortunes there. Nor did the breaking up of fome of our other fettlements contribute lefs towards its advancement, for, on lofing of Surinam, which, by the treaty of peace foon after concluded with the Dutch, was wholly given up (d), about twelve hundred of thofe that were fettled in that colony came to this ifland, and contributed much to the improvement of the fouth-weft parts thereof, called Surinam quarters ever fince. The colony was in this thriving condition when the French, to the number of 2200, with three men of war, and privateers, floops, and tenders to the number of 20 fail, under the command of monfieur de Caffe (then governor of the French fettlements in Hijpaniola,) had, in June 1694, invaded the inland, where they committed uncommon outrages: and having done all the mifchief they could in fcattered parties, collected their forces and failed to Carlifle Bay, where they landed fourteen or fifteen hundred men on the 18 th, who continued afhore for fome days; but were fo warmly attacked by the Englifh, who by this time had muftered a confiderable body of forces, that they were obliged to reimbark on the 23 dat night, and the next morning failed to windward, putting all the prifoners afhore at Port Morant. The ifland continued to flourihn after this time, and in ${ }_{1} 700$ received a confiderable addition by the breaking up of the Scotcb fettlement at Darien, which they were neceffitated to defert in the beginning of that year, moft of the people who were fent to that colony being then obliged to go over to Famaica, where many of their children and defcendants ftill continue in the poffeffion of that affluence they had induftrioufly acquired: and from that period we may look upon the illand as a fettled colony, which ftill continues to improve both in wealth and numbers; and is likely to continue in a growing ftate, as the legillative body ftill continues to give every reafonable encouragement to beginning fettlers, a great part of the ifland being yet uncultivated.

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## C. H A P. II.

# Of the prefent State of Jamaica, its Revenues, Produce, and Trade. 

S E C. T. I.

## Of the Paribes and Number of Reprefentatives, Ports of Entry and Ctearance, and Courts of Cudicature.

THE Illand of Jamaica certainly furpaffes all the other Englifb fugar-colonies, both in quantity of land and the conveniencies of life; and is fo advantagioully fituated, in regard to the main continent, that it has been for many years looked upon, as a magazine for all the neighbouring fettlements in America. And whether we now confider it with regard to the quantity or value of its productions, the number of men and fhips employed in itstrade, or the quantity of valuable commodities annually imported there from the different parts of Europe; we fhall certainly find it not only the richeft, but the moft confiderable colony at this time under the government of Great Britain; and I Thall hereafter endeavour to fhew how far it may be yet improved.

The inhabitants of this happy land ftill enjoy the fame form of government that was firft inftituted for their predeceffors; and continue in the ufe of thofe laws and regulations that have been fince ordained, for the more eafy and orderly management of both the public and private affairs of the community. But as the illand has grown more populous of late years, and the fetlements more thick in the remote parts; they found it neceflary to divide the larger parihes into others more commodious, which has now encreafed the number of them to 19 , viz.

| S 1. St. Katherine's. | 7. St. Thomas in the Va | 14. Hanover. |
| :---: | :---: | :---: |
| 2. Kingfon. | 8. St. John's. | 15. St. Jomes's. |
| 23. Port Royal; the three town parifhes. | 9. St. Dorothy's. 10. Vere. | 16. St. Anne's. <br> 17. St. Mary's. |
| 4. St. Tbomas in the Eaft. | 11. Clarendon. | 18. St. George's, |
| 5. St. David's. | 12. St. Elizabeth's. | 19. Portland. |
| 6. St. Andrew's. | 13. Weftmorland. | 20. Tiowney |

This augmentation of Parifhes put them alfo under a neceflity of increafing the number of reprefentatives, who are now chofen every three years; and regularly returned by all, in the fame order and proportion they formerly ufed to be, viz. three for each of the towns and town parihes, and two for each of the others; by which the number of them is now increafed to forty one. And it was found not only neceffary to augment the number of reprefentatives, but that the greateft care fhould be alfo taken in the choice of them; for the power as well as riches of the country lies in the hands of a few, whofe particular interefts we fhall hereafter fhew to clath frequently with the welfare of the community. This engaged many of the gentlemen to make ufe of their intereft in promoting a law whereby the reprefentatives might be appointed to be chofen by ballot, in which
they have fucceeded to the fatisfaction of the greater part of the community: and it is hoped fo juft a regulation will eafily meet with the approbation of his Majefty (a).

The appointment of convenient ports of Entry and Clearance, was alfo a circumftance that required the confideration of the public on this occafion; for without thefe, both the trade and planting intereft, on which it chiefly depends at this cime, muft neceffarily lie under the greateft inconveniencies in many parts of the inland. To remove this difficulty in fome meafure the legillative body have already appointed Port Antonio and Kingfon of that number; ports, I moft acknowledge fufficiently convenient for fuch veffels as trade to the north eaft and fouthern parts of the illand: but thofe that load in the weftern harbours ftill continue under great hardfhips; the roads being frequently bad, often impaffable; the winds always from the eaft; and the currents moft commonly fetting into the gulph, which is generally the beft and often the only paffage that veffels from thofe parts can make. How inconvenient muft it be then for fhips loaded in thefe remote harbours, to work againft wind and current, , to gain one of thofe ports chat have becn already appointed? and to be afterwards obliged to fail back with fhattered equipages, to make the beft of their way through a dangerous gulph : yet this muft be done, or the captain muft leave his charge and travel between one and two hundred miles through very inconvenient roads, to clear out at one of thofe already appointed. Port Royal has been indeed one of this kind fince the ifland was firft fettled under an Englifb government, and ftill continues to enjoy the fame privilege, though but a barren point of land, and fituated within a few miles of KingZon; while Savanba la Mar (a harbour, where near a fourth part of the produce of that ifland is annually (hipped) ftill continues to labour under great difficulties for want of that advantage.

The inftitution of circular Courts was another circumftance that required and engaged the attention of the public, in proportion as the number of fettlements encreafed, and the remote parts grew more populous; and they were at length eftablifhed (b), and appointed to be held quarterly in the feveral diftricts of the illand, to the great fatisfaction and real benefit of the colony. For if we confider that they have no other trade in that ifland at prefent, but what depends immediately on the planters, who are now almoft equally fettled in all parts; we fhall find fome of thofe populous towns, which, fince the decay of the Spanifh trade, have been fupported chiefly by ftanding courts and the public neceffities of the people, to be rather a prejudice than an emolument to the community; while they harbour fo many dependants in idlenefs at the expence of the induftrious, who might prove very ferviceable members had they been diftributed about the ifland, and their thoughts turned upon the more ufeful mechanical branches, or their induftry employed in the advancement of fettlements.

Trade, it is true, could not be too much encouraged, while the merchants could yet deal on advantageous terms with their neighbours, and export the produce of the mother country to advantage; but this is not the cafe at prefent, for all the branches that remain depend wholly on the planting intereft, which ought for this reafon to be the leaft fubjected to inconveniencies, there being farcely any thing imported there at this time, but what is immediately for their ufe, and paid for by the produce of their labours.
(a) This law was made in Famaica fome time ago, but has not yet obtained the Rayal Sanction, tho' one of the beft ever pafs'd in that Ifland.
(b) Though this law was paffed in the Ifland, and every neceffary conveniency eftablifhed for the execution of it, it has not met with his Majelty's approbation.

## S E C T. II.

Of the Lands, Settlements, Soils, Produce, and Income of Jamaica.

TH IS ifland, on a moderate computation, is reckoned to contain about fout millions and a half of acres of fertile land; but as the mould is varioully mixed, and the feafons fall differently in the different parts, the foil is varioully adapted to different forts of vegetables; for which reafon I fhall now divide the ifland, as it naturally is, into the mountainous, the hilly, and the bottom lands; and endeavour to give a true idea of the nature of each in its turn.

The mountains of this ifland are generally lofty, and, for the moft part, as yet adorned with their native woods, which keeps the earth conftantly moift and cool in thofe parts; but the roil is generally of a clayey nature, with a large admixture of gravel and vegetable mould; and as it is frequently refrefhed with howers, and but feldom expoled to the more active rays of the fun, it is not only the fitteft nurfery for the moft confiderable timber-trees of the ifland, but the moft luxuriant and niatural foil for all forts of European plants, as well as native fucculent vegetables; and indeed it anfwers fo well for thefe, that they generally have moft forts of European greens, roots, and fruit, with a great variety of the indigenous of the growth of thofe parts, in all the public markets.

The hilly lands, tho' generally haded and frequently refrefhed with howers, are yet more vigoroully warmed by the fun. Here the foil is generally terrene of earthy, with a more or lefs copious admixture of clay or gravel, and a larger quantity of vegetable mould (a); which frequently renders it a moft agreeable bed for the fugar cane; efpecially when marl or clay does not prevail, and a little care is taken to manure the ground. Thefe lands anfwer always beft for the native provifions of the country, and produce all forts of grain, fruit, and farinaceous roots in great abuidance: they fupply the moft agreeable foils for the cacao, coffee, ginger, black pepper, all-fpice, and canella; nor does the vanilla, the mandibocca, the maze, the convolvine potato, or the Indian corn grow any where more naturally, or in greater perfection.

The third divifion comprehends the lower parts of the ifland; where the lands, which are generally the moft fertile and convenient, feldom fail of being well opened and cultivated. The nature of the foil, however, is different in different parts, and thence may be very conveniently divided into fuch as are immediately furrounded by, or contiguous to the mountains, and thofe more remote and extended plains commonly called Savanas. The former, which fupply not only the richeft but the moft appropriated foils for the fugar-cane, (a plant whofe luxuriant growth requires the heat of the lower lands to raife, the moifture of the mountains to dilute, and abundance of vegetable mould to inrich its fap) are conftantly inriched by the wahhings of, warmed by the rays reflected from, and refrefhed by every cloud that breaks, or fhower that falls upon the higher lands. The favanas are not often inferior to thefe in the quality or native richnefs of their foil, being generally compofed of a fine brick mould, with a more or lefs copious admixture of clay or gravel, which renders it commonly of a more fticky nature: but the feafons feldom fall fo near the fea to refreh the foil, or to raife fo conftant and luxuriant a vegetation; for there the breezes are too ftrong and conftant by day to let the lighter clouds defcend fo low, and generally too ferene to move them down by night; which conftantly deprives the lands thus fituated, both of

[^4]dews and rains (b), except thofe that fall at particular feafons, when all the neighbouring atmofphere is overcharged with vapours. Yet in thofe they find not only convenient paftures for their cattle, but the moft natural foil for the Guinea corn, the cotton, and the aloes; with a variety of other vegetable productions that have their daily ufes in ceconomy.
Of the lands of this ifland we find no lefs than one million and fix or feven hundred thoufand acres already patented; but fo unequally divided, and among fo few, that I would be afhamed to give any account either of the diftribution or number of proprietors, had it not been abfolutely neceffary to thew the pernicious confequence of monopolies; and fuch furely it muft be deemed in thofe who take up more land than they or their children are ever likely to be able to cultivate. But to avoid a more tedious and uncertain computation on this occafion, I thall only give an inftance of the parifh of St. 'Fames's, one of the moft thriving in that ifland, and one that at this time feems to keep a due medium between the moft populous (exclufive of towns) and thofe that are yet the leaft cultivated. In this parifh, on an cxact computation, I find one hundred and fix thoufand three hundred and fifty two acres already patented; and now the property of about 132 perfons, whereof ten are hardly more than nominal proprieters, being poffeffed of no more than thirty five or forty acres one with another : a quantity of land nearly equal to the whole inland of Barbadoes, formerly computed at 106470 acres; which in 1676 , was computed to maintain no lefs than feventy thoufand whites and eighty thoufand blacks, in a decent and plentiful manner. From hence we may obferve how much the prudent diftribution of lands contributes to the fettlement of a colony; for in Barbadoes and the other fugar colonies, no man was allowed to take up more land than he could cultivate in a certain fpace of time, and the new comer always had his choice of the unpoffeffed lands to enter upon immediately, which, though perhaps more remote from the markets or fhipping-places, equally anfwered his purpofes, while every neighbour whofe plantation was already fettled (c), wanted the produce of this, as yet unfit for any thing but provifions, to fupply both his table and his flaves: Thus induftry was ftill promoted, for every eftablihed fettler wanted an opportunity of increafing his poffeffions with his family, and the produce of his labour was the only means of attaining it, which, for this reafon, he was refolved to employ to the greateft advantage; and made ufe of the major part in advancing his fortune, while a fmaller portion ferved to purchafe the neceffities of his family and flaves. By thefe means the colonies were foon fettled, and at length brought to fuch perfection, that the generality of cane-land now fells there from thirty theighty, or one hundred pounds ferl. per acre; while the moft promifing fields in famaica continue fill adorned with their native productions, and the cultivated are fcarcely valued at above ten or fifteen pounds an acre.

The neceffity of putting a ftop to fuch inconveniencies muft be then apparent to every perfon who confiders or regards the general welfare of the colony; but the
(b) In the more inland parts of this ifland, the earth is almoft conflantly refrethed with dews or rains, which feldom defcend lower than the foot of the mountains, or the adjoining hills; nay, you may frequently obferve both the fhowers and clouds to wind their courfes from one mountain to another, and to rife and fall with the intermediate bamocks; while the lower lands are parched with drought, and obliged to rely almoft wholly on the vernal and autumnal rains, which always come from the fea, and fall on all parts of the ifland alike: and hence the beft fituation for a fugar fettlement may be eafily known.
(c) When a perfon confiders what induftry is capable of producing in thofe parts of the world, he will think it indeed furprifing that any man fhould be allowed to keep wafte or uncultivated lands. I have been informed by a gentleman who carried on an indigo work for many years, that twenty five acres of good land in a feafonable place, well cultivated with indigo, and rightly managed, will produce above one thoufand pounds per amam currency; and yet twenty Negroes is more than fufficient to cultivate, and manufacture the produce of that quantity of land. Coffee is not quite fo profitable, but more certain and lefs expenfive; and 100 acres of tolerable good land, cultivated with this plant, will hardly fail of producing near 1400 pounds currency a year. What man of fenfe would not then rather buy provifions than employ his land that way, when his limits are confined?
means of redreffing them muft be the peculiar work of that wife body, to whofe care the fupreme power is committed ; and yet I am afraid that many of its members will think themfelves too nearly interefted, to confider the public happinefs with warmth on this' occafion. For my own part, I can think of no method whereby this grievance may be now redreffed, befides that of laying a heavy tax (a) on uncultivated lands, and reaffuming the forfeited without favour ; fuch a behaviour would, I am fatisfied, oblige them to ufe their utmoft endeavours, and in a fhort time, augment both the imports and exports of the colony, to double or trible the ufual quantities; and yet every fettler inclined to referve fome unopened land, which he may not be immediately able to plant with the more ufeful commodities of the country; may be allowed a reafonable or proportionate number of acres, to be regularly planted with the moft ufeful timber trees (b), of which they are now deftitute in the low lands; though they may be reftocked at a very fmall expence, and kept up without any prejudice to the other manufactures, for the ufe of which they are frequently wanted; and ofter prove a very beneficial branch of their exports: Such a regulation would introduce another piece of induftry among them, which is now but too much neglected; I mean that of manuring the open lands; for though they now think the greateft part of them rather too rank and luxuriant, and fpare that labour even where moft apparently wanted, becaufe they can open frefh ground ; they would upon a trial of this fort, (which may be eafily done in one or two acres) find, that dung adds a warmth to the foil, and maturates, as well as it enriches the juice; whence that extraordinary produce where fuch methods are daily put in ufe with judgment.

But though this Ifland be not as well cultivated as it might, or ought to be; its produce, from which alone it derives both its wealth and affluence, is confiderable enough to engage our attention for a time; and to give a very juft account of it is no eafy matter: by the books in the public offices of that Illand, the exports fince the beginning of the year 1737, fhould be as follows, viz.
(a) This method was tried formerly with great fuccefs in Antigua, where they had for a time laboured under the fame inconveniencies, to which this colony is now fubject from the uneven diftribution of its lands: But the leginative body of that Inand, having obferved how much the keeping of uncultivated lands, contributed to prevent both induftry and the growth of the fettlement; laid a tax of five fhillings per acre, on all manurable lands that thould not be forthwith opened and cultivated: The effect anfwered their expectation fo well, that moft of the richer lands of the Illand were foon after in cotton, or canes ; for every perfon pufhed bis whole ftrength, and induftry, upon this occafion; and gave up fuch lands as he could have no profpect of poffelfing free from the tax ; and thefe were difributed again in fmall parcels among the new comers, as well as thofe of the inhabitants that had no poffeffions before.
(b) Braziletto, fuftic, lignum vitæ, ebony, and baftard cedar, would grow almoft in every part of the Illand; and the cedar and mahogany, as well as the other valuable timber trees, may be raifed with a little care in all the wafte billy lands.

I have known the planks cut out of a fingle well grown mahogany tree to be fold for upwards of 701 . currency, and a fingle acre of ground will raife about forty of thefe; and may be under-planted with piemento, or canella, or ufed as pafture ground befides: Thefe, at the moft moderate computation, will, in the courfe of fifty or fixty years, be worth $1200 / \%$ and each of the others is of a proportionate value, or otherways very ufeful.


[^5]$$
\mathbf{O} \mathbf{F} \mathbf{J} \mathbf{A} \mathrm{A} \boldsymbol{\mathrm { C }} \mathrm{~A} \mathrm{C}
$$

But this is not to be depended on, for the difficulties and uncertainty to which the trade of that place is naturally expofed ; the labour of beating to windward againft the breeze, and current ; and the diftance or inconvenience of thofe ports already appointed for the entrance and clearance of chips; oblige the mafters (efpecially thofe that take in their loading in remote parts,) to make ufe of the firft and moft convenient opportunity of making an uncertain report, and obtaining a clearance, which frequently happens before the veffel is a quarter loaded. This put me under a neceffity of enquiring in England, where the principal part of the produce of all our colonies is imported ; and the ingenious Mr. Maitland (a) has been kind enough to fupply me with the following accounts to the year 5 I , as they were lately laid before the Houle of Commons, by the refpe Etive officers, viz.

The quantities of fugar imported into England and Scotland refpectively, from the Illand of Gamaica; and into England from all the Illands; for four and twenty years, ending in December 1751 - to which is added, a fchedule of the fugars exported from Jamaica to Norts Amertica, for the nine laft years, ending in November 1753.

|  | Imported from all the IApnis into England. Cts. Qrs. Labs. |  |  | $\underset{\substack{\text { Exported from Yamaia to } \\ \text { the Northern } \\ \text { Cat. }}}{\substack{\text { Colonite. }}}$ |
| :---: | :---: | :---: | :---: | :---: |
| 172 | 964480 I 25 | 271605110 | 32012 |  |
| 29 | 986648 х 3 | 354686, 310 | 5593120 |  |
| 1730 | $1019205{ }^{2} 25$ | 319456125 | 108192 |  |
|  | 811960323 | 309505 ○ 6 | $14266 \times 14$ |  |
| 32 | 815783 - 24 | 289069314 | 970421 |  |
| 33 | 1000175 [ 2 | $33^{83} 10017$ | 837439 |  |
| 34 | 682778 1 11 | 299973 1 11 | $5833{ }^{2} 23$ |  |
| 35 | 88529232 | $276308{ }^{2} \times 8$ | 52093 |  |
| 36 | 86914517 | $309388 \bigcirc 14$ | 75501 |  |
| 37 | 54306634 | 270063 - 15 | -5927 218 |  |
| $3^{8}$ | 862716221 | 349902013 | 1124637 |  |
| 39 | 949644314 | $392822 \quad 27$ | 1255019. |  |
| 1740 | 705050 - 16 | 27953733 | 9938212 |  |
| 4 I | 882009213 | 338206318 | 15081115 |  |
| 42 | 730250 | $341048{ }^{\text {O }} 22$ | 7849320 |  |
| 43 | 890953125 | 347928 1 7 | 10327 \% |  |
| 44 | 72585 <br> 64488 <br> 18 | (1)326600 <br> 305002 <br> 204 | $\begin{aligned} & 1248 \\ & 2189 \\ & 219 \end{aligned}$ | 186 |
| 46 | 74623414 | 239719215 | 681936 | 4976 |
| 47 | 605638 1 21 | 329762.020 | 4040217 | 4150 |
| 48 | 977790113 |  | 9547111 | 4584 |
| 49 | $930101{ }^{27}$ | 387226 0 <br> 122  <br> 409739 2 | - $\begin{array}{r}3235,326 \\ 115142\end{array}$ | If no Etror $\left\{{ }^{1368}\right.$ |
| 1750 | 823640326 | ${ }^{409739} 8219$ |  | in thefe? $\left\{\begin{array}{l}\text { g } \\ 112069 \\ \hline\end{array}\right.$ |
| 51 52 | 823528 - 27 | 384488 - 7 | $\begin{aligned} & 2162 \\ & 5780 \quad 3 \end{aligned}$ |  |
| ${ }_{53}$ | 1014084326 | ${ }_{40312411}{ }^{\text {In Proportioni }}$ | At a Mid. 6506 | $\left.\begin{array}{l} \text { To the e gth } \\ \text { of Nov. } \end{array}\right\} 45$ |

The quantity of fugar imported into England from all the Illands in the year 1753. was 1014084 cts 3 qrs. 36 lbs. This, at a medium taken for feven years before, gives Famaica alone, about

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403124cts.
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(a) This Gentleman is a Weft India merchant, and a partner in one of our moft confiderable houfes for many years; he is curious in political calculations, and has been very active in all matters relating to the intereft or welfare of the fugar-colonies that has been brought in queftion here.

Imported into London only, from the beginning to the 30 th of November 1744; 21138 hogtheads (d).
According to thefe accounts, 1 have computed the quantity of $1^{\text {® }}$. fugar exported annually from that Ifland, at a medium, for four years, ending in December $175^{11}$, to be about $47633^{85} \mathrm{cts}$. neat, or hort weight; which, at the ufual price that fugars bear in that place, will amount to about 7382801.7 s .6 d . that currency; but the fugar produced on the Ifland befides, is yet confiderable, and feldom under 4300 hogheads, of about $15 \frac{1}{2}$ cts. each, which is generally allowed to be confumed within the Ifland ; and with the exports, which, at the fame computation, amount to about 3073 I hogheads; fhew, that the fugars produced in that Ifland, at a medium for four years, ending in December 1751, are no lefs than 35031 hogheads per amum.

The quantity of $2^{\circ}$. rum exported annually from this Illand, is not fo confiderable in proportion, and hardly exceeds 4600 puncheons, or 50600 gallons a year, at a medium ; which, as rum generally fells there, will amount to about 69575 l. perann. but the retalers of this commodity are generally computed to difpofe of 1600 puncheons more within the Ifland ; and we may reafonably fuppofe treble that quantity to be ufed in private families, and at the feveral plantations where it is manufactured.

The following is an account of the rum imported into England from all the colonies for ten years, ending ini 751 , as it was laid before the houfe.

| A. p. | Gallons |  |
| :---: | :---: | :---: |
| 1742 | - | 473490 |
| 43 | - | -405329 |
| 44 | - | -397221 |
| 45 | - | -449980 |
| 46 | - | -388770 |
| 47 | - | 443528 |
| 48 | - | -627283 |
| 49 | - | 564204 |
| 1750 | -808798 |  |
| 51 | - | -713684 |

The greatef part of which is thought to be immediately from Jamaica.
Nor is it unnatural to find, that the firit extracted from the unconcreted juices of the cane, fhould, in this colony, bear fo fimall a proportion to its fugar ; while fuch quantities of molaffes, of which it is chiefly made, are yearly exported, and carried to North America, where it is manufactured at an eafy rate ; and frequently in fuch abundance, as enables them to export confiderable quantities.

The quantity of $3^{\circ}$ this commodity exported at a medium annually from this Ifland, is feldom under $25^{8707}$ gallons; which, as generally valued there, may be deemed to amount to about $12367 l$ currency (e); which, if manufactured within the Illand, would be certainly worth more than tieble that fum. But the neceffities of the poorer planters, who are the only perfons that are obliged to fell it, will not allow them to putchafe the neceffary conveniencies.

[^6]
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$4 t h$, Cotton makes another confiderable part of the exports of Camaica, from whence they feldom fend lefs than 1253 bags at a medium one year with another; and this at a moderate computation, may be jufly valued at eighteen thoufand eight hundred and ninety five pounds.

5th, Coffee. The quantity of coffee exported from this Illand is not yet fo confiderable, and feldom exceeds 220 cafks per annum at a medium; which, as this commodity generally fells there, may be valued at about three thoufand three hundred pounds.
$6 t h$, Pimento. The all-fpice or pimento, is another confiderable article of its exports; and feldom computed under 438000 pounds weight per annum, which at a medium may be computed to amount to about 21925 pounds a year.
$7^{\text {th }}$, Mahogany. While the mahogany tree grew in the more convenient parts of this Ifland, it furnifhed another very valuable branch of its exports; and that of its native growth was feldom valued under twenty thoufand pounds a year ; but as the culture of the tree has been wholly neglected, it is not to be admired that it fhould be now fcarce among them ; there is, however, fome ftill exported, tho' obtained with great difficulty; or the produce of a foreign foil, and not fo good. The quantity of this commodity now exported from Jamaica, is feldom thought to be worth lefs than twenty five thoufand pounds per annum, at a medium ; but it is chiefly imported here from the Mu/keeto-fhore, and other neighbouring parts.

8th. Befides thefe, which are the moft confiderable branches of the exports of this Ifland; there are large quantities of logwood, nicarago, braziletto, fuftick, lignum vitx, cocoa, ginger, canella or winter's bark, peruvian bark, balfams, indigo, aloes, hides, and flaves; dry goods, and bullion, fometimes exported from thence; whofe value is not fo eafily computed, and chiefly the produce of their foreign trade; which of late years is feldom computed to bring in above forty five or fifty thoufand pounds a year, but frequently not fo much.

And to thefe we may add the charges attending about $45^{\circ}$ fhips that are computed to refort to that Illand annually; which at a medium we may allow to be about twenty thoufand pounds a year.

This is the neareft computation I could make both of the produce and exports of this Ifland, and it can hardly fail giving a juft idea of the place, as well as of the induftry of its inhabitants; while that part of the produce of both, that is annually exported, and which we have now computed to amount to about $9457^{84}$ I. 7 s. 6 d . per annum, fhews both the wealth, and confequence of the colony. But though this be nearly the value of thofe commodities upon the fpot, they generally fell at a more advanced price in England, where they are chiefly imported, and have been computed to amount to 692104 l . 13 s. 6 d . Aer. annually, at a medium, for four years, ending in December 1751 : this is equal to 968946 l. 10s. $10^{\frac{3}{4}} \mathrm{~d}$. Famaica currency, it is however, fubject to many expences, and upon an average, feldom clears more than the prime coft. Let us next confider the foreign trade, and difburfements of the colony,

## S E C T. III.

## Of the foreign Trade, Imports, and Revenues of Jamaica.

TH I S Ifland was a long time remarkable for its trade, and the great quantities of all forts of commodities that ufed to be imported there ; nor was it extraordinary, while the neighbouring parts of the continent, and moft of the adjacent fettlements were fupplied from thence: but though this branch of their exports has been but very inconfiderable of late years, and their imports confiderably diminifhed on that occafion; they are ftill very large, and frequently fupply the luxury, rather than the wants of the community. To give a minute detail of every article of thefe, would require a larger fcope, and more labour than we can at prefent beflow upon the fubject ; to give a fatisfactory account was my defign; and for this purpofe 1 have taken the following abftract from the collectors books for the year $175^{2}$; which, I thought the moft natural and eafy method of communicating a juft notion of the foreign trade of that Ifland; and the more fo as the intercourfe of that year was deemed pretty moderate, and rather under the medium, having immediately fucceeded the hurricane in fifty one : and this I hope will be fufficient, as it contains not only an eftimate of the number of veffels, with an account of the ports to which they belong, but likewife a general account of their loadings; to which we have fubjoined a regular computation of the quantities and value of many of the principal commodities yearly imported there.

## Veffels from Europe.

In the courfe of that year (and it is nearly the fame one year with another,) there were no lefs than forty capital thips entered there directly from London; the loading of which confifted chiefly of dry goods of Britifh and Indian manufactures per cocketts, wines, iron and copper-ware, refined fugars, tobacco-pipes, \&c. Four from London and Cork, loaded chiefly with dry goods; and beef, pork, butter, tongues, herrings, \&c. the produce of Ireland. Eight from London and Madera, whofe loading confifted chiefly of dry goods, and wines. Two from London, Cork, and Madera loaded with dry goods, provifions, and wines. And one from London and Cape deVerds, with mules, affes, camels, and Spani/b wines, all from the latter.

From Brifol immediately they had eight, loaded chiefly with dry goods of Britibs and Iri/h manufactures, copper and iron ware, fhip chandlery ware, bottled beer, cheefe, cyder and refined fugar. And fifteen from Brijtol and Cork, with goods of the fame fort, and Irifh provifions.

There were no more than three fhips entered here immediately from Liverpool that year; and thefe were loaded chiefly with manufactured mahogany and cottons, ale, cheefe, cyder, and potatoes: but they had feventeen from Liverpool and Ireland, loaded chiefly with provifions : and one from Liverpool and Madera, loaded chiefly with manufactured cottons, and the wines of the latter.

They had but one veffel from Lancafter directly; and that loaded chiefly with cottons, and dry goods of a coarfe nature: and five from Lancafer and Ireland, loaded with the like goods, and provifions.

They had nine veffels from Hull, Plymouth, and the other out-ports of England; of which two called at Madera. Thefe were principally loaded with dry goods per cocketts, fhip chandlery ware, herrings, fhads, and a few wines from Madera.

The fhips from Great Britain by the way of Africa, were not above twenty nine this year ; the importation of llaves being diminifhed from about nine thoufand, which

## O F J A M A I C A.

which was nearly the medium before the war, to 6624, the number imported that year.

There were eleven other Englifh hips entered here directly from foreign ports in the courfe of this year ; viz. from Madera, four with wines; from Cape de Verds, three with mules, affes, camels, and Spani/b wines: from Bourdeaux, four in ballaft ; and from Libbon one, in ballaft alfo.

From the different parts of Scotland directly, they had no more than five, and thefe loaded chiefly with dry goods, and herrings: there were two more entered from Scotland and Ireland, with dry goods, and provifions: one from Scotland and Madera, with dry goods, and wines: and one from Scotland and Pbiladelpbia, with herrings, provifions, and lumber.

They had ten veffels directly from the different parts of Ireland, whofe loading confifted chiefly of provifions, fuch as beef, butter, pork, tongues, and herrings, a few French wines and fome Iribl linens: and one from Ireland and Madera, with provifions, and wines.

To thefe we may add fifteen veffels more that entered here from Barbadoes, Antigua, and the other windward iflands; loaded with European and American goods, not in demand in thofe fettlements : and thefe will compleat the number of European veffels that traded to Jamaica in the courfe of that year. I may now I hope, be allowed to make a recapitulation of them in the following order, viz.


Veffels from North America.
The number of veffels that refort to this Illand annually from the different parts of North America, is ftill more confiderable ; but are feldom fo large, or loaded with goods of fo much value, though they generally import the moft ufeful and the moft neceflary: In the courfe of that year there were no lefs than 40 veffels entered there from New York, loaded with flower, bread, beef, pork, hams, dried and pickled fifh, onions, apples, corn, peas, rice, foap, cheefe and candles; horfes, theep, hogs, ducks, geefe and turkies; butter, lard, tallow, oil, pitch, tar and turpentine; plank, boards, flaves, hoops, heading, fhingles and bricks. From Bofon they had thirty three more ; twenty eight from Rbode Ifland; eight from New London; eight from Pifcataway; and feven from Salem: all loaded with the fame commodities.

From Pbiladelpbia they had forty two loaded with bread, flower, hams and gamons; iron in bars, bricks, lumber, ftaves, hoops, heading and fhingles, \&cc. FromVirginia and Maryland feventeen, (of which one called at Madera) with peas, flower, bread, pork, bacon, foap, candles, tar and fhingles. And from fouth and north Carolina,

## THECIVIL HISTOR Y

Carolina, Georgia, and Cape Fair, they had thirty eight, whofe loading confinted chiefly of rice, leather, lumber, fhingles and tar.

From the Iflands of Bermudas, Turk, and Providence, they had fix veffels loaded chiefly with braziletto, turtle, falt, filh, poultry, onions and building ftones. In all 230 , hips and fmaller veffels.

## Veffels trading to the main.

Although the trade, which formerly ufed to be fuccefffully carried on with the neighbouringSpaniards, be now wholly loft; there are ftill a few, who venture more or lefs upon the coaft, and among the Indians; though generally attended with great danger, and very little profit. The veffels from thofe parts, that entered in Famaica in the courfe of that year, are as follows, viz. twenty three immediately from different parts of the coaft, whofe loading confifted chiefly of mules, horfes, cacoa, and fome gold and filver fpecie: three from Hijpaniola, with mules, indigo, and a few wines (a): nine from Curaffoa with mules: nine from the bay of Honduras with logwood : and five from the Mufkeeto More with mahogany, cedar, logwood, cacoa and turtle. In all 49, fmall veffels.


I am next to compute the value of fome of the principal commodities imported into this Illand annually, and would have willingly gone through the whole, could the quantities or value of them be afcertained; but this was impoffible where the greateft part of the imports pays no duties; and many principal articles are entered fo confufedly, that no juft calculation can be made either of their quantities or value; for which reafon, we fhall now lay down only fuch as we have no reafon to doubt of.

The moft expenfive articles among the imports of Jamaica, are thofe immediately introduced from England: the value of thefe has been lately calculated, to be laid before the parliament, and on an exact computation for four years ending in December 1751, has been found at a medium, to amount to $261728 \%$. 5 . fer. per annum, which, in that Ifland, would amount to 458924 l. 8 s. 9 d . currency, as goods are generally debited there. But, as we may reafonably fuppofe a fourth part of thofe, at the moft moderate calculation, to be imported by the planters themfelves, and fubject to none of thofe extraordinary charges to which debited goods are liable; I have computed the whole to amount to $431676 \mathrm{l} .8 \mathrm{~s} .3 \frac{3}{4} \mathrm{~d}$. currency, every year: to which we may add above feventy thoufand pounds, expended annually in England by the planters of Famaica refiding there; and in the education of their youth.

New Negroes form the next article in value; and though the number of thefe be leffened by near a third part fince the beginning of the war, they now feldom amount to lefs than $235000 \%$. currency, per annum: the number of thefe imported in 1752, did not exceed 6624 ; but they begin to encreafe, and before the war, generally were about 9000 at a medium.

Irifb provifions form another confiderable branch of the imports of Famaica, and thefe in the year 1752, (and it is nearly the fame every year) were as follows, viz. 19921 barrels of beef, $4307 \frac{1}{2}$ barrels of pork, and 15876 firkins of butter; which

[^7]at a medium will amount to about 87493 l . currency. But allowing a confiderable part of thefe to be alfo imported by the planters themfelves, we may reafonably abate a fourth part of the extraordinary furcharges, which will reduce this fum to about 78309 l. 17 s. per annum.

Madera wines make another confiderable article among the imports of this Ifland; but this decreafes every day, and at this time, they feldom have above half the quantity that ufed to be formerly imported there; for moft people make ufe of weak rum punch, which they find as wholefome, and generally more agreeable to their overheated habits: of late years the importation of this commodity feldom exceeds 827 pipes per annum, at a medium, which at a moderate computation amount to about 26464 . of that currency.

Thefe are the only commodities whofe value we could afcertain with certainty; and thefe with the produce of North America, which we can hardly compute at lefs than 70 , or $80000 \%$ per annum, make up the whole of the imports of that Illand; but the laft certainly furnifhes the moft neceffary articles for a fugar colony.

Iam-next to give fome account of the public revenues of this Inland: there have been very confiderable of late years, and raifed, partly by duties fettled for his Majent's fervice; and partly by taxes impofed by temporary laws on the more preffing occafions of the public. Thofe that have been fettled by ftanding laws for the immediate fervice of the crown, amount to about fixteen thoufand pounds a year, and are raifed in the following manner, viz.
$1 / t$, By duties on foreign wines and other firituous liquors; on foreign indigo, cacoa, tobacco, cotton, and Englifb refined fugars; which at a medium for feven years, amount to about eleven thoufand pounds a year.

2dly, By the quit-rents of about one million, and five or fix hundred thoufand acres of land, that are already patented in that Illand, and pay at the rate of a halfpenny per acre; and the intereft on quit-rent bonds at 10 per cent. which amount to about four thoufand pounds currency per annum, taken at a medium for feveral years.
$3 d l y, B y$ efcheats and cafualties, which feldom amount to lefs than one thoufand pounds more per annum.

The monies raifed by thefe means are paid into the Receiver General's office, who is allowed $2 \frac{\pi}{2}$ per cent. upon receipt of them, and as much on paying them again; by which difpofition he is deprived of the commiffions that would otherwife arife from the receipt of his commiffions, as well as the certain gratification of uncertain fervices. But his Majefty has been gracioufly pleafed to confent that thefe monies fhould be always laid out in promoting the welfare and fecurity of the Ifland, and in paying of the public officers, whofe falaries he was pleafed to confent fhould be regulated and appointed in the following manner, viz.

To the Governor for the time being 2500 l . per annum.
To the Auditor General, 202/. io s. per annum.
To the Chief Juftice, 120 l . per annum.
To the feveral Landwaiters, 120 l . per annum.
To the Captain of the train, 45 l .12 s .6 d. per annum.
The other parts of the public revenues are ftill more confiderable, and inftituted as a fund to fupply the immediate or more urgent neceffities of the colony; they are indeed generally lodged in the hands of the Receiver General alio; though the community have ftill retained the liberty of appointing a commiffioner or receiver of thefe alone; whom, whoever he be, they gratify either with a ftated commiffion of $5 l$. per cent. or an occafional falary, as they may think moft convenient; nor can any part thereof be appropriated or difpofed of without their confent and approbation. Thefe are raired by certain impofts, regulated according to the public neceffities of the
community,
community, and fettled fo as to fall chiefly upon the luxury, or neglect of the inhabitants. The difpofition, and manner of raifing them at prefent is as follows, viz.
$1 / \ell$, By duties on wine, rum, and other fpirituous liquors fold by retail, they raife about 8000 l . per annum, at a medium for the laft three years; of which extraordinary fum the town of Kingfion alone contributes about 115 l. every week.

2dy, By a deficiency tax, or tax laid on fuch as do not keep and maintain a number of white fervants, proportioned to the number of their flaves and cattle. This tax was firft inftituted to promote the importation of white people; and to oblige every man of intereft to encourage them, both for the fafety and welfare of the colony; but the neglect of the public on this occafion, now produces a fettled revenue of about 8000 l. a year, at a medium.
$3 d l y$, By an impoft of twenty, thirty, or forty fhillings per head, laid on imported Negroes, which feldom fails to amount to about 7500 l . per annum, at a medium.

Thefe levies alone make up a revenue of about $23500 \%$. per annum, which is always employed to promote the public happinefs, and to encourage and reward induftry : out of this the governor for the time being, is generally complimented with an additional falary of 2500 l . a year; and every officer in the regiment with an annual prefent : and it ferves alfo to give a decent encouragement to the new fettler, to relieve the diftreffed, and to promote the labours of the induftrious.

## S E C T. IV.

## Of the Inbabitants, Manner of living, and natural Curiafties of the IJland.

IHave hitherto laboured to give a clear and fatisfactury idea of the Ifland of Famaica, with regard to its government, foil, revenmes, produce and trade; and in this I hope I have fucceeded to the fatisfaction of every man who does not expect a volume on this fubject alone; I muft now endeavour to give fome account of its inhabitants, and I hope every confiderate perfon who obferves the method I have hitherto followed, will not expect that I fhould enter into any particular details here : a general idea of the whole, is what I defigned to communicate; and the people in all countries, may be divided into claffes that have fome general uniformity in their fentiments and actions, fufficient to convey a very fatisfactory notion of that fort. The method I thought natural in a performance of this kind, and have for that reafon, endeavoured to follow it in the difpofition of the fucceeding lines.

Tho' the inhabitants of this Ifland, may be naturally enough diffinguifhed by their parent countries into Englijh, Irijh, Scotch, and natives the defcendants of all. I fball for the prefent deem them but one united people, whom I fhall clafs into planters, fettlers, merchants, and dependents; the moft natural diftinctions to communicate a fatisfactory idea of the colony.

Many of the planters are men of very extraordinary fortunes, but the major part, though rich, and in eafy circumftances, are feldom out of debt; for the charges attending a fugar fettlement, are very confiderable, and conftant; the intereft of money very high, and their natural propenfity to increafe their poffeffions, conftantly engaging them in new difburfements and contracts. They are generally men of a free and open difpofition, friendly where they take, honeft in their dealings, and punctual, when the demands does not exceed their ability, or a new purchafe engage the produce of the year; they are obferved to beremarkably fond of grandeur and diftinc-
tion, which, doubtlefs, proceeds from the general obfequioufnefs of their numerous flaves and dependents, as well as from the neceffity of keeping them at a diftance; which in time gains into a habit.

Among thefe you frequently meet with men of as good a tafte, as much learning; and as well acquainted with the world, as may be met with in any part of Europe; nor is it uncommon to fird thofe who, (though never out of the 1land) thine in many parts of life, with as much delicacy and judgment, as if they had been bred in the moft polifhed courts. How foon thefe gentlemen might make the Illand a wealthy and valuable fettlement by becoming guardians of the public happinefs, fubjecting the lands to the due payment of monies botrowed at an eafy intereft in $E \tilde{\alpha}^{*}-$ rope, and becoming the fureties of the induftrious and careful, may be eafily obferved ; but alas! many of them feem to think it not their intereft to have the Ifand better fettled in their own days. As to the more amiable fex, there are but few of them befides the natives here, who are generally great lovers of decency and cleanlinefs, always fprightly and good humoured, naturally modeft, genteel, and lovers of mirth; nor does any people excel them in the labours of the needle, or oeconomy, when they take to thofe ufeful occupations: but many of them have been remarked both for their indolence, and the want of confideration; which too often deters the gentlemen in thefe colonies from entering into the matrimonial ftate, wherein the moft engaging behaviour would be requifite to break them of thofe vicious habits, which they feldom fail of acquiring in the more early fate of manhood (a).

The fettlers form another rank of people, that differs from the former only in degree; they are generally fuch as have fome foundation, though feldom enough to complete a fettlement ; and for this reafon commonly above one half of their eftates in debt, which they find no eafy matter to difeharge, as the produce feldom anfwers either in quantity or quality at the beginning s, though confantly attended with exorbitant charges and expences; for the lender of monies in thofe parts, is feldom fatisfied with intereft alone; he muft be factor for the eftate, and fupply every thing that may be wanted at his own price; he muft difpofe of the produce, and draw the ufual commiffions, however inconvenient it may be to the owner to fend it fo far to market, who frequently meets with an opportunity of difpofing of his effects'at the next fhiping place; or would willingly fhip them for fome European market, and draw bills in favour of his creditor for the neat proceeds thereof; but an attempt of this kind would expofe him to the immediate rigour of the laws, and likely prove the ruin of his growing hopes : his goods muft be fhiped on board of fome drover, where they feldom fail paying the ufual tributes of pilferage and waftage, befides the common expence of freight; they muft be landed at a certain wharf, where they pay double centage ; they muft be coopered afrefh at a certain expence, and fold, when a convenient opportunity offers, to pay the charges and intereft; for they feldom reach the capital, until the produce becomes very confiderable.

The trading part of the people is not at this time fo numerous, and may be naturally diftinguifhed into factors, merchants, and pedlars: the former tranfact bufinefs chiefly for European merchants, and others that fupply this market with different forts of commodities at their own rifque ; as well as for the different planters) for whom they may be occafionally concerned; and have a regular commiffion on the fale and purchafe of every thing that paffes through their hands: thefe people are generally induftrious, and feldom fail making confiderable fortunes when well befriended, or furnifhed with money ; which many of them do with a very fair character, while others, and indeed, the greater numbers, are obferved to lay hold of every opportunity of ferving themfelves. The merchants import their own goods; and run the rifque of the markets; but generally turn pedlars in the difpofal of them:
(a) What I'mean by vicious habits, are their great attachments to Negroe-women; there being but few gentiemen but what have feveral of thofe ladies very early in keeping.
the bufinefs was, indeed, beneficial while they could fupply the neighbouring markets, and export to advantage what would not anfwer fo well within the colony; but every opportunity of this kind is now gone, and very few of them are obferved to rife; for the principal planters are now fupplyed with every conveniency at their own rifque; and the next clafs is entirely engroffed by the factors, who generally import fuch commodities as are commonly wanted at a plantation. But goods of all forts have been imported there in fuch abundance of late years, in expectation of fome foreign trade, that they have been frequently fold under the prime cofts.

The dependents form a fourth clafs, and not the leaft ufeful to the community; it is conftituted of mechanics, clerks, and fervants of all forts, whofe ufeful induftry deferves encouragement, and adds to the public welfare in every foil; and moft of thefe that follow the more ufeful mechanical branches, as carpenters, coopers, bricklayers, millwrights, copperfmiths, and taylors, acquire very decent, if not ample fortunes; and are frequently raifed by an honeft induftry, fo far as to be confidered among the firft rank of people: clerks, when they behave with a proper attention to the intereft of their employers, are generally promoted, and interefted in the bufinefs, in proportion as thefe :grow lefs active, and more fond of indulging themfelves; nor does the vigilant fervant ever fail of gaining his mafter's efteem, who generally rewards his care with fome decent gratuity at the expiration -of his time.

To thofe we may add the Negroes, as a fifth and more numerous clafs, who are now computed to be more than 120000 in number; and by whofe labours and induftry almoft alone, the colony flourifheth, and its productions are cultivated and manufactured.

But although the methods of living in this colony, vary among the different claffes of its inhabitants; there are but few in the general run of mankind that live with more fatisfaction. The planters; and others whom afluence has fupplied with conveniencies above the reft, are decent, and often magnificent in their buildings; neat and rich in their furniture and dreffes; and plentiful, with order and delicacy at their tables: they have great quantities of poultry and all forts of ftock raifed at their plantations; North America fupplies them with flower ; and the fields almoft without culture, with a variety of greens, toots, and fruit: the general produce of their eftates, affords them wholefome diluting drinks; and, from England, and Madera, they are fupplied with thofe various wines and other liquors generally ufed at their tables: of late they give more than ufual into the ufe of foops, which they find more agreeable to their weakned ftomachs ; but in the general difpofitions of their tables, and methods of cookery, the Engli/h cuftoms are obferved.

The fettlers, and middling fort of people in every other ftation of life, are not far fhort of thofe in the effential and neceflary conveniencies; their habitations are generally commodious and decent, their dreffes neat and fimple, and their tables well fupplied with all forts of frefh provifions, as well as neceflary liquors: but the inconveniency of carriage, and frequent fcarcity of flower among thofe that cannot purchafe a confiderable quantity at a time, often oblige them to fubflitute plantains, caffada, or yams, in the room of bread; which, though not fo elegant, or agreeable to ftrangers, is not much inferior in wholefomenefs or degree of nourifhment.

The fervants in this colony are moflly Europeans, and indented for a certain number of years; at the expiration of which, they are not only capable of providing decently for themfelves, but gencrally receive fome gratuity that enables them to enter more eafily into life: Thefe people generally live in fmaller houfes built about the fugar works, that they may be in, or out, with greater conveniency in the croptime: By the laws and cuftoms of the country they are allowed a certain quantity of falt beef, and flower, every month or quarter; and a proportionate quantity of fugar, and rum, to fupply them with drink; but no ways reftrained in the ufe of the more
natural productions of the plantation, as plantains, yams, potatoes, caffada and greens, which they have in great abundance every where : they are obliged to be active and vigilant by day, and much expofed to the fun when their ftation is in the field; but at nights their occupations vary with the employments of the feafon, for in planting and weeding times, they can reft to the dawn of day ; but when the labours of the year are to be collected in a fhort fpace, time becomes more precious, and they, like the induftrious flaves, frequently undreffed, are obliged to watch by fpells every night, and to engage with equal vigour in the toils of the day ; while the planter and the overfeer pafs the mid-night hours in interrupted flumbers, anxious to fecure the reward of their annual labours; which, an unfeafonable guft of wind, or heavier rains, would undoubtedly deftroy, or a trifling accident retard: and happy is he, who at this feafon can have fervants, on whofe activity and inclinations he may depend; or whom health and vigour will allow to attend in perfon.

The Negroes who conftitute the laft clafs of the inhabitants of this country, are, for the moft part, the property of the Whites; and bought and fold like every other commodity in the country, being always reckoned a part of their eftates either real or perfonal : they live in huts or fmall thatched cabbins, fuftained by crotchets, whofe interfpaces are laticed, and plaiftered or dawbed with clay; thefe are difpofed in the form of villages, in proper places; and generally divided into two rooms, for the greater conveniency of the inhabitants. They are commonly allowed a few yards of blanket, or coarfe linens every year, which ferves to protect them a little from the cold in the more inclement feafons; and keep them warm, and fecure from the open air, when fick: they generally provide themfelves with food in the country parts, and for this purpofe every planter fupplies his flaves witha rich and convenient piece of ground, where they are obliged to employ the Lord's day, as well as the few other hours (a) allowed them, both to fock the ground and provide provifions for the following week ; and yet the produce of thefe few hours labour, is not only fufficient to fupply them with plenty in a feafonable year, but affords enough to furnifh the neighbouring markets alfo. Every plantation, however, is provided with a plantain-walk, and quantities of yams and corn, to fupply the new, and the infirm ; and to relieve the others in an unfeafonable year, or when their own provifions fail.

When we confider the inconveniencies under which thefe creatures labour, the toils they are obliged to undergo, the vicifitudes of heat and cold, to which they are expofed, and the groffnefs of their food in general; we ought not to be furprized if they had been ftill more flothful and fickly than they are commonly obferved to be; or if the difeafes to which they are obnoxious, had differed more apparently from our own: thefe are indeed frequently of a peculiar nature, and require a confummate knowledge of fymptoms and diforders, to difcover the real fources of them ; yet the owners, whofe intereft depends chiefly on their welfare, will commit them to the care of fome raw youth, or ignorant affumer, that is hardly fkilled enough to breath a vein, or difpenfe a dofe of phyfic: but this proceeds more from ignorance and vanity, than any real want of humanity; for few of them are judges of phyfic, and each would be thought to have a doctor of his own; and thefe have in the courfe of time, introduced fuch methods of practice in thofe colonies, that you may now frequently obferve gentlemen of the firft confequence, to be vomited and bliftered to death in a yellow fever, and the ladies, poifoned with bark in verminous inflammations; while
(a) In the country parts of this Illand, every plantation Negroe is allowed a Saturday afternoon, on fome other afternoon in the week, to ftock and manure his particular patch of ground, which he generally plants in caffada, yams, potatoes, Indian and Guinea corn; and on Sunday they provide provifions for the enfuing week, and fend fome to market, to fupply themfelves with a little falt beef, pork or fifh, and a little rum, which are the greateft dainties they can come at, unlefs a cat, a rat, or dog fall in their way. It is true, many of them raife a few poultry, and other ftock; but thefe they generally fell to enable them to purchafe fome decent as well as neceffary cloaths for their wives and themfelves,
others lie neglected in the eafy beginning of an undiftinguifhed remittent, until the diforder gains beyond relief. Et inde tantorum bominum fata.

I fhall now endeavour to give fome account of fuch of the natural curipfities of this Ifland, as can't be fo properly introduced in the following parts of the work; which, tho' but few, and not often noticed, feldom fail to raife both our attention and admiration, when duly confidered. The moft remarkable among thofe are,

1. The Water-fall in Mamee River, a little above Bull-Bay, in the parifh of Port-Rcyal.
2. The Cafcade, and,
3. The Grotto ; both in the parih of St. Anne's.
4. The Fogs in the patifh of St. Thomas in the Vale.

We fhall now give fome account of each.
The Water-fall, or Cataract in Mamee River, (one of thofe that takes its fource far back among the blue mountains, and by a moderate ftream, continues its agitated courfe by various windings, to thofe hills immediately above that fandy fhore within Bull-bay,) where, between two neighbouring rocky and barren hills, its waters have a fudden fall of near two hundred feet; whofe direction is altered about the middle fpace, by the volume of a huge protending rock, that extends from the fide of the adjacent weftern precipice ; which divides and agitates the fream with fuch violence, that the narrow fpace between the hills below, is filled with clouds and vapours, that reflect an admirable fucceffion of thining Iris's, while the fun continues to dart its rays about the ftream ; and hence the foaming fluid continues its varioufly interrupted and divided courfe between thofe barren hills to the thirfty plain below; not an ignoble reprefentation of Virgil's Amfanctius,

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\begin{aligned}
& \text { Urgit utrumque latus montis, mediogue fragofus, } \\
& \text { Dat fonitum faxis, et torto vertice torrens. } \\
& \text { Hic |pecus horrendum, \&c. }
\end{aligned}
$$

Virg. Lib. viii. 564, ©'c.
This place is rendered yet more romantic, by that facious cave that runs under the brow of the eaftern hill above the fall.

The Cafcade is fill more curious, and lies in the courfe of that branch of Rio Alto, which, (after having made its way many miles under ground,) rifes a-new in the hills immediately above, and continues its courfe between roaring river plantation, and Mendfy's Bogue, in St. Anne's: to give a fatisfactory notion of this wonderful contrivance of nature, I muft firft inform the reader, that moft of the hills in that part of the Illand are chiefly compafed of ftalactic matter, by whofe eafy folution, all waters oozing through the rocks, are fo charged with particles of this nature, that they readily incruftate bodies depofited for any confiderable time in their more open and lefs agitated courfes; and, as this river rifes at a confiderable diftance from, and above the level of the fea; it runs down a more moderate declivity between the two adjacent hills, whofe intermediate fpace is in fome parts more, and in others lefs contracted: In one of thofe more extended fpaces, over which the river fpreads its rolling waves in its lefs rapid defcent, nature has planted a moft curious grove of anchovy pear-trees (b), whofe fpreading roots intercept the fhallow ftream in a thoufand different places and directions; ftill inclining to, or receding from each other, as chance or nature directs their growth : The water thus retarded, foon begins to depofite its weighty load, which time has form'd into thofe crufts and various fhelves, that advancing years have fpread into thofe beautiful banks, and gradual platforms, for which it is now fo much admired; and whofe natural beauty is ftill inriched by

[^8]thofe fhady trees with which it is yet adorned, whofe falling progeny fill helps to continue this admirable piece in a perfect ftate, and to raife new banks and wonders in the defcending ftream.

The Grotto, of which we are now refolved to give fome account, lies in the fame parifh, and about feven miles above the bay: It is fituated at the foot of a hill, under which it runs, by a gradual and oblique defcent, for the fpace of two or three hundred yards, and ferves as a conveyance for the waters that fall into the adjoining vale, in the rainy feafons; as well as a convenient habitation for batts, owls, and fculking negroes, in fairer weather.

> Eft curvo anfractu Caverna accommoda fraudi Nigrorumve dolis; quam denfis frondibus atrum Urgit utrumque latus, tenuis qua Semita ducit. Virg.

After you pafs the narrow and woody path, that leads to this cave through the adjacent vale, you foon reach the opening of the grot, which is wide and fire at the entrance ; but contracts as it recedes, and further back, is divided into a numberlefs feries of caverns, and more regular fpaces, fuftained and adorned with a thoufand rifing, and defcending, or compleated pillars of falactites; which are formed of various crufts, that have been laid fucceffively by the waters that have dribled through the mountain after the more heavy rains of an uncertain feries of years: Thefe pillars rife and defcend in every part of the grotto, but are far more robuft and perfect backwards, where the waters, paffing through the thicker beds, have been more abundantly charged with fparry particles, and lefs difturbed by the open and agitated air.

The fog that fo regularly obfcures the air in Sixteen mile Walk for a certain part of the day, has been remarked almoft from the firft fettlement of the Ifland; and as it ftill continues, fill deferves our attention: the place, where it is obferved, is a pleafant vale, fituated foutherly, at the foot of the main ridge or chain of mountains, and about the middle of the Illand; but furrounded by hills on all other fides. The foil is fertil, and the place well fupplied with fprings and rivulets, which fall into two principal channels that unite their ftreams a little lower, and continue their common courfe fouthwards between two rocky hills, and barren precipices, until they reach the plain below. This level fpace is almoft daily and duly overcaft with mifts, (c) that begin to rife with the approach of night, thicken as it advances, fpread gradually unto the neighbouring vales, is heavieft about the dawn of day, and continues until the more active rays of the fun begin to warm and agitate the air: then it gradually rifes and expands; and between the hours of eight and nine, begins to flow in two principal ftreams; the one weftward among the mountains and neighbouring vales, the other fouthward, and directly over the courfe of the river, until it reaches, and vanifhes about the plains below : it is extremely thick in the morning, and when viewed from the top or brow of any of the neighbouring mountains, looks like a perfect fea, whofe various arms and inlets are thoroughly reprefented by the neighbouring and adjoining vales.

There are many other remarkable curiofities in this Ifland; but as we treat of all the branches of Natural Hiftory in the following feries, we will endeavour to introduce them in their proper places; and for the prefent, content ourfelves with having given fome idea of fuch as we could not fo conveniently introduce in any other part, nor chufe to omit.
(c) See the courfe and nature of thofe mifts explained in our Differtation on the general and partial motions of the atmofphere.


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## CIVIL and N ATURAL H I S T O R Y O F



Partil.
CONTAINING,
An Account of the feveral natural Productions of that Inland; diftributed into Orders, Claffes, and Genera, according to the moft natural Methods now known.

## In Three BOOKS.

The Firft, befides a circumftantial Account of the Foffils of the Inland, their Ufes, and Properties ; with fome Remarks on its Waters, Ores, and Soil ; contains a new and eafy Method of claffing native Foffils in general, with an Account of the Nature and Properties of each Clafs.
The Second is a Hiftory of the vegetable Productions, claffed and diftributed, nearly according to the Linnean fyftem; with the Characters of fuch as have not been hitherto known, or but imperfectly reprefented; and the Ufes and Properties of each.
The Third gives an Account of fuch Animals as we could obferve in, and about, that Ifland; which I have alfo diftributed into Orders, Claffes and Genera, chiefly according to the Syftems of Linneus and Ardtedius.

Scientia naturalis fundamentum ef omnis acconomia, opefciarum, conimerciorum, diette, medicine, ${ }^{\text {O }}$ mechanictes LiN. Obf.
Anood aved i

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I$T$ is not to be admired, that the fudy of Natural Hifory fould bave continued fo long neglected, and in confufion; while yet the means of relieving the unbappy fick bad been Jought from particular obfervations; and they themfelves expofed in public places, to the view of every paffenger, who, from bis own experience, might impart fome doubtful means of relief. Their practitioners or phyficians then were only fuch as had gathered the inaccurate obfervations of the vulgar, or feen, and followed the practice of their fathers or relations of the Jame profefion: They, no doubt, were acquainted with the Simples then in ufe, their known virtues, and common appellations, which they had faitbfully recorded; and this was all that could be done for the improvement of Natural Hiftory in thofe early ages. But when the knowledge of phyfic became more general, and the profeffors of that fcience began to wye with each otber; a more accurate knowledge of things fucceeded: and then it was obferved, that the nature of the machine altered infome degree, with every age, fex, and climate; that the fame dijeafes appeared different, in different confitutions; and that different affectus's frequently put on the fame appearance for a time. Hence it became evident, that the practice of phyfic required men of the greateft thought, and moft natural obfervation; who, befides thefe, fould be thoroughly acquainted with the different affections, parts, Arructure, and mechanifm, of the buman body; as well as the different materials, which the knoweledge of nature, or peculiar obfervations, might bave taught to be effectual in altering the different unnatural difpofitions of the babit; with their dofes, and manner of aEtion.

The neceffity of a thorough acquaintance with thefe things, put the lovers, and encouragers of phyfic, upon a more accurate Audy of the dif-
ferent
ferent branches of the profeffion; particularlarly, that of Natural Hiftory, which feemed the mof intricate, and of the largef fcope; and that, from the knowledge of which alone, they were likely in time to obtain a more competent knowledge of the proper medicines to be ufed on every occafion. But notwithflanding the labours of many learned men, this branch of literature bad continued for a long time in confufon, either through the inaccuracy of the Antients, whofe defcriptions communicated but very faint refemblances; or the Rabies of Syftematical writing, into which the Authors of later ages bad given without reAraint: Thefe bave bowever, gradually improved the defcriptions, and augmented the number of materials; and Tournefort, Ray, and the accurate Linneus, bave at length reformed the whole, and 'brought the method of fudying Natural Hifory, almoft to a perfect fandard: But though the labours of thofe great men, bave now rendered this fudy much more agreeable, and certain, than it bas been bitherto; we fill want many improvements, which a compleat and correct collection of the Several productions of the different parts of the world, with an account of the particular ufes they may be feverally put to in each, can alone afford us: This indeed is a difficult tajk, and not to be obtained without the labours of many people, both capable and willing to oblige mankind with their remarks and obfervations; and from fuch alone, (made with caution in the different regions, and among the different nations of the earth) can we bope for any tbing like perfection in this part of Natural Knowledge.

Thefe motives, have of late years, induced many gentlemen to employ their vacant bours, in making collections of, and obfervations on, fuch natural praductions as they could more eafily come at, either at home or abroad; nor can any undertaking be more laudable, or beneficial to mankind; or more pleafing to a mind of a natural turn. What fudy can be fo agreeable to a rational being? or what can raife our admiration, or oblige us to contemplate the power and wifdom of the Almighty, fo much as to obferve the means by which fuch a variety of beings of every kind, is produced with unwearied order and regularity? View but the globe on which you live, and obferve bow many different climates, and kingdoms, each inbabited by Animals peculiar to itfelf 1 what a variety of mountains and vales! each flowered and adorned with its peculiar produEtions! bow different even the bowels of the earth, pregnant with ores and minerals of various forts ! all fuited and adapted to their native beds. The conveniencies with which thefe laft fubfances alone, doth furnibs mankind, would be a fufficient inducement to engage a $N a$ turalift in a difquifition of their primary fate and productions; but when

## P $\quad$ R $\quad \mathrm{E} \quad \mathrm{F} \quad \mathrm{A} \quad \mathrm{C}$ E.

we reflect on the many advantages that accrue to the world in general, from the different parts of the whole kingdom; or confider how much the different materials obtained from thence, contribute to the eafe and Jatisfaction of buman fociety; we muff certainly think it a fiudy that ougbt to employ fome part of the thoughts of almoft all forts and claffes of people: The Farmer and the Hubbandmanwould find their advantage alike in the fludy of earths and moulds, as well as of the different compofitions that may moft effectually brake the texture of them, or warm and inrich their cbilly juices: the Miner would undoubtedly improve bis fortune, by a more perfect knowledge of the nature of ores, and their native beds; the Lapidary and the Cbemift, feem to profper alike in proportion to their knowoledge; and bow neceffarily it ought to engage the attention of the Pbyfician, will appear from a due confideration of the different branches of bis profelfion. But notwithftanding all thefe allurements, the fludy of this part of the creation, bas been (until of late) almof wholly neglected ; or left to the improvement of thofe few, whofe bread depended more immediately on their acquaintance with fome of its productions : and bow little fuch people bave fudied the nature of them, we may learn from the improvements made by men of the fame clafs at this day. Learning bowever, in every tafte, bas of late years met with its encouragers; which induced many people to give more into this, and every other fort of ufeful knowledge, than they were woont, and could bave formerly done: and the neceffity, as well as ufe of the infitution, obliged me to contribute what I bad obferved concerning the productions of this clafs, in Jamaica.

This put me under a neceffity of examining the different fyftems that bave been already publifbed upon the fubject: and finding thofe to be generally confufed, or inaccurate; and plan'd, without a due regard to that order, wbicb nature feems to preferve in the formation and difribution of her productions: I bave been induced to propofe the following form to the public, in which we begin with the moft fimple bodies now obferved in nature, and proceed gradually to the moft compound; placing every production in that clafs, to which its common properties, and apparent qualities, bew it to approach the nearef: and to render the method more generally ufeful; I bave brought it within a very narrow compafs; divided it into a few natural claffes; and diftributed the Species under their proper Genera, with the moft noted and appropriated appellations. To make the fudy eafy, and to render it more univerfal, was my defign; which induced me to avoid a multiplicity of names, as well as thoje that were uncommon, with equal care. Many, I muff acknowledge, bave a better opportunity of compleating a thing of
this kind; but their indolence, or want of inclination, prevents them from communicating their obfervations: and fuch as bave already wrote upon the fubject, feem to bave endeavoured to render it rather the fudy of a man's life, than the amufement of a few leifure bours, for which alone I would propofe it. This acceffary piece made it now neceffary to divide this Book into two diftinct Chapters : the firft of thefe comprebends the whole of this new method; and in the fecond we give a particular account of the native Fo/fils of Jamaica, with remarks on fome of the moft ufeful Species.

> 2uafque recondiderat, Et itugiifque admoverat umbris, Effodiuntur opes.

Ovid Metam.



THE

## T H E

## Civil and Natural HISTORY

$$
\begin{array}{llllllllllll}
\mathbf{C} & \boldsymbol{A} & \mathbf{P} & \mathbf{T} & \boldsymbol{B} & \mathbf{R} & \mathbf{I}
\end{array}
$$

C O N T A I N I N G,
A new and eafy Method of claffing native Foffils; in which they are difpofed according to their concurring Properties.

| A general View of the whole Metbod. |  |
| :---: | :---: |
| $\begin{array}{r} \text { 券 } \\ =\frac{3}{8} \\ =\text { Aqua. } \end{array}$ | I. Simplicifima, pluvialis, ED nivalis. Rain and fnow water. <br> 2. Particulis terreis impregnata. Terrene water. <br> 3. Salina varia. Salt, of faline water. <br> 4. Sulpburata. Sulphureous water. <br> 5. Metalice vavia. Metalic water; or fuch ne it changed with metalic pertictel. |
|  | 1. Volatile acidum primarium. The primary, or native volatile acid. <br> 2. Muriaticum. Foffil, or Sea-falt. <br> 3. Nitratum. Nitre. <br> 4. Alaminojus. Alum. <br> 5. Natratum. Natre. <br> 6. Catharticum. Glauber's falt. <br> 7. Borax. Borax, or boract. <br> 8. Amoniacum. Salt amoniac. <br> 9. Fugax tbematrum, froe balcriptivm. The falino-fulphys. <br> reous falt of hot-well waters. <br> 10. Vitriolicum varium. Vitriolic, or metalic falt. |
|  |  |
|  |  |
|  |  |
|  |  |
|  |  |
| $\begin{aligned} & \text { Bodies of } \\ & \text { a more } \\ & \text { mixt and } \\ & \text { uncertain } \\ & \text { nature. } \end{aligned}$ | 1. Pumex. Pammy. <br> 4. Agillaria. Clay-flone. <br> 2. Tophus. Tophus. <br> 3. Callimus. Fetites, and eagle's fones, \&e. <br> 5. Sabulum. Gravel. <br> 6. Arcna. Sand. |

S E C T.

$$
\begin{aligned}
& 0 \text { F } \\
& \begin{array}{lllllll} 
& 7 & A & M & A & I & C
\end{array} \text {. } \\
& \text { Partil. } \\
& \text { BOOKI. }
\end{aligned}
$$

## S E C T. I. De aquâ, $\mathcal{E}^{\circ}$ ejus variis Speciebus. Of Water, and its different Species.

TH I S fluid fhould undoubtedly be confidered as a native foffil, and defervedly accounted one of the moft powerful agents in all the works of nature: but we have great reafon to believe that it is folid in the natural ftate, and reduced only by the action of the fun (a), to that form in which we generally obferve it. It is the natural diffolvent of falts, and the general vehicle whereby all growing fubftances receive their nourihment, or matter of increafe; but its other qualities depend chiefly on its bed, or the particles with which it is charged : and the degree of efteem in which it ought to be held, when fimple, fhould be founded on its purity and lightnefs; as it does on the nature and action of the particles with which it is impregnated, when in a more compound ftate.

We fhall now difpofe the different forts of this fluid, under the following general heads, viz.
$\mathbf{I}^{\mathrm{C}}$. Such as are pure, or the leaft tainted with heterogeneous particles.

$$
\text { A QU A }\left\{\begin{array}{l|l}
\text { I. } \begin{array}{l}
\text { Pluvialis. } \\
\text { Rain water. }
\end{array} & \text { 2. Nivealis. } \\
\text { Snow water. }
\end{array}\right.
$$

Though thefe are the moft fimple flates of this fluid, it is far from being pure in either ; and we are now fatisfied, by diftillations, and other accurate experiments tried daily on this fubject in its feveral habits and conditions, that we are not to expect it without admixtures in any fhape ; for the air, into which it is raifed in the moft attenuated form, is charged with a multitude of other heterogeneous particles that mix with it even in that condition: and, though many of thefe may precipitate, when it changes to a folid ftate ; fuch as are nearly of the fame fpecific gravity, will ftill remain connected in the mafs.
$\mathbf{I I}^{\circ}$. Such as are more heavily charged with terrene particles.


Water is moft commonly met with in thefe ftates, in all countries; but it differs in proportion to the quantity, as well as quality of its admixtures, which muft naturally vary with the depth, and nature of the the foil, in every region.
$I I I^{\circ}$. Such as are charged with falts of a terrene bafe.
A QU A $\left\{\begin{array}{c}\text { I. Marina, } \mathcal{E} \text { muria- } \\ \text { tica fontana. } \\ \text { Sea, and brackinh } \\ \text { water. } \\ \text { 2. Aluminofa. } \\ \text { Aluminous water. }\end{array}\right.$
3. Natrata.

Natrous water.
4. Cathartica.

Epfom; or other water, charged
with purging falts.
(a) See the Memoirs of the Royal Academy 1711, and 15, Sur la Matiere du feu,

$$
\begin{array}{llll}
\mathrm{O} & \mathrm{~F} & \mathrm{~A} & \mathrm{M} \\
\mathrm{I} & \mathrm{C} & \mathrm{~A} .
\end{array}
$$

The waters of this clafs are very numerous as well as various; and difpofed here according to the nature of the falts they contain, on which alone both their virtues and operations do depend: they are generally diftinguilhed by the tafte, and the form of the cryftals of their falts.

IV ${ }^{\circ}$. Such as are charged with a calcarious earth ; and a loofe fulphureous fubftance, whofe acid is more or lefs deeply engaged in that abforbent bafe.

$$
\text { A QU A }\left\{\begin{array}{c|c}
\text { 1. } & \begin{array}{l}
\text { Sulpburata tepida. } \\
\text { Hot-well water. }
\end{array}
\end{array} \begin{array}{c}
\text { 2. Sulpburata frigida. } \\
\text { Cold fulphureous water. }
\end{array}\right.
$$

Thefe waters are frequent in moft parts of the world, and generally obferved to be the moft beneficial to mankind: they are diftinguifhed by the fmell, and the heat peculiar to moft of them, (nay to all at the firft fource); by the yellow tarninh they communicate to all filver veffels; and by the inflammability of the fediment they depofite.
$\mathbf{V}^{0}$. Such as are impregnated with falts, or particles of a metalic nature.
A QU A $\left\{\left.\begin{array}{c|c}\text { I. Vitriolica martialis. } \\ \text { Ferruginous water. }\end{array} \right\rvert\, \begin{array}{r}\text { 2. Vitriolica anea. } \\ \text { Copperih water. }\end{array}\right.$
Thefe are diftinguifhed by the nature of the particles they contain : thofe charged with fteel turn all aftringent infufions black; and a light admixture of the fpirit of falt armoniac gives all folutions of copper, or waters impregnated therewith, a lovely blue colour ; and aqua fortis a green one.

## S E C T. II.

## De acido minerali primario, © Salibus variis :

 Of the native mineral Acid, and the different Salts.WHOEVER obferves the natural conftitution of falts, efpecially thofe formed in open air, as nitre and vitriol; or confiders the operations of nature in Vulcano's and fulphur mines, will certainly allow the exiftence of a primary more fimple faline acid principle : which, according to the various bafes wherein it is lodged, conftitutes thofe various falts we obferve in the world; and which we fhall now divide, according to the different nature of their bafes, into the following claffes, viz.
$\mathrm{I}^{\text {. }}$. Such as are of a fimple terrene, or calcarious fix'd bafe.

$$
\text { 1.. M U R I A }\left\{\begin{array}{l}
\text { 1. Foffilis. } \\
\text { Rock falt. } \\
\text { 2. Marina. } \\
\text { Sea falt. }
\end{array} \quad \therefore \quad \begin{array}{l}
\text { 3. Fontana. } \\
\text { Spring water falt. }
\end{array}\right.
$$

Thefe are diftinguifhed by their grateful fubacid tafte, and the cubico-hexaedral figure of their cryftals. $2^{\circ}$. NITRUM $\left\{\begin{array}{l|l}\text { I. Humi tenue. } \\ \text { Native nitre. }\end{array} \left\lvert\, \begin{array}{l}\text { 2. Cryfalizatum. } \\ \text { Nitre, or falt petre. }\end{array}\right.\right.$
The firft of thefe falts is only ufed as a material in the manufacture of the latter, which is diftinguifhed by its bitterifh acrid tafte, and great coldnefs upon the palate ; its eafy folubility, its explofive quality when joined with a phlogiftic, and by the octaedral and pointed columnar form of its cryftals: the firf fpecies is the true

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## THENATURALHISTORY

native nitre, or falt petre ; the fecond, the factitious one, which is only the more acid and fticky parts of the other, engaged in a more fixed alkalious bafe, or matrix.

$$
3^{\circ} . \text { ALUMEN }\left\{\begin{array}{l|l}
\text { I. Calcarium romanum. } & \text { 2. Schificum. } \\
\text { Roman Allum. }
\end{array} \quad \begin{array}{l}
\text { Allum, or common allum. }
\end{array}\right.
$$

This falt is fufficiently characterifed by its agreeable ftiptic tafte, its foaming liquidity when pufhed by the fire, and by the octaedral form of its cryftals.

$$
4^{\circ} . \text { NATRUM }\left\{\begin{array}{c|c}
\text { 1. Foflie Egyptium, mu- } & \text { 2. Tartaricum foffile, cry/talis } \\
\text { ria accidens. } & \text { compreflis. } \\
\text { The Egyptian Natre. } & \text { Tartarian Natre. }
\end{array}\right.
$$

Though we are fatisfied of the exiftence of this falt as a native foffil, we are but little acquainted with its mines or hiftory. It is diftinguifhed by its alkalifent nature and the oblong compreffed form of its cryftals. The Egyptian fort has been introduced into the cabinets of the curious here, by the means of the Reverend Doctor Pocock; it feems difpofed in firata, and refembles the fea falt in tafte as well as appearance.

$$
\text { 5. SAL CA- }\left\{\begin{array}{l|c}
\text { 1. Epfonienfe. } \\
\text { Epfom falt. } \\
\text { 2. } \begin{array}{l}
\text { Norbonenfe. } \\
\text { French purging falt. }
\end{array} & \text { 3. e-magmate falis ma- } \\
\text { rini. } \\
\text { Common } \\
\text { falts. }
\end{array}\right.
$$

This falt, tho' a diftinct fort, and found natural in many parts of Europe, is feldom feen without a large admixture of fea falt, and fomething of the vitriolic: It is now chiefly obtained from the bittern of the former, and is diftinguifhed by its eafy folubility, and regenerative nature; when puihed by the fire, it fwells and foams like allum; and the refiduum mixed again with water, will in a fhort time reaffume its former cryfaline fhape and appearance.

## 6. BORAX $\left\{\left.\begin{array}{c|c}\text { I. Nativa fubviridisrudis. } \\ \text { Tinkal, or Tincar. }\end{array} \right\rvert\, \begin{array}{l}\text { 2. Purgata diaphana. } \\ \text { Borax or Borace. }\end{array}\right.$

This falt has been hitherto monopolized by a few people or focieties, who find it fo much their intereft to keep the knowledge of its fource and manufacture a fecret ; that we are to this day but little acquainted with either: It is diftinguifhed by its alkalifcency, difficult folution, flow fermentation when mixed with the ftronger acids, and the truncated hexaedral and columar form of its cryftals.

$$
7^{\circ} \cdot \text { AMONIACUM }\left\{\begin{array}{c|c}
\text { 1. Subvolatile nei }- \\
\text { trum off. } \\
\text { Salt amoniac. }
\end{array} \quad \begin{array}{c}
\text { 2. Florale five volatile alkalinum. } \\
\text { Native flowers of falt amoniac. }
\end{array}\right.
$$

This falt is found in both thefe ftates naturally ; and feems always to retain fomething of the difpofition peculiar to the animal kingdom; or to have gone through a deal of attrition and continued heat, to render it fo volatile. It is diftinguighed by its coldnefs and pungency upon the palate, its great volatility, and the branched form of its cryftals.

## $8^{\circ}$. HALCRIPTIUM $\left\{\begin{array}{l}\text { I. Furgax thermarum. } \\ \text { The falino-fulphureous falt of hot well-waters. }\end{array}\right.$

Though we are certain of the exiftence of this falt, and pretty well acquainted with its nature and manner of action; we are as yet unacquainted with its form, as its more fixed parts are the only that could be hitherto brought under a proper examination.

$$
\begin{array}{llllllll}
O & F & \mathrm{~A} & \mathrm{M} & \mathrm{I} & \mathrm{C} & \mathrm{~A} .
\end{array}
$$

II ${ }^{\circ}$. Such as have a metalic bafe, and are chiefly made up of metalic fubftances.

$$
\text { V IT RI O L U M }\left\{\begin{array}{c|c}
\text { 1. Ferri viride. } & \text { Green vitriol, or falt } \\
\text { of fteel. } & \begin{array}{l}
\text { 3. Album zinchi. } \\
\text { White vitriol. } \\
\text { 2. } \text { Ceruleum aris. } \\
\text { Blue and roman vitriol. }
\end{array}
\end{array} \begin{array}{c}
\text { Albidum plumbi. } \\
\text { Sugar of lead. } \\
\text { 5. Rubrum. }
\end{array}\right.
$$

Though thefe metallic falts go by the general name of vitriol ; they are extreamly different in their appearance, as well as nature, and properties: the firlt fort is diftinguifhed by the black colour it communicates to all the affringent infufions and juices of Vegetables. The fecond, by the blue colour its folution, or the waters impregnated with its falts or particles, do acquire, when mixed with any volatile falt. The third, by the whitenefs of its folution in aqua fortis; and the fourth, by the milky colour it communicates to common water. I have feen a fpecimen of the red fort fome years ago in the repofitory of the royal garden at Paris, but do not remember of what peculiar matrix it was thought to be.

Altho' thefe metals be the common matrix's of fuch falts; they often vary, and you'll fometimes find the white to contain a quantity of tin or copper; while the blue is mixed with fteel, or the green with either: The cryftals of the firft fort are of an octaedral form ; thofe of the blue, decaedral ; and the white, columnar and pointed.

## S E C T. III.

## De phlogifo minerali, Go bituminibus variis.

## Of the mineral Phlogiftic, and the various bituminous Subftances.

THAT there is a principle of this kind in every province of nature, is evidently feen by the fat of animals, the oil of vegetables, and our fubterraneous fires : and hence, I think it is apparent, that the following bituminous fubftances muft neceffarily proceed from fuch a fource, varioufly combined with other fubftances; but more or lefs engaged, according to the nature and difpofition of the admixture. We have divided the productions of this clafs under the moft natural and convenient genera, and ranged them in the following order, viz.
$I^{\text {e }}$. Such as have the leaft admixture of heterogeneous particles, and fill retain their native fluidity in fome degree.

## $1^{\circ}$. NAPHTA <br> $\left\{\begin{array}{l}\text { 1. levis pellucida, aquea vel citrina. } \\ \text { Rock oil }\end{array}\right.$

This is found in great abundance both in Egypt and Perfia; it is naturally light and tranfparent, but of a pale or citron colour.
> 1. Fufcum Barbadienfe.

> Barbadoes tar.
> 2. Obfcure bruneum Scotice E Dalecarlice.

> Scotch tar, Eic.
> 3. Tenax nigrum.

> Foffil pitch.

Thefe phlogiftic fubftances are much of a kind with the foregoing, but greatly charged with terrene, or other hetrogeneous particles: They are generally opake, of a dirty appearance, and moderately fluid.

II ${ }^{\circ}$. Such as we find in a folid form, with a large admixture of faline particles, and a moderate portion of earth.


Though I am fatisfied that this body has been once a fofter vegetable fubftance, hardened by time, and a long continuance under ground; and, only in fucceffion of years, fo remarkably impregnated with the mineral acid: I have been induced to give it a place among the native Foffils, on account of its peculiar electrical quality, and the concreated form of its falts; as well as its fingular nature, and common bed.


Thefe two genera of bitumens, though equally impregnated with falts, are very different both in nature and appearance. The amber is diftinguifhed by its agreeable fmell, electric quality, fubacid grateful volatile falt, and more difficult folubility. The fulphur is of another nature, flows with a more eafy heat, and fublimates into flowers when pufhed ; but when expofed to the more vigorous action of the fire, yields a vaft quantity (a) of an acrid or corrofive acid.

The native flowers differ but litdle from thofe obtained by art; they are, however, more pure and fhining, and found in the natural ftate about moft hot baths, where the heat is any thing confiderable near the furface : they are formed into hollow cones, and appear, in fome meafure, as if made up of fmall cryftals, irregularly difpofed in the mafs, the exact refemblance of a fugar loaf, but of a more hining luftre and yellow colour.

III ${ }^{\circ}$. Such as have a more abundant admixture of terrene particles, with few falts; and are found in a folid form.

$$
\text { I }^{\circ} . \text { AMBRA } \quad\left\{\begin{array}{l}
\text { 1. Grifea odorata, colore uniformi. } \\
\text { Ambergreafe. } \\
\text { 2. Subfufca, levis et variegata. } \\
\text { Englifh amber, or brown bitumen. }
\end{array}\right.
$$

Mr. Baker has a piece of this laft fubftance among his curious collection of Foffils: Both the fmell and appearance oblige me to range, it in this clafs.

$$
2^{\circ} . \text { ASPHALTUM }\left\{\begin{array}{l}
\text { I. } \begin{array}{l}
\text { Subfriabile atrim. } \\
\text { Jew's Pitch. }
\end{array}
\end{array}\right.
$$

This is a light, folid, inflammable fubftance; of a black colour, and fhining when frefh broke : It has a faint fmell, and breaks with equal eafe in all directions; but of no apparent grain. It melts very eafily, and is a principal ingredient in all the varnifhes now ufed by the engravers.

$$
\left\{\begin{array}{l}
\text { 1. Schifi nitens friabilis atra. } \\
\text { Coal. } \\
\text { 2. Solida nigra nuda. } \\
\text { Jett. } \\
\text { 3. Marmoris fatidi. }
\end{array}\right.
$$

(a) Sulphur yields about fourteen ounces in the pound.

$$
\text { O F J A M A I C A. } 4 \text { I }
$$

Thefe are inflamable fubftances of a coarfer fort; they are generally heavy, black, and folid, with a very large admixture of earth, and a more grofs fulphureous matter: The Jett feems to have fomething of a woody grain, and is generally found in detached meffes; but is fo like the other fpecies, that I do not think proper to feparate it from them; though they are always more fhining, and found in continued ftrata.

IV ${ }^{\circ}$. Such as have a large admixture of earth, with fome micaceus and metallic particles, and a great quantity of mundick, and other volatile acrid parts.

$$
I^{\circ} . \text { AURIPIGMENTUM }\left\{\begin{array}{l}
\text { 1. Subnudum arfenicale micaceum, aureo Splendens, five } \\
\text { Auripigmentum off. } \\
\text { Common orpiment. } \\
\text { 2. Cinereo-carulefcens, micans. } \\
\text { Blue orpiment. }
\end{array}\right.
$$

The orpiment is a glittering inflamable fubfance, that has fomething of the appearance of mica : it is foluble in oil, and fuffible in a moderate heat; but when pufhed by a ftrong fire, yields a great quantity of acrid volatile particles, with a difagreeable fharp fmell.

## $2^{\circ}$. ZARNICUM

1. Equale nudum fubflavefcens. Yellow Sandarack.
2. Album fragmentis planis. White Sandarack.
(3. Album fragmentis convexis.

The Sandarack is an inflamable Foffil fubftance of a plain uniform ftructure, and compact texture : It is foluble in oil, and burns with a whitifh flame, and noxious fmell.

## S E C T. IV.

## De terra metalica, $\mathcal{O}^{\circ}$ mineris variis :

## Of the metalic Earth, and various mineral Subftances.

THA T there is a principle of this kind in nature, and that very different from the other forts of earth (of which we are refolved to give fome account hereafter), is evident from the refult of thofe mineral fubftances that are daily tortured by the fire, and the acid (a); as well as from their apparent qualities in a more perfect ftate. But, as it is feldom found without a large admixture of the phlogiftic, I thought it moft natural to place the productions of this clafs immediately after the foregoing; and to difpofe them fo, that thofe which partake moft of that principle, may ftand foremoft in the clafs.

The following feems to be the moft natural diftribution of the productions of this kind, viz.
$I^{\circ}$. Such as have a large admixture of fulphureous particles, with fome mundick or orpiment, connected in a grofs metalic, and clayey bafe; having all the appearance of a metalic ore, but not productive of any.

$$
\text { Io. PY R I T E S } \quad \underset{\text { Pyrite. }}{ } \quad\left\{\begin{array}{ll}
\text { 1. } & \text { Scintillans ferreus amorpbos. } \\
\text { 2. } & \text { Ferreo cupreus matrice deliquef centi. } \\
\text { 3. } & \text { Ferreo cupreus matrice vitrefcenti. } \\
4 . & \text { Ferreo cupreus matrice apyra. }
\end{array}\right. \text { L. S. N. }
$$

(a) There bodies in general, however their texture and compofition may feem altered by the fire, of the acid ; are eafily reftored to their primitive flates by the addition of a phlogiftick, and a due degree of firc.

## 42 <br> THENATURALHISTORY

The Pyrite is a mineral fubftance of a moderately fixt nature : it is inflamable in fome degree, but not fufible; of an irregular form, foliaceous texture, and fparkling appearance. It is found in large irregular maffes, and naturally forms whole ftrata.

$$
\begin{aligned}
& 2^{\circ} . \text { MARCHASITES } \\
& \text { Marchafite. }
\end{aligned}\left\{\begin{array}{l}
\text { 1. Tetraedicus, vel octaedricus. } \\
\text { 2. Hexaedricus, vel dodecaedricus. } \\
\text { 3. Hemippericus, vel globofus. }
\end{array}\right.
$$

The Marchafite is a mineral fubftance of a fixt, terrene, and metalic nature, with an admixture of fulphureous particles: it is inflamable in. fome degree, but not fufible; and generally found fhooting into regular forms, putting on the appearance of opake cryftals.

II ${ }^{\circ}$. Such as have a large admixture of the phlogiftic connected in a more pure metalic bafe; and are inflamable in fome degree as well as fufible, but not malleable.
> 1. Cryftalli-farme.
> $1^{\circ}$. COBALTUM
> Cobalt, and its preparations commonly called arrenic.
> 2. Schifti lenticularis atri.
> 3. Rude fubgrifeum, granulis fubcaruleffentibus micans. Unde
> $1^{\circ}$. Arfenicum nudum album; $2^{\circ}$. Nudum flavum; $3^{\circ}$. Nudum rufefcens.

> The red, white, and yellow arfenic.

This metalic fubftance is generally hard, and of a blackifh-gray colour; it is fufible, and naturally volatile when pufhed by a ftrong fire: its glafs is blue, its folution in aqua fortis, redifh; and its regulus of a teffulated appearance, and dark colour : it is the true ore of our arfenic's, which owe their different colours to the different methods of preparing them.


Antimony is generally hard, and very heavy in its natural ftate : it is diftinguifhed by the ftriated texture, and the filver colour of its regulus, which frequently holds in the ore: it fhews a good deal of volatility when puthed by a ftrong fire, and its more fixt parts turn into a purple glafs. Its folution in aqua regia is yellow, and the mafs, when pufhed by fire, grows red before it melts.

## $3^{\circ}$. BISMUTUM $\{$ I. Nudum. Bijmut.

Bifmut is known by its whitifh pale colour, and the teffulated appearance of its regulus. Its glafs is brown; its folution in aqua fortis red; and the mafs commonly kindles before it melts in the fire.

$$
4^{\circ} \text {. Z IN CU M } \text { Zinck. }\left\{\left.\begin{array}{l}
\text { 1. Canum galina intertextum. } \\
\text { 2. Micaceum fubteffulatum nigrum. } \\
\text { 3. Micaceum rubicundum inquinans. } \\
\text { 4. Terrefre. }
\end{array} \right\rvert\,\right. \text { L. S. N. }
$$

This mineral fubftance is well known by the bluilh-white colour of its metal ; it is moderately hard, and malleable in a fmall degree, but apt to crack : its folution in

$$
\begin{array}{lllllll}
\text { O F } & \mathrm{F} & \mathrm{~J} & \mathrm{M} & \text { A } & \text { C A. } & \text { A }
\end{array}
$$

aqua fortis is white ; and the mafs melts before it grows red in the fire : its fumes are white and fleecy.

III ${ }^{\circ}$. Such as have a very large.admixture of the phlogiftic, intimately blended with a more pure metallic bafe: and are, both fufible and malleable.

Iron is eafily known by its gray colour, malleability, hardnefs and elafticity. It bears a fine polifh, though apt to ruft; and gives fire freely with all the harder productions of the argillaceous kind: its ores are eafily diftinguihed by their ocre, and the black tincture they communicate to all the aftringent infufions or juices of vegetables: the metal grows red before it melts in the fire.


Tin is known by its whitenefs, lightnefs, malleability and flexibility: it is fomewhat fonorous, and not apt to ruft ; its glafs and folution in aqua regia are both yellow.


Copper is generally of a lively brown colour, and a fonorous cohefive nature: it is eafily diftinguifhed in every ftate, by the blue tincture it communicates to all volatile fpirits; its glafs and folution in aqua fortis are both green.
$4^{\circ}$. PLUMBUM $\quad\left\{\left.\begin{array}{l}\text { 1. Nudum. } \\ \text { 2. Submalleabile. } \\ \text { 3. Nitri Spatof utrinque truncati. } \\ \text { 4. Particulis cubicis. } \\ \text { 5. Mafulis cubicis nigris. } \\ \text { 6. Informe particulis occultis. } \\ \text { 7. Striatum \& fublamellatum, nitens. }\end{array} \right\rvert\,\right.$ L. S. N.

Lead is eafily known by its livid colour, malleability, foftnefs, and the deadnefs of its found: its glafs is yellow, and folution in aqua fortis aqueous.
$I V^{\circ}$. Such as are of a more uniform texture, and perfect nature; and not fubject to ruft, or to be confumed by fire : but if altered, in fome degree, by acids or a more intenfe heat, may be foon reftored to their natural fates without any fenfible lofs.

## $I^{\circ}$. ARGENTUM Silver.

$\left\{\begin{array}{l}\text { 1. Nudum varium. } \\ \text { 2. Subvitreum, malleabile. } \\ \text { 3. Diapbanum lamellofum. } \\ \text { 4. Albidum informe fragile. } \\ \text { 5. Rubefcens polyedron glandulofum. } \\ \text { 6. Obfcurum. }\end{array} \quad\right.$ L. S. N.

This metal is eafily known by its whitenefs, weight, malleability, ductility, and found. It is not apt to ruft, or wafte in the fire : its glafs is redifh, its ruft black, and its folution in aqua fortis white.


Quickfilver is eafily known by its weight, volatility, fluidity, and filver colour : its folution is white, and its calx red ; and though it mixes eafily, and intimately with many fubftances; after it is apparently loft in them, a little fire, and fometimes oil, will reftore it to its native form.

## $3^{\circ}$. PL A TINA $\quad$ 1. Subgrifea friabilis. <br> Platine. <br> \{ The grey platine ore

The ore of this metal is of a dark gray colour, and friable ; it is of a fixt nature, and not fubject to ruft, or to be deftroyed by fire : it blends very intimately with all other metals, efpecially with gold; and is next to it in fpecifick weight. It is diffolved only in aqua regia.

$$
4^{\circ} . \text { A U R U M } \quad\left\{\begin{array}{l}
\text { 1. Nudum petra. } \\
\text { 2. Nudum miner.e. } \\
3 . \text { Nudum agregati. }
\end{array} \quad\right. \text { L.S.N. }
$$

Gold is the heavieft, and moft ductile metal we have yet known; it is naturally of a fine yellow colour, foft, malleable, and not fonorous, nor apt to ruft, or wafte in the fire: its folution in aqua regia (the only menftruum that diffolves it) is yellow, and its glafs violet. It is remarkable, that, 'on putting fome atber into a phial with the folution of this metal, and fhaking the mixture ; the gold quits the heavy acid menfruum, and incorporates with the lighter fluid at the top.

S E C T. V.

## De terra fimplici for folibus terreis.

Of fimple Earth, and the more compound Bodies of a terrene Nature.

THIS has been generally thought to be the firf principle of all bodies, but how juftly I will not undertake to determine: It will be fufficient in this place to remark, that many fubftances of this appearance are now obferved in the world ; and that thefe, upon a ftrict examination, are found not only different in appearance, but in qualities alfo. Nor is it lefs remarkable, that the moft compound bodies obferved in the compofition of our globe, do retain the fame nature and qualities with thofe more fimple fubftances; for which reafon we fhall now difpofe them varioufly with the different matrixes, from whence their general properties feem to fhew them derived: I muft however remark, that this kind alone appears to be the chief, and almoft the only pabulum, or fixed principle of vegetable, as well as animal fubftances, which is fufficiently apparent from the final reduction of both.

What we diftinguifh here by the name of fimple earth, in its moft natural ftates, feems to be compofed of fmall, fmooth particles flightly coherent; and readily difunited in water. It does not ferment with acids in any ftate, and generally grows lefs cohefive by fire. I have difpofed the moft fimple productions of this kind in the two following claffes, viz.
$I^{2}$ Such as are merely foffil, and have not yet gone through any change.
$\left\{\begin{array}{l}\text { 1. Fufca fimplex. } \\ \text { Mould. } \\ \text { 2. Subcrocea fimplex. } \\ \text { Red earth. } \\ \text { 3. Flava fimplex. } \\ \text { Yellow earth. }\end{array}\right.$
4. Subpinguis.
Bole, and Fullers earth.
5. Scbiftica.

Barren, or fchiftic earth.
6. Variè mixta.

Loam.
$\mathrm{II}^{\text {}}$. Such as have undergone fome change, and ftill retain fomething of the nature and difpofition of the productions from which they are returned. Thefe are generally of a more open and broken texture, and of a more pure nature when thoroughly reduced, and alone.


The productions of this nature that approach the neareft to the fimple ftate, feem to be thofe that are tranfparent, or nearly fo; and may be confidered as the effect of a particular fluor of this kind, which, for the prefent we fhall call fluor pellucidus terreffis : and that fuch a thing is very apparent in nature, and the cement of a number of bodies, is evident from the peculiar qualities of the whole clafs, fo apparent in many of them, the productions of which are obferved to elude the action of acids in every ftate; and never to give fire with fteel, or to grow harder in the fire.

The productions of this clafs are.

## $1^{\circ}$. TALCUM Talk.

 Izing glafs.2. Diaphainum lamellis crafioribus rbombeis. Scaliola.
3. Particulis ad angulum acutum friatis. 4. Fibris radiatis è centro radiantibus.

L. S. N.

Talk is generally tranfparent, and though compofed of many laminæ, yield an eary paffage to the rays of light: the productions of this kind are always fiffile into horizontal and tranfparent flakes; and bear the action of the acid in every ffate with eafe, but yield more or lefs, though never perfectly to the fire.

$$
\begin{aligned}
& 2^{\circ} . \text { GYPSUM } \\
& \text { Gypfe. }
\end{aligned}\left\{\begin{array}{l}
\text { 1. Pellucidum decaedro rbombeum. } \\
\text { 2. Pellucidum triquetrum, ad fummum pyramidatum. } \\
3 . \text { Pellucidum pentagonum, ad fummum pyramidatun. }
\end{array}\right.
$$

The Gypfe is not only tranfparent, but is commonly found of fome regular form, approaching upon the rhomboide. It yields readily to the fire, but does not ferment with acids in any ftate.

There are other productions of this nature that are fill more compound and opake; and though, generally, of no firm cohefion, feldom yield to the fire, but never to the acid when pure and alone : it is not, however, uncommon to find them mixed with a foreign fluor, or other particles on which you may obferve the fire, or the acid, to act occafionally. I fhall range the fecies of this clafs in the following order, viz.

1. Particulis impalpabilibus argenteis.
x MICA
x MICA
Mica.
Mica.
2. Particulis impalpabilibus aureits.
3. Particulis fquamofis fparfis.
4. Particulis Jubprifimaticisintercuffantibus.
L. S. N.

The mica is a terrene fubftance of a fparkling appearance, and feemingly compofed of thin, fmooth, fubdiaphane and fquamofe particles: the productions of this kind are feldom of any firm texture, though they bear the action of the fire and the acid with equal eafe.

$$
\begin{gather*}
2^{\circ} \text {. ASBESTUS. } \\
\text { Afoeflos. }
\end{gather*} \quad\left\{\begin{array}{l}
\text { I. Solidiufculus fifilis. } \\
\text { 2. Solidiufculus flexilis. } \\
3 . \text { Membranaceus flexitis. }
\end{array}\right.
$$

The Afbeftus is of a true terrene nature, and a fibrous interwoven texture; it bears the action of both the fire and the acid with equal eafe.


The Amianth is diftinguifhed from the foregoing only by the fimple longitudinal difpofition of its fibres: it bears the action of both the fire and the acid equally.

$$
4^{\circ} \cdot \text { TRICHERIUM }\left\{\begin{array}{l}
\text { 1. } . \text { Fibris fubdiaphanis obliquè difpofitis, } \\
\text { 2. Fibris longitudinalibus fubdiaphanis. } \\
3 . \text { Fibris radiatis fubdiaphanis. }
\end{array}\right.
$$

$$
O \quad F \quad J \quad A \quad M \quad A \quad I \quad C \quad A .
$$

The Tricherium refembles the Amiantus both in the difpofition and appearance of its fibres, or general texture; but it yields eafily to the fire, though never to the acid.

$$
5^{\circ} \text {. SCHISTUS } \begin{aligned}
& \text { The flate, bone, }
\end{aligned} \begin{aligned}
& \text { 1. Clangofus è nigro carulefcens. } \\
& \text { 2. Ater friptura varia. } \\
& \text { and dead fone. Friabilits nigricans. } \\
& \text { 4. Cinereus folidiufculus fcriptura cana. } \\
& \text { 5. Friabilis fraxmentis angulatis fubquadratis. } \\
& \text { 6. Subcinereus, © fubcaruleus, varius. } \\
& \text { The Hone. }
\end{aligned}
$$

The Scbifus is a ftone of a lamellated ftructure, fmooth grain, and opake appearance; it is generally found in flakes horizontally difpofed, but is fometimes divided perpendicularly alfo; and is frequently connected by a foreign fluor.

> S E C T. VI.

De argillâ 80 argillaceis. Of Clay, and clayey Subftances.

TH E ftickey nature of the clay does fufficiently fhew it a peculiar kind, and intirely diftinct from both the foregoing and the following: it is naturally ftiff and vifcid, nor does it diffolve in water but with difficulty: it hardens in the fire, and when pufhed with a ftrong heat, turns into a ftony or vitrefcent mafs. The productions of this clafs, when concreted into a folid form, give fire freely with fteel, and generally bear a fine polifh; but are never injured either by the acid, or a moderate degree of heat.

Its moft diftinguifhed kinds are the


This, like the foregoing, appears to have its variois degrees of mixture as well as compofition; and the molt fimple among them feem to be thofe that fhew themfelves in a tranfparent folid form, which we likewife conclude to be the effect of a peculiar tranfparent fluor of this nature: and that fuch a fubftance exifts every where in our globe, is evident from the various appearance of cryftals and flint, as well as from the different ftrata in pebbles, \&c.
The vitrefcent quality of thofe productions, probably, proceeds from the plaftick nature of the argilla; and the igniferous, from their native hardnefs.

The principal productions of this clafs are,

|  | 1. Conico cylindracea utrinque attenuata. Needle crytal. <br> 2. Columnaris utrinque pyramidata. <br> 3. Columnaris ad fummum tyramidata. |
| :---: | :---: |
| I ${ }^{\circ}$ CRYSTALLUS | 4. Utrinque pyramidata columna nulla predita. |
| Cryfal. | 5. Ad fummum pyramidata columnâ nulláa predito. <br> 6. Sub-rotunda, Juperficie Jcabro. <br> Pebble cryftal. <br> 7. Informis rupefiris aquea. <br> Rock cryftal. |

## 48 THENATURALHISTORY

The productions of this kind are fo apt to vary, more or lefs, from the common forms, that they have been divided almoft into as many Genus's as there are diftinct Species, and far beyond what nature feems to require. They are eafily known by their hardnefs, tranfparency, and regular forms ; and obferved to bear the action of the acid with eafe ; and to elude the force of moderate fires.


Thefe tranfparent and figured ftones are eafily known by their fuperior hardnefs and luftre : they elude the force of the fire and the acid with equal eafe, tho the laft fort is fometimes obferved to lofe its colour when pufhed by the fire.
$3^{\circ}$. TOPAZIUS
Topaz, \&c.
$\begin{cases}\text { 1. } & \text { Flavuis. } \\ \text { The topaz. } \\ \text { 2. } & \text { Fulvus. } \\ \text { 3. } & \text { The hyacinth. } \\ \text { 3. } & \text { Ruber. } \\ \text { 4. } & \text { Pur garnet. } \\ \text { Phe } \\ \text { The amethif. }\end{cases}$
5. Viridis.

The fmaragdine.
6. E viridi caruleus.

The beryl, or feagreen.
7. Niger.

The morion.

The productions of this kind approach very near the diamonds, both in beauty and luftre; and elude the force of acids with equal eafe; but do not bear the action of the fire fo well, though they ftill retain the general properties of the clafs.

> 1. Arenaceum vitrariorum. Cryftal fand.
> 2. Diapbanum albidum. Quartz-ftones.
> 3. Diapbanum parafiticum albidum. Quartz.

The Quartz is generally very hard and tranfparent; but not fo regular in its form, or of any beautiful luftre; it is of a vitrefcent nature ; gives fire with fteel, and bears the action of the acid with eafe.

The more compound and opake bodies of this nature come next in order, and are remarkable for their fuperior hardnefs and fine grain: They feem to be formed chiefly of the vitrefcent fluor, debafed by a lefs agitated or divided clay.

We fhall difpofe the productions of this clafs under the following Genera, viz.

$$
\text { Io: ACHATES }\left\{\begin{array}{l}
\text { 1. Subdiaphanus albidus minute undulatus. } \\
\text { 2. Sudiaphanus varie coloratus, cruftatus. } \\
\text { Agath. } \\
\text { 3. Subdiapbanus exalbidus. } \\
\text { A cornelian. }
\end{array}\right.
$$



Thefe fones are tranfparent in fome degree; of a fmooth fhining furface when polifhed; and generally clouded with different colours difpofed varioufly in the mafs: They anfwer all the qualities peculiar to the clafs with regard to the fteel, the fire and the acid.
$2^{\circ}$. SILEX $\quad\left\{\begin{array}{l}\text { 1. Unicolor albidust } \\ \text { White flint, or fire-ftone. } \\ \text { 2. } \begin{array}{l}\text { Subfufcus unicolar. } \\ \text { Flint. } \\ \text { 3. Unicolor ruber. } \\ \text { Blood-ftone. } \\ \text { 4. Unicolor viridis. } \\ \text { The green blood-ftone. } \\ \text { 5. Stratis variis. }\end{array} \text {. }\end{array}\right.$

Flint is commonly opake; but when reduced into thin plates, it becomes more or lefs tranfparent: it is generally of a fine grain, and uniform colour ; but is fometimes found divided by foreigh fepta. It is obferved of all fizes, and remarkable for its vitrefcency.

## $3^{\circ}$. SCRUPUS Pebble. $\left\{\begin{array}{l}\text { 1. Arenaceus nitens, maffulis fubrotundis, } \\ \text { 2. Varie ot pulcherrime nebulato-variegatus. } \\ \text { The Egyptian and Bobemian pebles. }\end{array}\right.$

The productions of this kind, are generally found in fmall detached maffes; and feem to be principally compofed of the vitrefcent fluor debafed with a finer clay, and fome metallic or terrene particles: they are of no determined figure or tegular ftructure, but may be eafily known by their fine grain, fmooth polifh, and elegant variety of colours difpofed in a clouded uneven form. They anfwer all the characters peculiar to this clafs.

$$
4^{\circ} \text {. PORPHIRIUM }\left\{\begin{array}{l}
\text { 1. Columnare nigrum Hibernie. } \\
\text { The Giant's caufeway fone. } \\
\text { 2. Viride maculis minoribus albis variegatum. } \\
\text { The green porphiry. } \\
\text { 3. Rubellum maculis minoribus albis variegatum. } \\
\text { The red porphiry. } \\
\text { 4. Subcinereum maculis majoribus difinctis variegatum. } \\
\text { The plumb pudding tone. }
\end{array}\right.
$$

Porphiry is eafily diftinguifhed by its great hardnefs, and uniform though fpotted colour; it is found in large maffee, bears a fine polifh, and anfwers all the other characters natural to the clafs.

$5^{\circ}$. LYDIUM<br>Touch-fone.

$$
\left\{\begin{array}{l}
\text { 1. Subplumbeum, vel nigric ans. } \\
\text { The touch-otone. } \\
\text { 2. Subgrifeum, vel virefcens. } \\
\text { The thunderbolt-ftone. } \\
\text { 3. Atro-caruleum. } \\
\text { 4. Subceruleum Septis divijum. }
\end{array}\right.
$$

The Touch-ftone is not of fo fmooth a grain, nor capable of fo fine a polifh as either the peble or the porphiry; nor does it yet tun into an open rough grain: it is very hard, gives fire freely with fteel, and eludes the action of the acid, and the fire with eafe.
$6^{\circ} . \mathrm{COS}$
Grain-fone. $\left\{\begin{array}{l}\text { 1. Solidiufcula, particulis pellucidis arenofis aqualibus. } \\ \text { 2. Solidiufcula, particulis arenofis quartzofs inaqualious. } \\ \text { 3. Solidiufcula borizontalis, fuperficie undata, particulis } \\ \text { majoribus arenofis. } \\ \text { Mill-ftone. } \\ \text { 4. Solidiufcula porofa aquam tranfmittens. } \\ \text { Water-ftone. } \\ \text { 5. } \begin{array}{l}\text { Friabilis, particulis glerofis. } \\ \text { Grinding-ftones. }\end{array}\end{array}\right.$

The ftones of this kind are eafily known by their hardnefs and granulated appearance : they give fire with fteel, and elude the action of the acid with eafe; nor do they ever fail to anfwer the characters of the clafs in regard to the fire, though their more open texture expofes them to its augmented action.

$$
\mathrm{S} \quad \mathrm{C} \quad \mathrm{~T} \quad \text { VII }
$$

## De margâ bo margaceis.

Of Marl, and the more compound Productions of a marly Nature.

WHOEVER has oblerved the eafe wherewith the different productions of this clafs, yield to both the acid and the fire ; and how readily they are, in fome ftates, difunited by water; will certainly allow them to be very different in their nature from thofe of the other claffes. The fubftances of this kind are feldom of a very ftrong texture, though frequently of a fine pore and fmooth grain : they ferment with acids in every ftate, and feem to be the bafe of moft of the terrene falts, but never do give fire with fteel.

The moft fimple Bodies of this fort, are
$\mathbf{I}^{\circ}$. Such as have not yet gone through any change; but remain in that lefs cohefive form, in which they are naturally obferved in the bowels of the earth.


The Marl, like the earth and clay, appears to have its various degrees of admixture and coropofition; and thefe ftill feem to approach the neareft to the fiumple ftate that fhew themfelves in a tranfparent form, or nearly fo; and may be confidered as the more immediate produce of fome fluor of this nature, which we fhall now call fluor pellucidus calcarius; the real exiftence of which is, I think, evident from the various flates and appearances of many productions of this fort, that are daily met with

## $\begin{array}{llll}\mathbf{O} & \mathrm{F} & \mathrm{J} & \mathrm{M} \\ \mathrm{A} & \mathrm{I} & \mathrm{C} & \text {. }\end{array}$

in every part of the world ; as well as from the admixtures, fepta, and cements of the fame kind, frequently obferved in many of the other productions.

The following genus feem to comprize the principal appearances of this kind.

| SPATUM Spate, or Spar | 1. Album diaphanum particulis rbombeis comprefis. <br> 2. Pellucidum varie cry/tallizatum. <br> 3. Pellucidum objecta duplicans. Iceland cryftal. <br> 4. Striatum trifariam imbricatum. <br> 5. Hemi/pbericum. <br> 6. Micaceum. <br> 7. Lapideum phofphorans fubpellucidum. <br> 8. Gypfeum angulare truncatum. <br> 9. Gypfeium cuneiforme fubpellucidum. <br> 10. Rupeftre fubpellucidum © fubcryfallizatum. |
| :---: | :---: |

The Spar is always tranfparent, and commonly found thooting into regular figures of an oblong, rhomboidal, or cubical form, which always divide and fubdivide into fmaller pieces of the fame figure before they yield intirely to the fire. It is mof frequently found in the fiffures of rocks, and then is chiefly compofed of rhomboidal fragments clofely cemented together. But it is often obferved in large maffes, and fometimes forming whole frata; or fhooting into regular cryftalline figures of a fometimes forming whole frata; or hooting into regular cryitaline figures of a
pointed or pyramidical form : it is eafily known by its traniparency, and the crackling noife that attends its feparation in the fire; and is obferved to yield eafily to all acids of force.

The more compound fubftances of this nature are very numerous; and always an-
wer the peculiar character of the matrix from whence we fuppofe them originally
The more compound fubftances of this nature are very numerous; and always an-
fwer the peculiar character of the matrix from whence we fuppofe them originally derived.

The moft noted genus's of the kind are,

$$
\text { Io.STALACTITES }\left\{\begin{array}{l}
\text { 1. Cretaceus cruftatus. } \\
\text { The ftalagmite. } \\
\text { 2. Marmoreus tunicato-cruftaceus apice nitrofo. } \\
\text { The Stalactite. } \\
\text { 3. Marmoreus ramoftrs. } \\
\text { 4. Marmoreus albidus varie fplendens. } \\
\text { 5. Subdiapbanus marmoreus. } \\
\text { 6. Subfufcus glabertunica cretacea obduEtuus. }
\end{array}\right.
$$

                                    1. Album diaphanum particulis rbombeis comprefis.
    2. Pellucidum varie cryfallizatum.
3. Pellucidum objecta duplicans. Iceland cryftal.
4. Striatum trifariam imbricatum.
5. Misporiam.
6. Lapideum phofphorans jubpellucidum.
7. Gypfeum angulare truncatum.
8. Gypfeum cuneiforme fubpellucidum.
9. Rupeftre fubpellucidum © fubcryfallizatum.

The Stalactite feems to be but a meer foiarry, or felenetic matter, varioully debafed with a ief agitated marly fubtance: it is generally of a glittering appearance, and many of the fpecies take a fine polifh; but all the forts yield with great eafe to both the fire and the acid.


## $2^{\circ}$. MARMOR Marble. <br> \{4. Concaceum figuris variis intertextum. <br> 5. Nigrum albo \& rubello variegatum. The Kilkenny marble.

The marble is a ftone of great beauty, and fine grain; bears a good polifh, and appears with a brightnefs fuperior to moft of the other productions of the clafs: it is found in large maffes feemingly compofed of fmall feparate concretions of various colours and forms, mixed, as it were in a folution of felenitic matter, which always appears more or lefs tranfparent about them. Its texture is deftroyed equally both by the fire and the acid.

$$
3^{\circ} . \text { CALCITARIUM }\left\{\begin{array}{l}
\text { 1. Rufefcens, felenitide friatum. } \\
\text { 2. } \begin{array}{l}
\text { LaEteum, particulis fere impalpabilibus. } \\
\text { Oamaica marble. } \\
\text { J. }
\end{array} \text { Cinereum © fubgrifeum rude ; particulis grofis. }
\end{array}\right.
$$

Lime-ftones are found in great abundance in moft countries; and feem to keep a medium between the marble and the grain or free-ftones. They are commonly impregnated much with fmall felenetic cryftals, and eafily known by their more or lefs thining furfaces, and the eafe with which they yield to both the acid and the fire.

$$
4^{\circ} \cdot \text { SIMPLEXIA }
$$

The free-ftone is generally of a plain uniform ftructure, and granulated texture : it fplits with equal facility in all directions, and is very eafily broke when firf taken out of its native bed, but hardens foon in the more open air ; it yields equally to both the fire and the acid.

## S E C T. VIII.

De productionibus nonnullis prioribus non proprie fubjiciendis. Of different productions which can't be fo conveniently placed under the foregoing Claffes or Genera.

WE difpofe the more mixed and uncertain productions of the mineral kingdom in this clafs: for the frequent appearance of them in collections as well as in the courfe of nature, would not admit me to pafs them over in filence; nor their uncertain difpofitions, forms and mixtures, allow that they fhould be ranged among the foregoing.

We fhall difpofe them in the following order, viz.

$$
\text { I. PUMEXX } \underset{\text { Pummy. }}{\text { P. }}\left\{\begin{array}{l}
\text { 1. Plumbagineus vulcaniarum. } \\
\text { 2. Pyrite cinereus. Pumax off. } \\
\text { 3. Varius mineralium. } \\
\text { 4. Ater vegetabilium. }
\end{array}\right.
$$

The different forts of pumice are only the productions of fire; and conftituted of the fmaller particles of more fixed terrene bodies; agitated by heat, and raifed with the fumes, and other more volatile particles, with which they might have been linked or cónnected.

## $2{ }^{\circ}$. TOPHUS <br> 1. Tbermarum. <br> 2. Lebetpum. <br> 3. Aniwalis valius. <br> Animal concretions.

There are mere calcarions concretions cormected together by heat, ath the interpofition of fome flimy matter.


Under this antient appellation, we difpofe all thofe tunicated maffes fo much noticed in the world, whether whole, or hollow ; br whether flled with a loofe nucleus of any denomination, or made up of contiguous, or feparate ftrata.
40 ARGIELARIA \{ I. Varias

The Argillaria is a meer clayey mafs intermixed with gravel, or finaller pebles; and hardened into the confiftence of a fofter fone by the continued heat of the fun, and frequent moifture: Thefe, when once concreted, hold firtoly together, and form very ufeful bars to many ports, and rapid rivers.

$$
5^{\circ} \cdot \underset{\text { Gravel. }}{\mathrm{SABULUM}}\left\{\begin{array}{l}
\text { 1, Varium. }
\end{array}\right.
$$

This is only a coarfer powder, compoled of the fragments of all the foregoing fabftances s which takes its appellation from and puts on the appearance of, the moft predominant fort.

```
60.ARENA {I.Varia.
```

This appelfation has been genefally givens to that fpecies of fandy quartz commonly ufed in the manufacture of glafs; but here we have applied it to the more minute fragments of the foregoing fubftances; which, like the gravel, takes its fpecific denomination from the-moft predominant fort: But when all the particles feem to be of one kind, we range them with the other productions of the fame nature; by which means we have, in this atangement, reduced the fand to the quartz; the Norfolk fand, to the peble; and the black fand to the iron, $E^{\circ} c$.


# C H A P. II. Of the native Foffils of J a maica. 

## S E C T. I. <br> Of Waters.

THOU G H this Ifland in general be very mountainous, and every where railed above the level of the fea; no part of the world can be better fupplied with water : but it is not reafonable to expect that it fhould be often pure, where the action of the fun is fo great; and the foil, in every part, impregnated with faline, or metalic fubftances.

I hall divide the waters of this I Iand in general, into the following claffes, viz.
$I^{0}$. Such as are charged more or lefs with terrene, or calcarious particles. Of this fort I find moft of the fpring and well waters, efpecially thofe in, and about Kingfon; which I have always obferved to have a further admixture of fome faline particles: thefe, however, of the neighbouring marhes feem to be better than the reft, and to fpring from a higher fource; they are generally lefs charged with the marine falt, not fo heavy in their nature, and much better fupplied with air. The fprings in the other parts of the Ifland are much of the fame nature, but generally more impregnated with calcarious earth; efpecially on the north fide, where incruftations and ftalactites are fo frequent.

The river waters are alfo of this kind, and every where remarkable for the quantities of terrene matter with which they are charged, or impregnated; nor can they be expected to be found otherwife, where the rapidity of their motion, and conftant warmth, help mutually to charge them with every foreign matter that happens to lie in their way: I do not, however, think them to be impregnated fo much with metalic particles as we commonly fuppofe; for I have tried thofe of Spanifh-toron river with a large admixture of firit of falt amoniac, to little purpofe; and from thence conclude, that its purging quality proceeds rather from the clay, with which it is fo copioufly charged : and this I am the more induced to think, $1^{\circ}$. Becaufe it lofes this quality when fettled, and cleared of its load; which would hardly be the cafe, if it did proceed from the falts, or folution of metals. $2^{\circ}$. Becaufe many other waters of the fame appearance, have the like qualities, though not fufpected to be any ways impregnated with metalic fubftances.
$I^{\circ}$. Such as are charged with the falts and particles of vegetables, as well as terrene fubftances.

All the ftagnating waters of Jamaica are much of this nature; and not only charged with the more minute parts (a) of aquatic plants, but abound likewife with a numberlefs feries of animalcules, or fmall infects, that feed upon the diluted particles of thofe vegetables. They are as much as poffible excluded from all oeconomic ufes, and indeed defervedly; for they are generally obferved to be both heavy and unwholefome.

III ${ }^{\circ}$. Such as are charged with faline particles.
There are but few faline waters in Famaica, except thofe that proceed immedi(a) See our Account of the Piftia among the Plants.

## $\begin{array}{lllllllll}O & \mathrm{~F} & \mathrm{~J} & \mathrm{~A} & \mathrm{M} & \mathrm{A} & \mathrm{C} & \mathrm{A} .\end{array}$

ately from the fea, and cover the falina's, or fill the lower ponds: but of thefe, they have a great variety; and they afford them many conveniencies for making falt, if the fcarcity, or value of that commodity had rendered it worth their labour. We alfo find fome brackifh fprings and rivulets in this Jlland, which feem to take their faline qualities from their beds, or the peculiar ftate of the earth through which they run; thefe are fufficient to fatisfy us that there are falt mines in this place; but they are not yet difcovered, and probably, lie too deep to be of any fervice to the publick in cafe they were known.

IV ${ }^{0}$. Such as are charged with fulphureous particles.
There are many fources of this nature in famaica; but the moft remarkable among them feem be thofe in St. Thomas's in the Eaff, Vere, and Portland. In the firft of thefe parifhes, we find two very confiderable fprings, which are now the moft in efteem, and generally ufed by the inhabitants: one of thefe is hot, the other cold : the hot fpring runs by many rills out of the fide of the rocky cleft that confines the middle part of the Sulphur-river to the Eaft, as it runs towards the fouth; it is very hot at the fource, naturally light, and plentifully charged with volatile particles, which appear to be but the vapours of the true mineral acid, linked with a light fulphureous fteam; and thefe flightly engaged in a calcarious bafe, feem to conftitute thofe falino-fulphureous falts wherewith thefe waters are now known to be principally charged; and on which alone thofe excellent qualities, for which they are defervedly noted, muft depend. They are remarkably beneficial in all capillary obftructions, and diforders of the breaft proceeding from weaknefs, or want of the proper glandular fecretions; in all lentors and vifcidities proceeding from the flothfulnefs, or inaction of the folid fyftem; in confumptions; and in nervous fafms, and weakneffes. It reftores the appetite, and ufual action of the vifcera, invigorates the circulation, warms the juices, opens the fkin, and urinary paffages, ftrengthens the nerves, and feldom fails to procure an eafy fleep at night.

The cold fuphureous water is more grofs, and more abundantly charged with a loofe heavy fulphur, whence both its offenfive fmell, and inflammable fediment ; but it is more effectual in all cutaneous diforders, and obftinate obftructions of the vifcera, as well as in the fcurvy, and all the other difpofitions of our juices, that require ftrong lixivious diffolvents.

## S E C T. II. Of Salts.

THE native falts of this Ifland are but few, and thefe the moft ufeful ; but are feldom manufactured by the inhabitants, who have them imported at a cheaper rate than they could be made within the colony, while labour is fo dear.

They are as follows,

## $1^{\circ}$. M URIA $\quad\left\{\begin{array}{l}\text { Marina. } \\ \text { Sea-falt. }\end{array}\right.$

All the Salina's of this Ifland are lightly overfpread with this falt; which may be manufactured here in great quantities, and to great perfection, had labour been lefs expenfive: It is an agreeable ftimulant and antifeptic.

$2^{\circ}$. M URIA \(\left\{\begin{array}{l}Fontana.<br>Spring water falt.\end{array}\right.\)

The brackin waters of 'famaica are remarkably charged with falt, tho' not ridily impregnated; it is the fame with that obtained from the fea water, buth in form and qualities.

$$
3^{\circ} \cdot \text { MURIA } \quad\left\{\begin{array}{l}
\text { Foffilis. } \\
\text { Rock-falt. }
\end{array}\right.
$$

The brackifh waters of that Ifland convince me, that there is a foffil or rock-falt in fome part of the ground, though none has been yet difcovered; but if it hould be found in a convenient place, it might prove very ferviceable as it is an agreeabie manure for all ftiff and clayey lands.

## NITRUM <br> \{ Humi. <br> Florid, or native nitre.

This falt is very common about all the ftone and brick houfes in Yamaica; efpecially thofe, whofe mortar has been worked up with falt or brackinh waters: It flowers in fuch places upon the walls; and deftroys all the cloaths, or paints, that are placed near it: the cooling and antifeptic qualities of this falt are fufficiently known to every body.

## HALCRIPTIUM <br> \{Tbermarum. <br> The falino-fulphureous falts of hot well waters.

This falt is only known by its effects, and action: It is of a mixt kind, and its conftituent parts are eafily feparated; its nature and qualities are explained in our account of the hot well waters.

## S E C T. III. <br> Of fulphureous Bodies.

A MBRA $\left\{\begin{array}{l}\text { Unicolor grifea adorata. } \\ \text { Ambergreafe. }\end{array}\right.$
The Ambergreafe is rarely met with in famaica at this time, though it is faid to have been found frequently on that coaft in former times. It is both an agreeable perfume, and a grateful nervous medicine.

## ASPHALTUM <br> $\{$ Friabile nigrum $\mathcal{E}$ fubodoratum. <br> Jews pitch.

The Fews pitch is generally introduced here from fome parts of the main continent, where it is found in great abundance: It is the principal ingredient in the beft varnifhes that are now ufed by our engravers.

## MARCHASITES $\left\{\begin{array}{l}\text { Aureo Splendens. } \\ \text { Yellow mundick. }\end{array}\right.$

This fhining fabftance is largely mixed with moft of the copper ores now found in Famaica, and frequently obferved to run in peculiar veins anong the more mellow matrixes.

S E C T. IV. Of metalic Subfances.

## Stibium

## Striatum nitens. Striated antimony.

We frequently meet with fome of this metalic fubftance in, and about the lead mines of Liguanee; but it is not made any ufe of here, though well known to be not only an eafy alterant, and fudorific, in the fimple ftate; but a fource from whence we are now fupplied with many very active and valuable medicines: the principal preparations made of this mineral are the calx antimonii diaphoretica; calx
 lorum ; kermes mineralis; fulpbur auratum; vitrum antimonii; tartar emeticum; guttce emotice; and the various regulus's. But befides its ufes in medicine, it is frequently employed in refining fome of the more perfect metals.
, ${ }^{\text {C. PLUMBUM }}$

## $\{$ Argentium granulato-micaceum. <br> $\{$ The fubgranulated lead ore.

This ore is very rich, of a fhining filver gray colour, and lamellated texture ; but the particles appear very fmall when the mafs is broke in a crofs direction: It is richly impregnated with filver, which renders the folution of it in aqua fortis milky; but is not found in any regular bodied veins, which obliged the Gentlemen who had been engaged in the lead works of Liguanee (where this ore is had in the greatef abundance) to drop the undertaking, after they had been at a great expence in building a very compleat and curious fet of works; and carried on the manufacture for fometime.

The ore ftands a confiderable time in aqua fortis before the fermentation rifes to any height, but it gradually throws up a confiderable quantity of fulphur, which, in colour and general properties, feem to anfwer the characters of the common fort; and I doubt, if fome of the fulphureous fprings found in that Ifland do not derive their qualities from this fource, efpecially as no iron ores have been yet obferved there.

The mechanical ufes of this metal, are too well known to need any mention here; and its medicinal qualities are not many to require our attention long: it is generally pernicious to the nerves; and fuch as work at it in any fate, feldom efcape its difmal effects, which feem to affect the bowels more immediately; but this is commonly followed by a paralitic weaknefs of the limbs, and a general refolution of the whole nervous fyftem, if neglected: It is not immediate in its action, and feldom affects for fome months after the firt application ; but is fure to communicate the lurking poifon in fome degree with continuance: its calx, and precipitate, are ufed in plaifters, and frequently ferviceable to fupify the nerves, and lull the fharp, or twichy pains fo peculiar to fcalds and cancerous ulcers: its falts, or vitriol, is a fine aftringent, and frequently ufed in inflammations and defluxions of the eyes; but all inward application is both dangerous and imprudent; nor can any thing befides an exceffive Aimulus to -, and the threatening ruin of a family, from fuch a fource, authorize the adminiftration:

The other remarkable appearances of the lead ores of Jamaica are thefe following.

$$
2^{\circ} \cdot \text { PLUMBUM }\left\{\begin{array}{l}
\text { Argenteum lamellulatum. } \\
\text { The lamellated fhining lead ore. }
\end{array}\right.
$$

This is found with the former, and anfwers nearly as well in all the trials I have made : it is not of fo chining an appearance, and its thin laminæ are difpofed more like thofe of talk.

## $3^{\circ}$. PLUMBUM Nigrum ceneo fubnitens.

This is found with the other fpecies, and commonly linked with a copper ore: when firft broke it appears Chining, but tarnifhes very foon; it is not much impregnated with filver.

$$
4^{\circ} \cdot \text { PLUMBUM } \quad\left\{\begin{array}{l}
\text { Nigrum Schifi. } \\
\text { The black lead ore. }
\end{array}\right.
$$

This ore is largely admixed with copper, and feldom rich; but the matrix is mellow, and eafly fluxed: It is found with the foregoing forts in the lower mountains of Liguanee.

## CUPRUM Copper.

1. Viride $\mathrm{E}^{\circ}$ fubplumbeum in matrice fobifofo. The green and livid copper ore.
2. Plumbeo-aneum Jubnitens.

The flining dark copper ore.
3. Caruleum in fobijto molli.

The blue opake copper ore.
4. Viride © fufcum fubnitidum leve.

The light green and dark copper ore.
5. Subviride in $\int$ chiflo fpatofo.

The greenifh ore intermixed with fpate.
6. Viride pyriticofum.

A green copper ore in a pyritical matrix.
7. Viride © carruleum fubdiaphannm in matrice fpatofomicaceo.
The green and blue ores in a fparry matrix.
8. Viride caruleum $\mathcal{O}$ diaphanum in lapide fragili obfcuro.
The blue and green ores with fome fparks of the lapis lazuli.
9. Viride © fubviride, Jpatofum atque pyriticofum, in matrice nigricanti fragili focundifimâ.
The greenifh ores in a rich blackifh fchitt.
10. Subfifcum porofum micis aureis nitens.

The dark porous ore with fmall fhining micaceous particles.
11. Subuiride in matrice fpatofo-faxeâ.

The greenifh ore in a fparry and ftony matrix.
12. Subviride in matrice fubnitido fufco \& cinereo bolari.

The dark green ore in a bolar gloffey matrix.
13. Fufcum in faxo cinereo \& fubmicaceo.

The dark ore mixed in a whitifh and fubmicaceous fone.
14. Plumbeo cinerefcens, fubnitidum equale.

The even coloured livid copper ore.
Thefe are the moft remarkable appearances of the copper ores of famaica, and no part of the world can abound more with fuch productions. The firft and fecond ipecies, are the richeft we have yet difcovered there; and thefe are thought to be
equal to fome of thofe that are efteemed of the firft clafs in Europe; nor undefervedly; for the matrix in which they are engaged, is of a foft and yielding nature, and anfwers both the hammer, and the fire, with equal eafe. I have examined a few lumps of that near Sir Simon Clarke's, which abounds more : with the lapis lazuli; and found it both rich and mellow, but as they have not yet dug any depth in the ground, it is not poffible to know how the veins may turn out: the mine at Mr. Anderfon's feems to be the moft conveniently fituated, both for wood and water, as well as carriage ; and not inferior to any in the quality of its ore; but that honeft man frequently miftakes the bad for the good, and thews a piece of mundick, which he obtains with difficulty from the hardened rock, for fine ore, while the rich and mellow matrix is thrown heedlefly afide; and, I doubt not, but it is the cafe with many others, who may be as little acquainted with the nature and appearances of metalic fubftances. I admire that fome of thofe gentlemen who have advanced fo far in their refearches after filver, did not pulh their induftry a little further, and endeavour to extract gold from fome of thofe; in which they were likely to prove more fucceffful where copper is fo much ufed at every plantation (a).

Befides the mechanical ufes of this metal, which are too well known to need any mention here : it is fometimes applied for the relief of difordered habits, and not undefervedly efteemed one of the moft powerful remedies in fuch dropfies as proceed from the weaknefs of the lymphatics, or a general languor of the folid fyftem; in which cafes it feldom fails to prove an excellent diuretic, and ftrengthener: there is a falt and a tincture eafily extracted from it by every volatile fpirit, that may be given on thefe occafions; and its vitriol and ruft are found to be the moft effectual deterfives and cleanfers of foul fores in thofe fultry parts, where the furface of the body is too much relaxed for the common applications to be effectual. But this fubftance of its own nature is rather prejudicial to the machine, and frequently puts on the appearance of poifon in its operation, for which realon it always requires to be adminiftered with caution. It affords fome beautiful blue's and green's that are daily ufed with fuccefs in painting; but the diforders which limners, and engravers, generally impute to this mineral, feem to arife rather from the aqua fortis, and the other ingredients that pafs daily through their hands, than from any of the dilaterious qualities of the metal.

As to Gold and Silver Ores, none were yet difcovered in this Itland, except what has been found mixed with the lead ores of Liguanee, which was not fufficient to defray the charges of the manufactury. Neither could I ever find any confiderable marks of iron, either in this or the other fugar colonies: black fand, it is true, is attracted by the magnet, but does not anfwer with the acid, or the fire; and the black Tricherium* which feems to fhew fome marks of real iron, is too light and porous to be confidered as an ore; and too farce to be of any fervice even in phyfic.

## * TRICHERIUM $\begin{aligned} & \text { Atrum micaceum ferro rarior impregnatum \& in- }\end{aligned}$ The black fangled Tricherium with a frnall admixture of iron.

This fubfance is found far back in the mountains above Bull-Bay, but it is not in any confiderable quantities.
(a) I bave with the affiftance of fome very ingenious planters computed, that an eftate which produces about 100 hogtheads of fugar a year, mult be at the certain expence of $65 \%$ per. annum in copper and lead alone; and hence it appears, that this Inand muft expend $23700 \%$ every year in thefe articles, which they might have got within the fland at an eafier rate, and ftrengthened the colony with fome thoufands of induftrious labourers befides.

## S E C T. V.

Of Earth, and earthy Subfances.

| TERRA Earth and Soyl. | Yellow earth. <br> 3. Subpinguis crocea. Red earth. <br> 4. Scbifica purpurea. Purple earth. <br> 5. Sabulo variè mixta. The mixed loam, or fandy foyl. |
| :---: | :---: |

6. Humofa nigra. Black mould. 7. Humofa radicibus intertexta. Turf, and fwamp-mould.
7. Humofa \& paludofa. Mud and dung.
8. Fimofa.

The earth obtained from the remains of animals.

Thefe are the common forts of native earth generally found in Famaica: and indeed, in moft other countries: the firft is what we properly call pure loam, or mould ; it is of a free open texture, and muft conflitute the principal part of every cultured foyl to yield a profit fuitable to the labourer's toil.

The fecond is of a poorer fort, and frequent in the mountains of this Ifland, where a conftant moifture and frequent admixture of vegetable mould renders it very luxuriant, and a proper matrix for many of the principal timbers and more fucculent plants. The third fort abounds in moft of the hilly lands; it is more or lefs of a bolar nature, and not efteemed either a kind or a luxuriant mould, though the native provifions, and the vines of the country thrive beft in fuch a foil. The fourth and fifth are the common forts in the lower lands and favannas, which we generally find both a kind and fertil bed, when fupplied with moifture; but this often fails, and leaves thofe fields almoft ufelefs. The fixth and feventh, are chiefly the produce of decayed vegetables, and known to be the richeft and moft luxuriant bed for all forts of plants. The eighth is peculiar to thofe bottom lands fituated near the fea, and is commonly mixed with brufh and mangroves; the foil is rich, but the fituation of the ground renders it only fit for Scotch grafs, and other marfhy vegetables. The ninth is common enough, but feldom ufed in this country; for few of them have any notion of the real properties of manure, or of dunging lands which they already think too rich : A moift, free foil, with moderate heat, will any where produce a luxuriant growth, but the warmth of the glebe alone can maturate or enrich the juice.

The moft remarkable compounds of this kind now found in Famaica are the,

## TA L C U M $\left\{\begin{array}{l}\text { Subfufcum diaphanim lamellis tenuiffimis fubelafticis. } \\ \text { The }\end{array}\right.$ The brownifh Talk with very thin laminæ.

I had once received fome of this as a production of Gamaica; but have been, fince informed, that it was brought there from the coaft of Guineic. It differs but little from that with which we are fupplied from Mufcovy.

$$
\text { M IC A }\left\{\begin{array}{l}
\text { Arrentee particulis minimis elabilibus. } \\
\text { The filver Mical. } \\
\text { Arrea aparticulis elabilibus impalpabilibus. } \\
\text { The golden Mica. }
\end{array}\right.
$$

## O F J A M A I C A.

Both thefe fpecies of Mica are frequent in Famaica, efpecially among thofe hills that lie between St. Katherine's and Sixteen-mile-walk; the laft fort has been frequently wafhed down with the floods, and fometimes taken for a lighter fpecies of gold fand: it is commonly found incorporated with the potters clay near $S$ panijh-town.
. Friabile, fibris fubdiapanis longitudinalibus.
The Tricherium with longitudinal fubdiaphane fibres.
2. Per Aratas difpofitum, fibris obliquis niveis.

## TRICHERIUM

The Tricherium with hort fibres difpofed obliquely in ftrata.
3. Nigrum Jubnitens ferro impregnatum.

The black Tricherium with gloffy flakes, and impregnated with iron.
Thefe fubftances are frequently obferved in Jamaica, and may probably yield a fine cement ; but they have not been yet tried in that Ifland.

## AMIANTHUS <br> $\{$ Durifimus externe granulatus, interne lamellatus. <br> The hard lamellated Amianthus.

They have great quantities of this fubftance both in Antigua, and Famaica: it is generally found in large detached maffes, having all the appearance of petrified wood, for which it is commonly taken in both illands.

## SCHISTUS

$$
\left\{\begin{array}{l}
\text { I. Purpurafcens quaquaverfum fiflis foriptura atra, } \\
\text { The purpleifh Schift with black lines, and fpliting } \\
\text { freely in all directions. } \\
\text { 2. Spato impregnatus \& feptis divifus. } \\
\text { The mixt Schifus. }
\end{array}\right.
$$

The laft fpecies is frequently found in the furf about Bull-bay; the acid attacks, and diffolves the cement of the mafs with great fury; and leaves an inert lump of pure fchiftic earth behind. The other is common in many parts of the mountains of St. Jobn's; but is generally fteril, and of little ufe.

$$
\begin{gathered}
\text { S E C. T. VI. } \\
\text { of Clay, and clayay Subfances. }
\end{gathered}
$$

| Argilla | 1. Subcinerea, fiflis. |
| :---: | :---: |
|  | Refining clay- |
|  | 2. Potters clay, or fandy clay. |
|  | 3. Sabulo © terra mixta. |

Thefe are the moft remarkable appearances of clay, in the vifcid ftate, now obferved in Jamaica. The firft is almoft pure, and very fit for the refining-houfe, as well as for earthen wares, if they fhould ever think it neceffary to work in fuch a manufacture, but it is not very common. The fecond fort is more frequent, and now fupplies the Ifland with water-jarrs, and other conveniencies of the like nature.

The third forms a great part of the foyl in many places; and is fufficiently remarkable for its ftiffnefs, and cohefion: when it abounds with fand without earth, it is the true brick-clay; but, when any confiderable quantity of this is joined in the mafs, it breaks its texture, and the clod is lefs cohefive; by which means it frequently
becomes a kind and luxuriant foil: from hence we may learn both the nature and manures of clayey land, as well as the manner of fitting it for every purpofe.

The following feem to be the moft compound fubftances of this nature, that I have obferved in a folid form, in that Ifland, viz.

## CRYSTALLUS <br> \{1. Conico-cylindracea utrinque attenuata. $\{$ The needle cryftal.

-This fpecies is found in that freeftone near the bath : the cryftals are very fmall, and hardly perceptible to the naked eye; but when the workmen break any of the ftones, the little fragments that fly about, are fo charged with thefe minute fharp-pointed cryftals, that they inflame and frequently blifter the fkin wherever they touch.
CRYSTALLUS $\left\{\begin{array}{l}\text { 2. Columnaris bexaedra, binc tantum pyramidata, lateribus } \\ \text { duobus majoribus oppofitis. } \\ \text { The pointed cryftal with two oppofite fides larger } \\ \text { than any of the reft. } \\ \text { 3. Collumnaris binc tantum obliquè pyramidata. } \\ \text { The obliquely pointed cryftal. }\end{array}\right.$

There is but little difference between thefe two fpecies; but the former feems to moot more freely, and to be lefs tranfparent in its appearance: they are both very hard, and mark glafs, or the beft polifhed fteel, with great eafe.


All thefe fpecies are frequent in Famaica: the three firt are commonly found in detached maffes, and feem to have much of the nature, and appearance of flint: the fourth is the true parafitical native fort, and found frequently mixed with many of the copper ores. The fifth is rather a fteril iron ore, than a Quartz ; but as it is generally found of an angular compreffed form, and eludes the action of both the fire, and the acid, I have given it a place in this clafs; it is very common in many parts of America, and moft frequently found in this form on the fea fide, but is fometimes obferved to be a principal mixture in many of the harder fpecies of grain ftones in this part of the world.
LYD IU M $\left\{\begin{array}{l}\text { 1. Atrum equale. } \\ \text { The Touch-ftone. } \\ \text { 2. Cinereum equale. } \\ \text { The Afh-coloured Lydium. } \\ \text { 3. Duriffimum e fufco grifeum. } \\ \text { 4. The Thunderbolt. } \\ \text { 4. Atro fubceruleum. } \\ \text { The Indigo-coloured Lydium. } \\ \text { 5. Rubellum fubfibrofum. } \\ \text { The brown Lydium with a fibrous texture. }\end{array}\right.$

All thefe fpecies of Lydium are found in the liland of Famaica, but feldom obferved in any confiderable maffes: the firft, and fecond, are often met with on the fhores, and may be ufed equally on occafion; tho' the colour of the former renders it more fit for all the purpofes of a touch-ftone. The third is the produce of fome other country; and has been introduced here, very much in the time of the native $1 n$ dians, who ufed to grind their maze with thofe fmall figured maffes, which we now call thunderbolts: It was manufactured in fome part of the neighbouring continent, and worked into various forms, to fupply thofe people with tools, for the different occafions of life, while the nature and manufacture of iron was yet unknown to them. The fourth and fifth forts are moft common in the inland parts of the country ; but are not yet obferved to be of any peculiar fervice.

$$
\text { COS } \quad\left\{\begin{array}{c}
\text { 1. Durifima grifea ferro arenacco atro-nitenti im- } \\
\text { pregnata, } \\
\text { The chocolate fones. }
\end{array}\right.
$$

Tho' many manufactured pieces of this ftone are found in every part of Yamaica, I could never meet with any of the kind in the rude, or natural ftate; for whichreafon, I was induced to look upon them as the produce and formation of fome part of the neighbouring continent, where chocolate had been formerly in ufe, which have been introduced here from time to time (like the thunderbolt ftone) for the manufacture, and oeconomical preparations of that feed; as this was for the ufe of their maize: The ftone is very hard, and of a coarfe granulated texture intermixed with a finer fhining black quartz, or fandy matter : It gives fire readily with fteel, and does not yield to any of the acids.

$$
\cos \quad\left\{\begin{array}{l}
\text { 2. Grulata giratilis. } \\
\text { The grinding flone. }
\end{array}\right.
$$

3. Micacea gronulata fiflis. The Briftol, or paving ftone.

Both thefe fpecies are imported here from England. The firt is much in ufe at every plantation, where iron tools are made ufe of ; and the other is fometimes imported for the ufe of churches, and other large buildings.


Thefe are the moft common forts of grain-ftones I have obferved in Jamaica; but they have not yet difcovered any regular quarry of either of them : they are generally found in detached maffes of different fizes:

$$
\cos \quad\left\{\begin{array}{l}
\text { 10. Solidiufcula porofa aquam tranfinittens. } \\
\text { The percolating fone, or the poroas fandy } \\
\text { Cos. }
\end{array}\right.
$$

This ftone is frequently introduced here, in the manufactured ftate; and found to be very beneficial to the inhabitants of the lower lands, as it ferves to cool, as
well as to purify the waters commonly ufed in their diluted drinks. It is a native of Madera and Barbadoes.

## S E C T. VII. De marga © margaceis. Of Marls and marly Subftances.

MARGA

Thefe are the only fpecies of Marl I could obferve in that ifland ; but the third and fourth are not common; and the firft is generally barren, for it affords neither true nourifhment, or an eafy paffage, to the tender roots of vegetables. The fhell marl is fcarce, and hardly ever met with, but in the mountains, or by the fea-fide; it is an excellent manure for all ftiff, and clayey foils.

The fecond fpecies is a peculiar fort of earth, that runs in veins, and is chiefly found in marly beds: it is of different colours, but thefe generally anfwer to that of the layer wherein it is found; it is apparently fmooth, and greafy, and fomewhat cohefive in its nature; but diffolves eafily in the mouth: The Negroes, who make frequent ufe of this fubftance, fay, that it is fweetilh; and many get a habit of eating it to fuch excefs, that it often proves fatal to them. It is the moft certain poifon I have known, when ufed for any length of time ; and often enters fo abundantly into the courfe of the circulation, as to obftruct all the minute capillaries of the body; nay, has been often found concreted in the glands, and finaller veffels of the lungs, fo far as to become fenfibly perceptible to the touch: It breaks the texture of the blood intirely; and for many months before they die, a general languor affects the machine, and all the internal parts, lips, gums, and tongue, are quite pale, infomuch, that the whole mafs of their juices, feems to be no better than a waterifh lymph. It is probable they are firft induced to the ufe of this fubftance (which is generally well known among them) to allay fome fharp cravings of the ftomach; either from hunger, worms, or an unnatural habit of bcdy.

The following are the moft remarkable compound productions of this kind, I could have met with in Jamaica.


This fpecies of fpar is frequent in the fiffures, and interftices of the lime-fones, in all parts of famaica.

## SPATUM

$$
\left\{\begin{array}{l}
\text { 2. Subaqueum mafulis triquetris prifmetico-truncatis quafi } \\
\text { talcofs, fragmentis rbombeis. } \\
\text { The fubaqueous far found in three angular truncat- } \\
\text { ed and prifmatical maffes. } \\
\text { 3. Rupefire fubaqueum, fubcryfallizatum \& fubfria- } \\
\text { tum. } \\
\text { The Rock-fpar. }
\end{array}\right.
$$

This fort of Spar is very clear, and found formed into rocks, of a prodigious fize, in the mountains of St. Anne's; where it is obferved to conftitute whole ftrata: There rocks iplit very eafily in all directions, particularly the perpendicular ; and the fragments, of which it feems compofed, are ftriated in a longitudinal direction. When it is expofed any time to the weather, the furface grows opake, and of a milky white.

## SPATUM


5. Confufe cryftallizatum, cryfallis deformitus. The diaphanous Spar, with deformed cryftals,
6. Subcryftallinum confufum.

The confufed fubcryftalline Spar.
Thefe laft fpecies are pretty common in moft parts of famaica, and generally found in fmall detached maffes.

## MARMOR <br> $\left\{\begin{array}{l}\text { 1. Lacteum variis concretum. } \\ \text { The whitifh baftard marble. }\end{array}\right.$

This fone is very much debafed, and frequently confounded with the lime-ftone, in the room of which it is often ufed in Famaica: It is very common, and indeed the principal fort of ftone in moft of thofe lower mountains, to the eaftward of Kingfon: It has a fmooth even grain, and bears a good polifh, but is feldom very fhining, or gloffy.

## CALCITARIUM <br> $$
\left\{\begin{array}{l} \text { 1. Subcinereum fpatofum. } \\ \text { The whitifh fparry lime-ftone, or calcitory. } \\ \text { 2. Cinereum textura fubequali. } \\ \text { The even grained calcitory. } \\ \text { 3. Subrubellum Jpatofum. } \\ \text { The fparry calcitory, with a flefhy caft. } \end{array}\right.
$$ <br> <br> 2. Cinereum textura fubequali. <br> <br> 2. Cinereum textura fubequali. <br> <br> The even grained calcitory. <br> <br> The even grained calcitory. <br> <br> 3. Subrubellum Spatofum. <br> <br> 3. Subrubellum Spatofum. <br> <br> The fparry calcitory, with a flefhy caft.

 <br> <br> The fparry calcitory, with a flefhy caft.}Thefe are the common appearances of the lime-ftones of that country, which we have generally obferved to conftitute the principal part of its rocky hills : the firft, and fecond fort, are the moft common in the fouthern parts of the Ifland ; but the other, which is more fonorous, and uneven in its form, is more frequent on the north-fide. They are all, more or lefs, of a granulated appearance, and yield with equal eafe, both to the fire, and the acid. They are burned to lime in every part of the Illand, where fuch a manufacture is neceffary; but it is not thought to be fharp enough for the boiling houfe : this, however, muft be a miftake, or owing to fome neglect either in burning, or cafking the lime ; for the ftone, in general, is not only kind, but hard enough to take and hold a great deal of heat, the moft effential quality of good lime.

SIMPLEXIA

## [1. Albida fructura Jubequalis.

The fofter fine grained free-ftone.
SIM P L E XIA $\left\{\begin{array}{l}\text {. The fofter white free-ftone of St. Tbomas's. } \\ \text { 3. Levior nivea particulis arenofis confertis. } \\ \text { The light fandy free-fone of Bermudas. }\end{array}\right.$
The two firt fpecies are natives of Famaica, and anfwer extreamly well in all manner of buildings : the firft is found in a large quarry near St. Anne's Bay ; the other in the parihh of St. Thomas's in the Eaft: but the third fort is a native of Bermudas, and frequently imported here for buildings ; it is more poreous, and lefs cohefive, than either of the others; but as it is very light, it anfwers beft in the work; and is imported at a very cheap rate,

## P U M EX \{ 1. Plumbeus fulpburariarum $\mathcal{E}$ thermarum. The livid pummy of fulphur mines.

This fubftance is the meer production of fubterraneous fires: it is always found in great abundance about the fulphur mines of Mount ferrat, and doubtlefs may be alfo obferved in Famaica, could we reach the firf fource of the hot-well waters of that place: the heat, at leaft, of thofe give me room to think, that fuch a thing exifts there ; and, probably, may be always found where-ever this is conftant, and from the confumption of fulphureous fubftances.

$$
\text { PUMEX. } \quad\left\{\begin{array}{l}
\text { 2. Ferreus ater gypfo adnatus. } \\
\text { The black ferruginous Yummy. }
\end{array}\right.
$$

This fubftance is very rare; I have met with a little of it far back, among the mountains in famaica.

TOPHUS $\left\{\begin{array}{l}\text { 1. } \begin{array}{l}\text { Aquarum incruf incrufting waters. } \\ \text { The Tophus of incruft }\end{array} \\ \text { 2. Labetbum. }\end{array}\right.$
Labetbum.
The cruft depofited by boiling waters.
Thefe fubftances are only concretions of the heterogeneous particles, with which many of the waters of this Illand are charged : the firft fort is fo common in moft of the fmall currents about St. Anne's, that every thing lying in their courfe, nay the very chanel is frequently incruftated; and hence the fource and formation of that beautiful, and famous cafcade, between Roaring-river, and Mendzey's-Bog, in this parifh.

## ARGILLARIA $\left\{\begin{array}{l}\text { 1. Subfufca Solidiafcula, variis admixta. } \\ \text { The dark and varioully mixed Argillaria. }\end{array}\right.$

This is a mixture of clay and gravel, that hardens into a very folid formby the continued heat of the fun, and a fmall admixture of falt-water; it is the foundation of that neck of land, that ftretches into the fea, and inclofes the harbour of Kingfion; as well as of fome other parts of the fea-fhore round this Ifland. It receives but little damage from the furges, or more agitated waves; but acquires a degree of hardnefs as often as the incumbent fands are wafhed off, by hurricanes, or other extraordinary commotions of the ocean.

## SABULUM <br> $\{\mathrm{J}$. Varium.

This is only a compofition of the fmaller fragments of all, or many of the forementioned fubftances; which generally takes its fpecific denomination from the moft predominant kind : the fhores, river-courfes, and many other parts of Fa maica, are full of various forts of this fubftance.

$$
\text { ARENA }\left\{\begin{array}{l}
\mathrm{i}, \text { Varia. } \\
\text { Sand. }
\end{array}\right.
$$

Sand differs but little from the foregoing; and, like that, is only a compofition of the more minute particles of all, or many of the other fubftances; which, in the fame manner, takes its fpecific denomination from the moft predominant fort: I muft however remark, that we have claffed the purer fpecies of thofe that ufed to go commonly under this appellation, with the other productions of the fame nature, and ranged the cryftalline fands among the quartz's; the roundifh among the pebbles; and black with the irons.

## THE

## C I V I L and N A T U R A L

## H I S T O R Y

$$
0 \mathrm{~F}
$$

$\mathcal{F} A \quad M A B A C A$.

## P A R T' II.

B O O K II.

$$
\text { C O } \quad \text { N } \quad \text { T A I I }
$$

A Hiftory of the vegetable Productions, claffed and diftributed nearly according to the Linnean Syftem; with the Characters of fuch as were not hitherto known, or have been but imperfectly reprefented: To which we have added the Synonyma from the moft approved Authors, as well as the beft Methods of cultivating and manufacturing the more ufeful Species; with the Properties and Ufes of each, in Mechanics, Diet, and Phyfic.

His genus omne
Plantarum fruticumque viret, nemorumque facrorum;
Et quas quaque feret regio.
Virg. Georg.

## P R E F A C E.

THE neceßrities of mankind bave, doubtle $s$, fir fobliged them to obferve thofe productions more exaltly, which they had found by experience, to be the moft immediately necelfary for their maintenance; and to feek and propagate with the greateft care, the beft means of relieving their more frequent wants. This, experience and obfervations bave, with time, improved Juffciently to fix the forff foundation of agriculture and pafturage (a) ; which fucceeding ages bave enlarged, and embellibed with a numberlefs feries of mechanical arts and manufactures: But bow far vegetable productions have contributed towards the general improvement, we can only learn from a due confideration of fome of thofe valuable neceffaries and conveniencies, with which we are daily furnifbed from this clafs.

To give a circumflantial account of tbofe, would require more room and labour than we can now beftow; but if we look into the different methods of living generally ufed among mankind, we 乃ball certainly find them to be fupplied, in every country, with the moft agreeable as well as the mof necellary parts of their food from this province; which fill adds a mof amazing variety to its luxuriance. Remark the different forts of roots now in ue, and the multiplicity of forms in which they are ferved up at our tables! Obferve the different forts of greens, and tender Jhoots, that are daily ufed for nouribment; and confider bow many forts of grain and fruit ferve to fupply the luxury, as well as wants of our kind! View but the macbine in a difordered condition, you will find the principal means of relief to be generally fougbt, for, and obtained from this kingdom. Oblerve a man in bis mof accomplifbed ftate, you will fee bim furrounded and adorned with the various productions of vegetables; bis moveables are cbiefly furnifbed by the foreft; bis cloaths frequently fupplied by the cotton frub; bis linen, books and papers by the barks of various plants: and if you confider bim as a member of the
(a) Res pecuaria.
community, bis trade, bis wealth and affuence, you will fnd, is cbiefly maintained and carried on with the productions of this clafs. How natural muft it then be for the inquijtitive part of mankind, to Search into, and endeavour to explore, the nature and fituation of a clafs of beings, that furnihes fo many materials to fuppty both the wants and luxury of the inbabitants of every part of the earth?

Thefe inducements bave always engaged fome part of mankind in the fludy as well as culture of plants; and the informations and materials tranfmitted from one colony to another, bave been always found to contribute alike towards the improvement of both. From bence we may learn to know the ufe of Natural Hifories in general, which Serve, not only to inform us of the materials with which different countries abound, but likewife to acquaint us with their ufes and various manufactures.

In this part of the Natural Hiftory of Jamaica, I bave followed the order and diftribution of Linneus as much as pollible: I bave, bowever, differed from bim in the difpofition of the more imperfect plants, which I bave placed, according to a more antient cufom, before the reft: nor was this my only reafon, for really I think they, in fome neafure, feem to approach nearer to mineral fubfances in their nature: but in the diftribution of them I bave been various; followed Hill fometimes, Michelius often, and partly my own fancy, juff as I thougbt them to approach neareft to nature. I bave given the general characters wherever I found tbem new, or but imperfectly reprefented before; and bave added the fynonima out of the moft noted and approved authors; I bave alfo given a fbort defcription of moft of the Species, and adjoined the ufer, culture, and manufactures of Juch as were found of any certain or known fervice.

## [ 71 ]

## T H E

## Civil and Natural HISTORY

## $\begin{array}{lllllll}7 & A & M & A & I & C & A\end{array}$

## PARTII.

## BOOKII.

## $\begin{array}{llllll}\mathbf{O} & \mathrm{R} & \mathrm{D} & \mathrm{E} & \mathrm{R} & \text { I. }\end{array}$

Of Plants that bear only obfcure, or imperfect Flowers.

## C L A S S I.

 Of Jubmarine Vegetables.$\begin{array}{llll}\text { S } & \text { E } & \text { C. } & \text { I. }\end{array}$<br>Of fuch as are of a tender berbaceous Texture.

A L G A I. Foliis ferè linearibus.
Alga Angufti-folia vitrariorum. C. B. \& SI. Cat. p. 5.
The fmall grafly leaf'd Alga, or Turtle-grafs.
This Plant grows frequently in the Challow fandy bays of Famaica; and is the mof common food of the manatee, the turtle, and the trunc-fiih; as well as many other fmaller marine animals.

A L G A 2. Foliis planis angufis, radice geniculata.
Alga Juncea, five juncus maritimus radice alba geniculata. Slo. Cat. p. 5.\& H. t. 22. f. 5 .

The larger Alga with flefhy roots.
This grows with the foregoing in moft of the fhallow fandy bays; and feems to be more generally ufed by the turtle and manatee.

```
F U C U S 1. Membranaceus brevis, lobatus, circulis concentricis notatus.
Fucus Fronde feffoli reniformi decuflatim friata. L. Sp. pl.
Fucus Maritimus galli-pavonis pennas referens. C. B. Pro. \&s Sl. Cat.
The membraneous afh-coloured dwarf Fucus.
```

This fmall plant grows very near the fhores in all the bays of famaica: it feldom rifes
rifes above three or four inches, and fticks by a ftrong ligamentous foot-falk to every rock, and fmaller pebble.

F UC US 2. Membranaceus, tenuis, undulatus, viridis.
Alga Latifolia, five mufcus marinus, $\mathcal{E}^{\circ}$ c. Sl. Cat. p. 5.
The long undulated membranous green Fucus.
This plant grows pretty deep in the fea, and is generaly foand aboint the larger rocks at fome diftance from the fhore. It is moderately tranfparent, and of a beautifu! green colour. It is frequently thrown up every where on the fhores of famaica.

$$
\begin{aligned}
& \text { FUCUS 3. Caule tereti ramofifimo, folits oblongis ferrato-dentatis, } \\
& \text { veficulis globofis. } \\
& \text { Fucus Caule teretir ramoifimo, folisstanceolato-ffrratis, fructificationibus } \\
& \text { globolis, pedunculis fubariftatis. L. Sp. Pl. } \\
& \text { Lenticula Marina ferratis foliis. Lob. \& Slo. Cat. p. } 4 .
\end{aligned}
$$

## The larger branched Fucus, or Gulph-weed with broader ferrated leaves.

This plant is frequent in all the feas about thofe parts of America: it grows about the rocks in the deeper paitts of the ocean, and is frequently thrown upon the fhores of this, and every other neighbouring Ifland, after hurricanes and ftrong fea breezes.

F UC U S 4. Ramofus, foliis oblongis angiufis ferratis, capfilis natantibus filo arnatis.

## The fmaller branched Fucus, or Gulph-weed.

This fpecies feems to be only a variation of the foregoing fort; it is however more commonly met with in this form, and very frequent in thofe feas.

## F U C U S 5. Caule tereti ramofo, foliis linearibus, capfulis foliolatis. <br> Fucus Caule tereti ramofo, foliis linearibus integerinis, fructijicationibus globofis, pedunculatis. L. Sp. Pliot it AD I A <br> The branched Fucus with capillary leaves.

This is rather an European than an American plant, and moft frequently obierved in the chaps of the Englijh channel: it is diftinguifhed from the foregoing, which it refembles very much in the general form, by its fimple capillary leaves.

## F U C U S 6. Opuntioides fubcompreflus, bracbios bolongis tumentibust tiver quandoque excavatis. <br> The larger Opuntioid Fucus.

This plant is more frequent about the Weftern Illands, whete I have gathered it in great abundance on my return from Famaica. It is the common food of the loggerhead turtle in thofe parts, efpecially when they ftray any diftance from the fhore.

```
F UCUS 7. Opuntioides fubcomprefus minor, bracbiis fubangulatis brevioribus.
Corallina Opuntioides ramulis denforibus, \&o foliis magis finuatis, \(\mathfrak{\text { Ed. }}\) Slo. Cat. p. 4. \& H. t. 20. f. 2.
Corallina Latifolia É opuntia, E̛c. Pk. t. 26. f. I.
The fmaller Opuntioid Fucus with many fhort angular joints.
```

$$
\begin{array}{lllllllllll}
\mathbf{O} & \mathrm{F} & \mathrm{~J} & \mathrm{~A} & \mathrm{M} & \mathrm{~A} & \mathrm{I} & \mathrm{C} & \mathrm{~A} . & 73
\end{array}
$$

This little marine plant is very common about all the harbours of the Inland.

$$
\text { F U C U S 8. Fronde dichotamo difico, ramulis fimplicibus teretibus } \begin{gathered}
\text { fubcomprefis punEzatis, dijco inferne cauli circumducto. }
\end{gathered}
$$

The dichotomous flender flexile Fucus with a difk round the ftem.
This plant is but little known to Botanifts ; tho' frequent enough in the Engli/b channel, where I have met with it on my return from famaica. It is commonly called Cable-moorings by our failors, and remarkable for the flexibility and evenefs of its branches, as well as for that extraordinary rim or difk that furrounds the ftalk near the root.

> F U U S 9. Fronde dichotamo integro, caule medium folium tranfcurrenti veficulis verucofis terminalibus. L. Sp. P1.

The flat divided and marginated Fucus with large fpungy capfules.
This plant is commonly called Kelp, and frequent in moft parts of Europe, but rare in famaica. When burnt it yields that concreted faline mafs, of which our black or coarfe glafs is chiefly made.

F U C U S 10. Minor ramofus, ramulis patcioribus fimplicibus conico: acutis.
The more fimple moffy Fucus with erect and flender conic branches.

## F U C U I I. Minor ramofus, ramulis fubcomprefis tuberculatis

 minufque divifis.The fmaller moffy Fucus with fewer fubcompreffed branches.
F U C U S 12. Minor comprefus ramofus, ramulis angufifimis.
The fmaller flattened moffy Fucus with narrow branches.
F U. C U S I3. Minor caule tereti ramoffrmo, ramulis minoribus fparfis tenuiflime divifs, ultimis acuminatis.
An, Fucus Caule tereti ramofifimo, ramulis /par/is, fpinis mollibus alternis. L. S. P.

The larger moffy Fucus with flender and much divided branches.

$$
\text { F U C U S 14. Minor caule tereti ramofifimo, ramulis minimis tenuif- } \begin{gathered}
\text { fime fectis, ultimis obtufis fubglobofis. }
\end{gathered}
$$

The fmaller moffy Fucus with obtufe branches.
F U C U I 5 . Ramofus tenuior Es erectior, ramulis quafi fetaceis, brevifime ©o tenuifime fectis.
The fmaller moffy Fucus of a more erect and lefs branched appearance.
Thefe are the moft common fpecies of thofe mofs-like Fuci obferved about $\mathcal{F}$ amaica; they grow very plentifully in all the bays. and harbours of the Illand, and are found on every part of the hore, whenever the feas are agitated more than ufual.

## THENATURALHISTORY

## $S \quad E \quad C \quad T . \quad$ II.

Of Jubmarine Plants of a more Aiff and fibrous Texture.
Acetabulum r. Caule fimplici, cyatho Ariato \& quaff fubcaliculato.
The fmall flender ftalked Acetabulum.
This delicate little plant is frequent about all the harbours of the Ifland; it grows in clufters, and rifes from a fimple cruftaceous root by which it fticks to the fones. Its ftalk or fhank is fmall and flender, and the cup rather of a conic form with the bafe upwards; and feems as if it were fuftained by a few fmall protuberances that ftand at the top of the fhank in the form of an irregular calix. When this plant is taken frefh out of the water it is fluxile, and elaftic; but when it continues for any time in the open air, it grows more ftiff, and fragil: the cup is always friated ongitudinally.

S P O N G I A I. Minor mollis ©f fexilis, fibris tenuifimis equalibus intertextis.
Spongia Minor \& mollior medulla panis fimilis, E®c. Sl. 'Cat. p. 7. \& H. t. 23. f. 5.

The fmalleft foft and downy Spunge.
This little plant is frequently obferved about Famaica; and, in texture and appearance, refembles the inward part of fine white bread,

S P O N GIA 2. Minor E' tenuior mollis, cellulata.
The fmalleft foft Spunge with large cells.
This fpecies is as common as the foregoing, but feems of a more porous or cellular ftructure, though equally fine.

## S P O N G I A 3. Minor fibrofa, fibris fubequalibus tenuibus \& flexilibus tenuiterque intertextis.

The fine fibrous fmall and flexile Spunge.
This is a beautiful even mafs, compofed of very delicate fibres loofely connected .together. It is of a more reticulated and interwoven texture than either of the foregoing fecies.

> S P O N G I A 4. Fiftulofa, flexilis E fibrofa major; fibris inequalibus laxe intertextis, exterioribus craffioribus reticulatis.
> Spongia Dura, feu fpuria major alba fifulofa fibris crafioribus. Sl. Cat. p. 6.
> Spongia Tubulofa fimplex. L. Sp. P1.
> The coarfe reticulated yielding Spunge.

This plant has fomething of the texture and appearance of a coarfer brown bread, or of the bark of fome tree in a macerated ftate.

> S P O N G I A 5. Fiffulofa major, fexilis, porofa E prominulata. Spongia $\begin{aligned} & \text { Turbinata cava. L. Sp. Pl. } \\ & \text { Spongia } \\ & \text { Dura, feu fpuria fuperficie, apicibus acutis exafperata. Sl. Cat. 7. } \\ & \text { \& H. t. 23. f. 4. }\end{aligned}$.

The larger porous and warted hollow Spunge.
O.F J A M A I C A.

This is of a clofer texture than the foregoing fpecies, and generally found growing about fmall decayed pieces of wood.

> S P O N G I A 6. Fifulofa छo cavernofa rufffens, fibris rigidis fubequalibus laxe intertextis.
> Spongia Cavernofa extus aculeata. L. Sp. P.

The brown loofe Spunge with rigid fibres.
This plant grows fomething like the foregoing in its difpofition; but its fibres are always rigid and fubdiaphane, and its texture more loofe and difengaged.

## 8 P O N G I A 7. Subrotunda, cavernofa, lamellata E゚ fubvillofa, texture cbartacea. <br> Alcinoum Subvillofum Americanum.

'The cavernous lamellated and fubvillofe Alcinoum, or AmericanSpunge.
This fpongy fubftance is found in loofe cavernous maffes, compofed of thin compreffed laminæ irregularly difpofed, and of a clofe paper-like texture. Every plate of the whole mafs is covered with a fhort delicate down.

## KERATOPHYTON 1. Reticulatum compreffum. <br> Frutex Marinus elegantifimus Clufi. Sl. Cat. p. 3.

## The plain reticulated Sea-fan, or feather.

Though the productions of this kind may fhew many marks of an animal nature, and are generally found furrounded with a coat or cruft, which is allowed to be the work of fome marine infects; I have been induced from their tunicated regular ffructure, and tapering branched form, as well as hollow center and expanded root; to look upon them as meer vegetable fubftances : and as fuch, I have thought this the moft convenient place for them. I acknowledge my worthy, and learned friend Mr. Ellis, has fatisfied me very amply as to the nature and clafs of moft of the other feemingly vegetating marine productions, but muft wait for fome further illuftrations before I can confent to range thefe among the effects of animal labour. Thefe are eafily known by their ftrong cohefion and horny texture ; branched and frequently reticulated form, and the flrong animal fmell they commonly yield when burnt.

## KERATOPHYTON 2. Majus compreffum, reticulatum $\mathcal{E}$ appendiculatum.

## The larger reticulated Sea-fan with lateral appendages.

This may be a variation of the foregoing fort, but is more remarkable on account of thofe fmaller appendages that rife cut of both furfaces: it is chiefly found about Carolina, and grows often to a monftrous fize.

KERATOPHYTON 3. Fruticofum ramulis liberis fubcomprefis diffice difpofitis.
An, Corallina Humilior fruticofa, छic. Slo. Hift. t. 22, f. 4.
The compreffed Sea-feather with loofe branches.
KERATOPHYTON 4. Fruticofum elatius, ramulis teretibus quaquaverfum. expanfis.
Corallina Fruticofa elatior, $\mathcal{E}^{3}$ c. Sl. Cat. \& Hift. t. 22. f. 1, 2, 3 .
The fpreading Sea-feather with flender branches.

The two laft fpecies are very common about this Inland, and grow, like moft common vegetables, with loofe difengaged branches, but without any foliage. The latter fort rifes to a moderate fize, and its mean ftem, when ftripped of the branches, is frequently ufed as a riding fwitch.

## $\begin{array}{llllll}\text { C } & \mathrm{L} & \mathrm{A} & \mathrm{S} & \mathrm{II} .\end{array}$ Of Mufhrooms.

$$
\begin{array}{cccc}
\text { S E C. I. } & \text { C } \\
\text { Of the borizontal } M u / b r o o m s, ~ o r ~ F u n g u s ' s . ~
\end{array}
$$

## AGAR1CUS i. Villofo-membranaceus, fuperne lacteus.

 An, Agaricum Membranaceum Micbeli. T. 66. f. 2.
## The fmall white villous Agaricus.

> A G A R I C U S 2. Subcinereus oblongus, ad apicem fimbriatus, elatior.
> The oblong fringed Agaricus.

This little plant is very beautiful in its form, and of a whitifh afh-colour. It is very rare in this Ifland: I have met with this fpecies in the remote mountains of St. Anne's.

## A G A R I C U S 3. Niveus major ad imum tumidus lamellis interruptis. Agaricus Officinarum.

The larger white Agaricus with interrupted laminæ.
The plant is frequent enough in the woods of Gamaica, where its growth is but little difturbed or noticed. It is eafily diftinguifhed by its white colour, thicker mafs, and the interrupted difpofition of its Laminæ or feed plates.

This vegetable has been lately difcovered to be the moft effectual application hitherto known to reftrain the effufion of blood in recent or old wounds, as well as in chirurgical operations; nay, is now found to anfwer even where fome of the moft confiderable arteries are $\operatorname{cut}(a)$ : is applied in fmall pieces (b) to the extremities of the veffels. The powder of this plant has been, heretofore, frequently ufed as a purgative, and put as a principal ingredient in fome of the capital preparations of the hops, but is now defervedly left out of all the ftanding compofitions.

## P O I A 1. Subfufca, fuperne fubfpongiofa, lanuginofa.

The downy Poria of a darkifh brown colour.

## P O R I A 2. Miniata fuperne glabra. The fcarlet Poria with a fmooth furface.

(a) See Cafes in Surgery, \&c. by Jofeph Warner. $1754^{\circ}$
(b) The middle part of this fubfance is all that is ufed, the outward coats being ftripped off on both sides.

|  |  |  | O | F | J | A | M | A | I | C | A: |  | 77 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| P | O | R | I | A | 3. Alba levis. |  |  |  |  |  |  |  |  |

The fmooth white Poria.
P O R I A 4. Crafifima fufca, porulis minimis. Agaricum Igniarium, Ecc. Micheli. T. II. f. I. $^{\text {. }}$

The thick black Poria with very fmall holes.
All there fpecies are very common in Famaica, and may be always found in every part of the woods: the laft fort is the moft common, and grows thick, rugged; and lumpirh in time; but is perfectly fmooth, and of a whitifh colour when young.
S E C T. II.

Of the petiolated Mufbrooms, or fuch as are generally found fanding on diffinet Footfalks.

## Lepiota r. Ephemora minima allida.

## The fmall upftart Mufhroom.

This little fpecies is frequent every where after heavy rains: it is of a very delicate texture, grows fuddenly, and feldom lives above a few hours.

> L E P I O T A 2. Major alba, feptis lividis, petiolo glabro. An, Fungi Albi venenati vifcidi. I. B. Slo. Cat. \&H. p. 64,

The larger Lepiota with a fmooth ftalk.
This is very like the common large European Mufhroom, and is very frequent in Famaica after the rainy feafons.

LEPIOTA 3. Major alba Septis lividis, petiolo annulo membranaceo
The larger Mufhroom with a membraneous ring round the falk.
There are but few of this fort in Gamaica: I have only feen one which was found on Coflly's Hill. It is rather larger than the common fort, and always furnifhed with a membraneous flap round the foot-ftalk.

L E P I O T A 4. Sublutea minor, petiolo annulo membranaceo cincto.
The fmaller yellow Lepiota with a membraneous flap round the ftalk.

This is as uncommon as the foregoing; it is much fmaller, and of a delicate yellow colour.

LEPIOTA 5. Parafitica nivea fuperne glabra, lamellis interruptis.
The white parafitic Lepiota with interrupted laminæ.
This fpecies is frequent enough in the woods, and refembles thofe mufhrooms figured in Micbeli, t. 72. f. 4. but the laminæ feem to be more 'regular and lefs interrupted in this.

# LEPIOTA 6. Paraßtica nivea, confertim enata, © Juperne excavata, limbo oblique reflex. <br> An, Fungus Ramofusmaximus,' Mich. t. 79. f. I. 

The white tufted oblique Mufhroom.
This fpecies of the Lepiota is very common after every heavy rain, and grows generally on the decaying trunks of the hog-plum, and cotton-trees: it is the only fort that is in ufe here; and when wafhed and pounded, is fometimes boiled with beef in our foops, to which they really give a very delicate and agreeable flavour, fo as to be generally pleafing to all forts of palates.

POCILLARIA Lanuginofa, Jupernè cava, obverfe conica, externè lamellata.
The downy Pocillaria lamellated on the outfide of the cup. See Tab. IHI. f. I.

I have found a few feecimens of this plant in the road to Sixteen-mile Walk. It is very rare in Jamaica, and eafily diftinguifhed from the Lepiota by its peculiar form, though the outfide of the cup is lamellated from the fhank to the rim or margin, which generally reflects a little, as in moft of that genus. It is made in the form of a wine-glafs; is obverfely conic and hollow at the top, with a flender foot-ftalk below: It is very much like thofe reprefented in Micheli, tab. 73. f. 4. but the ftalk is always fimple in this fpecies.

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\begin{array}{lllll}
S & E & C & T & \text { III. }
\end{array}
$$

Of the impeliolated Mufbrooms; or Such as rife above the Surface of the Ground without any difinct Foot-jtalks.

CLETRIA Rubella major odorata Eo obverfê ovata.
Micb. T. 93. f. I.
The flefh coloured Cletria with a ftrong fmell.
This curious mufhroom is found fometimes in Famaica: it is of a lax fpungy texture when frefh, hollow within, and furnifhed with large rhomboidal apertures, difpofed in an oblique direction in every part. It is of a rofy colour and rank fmell.

LYCOPERDON 1. Minus globofum petiolo brevifimo vel nullo donatum.
The fmaller Lycoperdon.

## LYCOPERDON 2. Majus fubrotundum albidum.

The larger Lycoperdon.
Both thefe fpecies are frequent in Famaica; they grow from a few fringy roots, and are found in all the lower lands, and paftures, after every heavy rain.

## CYATHIA Apertaminor obversè conica, corpufculis comprefis nigricantilus, Cyathoides. Mich. t. 102. f. i. a.

The fmaller fmooth Cyathia with black compreffed fhining capfules.

C L A-

# $O F J A M A$ A $A$ 

## C L A V A R I A Obloniga pulvere luteo referta.

The oblong flender Clavaria, or vegetable fulphur.
This plant is frequent enough in the parifh of Clarendon, and generally called the vegetable fulphur from the colour of its duft or feeds. It feems not to differ much in nature from the Lycoperdon.

D I T I OLA Cinerea affurgens. Mich. t. 88. f. 3. An, Fungus Ramofus minor corrugatus. Slo. Cat. 8. \& Hift. p. 65.

The afh-coloured erect Ditiola.
This genus of mufhrooms is of a compreffed and branched form, it is fmooth on one fide, and lamelated longitudinally on the other: it grows pretty common in the inland woods of Famaica.

## C L A S S III. Of Moffes.

## S E C.T. I.

 Of filamentous Moffes, or fach as appear in a thready Form.BYSSUS Sericeus'fimplex aquatios, colore viridi. The fimple green Byffus.
This delicate little plant is very common in moft waters in the mountains; it is of a light green colour and extreamly fine.

C ONFERVA Sericea ramofa viridis, caule rigidiori.

## The flender green Conferva.

This plant grows frequent enough in Mammee River, and many other parts of the Illand ; it is diftinguifhed from the foregoing by its branched and jointed form.

## S E C T. II.

## Of foliaceous and gelatinous Moffes.

U L V A Angufta minor; tubo tenwori.
The flender Ulva.
This plant is frequent about all the wharfs of Kingfonz; it thrives in the falt water, and grows on every poft in the harbour.

C OL LEMA Vifora, foliacea, inequalis.
The foliaceous Jelly-mofs.
I have obferved this moffy fubftance once in Mangeneel; it is of a glutinous conGitence and appearance, and is found in uneven foliaceous mafies.

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\begin{gathered}
\text { S E C T. III. } \\
\text { Of the branched aphyllous Moffes of a firm and moderately } \\
\text { rigid Texture. }
\end{gathered}
$$

US NE A I. Filiformis incana ramofa \& longifima, propendens. Ufnea Off.
Mufcus Tenuis ©́ capillaceus, छcc. Slo. Cat. 9. \& H. p. 60. t. 122. f. 3.

## The white pendulous and branched filamentous Ufnea.

This plant is at prefent chiefly ufed by the perfumers, who frequently mix it with their powders. It is fometimes kept in the fhops, and its vinous infufion is faid to be anodine and fubaftringent: it ufed to be ordered formerly to ftop fluxes, and to reftore the tone of weakened ftomachs.

## U S NEA 2. Lutea, fibris fubequalibus fubrigidis intertextis.

The yellow rigid Ufnea.
This little moffey plant grows commonly in every part of the woods: its fibres feem to be pretty even in every part, and are generally connected in an irregular tufted form,

## U S N E A 3. Lutea minima, fibris tomenti-formibus, faxis enafcentibus.

The fmall filky Ufnea.
This little plant is fo very delicate and flender, that it requires a good glafs to examine it with any fatisfaction. It grows pretty plentifully on the fide of the precipice near the fecond waterfall in Hope River, above the plains of Liguanee.

USNEA 4. Minima fufca repens E' $^{3}$ tomenti-formis.
The fmall woolly Ufnea.
This fpecies is not quite fo fine as the foregoing; the old plants are of a dark or brown colour, and the younger fhoots of a delicate white.

> PLA T I SMA I. Cinerea ramulis acuminatis.
> The whitifh Platifma with fharp-pointed branches.

PLATISMA 2. Cinerea, fibris lateralibus nigris crinita.
The bearded Platifma.
Both thefe fpecies are frequent in the woods of Yamaica; they are both of a whitih ah-colour, but the latter is remarkable for its black beard.

0 F J A M A I C A $\quad 8 \mathrm{I}$

## CLADONIA I. Subcinerea Aexilis atque propendens, caule ruffecenti fibrofo.

The pendulous branched Cladonia with a foxy ftalk.
The main ftalk of this plant diftinguifhes it from the firft fpecies of the Ufnea, which it, otherwife, refembles pretty much both in colour and appearance.

CL A D ON IA 2. Ginerea erecia ramofifima, ramuiis obtufis.
The erect Cladonia with obtufe branches.
CL A D O N IA 3. Cinered erecta ramóifima, caule rufffenti verucofo.
The erect Cladonia with a warted foxy ftalk.
CLADONIA 4. Cinereatubulata eo corniculata, minus divifa.
The lefs divided hollow Cladonia with pointed branches.
CLADONIA 5. Cinerea tubulata © minus divifa, caliculis ciliatis terminata.
The whitifh tubular Cladonia with ciliated cups at the end of the branches.

## CLA D O N IA 6. Cinerea tubulata, ramulis paucioribus obtufis capffulis coronatis.

The tubular Cladonia with obtufe capfules.
CLAD ONI A 7. Cinerea tubulata admodum ramofa, ramulis fub-obtujs.
The tubular Cladonia with fubobtufe branches.
CLAD O N I A 8. Cinerea tubulata admodum ramofa, apicibus elatioribus comprefos © ciliatis.
The branched tubular Cladonia with compreffed and ciliated tops.
All thefe fpecies are found in great abundance in the mountains of Liguanee: they grow moftly upon the ground, among the other forts of mofs; but a few of the firf Ipecies chiefly are found upon the decaying trunks of trees.

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\begin{array}{cccc}
\text { S E E C. IV. } \\
\text { Of dry crufaceous Molfes. }
\end{array}
$$

The membranous diffected Placodium.
PLACODIUM 2. Cinereum fubrotundum margine leniter crenato.
The round lobed crenated membranous Placodium.

## PLACODIUM 4. Fufcum filamentofum.

## The ftringy brown Placodium.

All thefe fpecies are met with in the woods, and found growing almoft on every tree in the inland parts of the Ifland.

$$
\begin{array}{ccccc}
\text { S } & \text { E } & \text { T. } & \text { V. } \\
\text { Of the foliated } & \text { Molfes. }
\end{array}
$$

AS the plants of this kind are very numerous, I have been obliged to divide them into claffes; and to range thofe that feem to anfwer in the general difpofition of their fructifications, together under the fame generic appellations."
$\mathbf{I}^{\rho}$. In this manner I have placed all thofe that bear oblong feed-veffels on lang and flender foot-ftalks ;' (whether they rife from the top, or inferior parts of either branch, or ftalk,) under the generic name of Polytricum. And thofe that bear coronated or angular feed veffels at the top of the ftalk or branches, and without any remarkable foot-ftalks, I have alfo placed under another Genus which we have called Mnium.

II ${ }^{\circ}$. We have difpofed thofe that bear fquamore heads at the alæ of the leaves, and have thefe difpofed in three or four regular feries along the trunk and branches, under the generic name of Selago.

III ${ }^{\circ}$. Such as we have obferved to bear their feed-veffels, in the fame manner, at the alæ of the leaves, and thefe placed without any determinate order, I have difpofed under the generic denomination of Sphagnum.

IV ${ }^{0}$. We have claffed fuch as have fmall fimple heads placed at the alx of the upper leaves, and thefe difpofed into oblong fpikes, under the name of Lycopodium.
$V^{e}$. Thofe that bear fmall warted heads upon the very leaves, we have ranged under the appellation of Hypnum.

> POLYTRICUM 1. Erectum minimum femipolicare, foliolis in acumen productis.

The fmall erect Polytricum.
This little plant rifes by a fmall fimple falk, and grows upon the trees, and rocks, every where in the mountains.

## POLYTRICUM 2. Repens difficbè ramofium atque pennatum, elegantilime ad angulos recios divijum.

The ramofe Polytricum with pinnated, divided and diftich branches.
This little mofs is extreamly beautiful: it fpreads flat wherever it grows, and is very minutely fubdivided; but all the branches fpring from the fides, and are again fubdivided very much in a like diftich and pennated order.

> POLYTRICUM 3. Bilineare minimum, foliolis patentibus.
> The fmall Polytricum with patent leaves.

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This fpecies is very fmall, and generally found in fhallow waters where the bottom is gravelly and hard.

POLYTRICUM 4. Minus glaucum pedunculolongiori.
The fmall whitifh Mofs with long foot-ftalks to the capfulx.
This fpecies is pretty fimple, and erect: it grows to about three quarters or one inch in height, and is always found in the more open and funny parts of the mountains.

POLYTRICUM 5. Erectum fimplex, fuperne foliolatum, infernè ferè nudum, foliolis in fetas quafi productis.
The larger erect and fimple Polytricum with long fetaceous leaves about the top.
This plant is frequent in the mountains, and rifes generally from an inch and a half, to two inches or better in height: the foot-ftalks of the feed-veffels are very long.

POLYTRICUM 6. Tripolicare fimplex Eo erectum, foliolis acutis. Plum. T. b. f. 6 .

The larger Polytricum with fharp pointed leaves.
This plant is found only in the cooler mountains of Liguanee; it is furnifhed with leaves equally from the bottom to the top.

M N I U M I. Erectum fimplex \& quadripolicare, foliis rarioribus, corond duplici.
The large erect Mnium with a double crown.
This large and beautiful fpecies of mofs rifes by a fimple foliated ftalk to the height of three or four inches, and bears a double angular crown or feed capfule on a fhort foot-ftalk at the top.

S E L A G O 1. Ramofa repens, Ė radiculofa, jpicillis quadratis.
The branched creeping Selago with fquare fpicille.
S ELAGO 2. Ramoffima repens, foliolis cordatis uno verfu amplexantibus.
The branched creeping Selago with the leaves difpofed on one fide.

> SE L A GO 3. Reclinata major, ramofa, foliolis carinatis. Selago Etc. Pk. t. 453. f. 8.

The larger reclining branched Selago with carinated leaves.
SELAGO 4. Minima repens atque ramofa, foliolis covatis uno verfu amplexantibus.
Selago Etc. Pluck. t. 453.f.g.
The fmall creeping and branched Selago with oval leaves.
All thefe fmall creeping moffes are common every where in Famaica: they fpread and grow by many roots to all the fhaded rocks, and banks. The arangement and difpofition of their leaves diftinguifh them fufficient from all the other forts.

SPHAGNUM 1. Tomentofum ramulis fimplicibus, foliolis angufis Jemiconicis.
The downy Mofs with fimple branches and fharp femiconic leaves.
This little plant rifes about two or three inches from the ground: its branches are generally very fimple, and furnifhed, as well as the ftalk, with a foft down between the leaves.

SPHAGNUM 2. Minus, è viridi fufcum craffufculum, ramofum छ. imbricatum.
The dark branched Sphagnum with fhort imbricated leaves.
SPHAGNUM 3. Erectum, fefquipolicare \& ramofum, foliolis conicis excaratis patentibus of oblique attenuatis.
The fmall erect and branched Sphagnum with hollow pointed leaves.
SPHAGNUM 4: Tenuifimum repens, foliolis nitidis, cordato-ovatis, am-
The fmall creeping Sphagnum with fhining oval leaves.
SPHAGNUM 5. Scandens diffufum, foliolis cordato-acuminatis rarioMufcus Ramofus repens plumeri Plum. de filicibus Americanis. T. 43. The fpreading climbing mofs with pointed leaves. SPHAGNUM 6. Fibratum repens, ramulis, fimplicibus minimis afurgen-
The fibred creeping Sphagnum with fmall fimple branches.
SPHAGNUM 7. Tenue aquaticum, fubereEtum, ramolum, foliolis minoribus aproximatis $\mathcal{E}$ imbricatis.
An, Mufcus Terreftris minor repens; ©ic, Slo. Cat, 12, \& Hift. t. 25. f. 3.
The flender aquatic Sphagnum with imbricated leaves.
SPHAGNUM 8. Reclinatum ramofum longius \& tenue; foliolis rarioribus
The fpreading flender Sphagnum with oblong ciliated leaves.

> LYCOPODIUM Ramofum erectum maximum, foliis fetaceis patentibus.
> Mufcus Squamofus, five Lycopodium altijfmum. Plum. T. $165^{\circ}$
> $A n$, Lycopodium Foliis alternis remotis, EGc. L. Sp. plant.
> An, Bellan-Patsja, H. M. P. 12. t. 39.

The larger Club-mofs or Wolf's-claw.
This large moffy plant is frequent in all the mountainous and fhady parts of $\mathfrak{F a}$ maica; it throws out a good many ftrong branches, and rifes commonly from one, to three or four feet; but is apt to lodge when it grows fo luxuriantly, and then thoots many fmaller roots from every part of the trunk, and branches that lies contiguous to the ground.

$$
\begin{aligned}
& \text { O F J A M A I C A. } \\
& \text { Of foliaceous Mofles with vifible Fructifications. } \\
& \text { MARSILEA Foliis quaternotis. L. Sp. Pl. } \\
& \text { Lens Et lenticula paluffis. J. \&. B. Ray. Hift. } \\
& \text { Lemma Aquatica quadriphylla. Pk. t. 429. f. 5. } \\
& \text { An, Nymphea Minor madera/patana ejufdem. T. 207. f. } 6 \text {. } \\
& \text { The four-leaf'd Marflea. } \\
& \text { This plant is pretty common in the ponds about Old-barbour, and in the parifh of } \\
& \text { St. Elizabeth's : it has a flender weakly ftalk, that creeps along the banks and bot- } \\
& \text { toms under the water, and emits a few long and flender foot-ftalks that reach the } \\
& \text { furface, and bear four thin obtufe leaves at their extremities, which are not unlike thofe } \\
& \text { of wood-forrel either in fhape or fize. }
\end{aligned}
$$

MARCANTIA. Terrefris viridis, foliis oblongo-lobatis, pedunculis longioribus, capitulis palmatis.
Marcantia Calice communi quinquefido laciniis margine refexis. L. S. PI.
Muícus Saxitilis, vel lichen primus petreus latifolius, Ecc. Sl. Cat. 13.\& H. p. 69.

Common Liverworth.
This plant is frequent enough in moft parts of America, and grows on all the moirt and mady banks in the woods and cooler mountains.

It is a gentle fubaftringent cooler and laxative; and may be very properly ordered in all the cooling apozems made ufe of in the burning fevers of America; as well as for thofe foulnefs's, and exulcerations of the fkin, fo common in thofe parts. It is the principal ingredient in the pulvis antilyfus of the prefent Pbarmocopoeia of the college, which has been fo much foke of fome time ago for the cure of the rabies canina.
LICHEN

1. Subcinereus maximus, tenuis, variè © tenuifime divifus.

The afh-coloured large, thin and varioufly diffected Lichen.

## L I C H N 2. Subcinereus maximus varie lobatus, lobis oblongis fubtus fuccis tomentofis.

The larger afh-coloured Lichen with oblong lobes.
LICHEN 3. Tenuis variè lobatus, lobis variè \& elegantifimè pertufis, B ad margines fimbriatis.
The fimbriated Lichen.
LICHEN 4. Variè lobatus, lobis irreguldribus, irregulariterque \&o obtufê crenatis.
The varioufly divided Lichen.
L I C H E N 5. Variè E tenuiter lobatus, quandoque fruticis in modum divijus, apicibus pulverulentis reflexis.

The branched Lichen with feeded tops.

Thefe fpecies of the Lichen are frequent enough in the mountains of Jamaica, efpecially thofe of New Liguanee: they are diftinct enough both in the form of the leaves, and manner of bearing their feeds.

## ANTHOCEROS Niveus, variè lobatus Eo corniculatus, lobis angufis integris.

The white corniculated Anthoceros.
This beautiful little plant is frequent enough in the mountains of New Liguanee, and receives much additional elegance from thofe flender and hollow conic appendices that rife from the margin of the leaves, or lobes in every part. The feedcapfulx feem raifed above the body of the leaf; they are of a compreffed form, and open into two recedeing feiral valves.

## C $\quad$ L $\quad$ A $\quad$ S $\quad$ S $\quad$ IV. Of Ferns.

S E C T. I.
Of fuch as bave their Fructifications or Capfulde of an inverted conic Form; bollow, and difpofed feparately at the Margin of the Foliage, with a fingle Briftle or Seta in each.

> TRICHOMANES I. Minor, repens, fimplex, foliolis oblong is finuatis. An, Trichomanes Minor repens, Eoc, Pk. t. 205. f. 3. An, Phyllitis Minima fcandens. Slo. Cat. 15.

The fmall creeping Trichomanes or Goldy-locks.

> TRICHOMANES 2. Simplex, repens, foliis sereztis incijiss, capfulis bipbylliso
> Trichomanes Fronde fimplici oblonga locerata. L. Sp. Pl.
> Phyllitis Scandens minima mulci facie, ©ci. Slo. Cat. 15. \& H. t. 27 .

The fmall creeping Trichomanes with diffected keaves.
TRICHOMANES 3. Major fcandens Eo ramofifimus, fronde tenuifimè divifa.
Trichomanes Frondibus fupra decompofitis, pinnis filiformibus linearibus uniftaris. L. Sp. Pl.
An, Trichomanes Scandens, \&c. Pk. Phy, t. 29I. f. 2,
Adiantum Ramofium fcandens, E®c. Slo. Cat. 22. \& Hirt. t. 58. \& Plum. t. 93.

The larger climbing Trichomanes.
Thefe fpecies of the Trichomanes are common in the woods of Famaica, and fo diftinct from each other that they need not a particular defeription: the firft and fecond forts are very fmall, and feldom exceed three or four inches in height; but the third is larger, and its numerous foliage often fhoot above a foot from the climbing root, or trunk of the plant.

SECT.

## S E C T. II.

Of Juch as bave their Fructifications difpofed in Separate Spots, and placed immediately under the Margin of the Leaves.
A DIANTUM In Minimum crectum fimplex, foliiss trapezioidibus fubimbricatis.
Filix Parva, ©c. Pluck. tab. 25 r. f. 4.
The fmall erect undivided Adiantum, or Maiden-hair.
This little plant feldom rifes above two or three inches from the root; its leaves and ftalk are very delicate, and the fructifications but few. It grows chiefly in dry and rocky places.

ADIANTUM 2. Simplex aut vix divifum, caule tereti, foliis amplis trianguilaribus impetiolatis. T. 38. f. I.
Lonchitis Serrata \&o retufa. Plum. t. 52.
Adiantum Nigrum non ramofum majus, Ec. Slo. Cat. 21. \& Hift. t. 55. fig. 2.
The large leaf'd undivided Maiden hair.
This plant grows chiefly in moift and fhady places: its falk is feldom branched or divided, and its leaves are commonly from one to two inches in length, and about one and one fourth in breadth.

ADIANTUM | 3. Ramofun, ramis fimplicibus lons is alternis reflectentibus, |
| :---: |
| inferioribus quandoque divifis, foliis trapezioidibus |
| angufioribus. | Adiantum Nigrum maximum non ramofum, \&c. Slo. Cat: 2 I. \& Hint.

$$
\text { t. } 55 \text { f. } 2
$$

Adiantum Ramofium foliis dentatis, \&8c. Pl. t. 97.
The fmall leaf'd Maiden hair with undivided branches.
This plant is very common in Famaica, and rifes generally from a foot and a half, to about two feet or better, in an oblique direction: it is furnifhed with a few alternate fimple branches, and oblong crenated leaves,' but the former are difpofed in a diftich as well as an alternate order, and thofe neareft the root are fometimes furnifhed with lateral ramifications alfo.

ADIANTUM 4: Simpliciter ramofum, foliis majoribus, caule birfuto.
An, Adiantum Etc. Pk. t. 253 . f. I.
The hairy falked Adiantum with undivided branches.
This differs but little from the foregoing in its general make and difpofition; but the ftalk is always hairy, and the leaves large and open. It rifes commonly to the height of two feet or better.

ADIANTUM 5. Tenuius fimpliciter ramofam, fronde minori profunde lobatâo

## The flender Maiden-hair with fhort undivided branches and fmall leaves.

## THE NATURAL HISTORY

This plant rifes by a very delicate flender black ftalk to the height of twelve or fourteen inches: its branches are very fhort, and furnifhed with a fmall lobed and diffected foliage.

ADIANTUM 6. Ramofum, ramis fimplicibus, fummo caule radiatis. Adiantum Frondè digitata foliis pinnatis. L. Sp. Pl.<br>Lonchitis Radiata. Plum. t. 100. \& Pluck. t. 253 - f. 3.

The fmaller Maiden-hair with radiated branches.
This elegant little plant rifes by a fimple ftalk to the height of fix or eight inches, and then divides into five or more fimple branches difpofed in a radiated expanded form; which are fuftained, as it were, by a few fimple leaves placed in the manner of an umbrella or common cup, under their infertions. The leaves are fmall and difpofed in a pennated order.

> ADIANTUM 7. Ereftum inordinate ramofum, caule tereti, ramulis ©o petiolis atro-nitentibus.
> Adiantum Ramofius, E'c. P1. t. 95.
> Adiantum NigrumCanadenfe, E̋c. Pk, t. 254 . f. 1.
> Adiantum Offi. Jamaica.
> The fmaller branched Maiden-hair.

This plant rifes by a fhining black branched foot-ftalk to the height of fourteen or eighteen inches: it grows in thady places, and is plentifully fupplied with leaves; but thefe fall off with great eafe when the plant is dryed.

> ADIANTUM 8. Erectum majus inordinatè ramofum, foliis amplioribus trapezioidibus cum acumine; caule, ramis $\mathcal{F}$ petiolis atro-nitentibus.
> Adiantum Frondibus fupra decompofitis, foliolis alternis, ©®c. L. Sp. pl. Adiantum Nigrum ramofum maximum, E®c. Slo. Cat. $23 . \& \in \mathrm{H} . \mathrm{t} .59$.

This plant refembles the foregoing both in form and appearance; but it grows to a more confiderable fize, and is often obferved to be half an inch, or more, round the ftalk : it rifes fometimes to the height of three feet or better, and makes a very beaufiful appearance in the woods.

> ADIANTUM 9. Ramofum caule tereti, ramulis fimplicibus, fronde compofita profundè Tobatá.
> An, Filix Sexatilis caule tereti, EJc. Pk. t. 180. f. 9.

The branched Maiden-hair with a compound foliage.
A DIANTUM 10. Ramofum ad tertiam feriem divifum, ramulis teretibus comprefis, fronde pinnata, laciniis fublobato-deutatis, inferioribus difinctis.
The branched Maiden-hair with a lobed foliage.
Thefe two fpecies have been but little known until of late: I found both in the midland parts of the Ifland, where the latter grows pretty luxurioully, and rifes fometimes to the height of three or four feet. Its fmaller branches are very flender; and its delicate foliage divided into diftiret denticulated lobes.

## ADIANTUM II. Flavum ramofifimum; aculeatum; ramulis \& frondibus tenuifimis.

Adiantum Frondibus Jupradecompofitis, pinnis palmatis multifidis, caule aculeato. L. Sp. pl.
Filix Ramofa major caule Jpinofo, Éc. Slo. Cat. 23.80 H. t. 61.
This plant is very much divided, and furnifhed with a great number of fhort recurved prickles; its branckes are very flender, and the leaves fmall and deeply crenated: it grows in tufts, and is found in great abundance Above-rocks, and in many other parts of the Ifland.

All thefe Species of the Adiantum are light fubaftringent vulneraries, and may be adminiftered with great propriety in all relaxations and weakneffes of the fibres; in purulent confumptions; and in the ulcerated or relaxed ftate of the glands, efpecially thofe of the breaft ; as well as in moft cutaneous difeafes.

## S E C T. III.

Of fuch as bave their Fructifications difpofed in fimple Lines, under and along the Margin of the Sinus's, or Incifions of the Foliage.

## LONCHITJS I. Erecta ramofa, pinnulis profundè crenatis. <br> An, Lonchitis Altiffina globuligera, Éc. P1. t. 3 I.

Adiantum Nigrum ramofum maximum, foliis feu pennulis obtufs varie fed pulcherimè finuatis $\mathcal{E}$ dentatis. Slo. Cat. 22. \& H. t. 57.
The larger Lonchitis with a fmooth diffected foliage.
This plant grows very common in the woods: it rifes generally to the height of three or four feet, and fpreads a good deal in its growth : it is eafily diftinguifhed by its fmoothnefs, and the divided appearance of its foliage.

LONCHITTS 2. Erecta tribracbiata, lateralibus tripartitis, medio recto fimplici. Tab. I. fig. I, \& 2.

## The tripartite Lonchitis.

This plant rifes by a fimple falk to the height of two or three feet, and then divides into three parts, whereof the midale is fimple; but each of the lateral divifions is again parted into three fimple branches of a proportionate length : it grows in the mountains of Nerw Liguanee, and has not been obferved by either Plumier, or Sir Hans Sloan.

## L ONCHITIS 3. Hirfuta, cofa fimpliciter pennata, lobis oblongis obtuse crenatis.

Lonchitis Frondibus pinnatifidis obtufis integerimis, furculis ramofis birfutis.: L. Sp. Pl.
Filix Villofa pinnulis.quercinis. Pk. t. 30. f. 3.
This plant-rifes commonly to the height of four or five feet; it is moderately hirfute, and often found in the mountains of St. Anne's.

The pinnated Lonchitis with a lobed foliage.
This plant is very different from either of the other fpecies; it feldom rifes above three feet, and the lobes of the foliage are fimple and very near each other.

## S E C T. IV. <br> Of fuch as bave their Fructifications difpofed in Lines under and along the Margin of the Leaves.

PTERIS I. Minor fimplex monophyllus atque lobatus, lobis profundè inci/ss, laciniis lanceolatis.
Hemionitis Profandê lacinēata. Pl. t. 152.
Pteris Minor divifus. Pk. t. 286. f. 5.
Hemionitis Foliis atro-virentibus, ©c. Slo. Cat. 15.
The fmaller fimple Pteris with a divided foliage.
This little plant feldom rifes above four or fix inches from the ground ; it is beautifully difiected, and of a very fingular form, but varies very much in its divifion and appearance.

I T ER IS 2. Simplex, foliis impetiolatis long is angufis auritis.
Filex Pediculopinnas gladiformes tranfadigente, Ec. Pk. 402. f. I.
An, Pteris Fronde fimplici lineari integerimâ longitudinaliter fruttificanti. L. Sp. P.

Lonchitis Non ramofa, longifimis angufis, Ec. foliis. Plum, t. 6 g .
The fimple Pteris with narrow leaves.
This plant feldom rifes above fourtéen or fixteen inches; it grows in cool and moift places, and is remarkable for its narrow fimple leaves, and undivided ftalk.

## PTERIS 3. Simplex affurgens, foliis, longioribus lanceolatis, petiolis brevibus. <br> Lonchitis Major pinnis longis anguffiffimifque. Slo, Cat. 16. \& H. t. 34. The fragrant Luzan-Fern of Pet. Gaz, t. 63. f. 10 ,

The larger erect Pteris with long lanceolated leaves.
This plant fprings from a large firm root, and rifes commonly to the height of twelve or fixteen inches above the ground, fometimes mere? It grows in the moft cool and fhady places, but thrives beft in a tocky or gravelly foyl.

## P T E R IS 4. Simplex, pinnis longis in lobos innguftos falcatos profundè fectis, infina utrinque griminata. <br> Pteris. Pluck. t. 40 I. f. I. <br> Pteris Fronde pinnata, pinnis pinnatifidis, infimabipartito. L. Sp. Pl.

The fimple Pteris with the lower ribs double.
This plant grows in the cooler mountains of New Liguanee: it rifes commonly to the height of two feet and a half, or better, and is eafily diftinguifhed by the regular divition of its lower ribs.

P T E R IS 5. Sefquipedalis ramofus, foliis minoribus oblongis ferratis. Adiantum Album foridum, Ec. Pk. t. 3. f. 2. An, Adiantum Foliis bexagonis. Pl. t. 37.

The branched Pteris with oblong crenated leaves.
This is a very elegant little fpecies of the Pteris: it grows commonly in moilt and mady places, and rifes to the height of fixteen or eighteen inches. It is pretty much divided, and the leaves, when young, are ferrated ; but, as it begins to feed, the margin reflects, and none of thefe are feen : it is very common about the cafcade in Sto Ann's.

## PTERIS 6. Ramofus, fronde profundè lobatâ, pinnulis oblongis lobis

 denticulatis.The branched Pteris with prickly ribs.
This plant rifes to the height of three or four feet, or more, and makes a very elegant appearance in the woods. It is not common; I have found it once in the woods Above-rocks.

PTERIS 7. Ramofus, fronde rariori lobatâ, lobis linearibus auritis quandoque fubdivifs, terminalibus longioribus.
Filix Ramofa, ©ec. Plum. t. 29.
Pteris Fronde fupra decompofitâ, infimis bafi pennato-dentatis, terminalibus longifamis. L. Sp. P.
Filix Forminea five ramafa major, Eic. Slo. Cat. 24. \& H. t. 63.
The larger branched Fern with a narrow divided foliage.
This plant is very common in the mountains of Famaica: it grows very thick in the moft open fpots, and thrives beft in a ftiff clayey foyl.

PTERIS 8. Ramofus, foliis linearibus per pinnas alatas.
Pteris Fronde decompolitâ foliolis pinnatis, infimis Jemipinnatifidis, terminalibus bafeofque longifimis. L. Sp. Pl.
An, Pteris Etc. Pet. Pterig. t. 3, 10.
The fmaller branched Fern with a narrow divided foliage.
This plant grows like the foregoing, but never rifes to that height : it loves an open gravelly foyl, and is very common in the lower hills.

## S E C T. V.

Of fuch as bave their Fructifications dijpofed in fimple Lines extended along the Sides of the main Nerve or Vein of the Leaves.

## BLECHNUM 1. Simplex foliis amplioribus oblengis falcatis \& impetiolatis. <br> Blechnum Fronde pennata, pennis lanceolatis oppofitis bafz emarginatis. L. Sp. Pl. <br> Lonchitis Juxta nervum pulvurulenta. Plum. t. 62. \& Pet. Pterig. t.3. f.g. An, Filix Maxima in pennas tantum divía, Eic. Slo. Cat. \& Hift. t. 37.

The" undivided Blechnum with larger oblong leaves.

This plant rifes by a fimple undivided falk to the height of thirteen or eighteen inches; the leaves are long and pretty narrow; and the feed-capfulx difpofed in two lines along the fides of the main nerve on the under fide of the foliage.

## S E C T. VI.

Of Juch as bave their Fructifications difpofed in flreight and fimple Lines on the under Side of the Leaves.

ASPLENIUM 1. Acaule, foliis ampliffimis, margine inequali E8 leniter ferrato, petiolis angulatis $\delta$ marginatis.
Afplenium Fronde fimplici lanceolatá ferratá. L. Sp. Pl. Lingua Cervina Longo lato ferratoque folio. Plu, to 124. Phyllitis non finuata, foliorum limbis, Ecc. Slo. Cat. 14.

## The large fimple Afplenium or Hart's-tongue with a ferrated margin.

This plant is found in all parts of famaica: and is generally obferved to grow in tufts. The leaves rife from a thick fibrous root, and fhoot commonly to the height of two or three feet. It grows fometimes upon trees, fometimes upon the ground.

## A S P L EN I U M 2. Acaule minus, foliis oblongis, petiolis glabris. <br> > The fimple Afplenium or Hart's-tongue with a fmooth fhining Foot-ftalk. <br> <br> The fimple Afplenium or Hart's-tongue with a fmooth <br> <br> The fimple Afplenium or Hart's-tongue with a fmooth fhining Foot-ftalk.

 fhining Foot-ftalk.}This plant feldom rifes above ten or twelve inches; but grows from a fibrous root like the former, which generally runs in the ground: the margin is even and the ftalk fmooth. It is found in the road through Mayday-bills, and has not been noticed before, or if it has, muft have been confounded with other plants.

ASPLENIUM 3. Minimum fimplex foliolis fubrotundis quandoque crenatis.
Afplenium Frondibus pinnatis, pinnis cuni-formibus obtufis crenato-emarginatis. L. Sp. Pl.
Filicula Pumila, Éc. Pk. t. 8g. f. 5.
The fmall fimple Afplenium with roundifh leaves.
This little plant feldom rifes more than one or two inches above the root; the ftalk is flender and delicate; and the leaves roundifh, jagged and few: the feed-capfules are difpofed in a few fhort lines on the back of the leaves. It grows in the fiffures of the rocks about Port Antonio.

## ASPLEN IUM 4. Simplex minus reflectens, foliis oblongis crenatis $\mathfrak{B}$ fubauritis, fummitate apbyllo radicanti. <br> Asplenium Frondibus cordato-cuniformibus indivifs, apice filiformi radicante. L. Sp. pl. <br> Afplenium Minus, Eic. Pk. t. 253. f. 4. <br> Lonchitis Afplenii folio, pinnulis variis, Éc. Slo. Cat. 16. \& Hift. t. $3^{\circ}$

This plant is frequent in the mountains of Liguanee: it feldom grows above ten or twelve inches in length, and is always found, with the top bending towards the ground.

# ASPLENIUM 5. Minus affurgens fimplex, foliis oblongis, margine inequali crenato. <br> Afplenium Frondibus pinnatis, pinnis fubrotundis crenatis. L. Sp. PI. Afplenium Minus, Eic. Pk. t. 253. f. 5. <br> Trichomanes Crenulis bifidis incifum. P1, t. 74. 

## The fimple erect Afplenium with crenated leaves.

This plant grows alfo in great abundance about the mountains of Liguanee; it is very different in its growth, and is found from fix to eighteen inches in height.

## A S P LE NI U M 6. Simplex foliis oblongo-ovatis, caule marginato-alato.

The oval leaf'd Afplenium with a margined ftalk.
This plant feldom rifes above fourteen or fixteen inches in height; its leaves ate oval and fimple, and the ftalk furnifhed with a margin on each fide: it is' very common in Portland, and the Barrack mountains in Wepmoreland; and feems to like a thady moift foyl beft.

$$
\begin{array}{cc}
\text { ASPLENIUM } & \text { 7. Simplex a alurgens, foliis oblongis oppofitis, caule ge- } \\
\text { niculato, lineis fruitificationis fere contiguis. }
\end{array}
$$

Lingua Cervina nodofa. Plum. t. 108.
Filix Major in pinnas tantum divifa raras, Ěc. Slo، Cat.18. \&c Hift. t.41.
The fimple erect Afplenium with a knotted falk.
This plant is very common about the Barrack road in the mountains of Wefmoreland : it rifes three or four feet in height, and has the feed-lines fo clofely difpofed on the back of the leaves, that it may be eafily miftaken for an Actofticum at firft view.

## ASPLENIUM 8. Simplex, frondibus oblongis acuminatis © profunde crenatis.

Filix Mas vulgari fimilis, pinnulis amplioribus, Ėc. Pk. t. 179. f. 2. Afplenium Etc. Thez. Zey. page 100. Pl. I.

## The fimple Afplenium with an oblong and deeply jagged foliage.

This plant rifes generally to the height of about three feet : its leaves or pinnae are deeply indented, and the feed-lines fhort and thick-fet on the back of them.

## ASPLENIUM 9. Affurgens, fimplex, foliis oblongis, ultimo crenato. Trichomanes Majus nigrum, Ơc. Slo. Cat. 17. \& Hift. t. 35 .

The fimple erect Afplenium with a crenated upper leaf.
This plant generally rifes to the height of two or three feet; the ftalk is fimple and the leaves almoft entire to the uppermoft, which is commonly jagged, or more imperfectly divided: it grows in cool and hady places.

> ASPLENIUM 10. Simplex riillofumr foliis lanceolato-cesatis, levifime crenatis, biners fractificationis denffimè fitis.
> Pteris Fronde pinnatá, foliis oblangoocratis obtulis fubtus lannatis. L. Sp. PI.
> Filix Minor rufá lamugine obductá. Slo. Cat. 19. \&e Hift. to 3.5.
> The fimple hairy Afplenium.
> C.
> This

This plant feldom rifes above eighteen or twenty inches, and is foliated almoft from the root: it grows in the lower mountains of Liguanee, and feems to like a fhaded fandy foyl beft.

> A SPLENIUM II. Simplex, nigrum, foliis oblongo-acuminatis, margine quafi laceratis.
> Filix Non ramofa Zeylonica, Ěc. Thez. Zey, t, 43. ${ }^{2}$ I

The fimple Afplenium with lacerated leaves.
This fpecies of the Afplenium feldom rifes above fourteen or eighteen inches; the ftalk is black and fimple, the leaves pointed; and appear as if torn at the margin : it grows in the lower mountains of Liguance, and thrives beft in a free fandy foyl.

> ASPLE NIUM 12. Simplex minus flavum, foliis paucis traperioidibus quafi laceratis, terminatrice production

Afplenium Minus, Eic. Pk. t. 405. f. 2,
Nilla-panna Etc. H, M. prevet. 48.

## The fmaller Afplenium with lacerated leaves.

This plant is very like the foregoing both in form and difpofition ; but it feldom rifes above ten or twelve inches, and the upper leaf is remarkably longer than any of the reft.

AS PLEN IUM 13. Majus, fimplex, foliis amplioribus © longioribus, cor-dato-lanceolatis leniterque crenatis, petiolis brevilimis. $A n$, Lonchitis Glabra major. Plum. t. 60.

## The larger Afplenium with the leaves flightly crenated.

This plant is commonly found in the moft fhady and mountainous parts of $\mathrm{Fa}_{\mathrm{a}}$ maica: it grows to the height of three or four feet, and is frequent enough in the mountains of St. Ann's and Wefmoreland.

## ASPLENIUM 14. Majus fimplex, foliis oppofitis amplifimis amplexantibus.

The larger Afplenium with oppofite embracing leaves.
This plant, if ever noticed before, has been confounded with the foregoing: it is very rare, and grows generally in the moft retired parts of the woods. I have obferved only one tuft of it, and that, far back in the mountains of St. Amn's: it grows in a rich fhady foyl, and rifes to the height of five or fix feet from the root.

ASPLENIUM 15. Simpliciter pinnatum, caule compreffo marginato, fronde pinnatá, laciniis fublobato-dentatis inferioribus diftinetis, fuperioribusadnatis.
Afplenium Fronde compofitâ, pinnis oppofitis, Ejc. L. Sp. P1.
Lonchitis Dentata, pinnularum cacumine bifecta. Plum. to 46.
The divided Afplenium with margined ribs.
This plant feldom rifes above two feet: it is beautifully divided and margined, and feems to thrive beft in a fhady dry place. It is frequent in the lower mountains of Liguanee.

# ASPLENIUM 16. Ramofum majus, frondibus amplioribus pinnatifidis, lobis angufis ferratis patentibus. An, Filix Africana foride fimilis。 Pk. t. 87.f. 5 . 

The divided Afplenium with narrow ferrated lobes.
The fmaller branches, in this fpecies, are very fimple, and the foliage divided by open interftices into narrow ferrated lobes, which do not join to the bafe, but are connected by a flender fegment of the common margin; the whole plant, if I remember right, rifes to the height of five or fix feet, or higher; and is frequently met with in the woods: the feed-capfulæ are difpofed in two feries on the back of each lobe.

## A SPLEN IUM 17. Subarborefcens fupra decompofitum, foliolis angufis ferratis bafi adnatis.

## The finall Fern-tree.

This fpecies of the Afplenium is very full of branches, and rifes by an imperfect bodied trunk to the height of feven or eight feet from the ground : it is very difficult to diftinguifh it from the Fern-tree, with which it has been generally confounded. The feed-capfulæ in thefe three laft fpecies, as well as in the firft and fome of the other forts, are difpofed in oblong fpots of no great extent : they feem to approach the Polypodium in the general appearance, but may be eafily diftinguifhed when carefully obferved.

$$
\begin{aligned}
& \text { S E C T. VII. } \\
& \text { Of Juch Plants as bave their Fructifications difpofed in Lines that } \\
& \text { interfect each other on the underfide of the Leaves. }
\end{aligned}
$$

Hemionitis i. Parafitica acaulis, foliis longis angufis utrinque productis.
Hemionitis Frondibus lanceolatis integerimis. L. Sp. Pl. Hemionitis Plum. t. 127. Lit. C.

## The narrow leaf'd undivided Hemionitis.

This plant is commonly found on the trunks of trees in the cooler and more finady inland woods: the leaves are plain and fimple, and feldom exceed fixteen or eighteen inches in length, when moft luxuriant; they grow in tufts from a ftrong fibrous root.

## HEMIONITIS 2. Parafitica repens, foliis ovato-acuminatis. <br> The creeping Hemionitis with pointed oval leaves.

This uncommon plant is fometimes found creeping on the trees in the cooler fhady inland woods: the leaves are about two inches long, and one and a half over where broadeft. I have obferved this fpecies far back in the mountains of St. Ann's.

HEMIONITIS 3. Subbirfuta monopbylla fimplex, fronde palmato-
Hemionitis Frondibus palmatis birfutis. L. Sp. PI.
Hemionitis Subbirfuta, fimplex, E'c. Pk. t. 287. f. 4.

Hemionitis Aurea, birfuta. Plum. t. 151.

## The hairy fimple lobe-leaf'd Hemionitis.

This little plant feldom rifes above five or fix inches from the ground. It is pretty hairy every where, and grows chiefly in low moint places, but thrives beft in a rich luxuriant hady foyl.

## S E C T. VIII.

## Of fuch as bave their Fructifications difpofed in difinct round Spots,

 or fmall Heaps, on the under Side of the Foliage.WHE N I firft difpofed thefe plants in the following order, I had not feen Linneus's method of claffing them, nor his remarks upon the difpofition of their capfulx (a); but as I find the fituation of thefe to be of fingular fervice in the arrangement of this intricate and numerous family, 1 thall endeavour to mention it when ever I recollect, or can difcover the true pofition of them; though I hall fill follow my common method, viz. of beginning with the moft fimple, and geing on gradually to the moft divided fpecies.

POL Y PODIUM 1. Acaule foliis oblongis fimplicibus, capfulis ferialibus. Phyllitis Arboribus innofcentibus, Ėc. Slo. Cat. 14.

The fimple Polypodium without a trunk.
This plant is very common in the woods of Jamaica, and grows like the firft fpecies of the Afplenium both in fize and appearance: the leaves are thin and delicate, feldom under two and a half or three inches in breadth, and eighteen or twenty in length.

POLYPODIUM 2. Acaule minus, capfulis duplici ferie nervis interjectis.

## The fmaller Polypodium with two feries of capfulæ between the radiating nerves.

This plant is commonly confounded with the foregoing, though it is very diftinct both in the areolated texture of its leaves, as well as the difpofition of its capfulx. It rifes generally to the height of fixteen or eighteen inches.

## POLYPODIUM 3. Acaule erectum minus, margine crenato-lobatáa, apice lanceolato porrecto.

## The fmall fimple Polypodium with crenated leaves.

This plant grows, by a fmall fibrous root, to the trunks of decaying trees, and is commonly found in the moft folitary woods: it confifts of fimple leaves, which feldom rife above three or four inches from the root; thefe are obtufely crenated at the margin's in the lower part; but the top ftretch into plain lancet-like fimple lobes.
(a) Thofe that are difpofed in two lines, along the fides or nerves of either the leaves or lobes, I fhall call Lineales; but fuch as run in a lineal direction from the middle vein, or rib, and lie parallel to the fmaller nerves, we fhall call Seriales; and thofe that are difpofed in no peculiar order, we fhall call Sparfie.

# POLYPODIUM 4. Minus acaule, fronde infernè partitâ fupermè lobatâ, capsulis linealibus. <br> Polypodium Minus, acaule. Pk. t. 2go. f. I. 

## The fmaller fimple lobe-leaf'd Poly podium.

In this plant the leaves rife together from a fibrous root, and feldom grow above five or fix inches in height: the foliage is divided into fmall diftinct parts towards the bottom; but as the plant rifes thefe are confounded together, and it becomes a lobed margin on each fide of the ftalk or rib. It thrives beft in dry rocky places.

> POL YPODIUM 5. Simplex repens, folis minoribus ovatis, capfulis fparfis. Lingua-Cervina Minima repens. Plum. .t. 118 . An, Polypodium Frondibus crenatis glabris frutificationibus folitariis. An, Phylitidi Scandentiaffinis. minma. Slo. H. t. 28.

## The fmall creeping Polypodium with oval leaves.

This fmall plant is very rare in famaica: I found it in the mountains of St. Faith's near the fide of the river below Mr. Browne's eftate. It creeps along the ground, and cafts its finall oval leaves on both fides, in an alternate order: thefe feldom exceed an inch and quarter in length, and lie, commonly, clofe upon the ground, or rocks.

> POLYPODIUM 6. Scandens, caule tereti Isirfuto, foliis fimplicibuslanceolatis, capfulis linealibus.
> Polypodium Frondibus lanceolatis integertmis glabris, fructificationibus foo Titariis, caule ramofo repenti."L, Sp. P.
> Lingua-Cervina Scandens, Ecc. Plum, t. Itg.
> Polypodium Scandens; Éc. Pk. t. 290. f. 3.
> Phylittis Minor fandens, E'c. Slo. Cat. 15.

The climbing Polypodium with a flender hairy ftalk.
This plant is very common in the inland open parts of famaica; it is a climber, and creeps along every tree that comes in its way ; the leaves are about two inches in length, and a third of an inch in breadth. It is frequent in Sixteen-mile Walk, and many other parts of the Illand.

## POLYPODIUM 7. Trypbillum fimplex, foliis majoribus margine quafi laceratis, capfulis pparfis.

Hemionitidi Afinis filix major trifida, © $\mathcal{G}_{6}$. Slo. Cat. 18.8 H. t. 42.
An, Hemionitis Maxima trifolia. Plum. t. 148. \& Pett. Pter. t.7. f. 6.

## The larger fimple Polypodium, with three lacerated leaves.

'This plant rifes commonly to the height of twenty four or thirty inches: its leaves are very large in proportion, and appear as if they had been torn at the margin. It grows in the more fandy inland mountains, and is pretty frequent in the woods of St. Mary's.

> POLYPODIUM 8. Minus tripbyllum, foliis profundè divifs, lobis oblongis fublobato-crenatis.
> Polypodium Etc. Pk. t. 289. fo 4 .
> An, Polypodium Frondeternata fnuato-lobata, intermediomajori. L.Sp.P.

The fmaller three leaf'd Polypodium with a divided foliage.
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Thefe little plants rife, three or four together, from a tufted fibrous root, and feldom exceed eight or ten inches in height: their foliage is divided very deep, and each lobe is again deeply crenated in the margin.

## POLYPODIUM 9. Simplex minus, fronde ad nervum pennatifidâ, laciniis linearibus patentibus, capfulis linealibus.

## The fmaller fimple Polypodium, with a narrow-lobed open foliage.

This plant feldom rifes above fixteen or eighteen inches; the ftalk is black and delicate, and the lobes, or divifions of the foliage, nearly alike in breadth; they are generally about an inch long and pretty wide afunder.

## POLYPODIUM 10. Simplex, fronde majori ad nervum pinnatifida, lobis fubcrenatis longis angufis acutis, capfulis linealibus.

The fimple Polypodium with a large digitated foliage.
This plant grows commonly in an open free foyl: the trunk or rather root, is pretty thick and fhagged, and runs a good way under ground; from whence it emits, at certain diftances, fome fimple falks with an open divided foliage: this confifts of long narrow flips ftanding in a pinnated order on each fide; but thefe are all connected at the bottom, clofe to the main rib. This plant is fometimes found climbing on the neighbouring trees; and then the root becomes a trunk of the fame fize and fhagged appearance; and emits its foliage laterally, as it does in the other ftate: the ribs are feldom under two feet and a half in length, in any ftate, and the narrow fide lobes are generally about fix or feven inches.

> POLYPODIUM 11. Simplex, caule tenui, foliis lanceolatis totá báfíaffixis, inferioribus difinctis fuperioribus adnatis'; capfulis Jerialibus.

The fimple flender Polypodium with long narow lobes.
This plant rifes, by a very fmall and flender rib, to the height of twenty fix or thirty inches; its foliage is pretty open, and the lobes very diftinct and feparate towards the bottom ; they are of a lanceolated form, and ftick by their entire bafes to the rib; but as they approach nearer towards the top, they are joined together at their bafes, as if it had been but a lobed margin.

> P OL Y POD IUM 12. Erectum fimplex, foliis paucioribus \& majoribus cvatis.
> An, Lingua-Cervina Quinquefolia. Plum. t. 114.
> Hemionitis Maxima quinquefolia. Plum. t. 146.
> Filix Major fcandens in pinnas tantum, छ\%c. Slo. Cat. 17. \& H. t. 39, \& 4 I. f. 2.

## The fimple erect Polypodium with large oval leaves.

This plants grows moftly in the cool and fhady woods, and feldom rifes more than fixteen or eighteen inches from the ground: its leaves are large, diftinct, and of an oval form. I have never feen any of its fructifications, tho' I have often obferved it frefh; and have ranged it here only by the habit or appearance, which feems to fhew it is of this kind.
POLYPODIUM 13. Erectum fimplex, foliis oblongis majoribus, inferio-
ribus auritis fupremis adnatis, capfulis Serialious.

O F J A M A I C A.
An, Polypodium Simplex, ©̛. Pk. t. 289. f. 3.
The fimple erect broad-leaf'd Polypodium, with diftinct capfule.
This plant is furnifhed with broad leaves, like the foregoing; but the capfulix are very diftinct: the three uppermoft leaves are connected togcther at the bottom, and the two lowermoft have each an ear, or appendage, towards the bafe. It feldom rifes above fixteen or eighteen inches.

POL Y P ODIUM 14. Simplex foliis lanceolatis integris bafinequalibus fubauritis, petiolis brevifimis, capfulis Jpar/is.
An, Lonchitis Altifima pinnulis utrinque, E®c. Slo. Cat. 16. \& Hift.t. 3 I.
The fimple narrow-leaf'd Polypodium.
This plant feldom rifes above two feet and a half, or three feet in height; the falk or rib is very fimples and the leaves pointed and entire: they are connected by very fhort footftalks, and project backwards on each fide of them.

## POLYPODIUM 15. Simplex, foliis nervofis lanceolatis integris acumi natis ad bajem contractis.

The fimple Polypodium with pointed narrow leaves.
I have not yet feen the capfulæ of this plant, and place it here only from the habit which feems to manifeft it of this tribe : it is feldom above two feet and a half in height, and is remarkable for the clofe nervous texture of its leaves.

> POLYPODIUM 16. Simplex fubbirfutum, foliis lancoolato-oblongis, capPolypodium Frondibus lanceolatis, integegirimis, birfutis; fructifcationibus folitariis. L. Sp. Pl.

The fimple hairy Polypodium with lancet-like leaves.
This plant feldom rifes above thirteen or fifteen inches: I have only feen one of the kind in the ifland ; I found it at Mr. Cook's in St. Elizabetb's.

POLYPODIUM 17. Simplex, foliss lanceolato-ferratis gradatim minoribus, capfulis ferialibus, caude finuato © fubangulato.
Kari-beli-panna Etc. H. M. vol. xii, t. 17.
The fimple Polypodium with a pyramidal foliage.
This plant is very fimple, and feldom rifes above the height of two feet and a half: the leaves are lanceolated, and ferrated or indented; and faftened by thort foot-ftalks.

POLYPODIUM 18. Erectum fimplex, foliis lanceolatis profundè fublobatis ferè equalibus \&o oppofitis, terminatrici confimili, capfulis linealibus.
Filix Latifolia, pinnulis ferè acuminatis dentata. Plum. t. 16.
Filix Zeylonica denticulata, Bc. Thez. Zey. t. 44. f. I.
Filix Non ramofa major furculis raris, E'c. Slo. Cat. 19. \& Hift. t. 48.
The fimple erect Polypodium with leaves equally lobed.
This plant is very common in the lower mountains of Jamaica. It feldom rifes above
above two feet; and is the only one of the kind I have known, whofe branches and leaves do not diminifh gradually to the top.

> POLYPODIUM 19. Simplex, frondibus majoribus oblongis profundè lobatis, inferioribus dïfinctis auritis, mediis dimidia, fuperioribus totá bafi adnatis; lobis fubcrenutis remotis.

The large-leaf'd fimple Polypodium with remote open lobes.
This plant rifes generally to the height of two or three feet, and is commonly found in cool and fhady places. The capfula are very few, and feem as if they were difpofed in a lineal form.

POLYPODIUM 20. Minimum fimplex, foliis angufis ferrato-lobatis.
An, Polypodium Minimum foliolis angufis crenatis. Pk. t. 283.
The fmalleft Polypodium with flender ferrated leaves.
This plant feldom rifes above four or five inches: it grows in tufts from a proportionate fibrous root; and is generally well fupplied with narrow ferrated, or lobed leaves.

POLYPODIUM 21. Simplex Ep pyamidatum, foliis lanceolatis inci/s gradatim minoribus, lobis approximatis angufis integris, capfulis fublinealibus.
An, Filix Minor in pennas tantum divifa. Slo. Cat. 18. \& Hift. t. 43. Filix Non ramofa major furculis crebris, Ěc. Slo. Hift. t. 5 I. f. 2. Filix Paluftris mas non ramofa, Éc. Pk. t. 243. f. 6. \& t. 244. f. I.

The fimple Polypodium with deep-cut leaves.
This plant is very common about the lower hills of Jamaica: it grows in fhady places, and feldom rifes above two or three feet.

POLYPODIUM 22. Minus fimplex, foliis oblongis integris falcatis, fuperioribus totá inferioribus auritis dimidiá tantums bafi adnatis.
Filix Non ramofa major, Ėc. Slo. Cat. 19. \& Hift. t. 48.
The fimple Polypodium with oblong leaves.
POLYPODIUM 23. Simplex, foliis lanceolatis integris diftinctis tota baf affixis, fupremo fubbaftato, capfulis folitariis.
Polypodium Simplex, E̛c. Pk. t. 288. f. 1.
The fimple Polypodium with diftinct leaves.
POLYPODIUM 24. Scandens, caule tereti glabro, foliis petiolatis anguftis fubferrulatis, quandoque auritis, quandoque digitatis.
Polypodium Scandens, E'c. Pk. t. 407. f. 2.
Polypodium Etc. Thez. Zey. Tab.
Phylitidi Multifida affinis. Slo. Cat. 19. \& Hirt. t. 46.
The climbing Polypodium with a flender fmooth ftalk.
This fpecies of the Polypodium is a climber, and rifes to a confiderable height

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along the trees; the ftalk is fmooth and flender, and the leaves of a ferwous texture, and fometimes divided into two or more unequal parts.

## POLYPODIUM 25. Minus fubbirfutum \& fimpliciter pinnatum, foliis difinctis fubovatis crenatis, capfulis fatis.

## The fmaller fubhirfute and divided Polypodium with fimple branches and oval crenated leaves.

This plant is not common in Famaica; it feldom rifes above eight or ten inches from the ground, and freads into a branched foliage above the middle; thele are fimple, and furniphed with oval alternate and jagged leaves: both the foliage and branches of the plant are adorned with a fine down.

> POLYPODIUM 26. Simpliciter pinnatum, pinnis obtuse lobatis, inferioribus fubdivifs petiolatis, mediis diffinctis, fuperioribus basi adnatis, capfulis linealibus. An, Polypodium Etc. Pk. t. 2q6. f. 2.

## The Polypodium with diftinct and divided under-branches and obtufe lobes.

This plant feldom rifes above the height of two or three feet, but its foliage is very fpreading open and large in proportion: the lower branches are much divided, and each of the divifions is lobed again; but thefe ftand ch peculiar foot-ftalks: the other ribs are obtufe, and flightly jagged, fimple, and cut into diftinct lobes; but the middle pinnæ are diftinct at the bate, while thofe above them are all connected by a marginal foliage : the ftalk is pretty flender,

> POLYPODIUM 27. Simpliciter pinnatum, pinnis difinctis fimplicibus profundè finuatis, lobis majoribus crenatis, capfulis Jparfis.

The pinnated Polypodium with an open diffected foliage.
This plant refembles the foregoing very much in the fize, form, and difpofition of its foliage ; but it is diftinguifhed by the arrangement of its capfult, and undivided ribs or branches.

## POLYPODIUM 28. Subarboreum ramofum, fronde pinnatifidâ ad coftam fecta, lobis lanceolatis integris, capsulis fparfis.

The fubarborefcent Polypodium with a large lobed foliage.
This plant grows very large and buhyy, putting on the appearance of a fmaller tree : it rifes to the height of eight or ten feet, and is compofed of a fhort thick trunk, and branched fpreading arms. It is fometimes met with in the mountains of St. Mary's; and is not uncommon Above-Rocks.

POLYPODIUM 29. Simpliciter ramofum minus, foliis angufis crenatis
Filix Mas non ramofa, pinnulis angufis, Ėc. Pk. t. 180, f. 4.
The fmaller Polypodium with fimple branches and fmall crenated leaves.

This plant feldom rifes above three feet in height; it grows in cool and fhady places, and is common enough in moft of the inland parts of the Ifland.

# POLYPODIUM 30. Minus, pinnis marginato-alatis 8 canalicuitatis, foliolis oblongo-covatis profundè crenatis. Filicula Fontana latiori folio. Pk. t. 180. f. 6. 

The leffer branched Polypodium with oval crenated leaves and chanel'd ribs.

This plant feldom grows to any confiderable height, and is pretty frequent in all the fhady vales of Jamaica.

> P O L Y P O D I UM 3 I. Ramofum fcandens, fronde patulâ fpeciofâ tenuiori, capfulis ad crenas pofitis, ramulis teretibus.
> Filix Ramofa maxime fcandens, \&c. Slo. Cat. 23. \& Hift. t. 60 .

The larger climbing Polypodium with a minute fpreading foliage.
This plant is pretty common in the woods in St. Elizabetb's; and rifes to a confiderable height by the affiftance of the neighbouring trees: it is remarkable for the elegancy of its fmall and fpreading foliage, the lobes of which are very minute, oblong, and jagged, and the feminal capfulx difpofed at the bottom of each chap or notch, fo that it feems to refemble an Adiantum in fome meafure; but on obferving the fpots with a lens, they are found to have the fame make and appearance with thofe of all the other fpecies of this tribe.

POLYPODIUM 32. Ramofum tenue Es affurgens elegantiflamè divifum, pennulis marginatis, fronde tenui lobata atque crenata, capfulis fublinealibus.

## The flender branched Polypodium with a minute fpreading foliage.

All the parts of this plant are very neat and flender; its foliage is very like that of the foregoing, but fomething larger and more clofe; and the capfulx, when thick, are difpofed in very regular lines along the back of the lobes; but when they are but few, they do not appear fo orderly. It feldom rifes above three feet from the ground.

## P OL YP ODIUM 33. Subarboreum ramofum, cofis validifimis, fronde majori finuatá E̛ minus divijâ.

The larger Polypodium with ftrong ribs, and a lefs-divided foliage.
The ribs of this plant are very large, and rife from a fubed fhort and thick trunk; they fpread much, and fhoot commonly to the height of eight or nine feet: its foliage is very large, open, and irregularly lobed. The plant thrives beft in a rich and cool foyl, and is frequently met with Abrve-rocks.

POLYPODIUM 34. Hirfutum ramofum, frondibus oblongis pinnatis \&8 pinnatifdis, lobis appropinquatis oblongis integris, capfulis linealibus.
The larger hairy and branched Polypodium.
This plant is found in the inland woods, and rifes commonly to the height of four or five feet : its leaves are pretty deeply cut, but the lobes are fimple and clofe. It is remarkable for its down.

# P OL Y P OD IUM 35. Majus ramofum, frondibus pimatifdis, tobis sblong is fubcrenatis, inferioribus difinctis fuperioribus fubadnatis; capfulis linealibus ner'vulo appropinquatis. 

The larger branched Polypodium with a pinnated foliage.
This fpecies of the Polypodium rifes to a confiderable height, and is divided into a number of pretty robuft branches: the leaves or foliage is divided into oblong and lightly ferrated lobes about half an inch in length ; thefe are diftinct, and prettry wide afunder towards the bottom; but as they approach the top of the leaf, they grow nearer, and are connected at the bafe.

POLYPODIUM 36. Ramofum tenuius, caule É ramulis fipulis fquamofis obfitis, foliis feu frondibus lanceolatis ad nervum fere pimatifidis, lobis oblongis ferratis \& appropinquatis, capfutis lublineatibus.
The ramous flender Polypodium with ftubbled branches.
This plant does not rife above three or four feet; its ftalk and branches are very flender, its foliage delicate, and the feed-capfulx very thin.

## POL YPODIUM 37. Ramofum catle tereti glabro, frondibus yeminatis ad nervum pinnatifidis, lobis lineari-lanceolatis refilis oppofitis.

The divided Polypodium with flender ftalks and a paired foliage.
This plant is not mentioned by either Sir Hans Sloane, or Plumier; its pinnæ are always difpofed in pairs on common alternate foot-ftalks, and the lobes of each, fharp and lanceolated, always intire, and rifing at right angles from the main nerve.

## POLYPODIUM 38. Ramofum caule tereti nigro, frondibus geminatis longioribus.

The larger divided Polypodium with a paired foliage.
This plant differs but little from the foregoing either in form or appearance, but is generally larger: both fpecies are fometimes found climbing tho' they commonly grow in large fpreading tufts: they are frequent enough Above-Rocks.

POL Y POD I UM $\begin{gathered}\text { 39. Quadrunciale minimum ramofum, cofta alata, folis } \\ \text { olis cornu cervi in modum feeti is. }\end{gathered}$
An, Filix Saxatilis caule tenui fragili. Ray. Pk. t. 180. f. 5.
The fmall Polypodium with a divided foliage and few branches.

## P OLYPODIUM 40. Caulefcens Spinofum $\mathcal{E}$ fimpliciter ramofum, foliis vatis leniter inci/s.

Filix Arborefcens bumilis \& Jpinofa, E'c. Plum. t. 3. Polypodium Spinofum, E®c. Pk. t. 293.
Filix Arborea ramofa \& fpinofa, Eic. 1 Slo. Cat. \& Hift. t. 46.
The prickly Polypodium with oval indented leaves.
This plant rifes to a pretty confiderable height ; it is eafily diftinguifhed by its oblong indented leaves and prickly ftalk.

## THEN:ATURALHISTORY <br> P OL YPODIUM 41. Arboreum maximum, fronde tenuiori; caudice duri)/zmo.

Filix Arborefcens pingulis dentatis, Fc. Plum. t. I, 2.

## The Fern-tree.

This plant rifes by a confiderable fimple hard and lignous trunk, to the height of twenty or twenty five feet; it is, like the other ferns and palims furnifhed only with ribs, which fall off gradually as it rifes, while the new fhoots fprime up from the top: it refembles the palm tribe both in the form and ftructure of its trumk atfo, being yery bard immediately under the bark, but loofe, foft and fibrous in the middle. It holds for many years, bears all the inclemency of the weather with eafe and is frequently ufed for pofts in hog-fties and other inclofures, where the fraller palms are not at hand.

3 I could not hitherto obferve the feed-capfulx of the following plants; but as the general habit, and ftricture of the leaves feem to range them in this clafs, I fhall infert them here, until further obfervations determine their real claffes.

P O L Y P OD I U M 42. Simpliciter divifum, frondibus inferior ibus fubdivi-
This plant feldom rifes above a foot and a half; the lower branches are divided into three or five oblong foliages, and thefe into oval fubferrated lobes.

## P O L Y P O D IUM 43. Ramofum, ramis © ramulis alatis, foliis ovatis ferratis, fuperioribus adnextis.

This plant feldom rifes above one or two feet; and is cafily difinguifhed by the oval ferrated form of its foliage, and margined branches.

## POLYPODIUM 44. Ramofum, fronditus oblongo-lanceolatis profunde incifis, nerva fubcanaliculato, Itobis appropinquatis © . fubcrtnatis, infmis quandoque difinctis.

By the general make of this plant it muf rife to the height of three or four feet: its foliage is very particular, for the nerves of the lobes are very diftinct, the ribs furnifhed with a little down, and the nerves of the foliage lightly chanreled and full of duft ; but I could not yet obferve any feed-capfulæ upon it.

## S E C T. IX.

Of thofe capillary Plants whofe Fructifications cover the wobote Disk, or Underfide of the Ledres or Foliage.

## ACROSTICUM i. Acaule, folio oblongo integro fuperne nitido petiolato.

Lingua-Cervina Angufifolia, E̊c. Plam. 1. 129.

## The Leaf-Acrofticum.

This plant is found in the cooler mountains of Nere Liguavees it grows upon the rocks, and rifes in tufts from a freading fibrous root ; but it feldom exceeds ten or twelve inches in length, and is every where furrounded with a thin membraneous margin.

ACROSTICUM 2. Acaule, fronde pinnatifidà ad nervum divifâ, lobis linearibus bafi adnatis.
Filici-folio Polypodium Feruginofum minus. Pk. t. 89. f. 9.
The fmaller Acrofticum with a narrow-lob'd foliage.
This plant is commonly found in low cool and fhady places: it rifes in tufts, and feldom exceeds ten or twelve inches in length.

## ACROSTICUM 3. Minus fimplex, fronde pinnatifida, lobis linearibus remotis dijlinelis totâ bafi adnatis.

The fmaller fimple Acrofticum with narrow open lobes.
This plant ftretches by a fimple flender root upon the rocks, and, at certain diftances, emits a few fimple falks, which feldom exceed five or fix inches in length, and throw out many oblong narrow tobes on each fide: the whole plant is of a dry dirty colour, and feldom perfect in its foliage ; it is very different from the foregoing fpecies.

ACROSTICUM 4. Maximum uliginofum fimplex, cofâ craffiori, foliis
oblongis diftinctis integris.
Acrofticum Fronde pinnata, pinnis alternis linguaformibus inteserimis glabris. L. Sp. Pl. \& H. C.
Lingua-Cervina Aurea. Plum. t. 104.
Lonchitis Paluftris maxima, Ecc. Slo. Cat. 15.
The large marfhy Acrofticum with oblong leaves.
This plant grows commonly in low and marihy places: it rifes often to the height of feven or eight feet, and is well fupplied with oblong alternate leaves.

## ACROSTICUM 5. Erectum minimum fimplex, foliolis angufis crenatis vel lobatis.

Acrofticum Erectum minimum, ©̌c. Pk. t. 283.

## The fmall narrow-leaf'd erect Acrofticum.

## A CROSTIC UM 6. Erectum fimplex, foliis oblongis marginatis \&e leniter undulatis.

Filix Major in pinnas tantum divija oblongas, E®c. Slo. Cat. I8. \& Hirt. t. 40 .

The fimple erect Acrofticum with oblong margined leaves.
This plant grows in the cooler mountains, and feems to like a free open or gravelly foyl; it is found near St. Mary's, and feldom rifes above three feet and a half from the ground. It is a queftion if it be not a variation of the foregoing fecies.

[^9]Acrofticum Minus, Eic. Pk. t. 281. f. 4.
The fmaller fimple Acrofticum with oval leaves.
This plant is very common in the middle mountains of Liguanee; its leaves are fimple, of a milky white beneath, and furnifhed with a brown down at the margin: the flalk is pretty flender, and feldom fhoots more than ten or twelve inches above the root.

ACROSTICUM 8. Simplex, foliis lanceolatis irregulariter difpofitis, fuperioribus fingularibus, inferioribus geminatis vel ternatis. Lingua-Cervina Triphylla, EOc. Plum. t. 144.<br>Acrofticum Fronde non pinnata, foliisternatis lanceolatis. L. Sp. PI.

The erect Acrofticum with lanceolated leaves irregularly difpofed.
This plant grows chiefly in the mountains, and loves a moift, rich foyl; it is commonly found by the fides of rivulets, and feldom rifes above two or three feet.

## A C R O S T ICU M 9. 2uadrunciale minimum ramofum, caule alato, fronde tenuiori divifo.

## The fmall Acrofticum with a divided foliage and margined ftalk.

This beautiful little plant feldom rifes above three or four inches from the root; the ftalk is furnifhed with a rim or margin on both fides, and the foliage is very minutely divided into narrow fubpalmated fegments: by the habit it feems to be of this kind.

> A CROSTICUM 10. Fufcum fimpliciter pinnatum, foliis parvis totâ bafi adnatis, inferioribus diflinctis remotis affatis auritis vel fublobatis, Juperioribus acuminatis contiguis integris.

This plant feldom rifes above two feet and a half from the root, and is eafily diftinguifhed by its brown ftalks, and fmall narrow leaves.

## ACROSTICUM 11. Simpliciter pinnatum, caule et ramulis teretibus nitidis, fronde tenui diffecto, lobis difinctis palmatis fublobatis © apice incifis denticulatis.

$$
\text { An, Acrofticum Minus, Eic. Pk. t. } 350 \text {. f. } 3 \text {. }
$$

## The flender branched Acrofticum with a delicate diffected foliage.

This elegant little plant is pretty frequent in the cooler mountains; its ftalk and branches are very flender, the former feldom exceeding the thicknefs of a large pin; the latter not much above a thick hair : the foliage is very delicate and much divided, and each part denticulated at the top; but the larger divifions are diftinct and fupported by narrow foot-ftalks. .. The whole plant feldom rifes above twelve or fourteen inches, and bears its largeft foliage above the middle of the ftalk.

# $\mathrm{O} F \mathrm{~J}$ A M A C A. <br> ACROSTICUM 12. Erectum ramofum, caule © ramis atro-nitentibus, fronde divifa. <br> <br> The black-ftalk'd Acrofticum. 

 <br> <br> The black-ftalk'd Acrofticum.}

This plant grows in the moft cool and fhady places in the lower lands; its branches are pretty much divided, and tife to the height of twenty or thirty inches above the ground: the leaves are minutely divided, and of a filver colour underneath. The whole plant feems to have much of the appearance of a fpecies of Maid-en-hair.

## S E C T. X.

Of Juch as bave their Fructifications of a globular Form, and difpofed on Separate branches.
OSMUNDA I. Subbirfuta fcapis caulinis geminis, fronde bipinnatâ 10. batâ E fubcrenata.
Ofmunda Scapis caulinis geminis, fronde bipinnatâ birfutâ. L. Sp. Pl.
The hairy Ofmund with crenated oval lobes.
This plant is pretty common in famaica: it grows in cool and rocky places, and feldom rifes above fourteen or fifteen inches from the ground.

## OSMUNDA <br> 2. Fronde lanceoalata bipinnata lobata atque Serrata, lobis inferioribus: diflinctis angufis fubferratis.

The Ofmund with lanceolated leaves.
This plant grows from an oblong fibrous root, and feldom rifes above fixteen or eighteen inches: it is very fmooth, and the leaves oblong and ferrated. I have not yet feen the feed-capfulx, and have placed it here only from its general habit.

## OS MUNDA 3. Ramofa, foliis fuperioribus lanceolatis ferratis, inferioribus lobatis, lobis difinclis ferratis.

## The larger fmooth Ofmund.

This plant grows commonly to the height of twenty four or thirty inches; its ftalk and foliage are very fmooth and fpreading, and its leaves ferrated pretty deep. I have placed it here from the habit not having yet feen any of its feed-capfulx.

> O SM U ND A 4. Minor quadripolicaris fimpliciter pinnata, caule finuato narginato, pinnis oppelitis lanceolatis, fuperior ibus fimplicibus, mediis auritis, inferioribus ad bafem pennatifidis, lobis lanceolatis difinctis.

## The fmall Ofmund with a margined ftalk.

This plant feldom rifes above four or five inches; the lower lobes are a little, but minutely, ferrated.

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\begin{array}{lllll}
\mathrm{S} & \mathrm{E} & \mathrm{C} & \mathrm{~T} . & \mathrm{XI} .
\end{array}
$$

> Of fuch as bave their Fructifications difpofed on fimple difich Spikes.

Ophioglossum 1. Spicatum fimplex, folio cordato. Ophiogloffum Fronde cordata. L. Sp. P1. The heart-leaf'd Adder's tongue.
This plant rifes commonly to the height of five or fix inches above the root ; I have feen only one of the fort in America, which was found in the thicket below Mr. Rocb's in Mountferrat.

OPHIOGLOSSUM 2. Fronde bifectâ palmatá; Spicá centrali fronde longiori.
Ophiogloffum Fronde palmata bafi Jpicifera. L. Sp. Pl. The fmaller Adder's tongue with a palmated foliage.

## OPHIOGLOSSUM 3. Fronde bijeciáa palmatâ, jpicâ laterali breviori nonocapfulari.

## The fhort-fpik'd Adder's tongue with a palmated foliage.

Thefe little plants are common enough in the woods, and feldom rife above three or four inches: the ftalk is fimple, and divides into two parts at the top; and each of thefe is again bifected, and bear a bilobed or trilobed foliage.
S E C T. XII.

Of fuch as bave their Fructifications of the Form of a Crefcent, and dijpofed on fimple Spikes at the Extremities of the Stalks or Branches.

EQUISITUM I. Afurgens majus, ramis verticillatis fimplicibus.
Equifitum Caule angulofo frondibus fimplicibus. L. Sp. P1.
The larger Horfe-tail with fimple branches.
EQU I S I T U M 2. Afurgens ramofim $\S$ verticillatum.
Equiftum Caule jpicato frondibus compofitis. L. Sp. P1.
The branched Horfe-tail.
Thefe plants grow naturally in famaica: I have obferved both fpecies about the river near Mr. Dermis's in St. Mary's, where they fhoot very luxurioutly. The dryed plants, are ufed by our Cabinet-makers to give a polifh to their work ; for the furface of every part of them is fomething like a fine file, and furnifhed with fhort delicate denticles, that rub off the fmaller protuberances of the wood by flow degrees, and leave the furface fmooth and hining.

## C L A S S V.

Of fuch as have vifible, tho' very fmall Flowers, con cealed in peculiar Capfulx, or common Receptacles.

$S$ E C T. I.<br>Of fuch as bave their Flowers dijpofed in clofe fleby Receptacles. FICUS 1. Foliis lobatis fructu majori.<br>Ficus. Foliis palmatis. L. Sp. Pl.

## The Garden Fig-tree.

This tree has been long introduced and cultivated in the low warm lands of $\mathfrak{F a}$ maica, where it thrives very luxuriantly, and produces a great quantity of delicate mellow fruit, which is greatly efteemed by moft people in that country. It is planted almoft in all the gardens about Kingfon, and rifes often to the height of fixteen or feventeen feet from the ground; but its branches are commonly thick and fpreading, and frequently require to be fupported. It is generally propagated by the fuckers that rife from the roots of the old trees: But Mr. Miller, who has had long experience, and tried many experiments on this and the like occafions, recommends raifing of them by layers; which, he fays, always produce more promifing and better rooted plants, and may be removed in a twelvemonth; but probably fooner, in thofe warm countries where the vegetation is conftant. In pruning thefe trees, he advifes to cut only the naked branches, or thofe leaft fupplied with collateral fhoots. Columella obferves, that this tree thrives beft in an open air, and gravelly foil, which indeed anfwers extremely well, where the feafons are moderate, and the fruit deftined to be preferved; but, in a dry fituation, and when the fruit is intended for immediate ufe, it requires a richer foil, with fome manure, and watering. Tournefort, in his travels thro' the Archipelagus, has obferved, that this tree when caprification (a) is ufed, produces above eleven times more than thofe in the fouthern provinces of France, where the annual produce of a moderate tree is computed to weigh about 25 pounds, one year with another. The fruit is preferved by a continuance in the heat of the fun; but it muft be picked before it grows over mellow, or foft, and fheltered from all manner of damps during the procefs, for which Columella recommends a watled floor raifed about a couple of feet from the ground, and covered with cane tops, ftraw, or other dry fubflances, on which the fruit may be laid; but to preferve them from the injury of the weather, he propofes tacked fide hurdles, that may be raifed every night, or in moift or rainy weather, and let down when the fun appears more active. After they are dried properly in this manner, they muft be potted, and kept in a dry warm place; but in Zia, they pafs 'em generally thro' the oven after they have been fome days in the fun, by which means they are enabled to keep them for a confiderable time ; and indeed it is neceffary to take fome fuch method, where they make a principal part of the food of the inhabitants (b) 。
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[^10]FICUS 2. Arborefcens folio ovato, fructu minori glabro. An, Ficus Indica maxima cortice candicanti, Ee. Slo. Cat. I8g.

## The Mountain Fig-tree.

FICUSं 3. Arborefcens, foliis oblongb-ovatis, baccis fubverucofis.
The Mountain Fig-tree, with fmall warted Berries. FICUS 4. Arborefcens folizs cordato-fagittalis.

The Hart leafed wild Fig.
FICUS 5. Arborea affurgens utrinque bracbiata, foliis ovatis, ramis aperndi,
Ficus Foliis lanceolatis petiolatis, pedunculis agregatis, ramis radicantibus. L. Sp. Pl.

Ficus Indica maxima cortice nigricanti, Esc, Slo. Cat. 188.

## The wild Fig tree, or the Indian God-tree.

This monftrous tree is, at firft, but a weakly climbing plant that raifes itfelf by the help of fome adjoining trunk, rock or tree; and continues to fhoot fome flender flexile radicles, or appendixes, that embrace the fupporter, and grow gradually downwards, as the ftem increafes: This at length gains the fummit, and begins to fhoot both branches and radicles or appendixes more luxuriantly; thefe in time reach the ground, throw out many fmaller arms, take root, and become fo many ftems and fupporters to the parent plant; which now begins to enlarge, to throw out new branches and appendixes, and to form a trunk from the fummit of its fupporter; which ftill continues in the center of the firft radicles, interwoven in their defcent, and at length augmented and connected gradually into a common mafs or body about the borrowed foundation; which (if a vegetable) foon begins to decay, and at length is wholly loft within the luxutiant trunk it fupported. This tree is very common in both the Eaft and Weft Indies, and a poor defpicable creeper in its tender ftate: it feldom fails when it meets with a proper fupport, and generally makes ufe of all the arts of true policy to perfeet its growth; but when once come pleat, it will live a long time, for it throws out many new appendixes for every one that chances to fail, and each more ufeful, as they fupport the top more immediately: nor is this all, for the roots frequently emit new fhoots, and thefe rife by the parent prop into other trees; and thus one plant is fometimes obferved to raife a whole grove.

Politias © mores binc difcite reges.

[^11]
## S E C T. II.

Of Juch as bave their Flowers difpofed very thick, on oblong fupporters, and covered with their membranous Cafes that fall off, as thofe grow more perfect.

# CoIlotapalus 1. Ramis exacatis, foliis amplis peltatis atque lobatis. Yarruma Oviedo, Esc. Slo. Cat. 45. \& H. t. 88, \& 89. Ficus Surinamen/is multifido folio, Ecc. Pk. Phy. t. 243, f. 5. Amboiba Plumeri; © Gacirma Mart. 562. 

## The Trumpet-tree, and Snake-wood.

This tree grows in moft of the woody parts of the Illand, where the foil is loofe and free; and rifes commonly to a confiderable height, being feldom under thirty-five or forty feet in the moft perfect flate: The trunk and branches are hollow every where, and ftopped from fpace to fpace with membranous Septæ, which anfwer fo many light annular marks in the furface. It fhoots both its leaves and fruit in the fame manner ; and each, while young, is covered with a membranous conick cap, which falls off from the bafe without fplitting, as they acquire a certain degree of perfection. The leaves are large, round, and lobed; and furnifhed with a white down underneath : the fruits rife four, five, or more, from the very top of a common foot ftalk; and fhoot into fo many oblong cylindric berries, compofed of a numberlefs feries of little alfini, fomething like our ftrawberry or rafpberry, which they alfo refemble very much in flavor, when ripe, and are very agreeable to moft European palates on that account.

The Botanic characters of this plant, as nearly as I could make them out, are as follow, viz.

Periantium Commune. Spatba conica bafidefidua.
Receptaculum. Spadix quadri vel pluri bracbiatus, bracbiis fimplicibus oblongis, cylandraceis, acinis minoribus numerofisrefertis, quce etate crefount, $\mathcal{F}^{5}$ abeunt in totidem baccas acinofas dulces. Partes propria generationis sc videntur.
Periantium. Singulo bracbio Jpadicis incidunt caliculi numerof, carnof, minimi germina totidem involventes.
Corolla. Corollula minima infundibuliformis, limbo ampliato antberis numerofs minutifinis referto.
Piftillum. Germen ovatum calicula inclufum, Eec.
Recept. commune. Bracbium fibrofum fpadicis, acinis baccatis refertifimum.
The wood of this tree, when dry, is very apt to take fire, which it frequently does by attrition; and has been, for this reafon, much in ufe among the native Indians, who always ufed to kindle their fires in the woods by thefe means. The bark is ftrong and fibrous, and frequently ufed for all forts of cordage : the fruit is very delicate, and much fed upon by the pigeons and other birds, who by this means fpread and propagate the tree in all parts of the ifland: and the fmaller branches, when cleared of the Septa, ferve for wind inftruments, and are frequently heard many miles among thofe echoing mountains; they yield an agreeable hollow found: I have feen fome cut and holed in the form of a German flute, and have not been difpleafed with their notes. The trunks are very light, and the moft appropriated timber for bark-logs, where fuch conyeniencies are ufed; which is often the cafe among the poorer fort of
people. The trunk and branches of the tree, yield a great quantity of fixed falt, which is much ufed among the French to defpumate, and granulate their fugars: fuch a mixture is always neceffary in the manufacture of that commodity; and tho' the alkaline falts of lime are generally fufficient; yet, when the juices are thin and clammy, a ftronger and more, active falt is requifite, and will always anfwer the trouble of obtaining it.

This plant appears in two diftinct forms in the woods; it grows fometimes very luxuriantly, and then bears but four or five berries on each common fpadix; fometimes it rifes hardly above fixteen or twenty feet, and then the berries are more numerous, generally ten or more on each fpadix, and the bark is more tough and fibrous. Quere, If they may not be two diftinct fpecies?

## O R D E R II.

Of the more perfect Plants; or fuch as bear diftinct and apparent Flowers and Fructifications.

## $\begin{array}{llllll}\mathrm{C} & \mathrm{L} & \mathrm{A} & \mathrm{S} & \mathrm{S} & \mathrm{I} .\end{array}$

Of the Monandria, or fuch as bave only one Filament or male generative Part in every bermaphrodite Flower.

## S E C.T. I.

Of Juch as have one Filament, and one Stile, or Female Part in each Flower.

SALICORNIA I. Apbylla ramofa, ramis in ficas abeuntibus longas anu-
Salicornia Articulis apice comprefis emarginatis bifidis. L. Sp. Pl. An, Salicornia Caulium remorumque articulis apice bicornibus. Gron. f. Virg. $129^{\circ}$
This plant is found in great abundance at the burrough in St. Fames's: It grows in the low falina near the fea, and feldom is above eight or eleven inches above the ground: It has but one ftamen to every file. The whole plant abounds with a neutro-muriatic falt.

> MARANTA 1. Foliis lanceolato-ovatis, petiolis fuperne gangliongis fructu glabro.

Maranta \& Thalia. L. Sp. Pl. an Alpinia ejus. Gen. Pl.
Canna Indica radice alba alexipharmaca, Ėc. Slo. Cat.

## Indian Arrow-root.

This plant is cultivated in many gardens in Famaica, where it is confidered as a
warm alexipharmic, and thought to refift the force of poifons very powerfully ; but its chief effects feem to depend on its abforbent and lenient nature, having but few warm particles in its compofition.

The root wafhed, pounded fine, and bleached, makes a fine powder and ftarch: it has been fometimes known to be ufed for food when other provifions were farce, and is frequently adminitered in infufions to the fick: the plant grows from a thick Ang root, and floots by a fimple foliated falk to the height of two or three feet, and rminates in a loofe and fomewhat branched flower-fpike: it was called Indian smon-root, becaufe it was thought to extract the poifon from the wounds inflicted by poifoned arrows of the Indians.

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CANNA I.,Caplutis verruco/is 苗atulis biforis.
    Canna Spatulis biforis. L. Sp. Pl.
    Canna indica Rivini, E`c. Slo. Cat. p. 12f.
    Cannacorus Latifol.vuly. Tournf.& Thez.Zey. 53. Pag.2.
    Katu-Balo H. M. P. 11. t. 43. & Meeru. Pir. pag. 212،
    Tozcuitlapil. Hern. 282.
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                If Indian fhot.
    This plant is common in moft parts of Gamaica; it rifes commonly about four feet from the ground, and is furnifhed with large oval leaves near the bottom: the top fhoots into a fimple flower-fpike, and is adorned with red bloffoms, which are fucceeded by pretty large oval and echinated capfulæ containing large round feeds, from the fize and form of which it derives its prefent appellation in thofe parts.

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A MOMUM I. Minus fcapo vefito, foribus fpicatis.
    Maranthà L. Sp. Pl.
    Zinziber Silvefte minus, ECc. Slo. Cat. p.61. & H. t. 105.
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## The leffer Amomum with a foliated ftalk.

This plant is found wild every where in the woods of Jamaica; it grows from a flefhy root, and fhoots by a fimple foliated falk to the height of three or four feet, and then terminates in a fimple flower-fpike. As the botanic characters of this plant have been but imperfectly defcribed before, I fhall fet them down here at length.

Periantium. Monopbyllum breve tubulatum, germini incidens, ad limbum in trïa fegmina obtuse fectum
Corollawi Monopetala tubulata calice duplo longior, fauce parum ampliato, ore in tria Jegmina equalia obtuse Secto.
Nectarium, E fauce tubi emergit Nectarium ovatum latius; © è parte buic op-
\& ftamina. $\quad$ pofita, ofurgit. Stamen unicum brevifimum, antherâ oblongâ bilobâ \& long itudinaliter canaliculatâ ornatum.
Piftillum. Germen ovatum bbtufum; ;Ayluis fimplex; Aigma obtufum, quod cum parte fuperiori flyli in finu antbor reconditur.
Pericarpium. Capfula fubrotunda obtusè trigona trilocularis trivalvis, fingulis loculamentis binis vel quatuor feminibus refertis.
The root of this plant bruifed and applied by way of poultice, is thought to be an admirable remedy in open cancers. Slo. Ecc.

A M OMUM 2. Scapo florifero partiali aphyllo, Jpicâ longiori.

Amomum Scapo mudo, jpicâ oblongà obtusâ. L. H. C, \& Sp. PI.

Paco-Ceroca Pifonis, page 213.

# THENATURAL HISTORY 

Zerumbet Off. Dale. \& Pet. Gaz. t. 22. f. 3. \& Caffamunier off. ejuf. dem. t .27.<br>Zinziber Silvefre majus, E̛T. Slo. Cat. 61. \& H. t. 105.

The larger Amomum with a diftinct flower-ftalk.
This plant is frequent enough in the woods, and grows commonly to the height of five or fix feet ; the ftalks are fimple, and furnimed with oblong leaves, that decreafe gradually towards the top: the flowers grow on particular ftalks that fpring immediately from the root without any foliage; but thefe feldom rife above one or two feet from the ground.

The root is warm, and ftimulates very gently; it is not much ufed at prefent, but may be very properly adminiftred as a ftomachic and alexipharmic in cafe of need.

## $\begin{array}{llllll}\mathbf{C} & \mathrm{L} & \mathrm{A} & \mathrm{S} & \mathrm{S} & \text { II. }\end{array}$

## Of the Diandria, or fuch as have two Filaments or male generative Plants in each hermaphrodite Flower.

S E C T. I.<br>Of Juch as bave two Filaments or Stamina, and one Stile or female Part, in every Flower.

CLADIUM 1. Culmo nodofo, floribus quafi umbellatis, umbellis gradatim affurgentibus.

## The large florid Cladium.

This plant grows commonly in marfhy ground, and rifes frequently to the height of four or five feet above the furface; the falk is hollow and jointed, and furnimed with a few triangular harp-edged fedgie leaves; thefe are vaginated at the bafe, and embrace the main ftalk for the fpace of two or three inches above the joints: from each of the upper vaginæ, fprings a lateral compreffed and flightly vaginated peduncle or fupporter which divides foon after into a number of radii in the form of an umbrella; thefe are again divided, and fubdivided until, at length, they become the fimple foot-ftalks of the following flowers, and fructifications, viz.

Periantium. Gluma quinque valvis uniflora, valvis imbricatis, exterioribus brevioribus, fuperioribus majoribus florem involventibus.
Corolla. Gluma univalvis genitalia ftricte involvens.
Nectarium. Seto gemina inermes è dorfo corolla verfus bafem enata.
Stamina. Filamenta duo brevilima, anthoris oblongis fulcatis margine laterali floris utrinque obvolutis, $\mathcal{E}$ ad latera fyli pofitis.
Piftillum. Germen oblongo-ovatum, fyluis fimplex longitudine calicis, figmata tria tenuia cirrata deflexa.
Pericarpium. Nullum femen unicum oblongo-ovatum.
NYCTANTES 1. Caule volubili, foliis ovatis, floribus terminalibus ternatis.

Nyctantes

# Nyctantes Caule volubili, foliis fubovatis acutis. L. H. C. \& <br> Nyctantes Foliis inferioribus cordatis obtufis, fuperioribus ovatis acutis ejufdem. H. Up. \& Sp. Pl. 

The Arabian Jeffamine, or Jafmin.
This plant is cultivated and thrives in moft of the gardens of Yamaica; it forms a shady pleafant arbour, and its delicate flowers afford a very agreeable fcent.

$$
\begin{aligned}
& \text { JASM I NU M I. Volubile, foliolis pinnatis oppolitis. } \\
& \text { Jafminum. Foliis oppofitis pinnatis. L. H. C. \& Sp. Pl. } \\
& \text { The Spanifb Jeffamine, or Jafmin. }
\end{aligned}
$$

This plant is cultivated in the gardens of Jamaica like the foregoing, and ferves for the fame purpofes; it climbs pretty faft, and forms a fhady and pleafant arbour: it thrives very well in all thofe colonies.

$$
\begin{aligned}
& \text { J A S M INUM 2. Fruticulfoum, foliis ovato-acuminatis minoribus rigidis } \\
& \text { oppofitis. } \\
& \text { The fmall fhruby dwarf-Jeffamine, or Jafmin. }
\end{aligned}
$$

This is a native of Jamaica, and grows very plentifully in the parih of Portland; it fhoots in fmall tufts, and feldom rifes above a foot or two from the ground. Its leaves are very fmooth and fhining.

O L E A 1. Foliis lanceolatis, ramis teretiufculis. L. H. C. Olea Foliis lanceolatis. L. Sp. Pl.

## The Olive-tree.

This plant has been introduced here fome years ago, and cultivated at Mr. Ellis's at the Caymanas, where it now grows to the height of fifteen or twenty feet, but has not yet bore any fruit. It is a pity that the gentlemen of this Illand have not been equally induftrious in procuring fome of thofe valuable vegetables that grow fo luxuriantly on the neighbouring coaft, and add fo much to the riches and trade of the Spanifb fettlements upon the main.

When this tree does not bear, or grows lefs fruitful, Cato advifes to dig the earth from about the roots, placeing fome fraw or litter in its room; and then to put fome rich manure over this (a).

## VERBENA 1. Erecta divifa, Jpicis è divaricationibus fupremis affurgentibus.


#### Abstract

(a) Where the oil of the Olive is well manufactured, great care is generally taken to hand-pick the fruit, if it can poffibly be done, either from the ground or a fcaffold; for by this means, both the fruit and tree remain uninjured, and this produces equally the following year, while that is obferved to produce a lefs tainted oil. They are generally ripe about December, gathered in dry weather, and preferved from moifture as much as poffible: they are paffed upon clofe hurdles to cleanfe them from naftinefs, and forted, if neceffary, thro' large fieves; the leaves, ftalks, and cups (if any adhere) picked out, then paffed through the mill, which is fet fo as to break the pulp only, and fent to the prefs, where the oil is expreffed with the other juices, and fmaller loofe particles of the fruit: thefe admixtures are what they call lees, and come off more plentifully towards the end of the operation; but the oil feparates gradually from them, and to quicken the feparation in what comes off laft, which is generally received in feparate vefiels, they frequently throw in proportionate quantities of falt, which mixes very eafily with the aqueous parts, and carries them with the adherent particles to the bottom; great care fhould, however, be taken, that all the veffels in which the oil is received, be well tinned or waxed; for otherwife it is apt to acquire both a colour, and a foreign tafte from the wood. The preferved fruit is recommended as a cooling ftomachic: the oil is opening and demulcetive; and frequently ufed in mixtures, fomentations and plaifters. Its diethetical and mechanical ufes are too well known to need any further notice.


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Verbena Folio fubrotundo ferrato, flore caruleo. Sle. Cat. 60. Verbena Scutellaria five caffide folio, ©ic. ${ }^{*} \mathrm{Pk}, \mathrm{t} .70$. f. I.

The larger erect Vervine.
-This plant has been commonly confounded with the following fpecies, from which it is eafily diftinguifhed by its growth and appearance ; it is commonly divided into a great number of branches, and generally rifes from one to two feet, or more, above the root.

> VERBENA 2. Procumbens ramofa, foliis majoribus, fpicis longifimis lateralibus.
> Verbena Diandra, Jpicis longi/fmis carnofis fubnudis. L. Sp. Pl.

The reclining branched Vervine.
This plant grows in a fupine pofition, and is commonly furnifhed with a few fimple branches, which, like the main ftem, terminate in a long flower-fpike, and are furnifhed with pretty large and fucculent leavés: the whole plant is kept in moft of the fhops of America, where it is much in ufe among the poorer fort of people; its juice is a ftrong purgative, the infufion diaphoretic and laxative, and the decoction aperitive and diobftruent. A decoction of this plant and the Mentaftrum is efteemed a fpecific in dropfies. See Sloane's, EPc.

## VERBENA 3. Nodiflora repens foliis ob-ovatis fupernè crenatis, pedunculis long is folitariis, foribus conglobatis.

Verbena Tetrandra, Jpicis capitato-conicis, foliis Serratis, caule repenti. L. Sp. Pl.

The round-leaf'd creeping Vervine.
This plant is very common in the low moift lands of Faniaica: it is eafily known by its obtufe crenated leaves, and round-headed fpikes.

> VERBENA 4. Subfruticofa reclinata, foliis angufis ferrato-dentatis, pedunculis longis folitariis, floribus conglobatis. T. 3. f. I.
> Verbena Diandra, Jpicis ovatis, foliis lanceolatis ferratis, caule fruticofo, Ec. L. Sp. Pl.

## The larger reclining Vervine with narrow leaves.

This plant grows about the Ferry and lower lands of St. Katherine's ; it is biannual or triannual, and ftretches by a flender lignous ftalk to the length of about five or fix feet from the root: it grows in a rich and moift foyl, and is furnifhed with a great number of oblong ferrated and veined leaves that are adorned with a fine down underneath : If I remember right, there is a figure of it in Pluck. The flowers are difpofed in the fame manner as they are in the foregoing.

[^12]$$
O \text { F J A M A I C A. }
$$

This plant is a fine vulnerary and fubaftringent, and is commonly applied to blecding wounds in either men or cattle by the inhabitans of the country parts of $\mathcal{F} a$ maica; it is thought to be fo powerful a ftiptic or aftringent, as to ftop the hemorrhage even when fome of the more confiderable arteries are cut; and may be defervedly confidered as an excellent application in all manner of fores where the habit is relaxed.

The flowers of this plant are furnifhed with four unequal ftamina, and the fikes interruptedly verticillated.

> VER BENA 6. Hirfuta, foliis ovato-acuminatis atque ferratis, fpicis teAn, Verbena Tetrandramis fpicis fliforsormibus paniculatiots, foliis indivijs, Esc. L. Sp. Pl. In foribus bujus planta famina Semper duo, छo adnata funt; feminaque quatuor oblonga aglutinata.

The hairy Vervine with flender fpikes.
This plant grows pretty common in St. Mary's; and feldom rifes above two feet and a half from the root : it is rare in moft other parts of the Ifland, altho' I have met with a few fpecimens about the Ferry. It thrives beft in a cool and rich foyl.

> S A L V I A r. Spicata repens, Melifla minori folio, foribus fafciculatis alternis. Verbena Minima Cbamedrios folio. Slo. Cat. 64. \& Hift. t. 107. Verbena Diandra Spicis laxis calicibus alternis, ©̌c. L. Sp. Pl.

## The creeping fweet-fcented Sage.

This little plant is found creeping under every hedge and bufh in the lower lands; and runs frequently to the length of two or three feet, but it always roots at the lower joints: it has a faint fmell of balm when firft pulled, and may be naturally fubfituted in the room of that plant ; tho it is not fo ftrong a cephalic.

S A LVIA 2. Foliis lanceolato-ovatis integris crenulatis, fioribus fpicatis, caliculis acutis. L. H. C. \& Sp. Pl. Salvia Rubefcens \& viridis off:

## Garden-fage.

This plant has been cultivated here a long time, and is chiefly planted in the mountains where it thrives and grows to great perfection: it is a gentle cephalic and diaphoretic ; and is generally adminiftered in infufions.

ROSMARINUS I. Fruticofus incanus, foliis lanceolato-linearibus.
Rofmarinus L. H. C. \& Sp. Pl.
Rofmarinus off.

## Rofemary.

This plant has been long cultivated here, but does not thrive well in either the high or low lands; though it grows fufficiently to fupply enough for common ufes: it is a warm cephalic and aromatic ; and an excellent ingredient in difcutient baths.
DIANTHERA 1. Foliis oblongo-ovatis cum acumine, spicis forum
geminatis.

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This curious little plant is very rare in Zamaica; I have feen one or two fpecimens of it in the woods about Mangeneel, where it feems to be moft common : it feldom rifes above eighteen or twenty inches, and bears its flowers at the alæ of thofe leffer leaves that conftitute the greater part of the fpikes; but as it differs very much in the general characters from what has been already defcribed under this name, I fhall give thofe of this plant here at length.

Periantium. Duplex, exterius bypbyllum, foliolis angufis lanceolatis; interius monopbyllum, ad bafem ferè Sectum in quinque lacinias lanceolatas minores.
Corolla. Recta tubulata ringens, labio fuperiori recto oblongo; inferiori oblongo trifido.
Stamina. Filamenta duo longitudinis ferè corolla, antberis gemellis oblongis fingulo incidentibus: rudimenta vero duorum faminum in fundo foris pullulant.
Pitillum. Germen oblongum, fylus fimplex longitudine faminum; figma fimplex. Pericarpium. Nullum. Calix connivens in finu femina fovet.
Semina. Duo oblonga, comprefla, erecta, ferè adnata. ad Prunellam accedit.
DIANTHERA 2. Foliis lanceolato-ovatis, racemo Jpatiofo affurgenti, fp icillis verticillatis.
Antirrhinum Minus angufifolium fore dilute purpureo. Slo. Cat. 59. \& H. t. 103.

## The large Dianthera with a loofe fpreading flower-top.

This plant grows commonly in the low lands, and is frequently met with about the Angels beyond Spanifbtown; it rifes generally to the height of two or three feet, and is plentifully furnifhed with flender fubdivided branches near the top: it differs widely in characters from that already mentioned, for which reafon I fhall put down the moft effential marks of it at large.

Periantium. Monopbyllum in quinque lacinias erectas anguftas ad bafem fere fectum.
Corolla. Tubulata ringens, tubus turgidus; labium fuperius rectum ovatum; inferius reflectens tridentatum, fauce variegatả.
Stamina. Filamenta duo longitudinis ferè corolle, antherce fingulo gemella, diftincta, alterá paulo majori.
Pericarpium. Capfula oblonga obversè-ovata bilocularis bivalvis, valvis difepimento oppofitis.
Semina. In fingulo loculamento bina, compreffa diffepimento affixa.

## DIAN T HER A 3. Foliis lanceolatis, floribus Jpicatis, calicibus duplicatis.

## Garden Balfom.

This plant is cultivated in fome of the gardens of Famaica, and feldom rifes more than ten or twelve inches in height: the antherea are not fo diftinctly feparated in this fpecies, though the other characters agree.

JUSTICIA 1. Herbacea affurgens, ad alas alternas nodos E fummitates florida; foliis paucioribus ovatis petiolis longis incidentibus. 'Tab. 2. fig. I.
The branched Jufticia with oval leaves.
This beautiful plant is very common about the Ferry, and flowers generally about
the month of $\mathcal{F u l y}$ or $A u g u f$ : it rifes by a flender ftem to the height of about three feet from the ground, and Choots into a great number of branches that grow gradually lefs as they afcend, and are difpofed in an oppofite order as well as the leaves from whofe alx they commonly thoot. The generic characters of this plant are as follows.

Periantium. Triplex; exterius parvum bipartitum, laciniis aingufis erectis acutis; medium quinquepbyllum minus; interius minimum monopbyllum quinquepartitum, laciniis erectis acutis.
Corolla. Monopetala nutans tubulata ringens \& lateraliter compreffa; tubus ad bafem anguftus, ultra ampliatus falcatus; limbus in duas lacinias profundè fectus, Juperiori indivifá majori rectá; inferiori anguftiori integrâ © leniter reflexâ. .
Stamina. Filamenta duo inferne tubo adnata fupernè libera, fub labium fuperius porrecta, $\mathcal{E}^{\text {l }}$ longitudine for is; antherce ovatue.
Piftillum. Germen oblongum, Aylus fimplex longitudine $\mathcal{E}$ pofitione faminum, figma fimplex.
Pericarpium. Capfula compreffa obversè-cordata, bilocularis, bivalvis.
Semina. Orbiculata, compreffa, folitaria.
UTRICULARIA. I. Foliis capillaceis ramofis, frapo afurgenti nudo Jupernè ramojo.
The fmaller Utricularia with a branched ftalk, and capillary leaves.
This elegant little plant is very common in all the ftagnated waters about the Ferry, and in the parifh of St. George's: it feldom rifes above four inches from the root, and bears a beautiful fucceffion of fmall yellowifh flowers.

Z I N Z I BER. I. Foliis lanceolatis, floribus fpicatis, fcapo forifero partiali:<br>Amomum Scapo nudo, Jpicâ ovatâ. L. H. C. \& Sp. Pl.<br>Zinziber \& Gingiber Off. \& Zingiber, C. B. Slo. Cat. 60.<br>Zinziber Anguftiori folio famineo's $\mathcal{F}^{2}$. Thez. Zey. \& Jnfchi. H. M. Part xi. t. 12.

## Ginger.

This plant fometimes is cultivated with great care in our fugar colonies, and frequently furnifhes a confiderable branch of their exports; but as the demand is uncertain, and the price very changeable, it is not fo regularly planted is fo valuable a commodity ought to be: It is propagated by the fmaller pieces, prongs, or protuberances of the root, each of which throw up two different ftems; the firt bears the leaves, and rifes fometimes to the height of three feet, or more, though its ufual growth feldom exceeds fixteen or eighteen inches: when this fpreads its leaves and grows to a full perfection; the fecond ftalk frings up, which is alfo fimple, and furnifhed only with a few fcales below, but at the top is adorned with a roundifh fquamofe flower-fpike; and feldom rifes above two thirds of the height of the other. The plant thrives beft in a rich cool foyl; (that lately cleared is the beft,) and grows fo luxuriantly in fuch places, that I have fometimes feen a hand of ginger weigh near half a pound (a): it is, however, rematked that fuch as are produced in a more clayey foyl fhrinks lefs in fcalding, while thofe raifed in the richer free black moulds are obferved to lofe more confiderably in that operation.

The land laid out for the culture of this plant, is firft well cleared and hoe'd, then flightly trenched, and planted about the month of March or April: it rifes
(a) The larger fpreading roots are called Hands in Famaica.
to its height and flowers about September ; and fades again towards the end of the year. When the ftalks are wholly withered, the root is thought to be full grown and faturated, and then fit to dig; which is generally done in the months of January and February following. When thefe are dug up, they are picked and cleaned, and then fcalded gradually in boiling water (b): after this they are fpread and expofed to the fun from day to day until the whole be fufficiently cured; they are then divided into parcels of about one hundred weight each, and put into bags for the market : this is called black Ginger.

The white fort differs but little from this; it is, however, more agreeable to the eye, and generally more pleafing ; but the difference is wholly owing to the different methods of curing them; for this is never fcalded, but inftead of that eafy procefs, they are obliged to pick, warh and fcrape every root feparately, and then to dry them in the fun and open air, which takes up too much time and pains for any real advantage it can produce.

But to preferve this root in fyrup, as it is ufually done, it muft be dug while its texture is yet tender and full of fap; and then the fhoots feldom exceed five or fix inches in height: thefe roots are carefully picked, and wafhed, and afterwards fcalded until they become tender enough for the purpofe; they are then put into cold water and fcraped and peeled gradually : this operation may laft three or four days, during which time the roots are conftantly kept in water, but is frequently fhifted both for cleaniinefs, and to take off more of their native acrimony. Afrer they are well prepared in this manner, they are put into jars, and covered over with a thin fyrup, which, after two or three days, is chifted and a richer put on ; and this is fometimes again removed, and a fourth put on, but it feldom requires more than three fyrups to be well preferved: the Chifted fyrups are not, however, ufelefs, for in thofe countries they are diluted and fermented into a fmall and pleafant liquor, commonly called cool drink.

As the botanic characters of this plant have been but imperfeetly defcribed hitherto, and generally laid down from imperfect fpecimens; I have been induced to give them here at large as they appear in the perfect ftate of the plant.

Periantium. Spatba duplex uniflora, exterior membranacea conica florem laxe cingens, interior membranacea tenuior $\mathcal{E}$ minor tubo foris adnata, © limbum cum genitalibus firicte involvens, in conum acuminatum leniterque compreffum producta.
Corolla, Monopetala, inferne angufa tubulata, germini incidens; limbus tripar\& Nectarium. titus, laciniis oblongo-ovatis medio majori : è finu buic oppofito emergit Nectarium craflum oblongo-ovatiom, in acumen finuatum definens.
Stamina. Filamenta duo tubo foris adnata; antbera craffe nectario adnata: rudimenta vero totidem. Jupernè lihera per longitudinem tubi porrecta, nullifque antheris donata, lacinia majori foris fuppofita funt.
Piftillum. Germen fubrotundum fori fuppofitum; fylus rectus fimplex longitudine floris, $\mathcal{E}$ inter antheras porrectus: figma craflius tubulatum 8 ciliatum.
Pericarpium. Capfula fubrotunda unilocularis, obtusè-triloba, tribus lineis longitudinalibus internè notata.
Semina. Plura, \&c. Sed plerumque abortiunt.
(b) For this purpofe they have a large Ketle fixt in the field or fome convenient place, which is always kept full of boiling water during the whole procefs; the picked Ginger is divided into fmall parcels, put into bafkets, and dipped one after another in the boiling water, in which each is kept for the pace of ten or twenty minutes; it is then taken up and fpread upon the common platform ; and thus they proceed until the whole is fcalded; but they always take care to change the water when it is highly impregnated with the particles of the root.

The root of this plant is a warm pungent aromatic, and anfwers in all weakneffes of the ftomach and vifcera proceeding from cold, or inertion: when preferved it is mild, and generally ufed as a ftomachic, though not lefs effectual in defluxions of the breaft, or weaknefs of the nerves; but the other coarfer preparations of it are ufed more by thofe who are obliged to bear the inclemency of the weather in the colder regions, and require fome warm ftimulants to rarify their chilly juices, as well as to promote the tonic action of their contracted fibres.

## S E C T. II.

## Of fucb as bave two Filaments and three Stiles in every Flower.

Piper i. Frutefcens diffufum ramis fexilibus geniculatis, foliis covaris quinquenerviis, ad petiolum leniter revolutis.<br>Piper Foliis lanceolato-ovatis quinquenerviis rugofis. L. Sp. P1. Piper Frutex Americana, EFc. Pk. 215. f. 2. Saururus Frutefcens, foliis plantagineis, fructu breviori. Plum. Nhandu Pifonis.

## The fmall-grain'd black Pepper.

This plant grows very common in moft of the hilly parts of the Ifland, and looks very bufhy and fpreading on account of its flender flexile branches; it begins to divide very near the root, and rifes in tufts, frequently to the height of fix or eight feet or more ; it thrives beft in cool mady places, and feems to delight in a mixt clayey foyl.

The feeds and other parts of the fructification grow in the fame manner with thofe of the black pepper of the Eaft-Indies, from which they differ only in fize; for the grains of this feldom exceed a large muftard-feed in dimenfions, but the tafte and flavour is in every refpect the fame: the leaves and growth of the fhrub very nearly refemble that delineated in the Hortus Malabaricus, but the plant is neither fo luxuriant or fucculent.

I have had a large quantity of this fpice gathered for me, and have generally ufed it for many months; but never could perceive any fenfible difference between it and that of the Eaft whether ufed either in cookery or feafoning.

To gather any quantities of this aromatic, it muft be picked when full grown, and before it ripens; for, like the Pimento, the Camela and moft other ficy grains, it grows foft and fucculent by maturity, and demits the purgent flavour that recommends it while in the full grown ftate : it may be then dried in the fun like the Pimento, and left adhering to the natural fpikes, which feem to have the fame flavour and pungency with the grain itfelf, and are as eafily ground in the mill.

The leaves and tender fhoots of this plant are frequently ufed in difcutient baths and fomentations, and fometimes pounded and applied with fuccefs to foul ulcers: the root is warm, and may be fuccefsfully adminiftered as a refolutive, fudorific or diaphoretic; but it muft anfwer beft in a diluted ftate, fuch as in infufions or light decoctions: which, however, may be varied in degrees of ftrength as occafion requires. I do not know of any diobftruent of this nature that anfwers better in dropfies, or lighter obftructions from a lentor or inertion.

PIPER 2. Arboreum erectum geniculatum, foliis cordato-acuminatis ad petiolum inequalibus.
Piper Foliis ovatis Jeptem-nerviis oblongiulculis acuminatis, petiolis bidentatis. L. Sp. Pl.
Piper qui Saururus Foliis Septi-nerviis oblongo-acuminatis.' Thez. Zey. t. 83. f. 2.

Piper Longum arboreim altius, E゚c. Slo. Cat. 44. \& H. t. 87.

## The Elder-tree.

This fhrub has been generally confounded with the foregoing, but it grows more luxuriantly, and rifes commonly by a ftreight fiender and geniculated branched ftem to the height of twelve or fifteen feet, or more ; the fpikes are always inconfiderable in this feecies, and the leaves not even at the botttom, running always further along the foot-ftalk on one fide.

PIPER 3. Frutefcens diffufum flexile, foliis ovatis venis plurimis oblique arcuatis refertis.
Piper Foliis ovatolanceolatis, nervis alternis, Ppicis uncinatis. . L. Sp. P1. The fmaller tufted Piper with oval leaves.
This plant is pretty frequent in the low lands, and feldom rifes above feven or eight feet from the ground; the leaves are whitifh underneath.

> PIPER 4. Frutefcens minus, foliis amplioribus nitidis ovatis ad bafens in equaliter porrectis, Jpicâ longiori equali.

Piper Longumarboreum foliis latiflimis. Slo. Cat. $45 . \&$ H. t. 88. Jaborandi Quarta. Pif. 216. An, Piper Longüm off. © Pk. t. 104. f. 4.

## The Piper with large fmooth leaves and even fpikes.

This plant feldom rifes above fix or feven feet, and is eafily known by its large fmooth and fhining leaves: it is found in St. Mary's, and St. Elizabetb's, and grows moft commonly in thady places and a gravelly foyl.

## O F J A M A I C A.

## C $\quad \mathbf{L} \quad$ A $\quad$ S $\quad$ S $\quad$ III.

## Of the Triandria, or Vegetables that have three diftinct Filaments or male generative Parts in every Flower.

S E C T. I.<br>Of fuch as bave three Filaments, and one Stile or female Part in each Flower.<br>Boerhanvia 1. Diffufa, foliis fubrotundis fubtus cinerecis, fruflu friato a/pero.<br>Boerhaavia Foliis ovatis. L. H. C. © caule diffufo. Sp. Pl. Valerianella Curafavica Pk. t. i13. f. 7 . Boerhaavia Varia. Houft. apud Miller. Valerianella Folio fubrotundo, Esc. Slo. Cat. Talu Dama H. M. p. 7. t. 46.

## Hogweed.

This plant grows in every part of the Savannas; the ftalk fhoots from an oblong flefhy root, and rifes commonly to the height of two feet and a half or better; the flowers are red, and difpofed in the form of an umbrella at the end of its flender rifing branches. The weed is frequently gathered for the hogs, and thought to be very fattening and wholefome food for them; but they feldom eat the root.

> BOERHAAVIA 2. Sarmentofa, foribus herbaceis diandris campanulatis, foliis fucculentis obtuse triangularibus, fructu ad apicem verucofo.

The creeping branched Hogweed with fucculent leaves.
This plant is common in the low lands, and grows every where among the buhes in the Savannas, about Kingfon; it runs frequently three or four yards in length, and throws out a number of ramified branches as it creeps: the leaves are fucculent and of a pale greenifh colour, and the flowers of a dirty yellow : the fruit is oblong and echinated round the top, but fmooth below. I have been induced to place this genus here becaufe I have always found the parts of the flowers to be conftantly and regularly the fame in thefe climates, tho' they are frequently obferved to vary in the European gardens.

ANTIDESMA I. Fruticofa, ramulis teretibus, racemis laxis termi-
Berberis Fructu arbor baccifera, Ec. Slo. Cat. 170.
Hirtella L. Gen.
An, Antidefma Alexiteria ejufdem. Sp. P1.
The fhruby Antidefma with flender branches.
This fhrub is pretty frequent about $S t$. Mary's, and feldom rifes above eight or nine feet from the ground; the leaves are of an oval form, pointed, and placed in an al-

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ternate order along the branches; it has not been put to any ufe here yet, tho' probably the fame whofe alexiterial qualities have been tried and attefted from the Eaft.
I have been induced to make ufe of Burman's appellation as more expreflive of the virtues of this plant, which I think fhould be the principal fource from whence the names of vegetables ought to be derived, when they are remarkably noted for any.

> COMOCLADIA 1. Caudice fimplici quandoque bracbiato, fronde comof $\hat{a}$. finnatá; floribus confertis feflilibus, racemis alaribus. Prunus Racemofa, caudice non ramofo, \&ic. Slo. Cat. 184. \& Hift. t. 131, \& 222.

## The Maiden Plumb-tree.

This tree feldom grows to any confiderable thicknefs; it is frequent in the low lands, and rifes by a fimple, or fimply divided flender ftalk to the height of twelve or fixteen feet, and is furnifhed with many oval pinnated leaves about the top; thefe are pretty large and hang regularly on the fides of long proportioned ribs, from whofe alx fpring fo many, or more, flender branched fipikes, on which the flowers grow in groops at diftant intervals. The botanic characters of this plant have not been yet known, for which reafon I have inferted them here at length.

Periantium. Monopbyllum parvum, ad bafem ferè tripartitum, laciniis patentibus.
Corolla. Monopetala, tripartita patens, laciniis ovatis ferè equalibus incifuris calicis oppooitis.
Stamina Filamenta tria equalia breviora, ex incifuris foris orta, antbere fibrotunde.
Piftillum. Germen ovatum minimum, umbilico carnofo cinetum; Aylus nullus, figma obtufum.
Pericarpium. Bacca oblonga fubarcuata fucculenta.
Semen. Nucleus oblongus bilobus, nauco proprio perdurato teclus.
This tree is propagated both by the joint and feed ; the fruit is eatable, though not inviting, and the wood hard, of a fine grain and reddifh colour. The whole plant grows fo like the Spathe in form, difpofition and foliage, that they are generally confounded under the fame name, and diftinguifhed with difficulty when out of bloom; nor could I be yet certain which is the true timber-tree; but one of them certainly is one of the hardeft woods and of the fineft grain of any in America; it is however, only fit for fmali pieces of workmanhip, being feldom above three or four inches in diameter.

It is remarkable that in this, and fome other American plants, where a flefhy umbilicus furrounds the germen, the pulp of the fucceeding berry is not formed by the calix, but by the fwelling navel of the flower: this is the care in the green-heart plumbs, \&c.

MELOTRIA I. Scandens, foliis obtusè triangalaribus fubcrenatis, frugiu glabro.
Melotria L. Gen. H. C. \& Sp. Pl.
Cucumis Minima fructu ovali nigrolevi. Slo. Cat. 103. \& H. t. 142.

## The fmall Melotria with black fmooth berries.

This plant is nearly allied to the cucumber tribe, from which it is diftinguimed only by its hermaphrodite flowers; it is common enough in the low lands, and generally found creeping or climbing occafionally. It is remarkable for its Render ftalk and fonall black oval berries.

TAMI-

TAMARINDUS I. Diffufus, foliolis pinnatis, pinnis difticbis alternis.
Tamarindus Ray Hift. L. H. C. \& Sp. Pl.
Tamarindus Mufei \&i Thez. Zeyl.
Tamarindus Gerbardi emaculati, E$c$. Slo. Cat. 147.
Tamarindus Pluck.t. 64, f. 4 .
Tamarindus \& Caranda Bontii, p. 94. \& Intay. Pif. 157.
Balem Pulli. H. M. P. 3. t. 23.
In floribus bujus planta faminacompreffa funt, uno verfu difpogita, $\mathfrak{E}$ ad medietatem con nexa; petalumque Juperius, majus rigidum, difforme © obtufum. Ad Diadelphias prope accedit.

## The Tamarind-tree.

This tree is pretty common in Famaica, and indeed in all our fugar colonies, but thrives moft luxuriantly in the gravelly bottoms of St. Cbrifophers. Its fruit and leaves are equally cooling: the latter are fometimes ufed in fubacid infufions, but the other is moft generally preferved with fugar or fyrup, and kept in that ftate throughout the year by moft families: It is a gentle grateful cooller and laxative, and much coveted by all new-comers: It is fometimes ufed in common diluting drinks, and frequently enters as an ingredient in punch, which then feldom fails to open the body. Alpinus fays, that the decoction of the leaves kills the worms in children, but with what certainty, I am not able to determine: It is however obferved, that moft auftere vegetable juices do deftroy them more or lefs in thefe warm climates.

This plant is a fenfitive, in fome degree, and clofes up its leaves on the approach of cold, or moift and heavy air.

> COMMELINA 1. Erecta major Simplex floribus conglomerat is pedunculo longiori incidentibus. Commelina Corollis equalibus, foliis ovato-lanceolatis fubciliatis. L. H. Upf. \&ericlimenum Erectumberbaceum, \&c. Slo. Cat. \& H. tab. I47. Zanonia Plumeri.t. $3^{8 .}$

## The larger erect Commelina with long Flower-ftalks.

This plant is frequent enough in the Ghady mountains, and rifes generally to the height of three feet, or better, above the root. The falk is fimple, and furnifhed from fpace to fpace, with large lanceolated leaves that ftand on vaginated footftalks: From the upper vaginæ and immediately under the main body of the leaves, rife the peduncles or foot-ftalks of the flowers; thefe are generally pretty long, and furnifhed with one or two fmaller leaves about the middle, but at the top they are charged with a group of flowers difpofed clofely together.

Tho' I think this plant differs widely from the other fpecies of the Commelina, both in difpofition and appearance, I have ranged it here, according to cuftom ; but fhall add its Botanic characters, as they appeared in the frefh plants growing in their native foil.

> Periantium. Preter folia foralia, nullum, Corolla. Monopetala infundibuliformis; pedamen imperforatum, limbus in fex lacinilas vovetas Sectus, laciniis tribins interior ibus majoribus \& corollam referentibus, ceteris exterioribus of calicis quafi vicem fupplentibus.

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> Pericarpium. Pof delapfum faminum corolla connivet capfulampue involvitfubrotundam obtufe trigonam trilocularem; ©゚ abit in baccam fucculentam obverfe-orotam, \&o oblique pedunculatam.
> Semin. Unum vel alteram in fingulo: loculamento câfulde obvolutte.

C OMMELINA 2. Procumbens foliis lanceolato-cvatis, floribus paucioribus, petalis duobus majoribus.
Commelina Plum. Gen.t. 38.
Commelina Coroltis inequalibus, foliis ovato-lanceolatis acutis, caule procumbenti glabro. L. Sp. PI.
Veatla-Caitu H. M. P. 7. t. 58. © Ephemerum bengalenfe. Pk.t. 27.3,

## The broad-leaf'd Commelina.

This plant is very common in the middle lands; it grows in beds, and creeps generally along the ground, thfowing out a great number of leaves and fmall branches towatds the top. It is accounted an excellent food for moft forts of cattle, efpecially thefe that give mill.

C OM MELINA 3. Erecta fimplex angufi folia, foribus fingularibus.
An, Commelina Petalistribus majoribus equalibus. L. H. C.
Ephemerum Pbalangoides maderafpatens minimum, Éc. Pk. t. 27. f. 4.
This plant feldom rifes above the height of nineteen or twenty inches: It is pretty common in the mountains of Wefmorland, but I have not feen it any other part of the Ifland.

> S CIR PUS 1. Minimus nudus, capitulo fricto cvato, radice fibrofa. Scirpus Culmo tereti nudo fetiformi, Prica Jubglobofa. L. Sp. Pl. Et Scirpus Culmo tereti nudo Jetiformi, Jpica ovata bivalvi ejufdem. Juncelli Omnium minimi, Ģc. Pk. t. 40. f. 7.

## The finall Wire-rufh.

SCIRPUS 2. Minimus nudus, capitulo fricto terminali, radice fqua$m o f a$.
Juncus Parvus paluftris, Ěc. Pk. t. 40 . f. 6.

## The larger Wire-rufh.

Both thefe little plants are very frequent in the fwamps of Famaica, efpecially thofe near Kingfon; the former grows commonly to the height of three or fous inches, but the latter is more luxuriant, and rifes generally to fix or eight.

SCIRPUS 3. Cultino rotundo nudo; fpica flicta oblonga terminali.
Scirpus Culmo tereti nudo, Jpica fubovata \& fubgtobofa. L. Sp. P.
The aphyllous round-fhanked Scirpus, or Rufh.
S CIR P U S 4. Culmo triquetro nudo, fpica fricta oblonga, terminali.
The aphyllous Scirpus with a triangular Stalk.
Both thefe plants are frequent in all the hatlow flanding waters of the Ifland, efpecially thofe to the eaft and weft of King/ton: the ftalks of both are almof hollow, and partitioned by frequent tranfverfe Septa. The Botanic characters of them are more or lefs particular, and generally appear in this manner, viz.

Receptaculum Commune. Oblongum, fouamis numerofis anguftis obfitum, quod flores fingulares colligit in Jpicam Arictam oblongam.
Corolla, Nulla. Stam. filamenta tria vel pauciora longa tenuia, antbenis longis inflrusta.
Nectaria. Filamenta quinque vel Sex fillo breviora rugofa erecta attenuata, infra bafem geminis enata.
Piftillum. Germen oblongum breve, fito conico bifido inftructum; Aigmata oblonga decedentia, uiltra fquamas porrecta.
Péricarpium. Nullum, femina folitaria orbiculata compreffa.
SCIRPUS 5. Major rotundus, panicula terminali, fopicillis comprefiss
Juncus Levis, Éc. Slo Cat. 37.
Scirpus Lacuftris Altijfimus. Tournef. \& L. flo. Lap.

## The flat-panicled Bullrufh.

This plant is very like the common Rullrulh; I have met with it in the mountains of 'St. Mary's, where it grew extreamly well, but was probably planted there. The foil in which I obfepved it was rich, and beftyewed with alhes aboutt the root.

## SCIRPUS G. Major rotundus, paniculal terminalifpicillis ovatis tumentibus pedunculis comprefis. <br> Scirpus Culmo tereti nudo, Jpicis ovatis plurimis pedunculatis terminalibus. L. Sp. Pl.

## The Bullrufh with oval Panicles.

This plant is common about the ferry, and grows every where in the banks of the river; it is very like the foregoing in appearance, but eafily diftinguifhed from it by the oval and roundifh form of the Spicillw, or lefferr parts of the Panicle, which, in that, are long, narrow, and compreffed.

CYPERUS 1. Pratenfis minor paniculis conglabatis, fpicillis compreffis difiche imbricalis.
Gramen Cyperoides jpicis compaEtis fubrotundis. Slo. Cat. \& H.t. 79. Gramen Cyperoides pumilum, © ©. Pk. Phy.t. 19i, f. 8, \& 192, f. 2.

The fmalleft Graffy Cyperus or Sedge.
This plant is common in the lower lands of Jamaica, and feldom rifes more than nine or ten inches aboye the ground. Its outward panicles ftand upon foot-ftalks, but the middle one is largeft, and fixed to the end of the ftem; each however is compofed of a number of fmall compreffed Spicilla that ftand in a radiated form.

## CYPERUS 2. Minisnus pratorfis paniculo Aricfo fingulari, foliis involucri ternis.

## The fmall Cyperus with a fingle Head.

This little plant is fometimes found in the lower lands, and feldom rifes above three or four inches from the root ; the ftalk is fimple, triangular, vaginated at the bottom, and furnifhed with three leaves above; the flowers appear in this manner.

Periantium. Ghma bivaluis brevis uniflora perfifens, walvis oblongis patentibus.

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Corolla. Gluma bivalvis, valvulis oblongis carinatis comprefis.
Semen. Unicum orbiculatum compreflum.
CYPERUS 3. Maximus aflurgens, culmo rotundiori, panicula jparfa quandoque monfrofa; Jpicillis comprefis difiche imbricatis. Cyperus. Maximus panicula foliacea. Slo. Cat. $35 . \&$ H.t. 74. f. I.

## The largeft foliaceous Cyperus.

This plant grows in all the low lands near the Caymanas; and rifes commonly to the height of five feet, or better: It feeds but feldom, but in the room of thefe it bears a large foliated top that is divided and fubdivided into two or three feries of umbellæ, each growing gradually fmaller as they rife towards the fummit, where every little radius ends in a few leaves. It feems to be the papyrus of Stapel, in his notes on Theopbraftus.

CYPERUS 4. Major umbellatus, paniculis laxis, Spicillis teretibus, culmo triquetro.
Cyperus. Panicula maxima fparfa, छcc. Slo. Cat. 35, \& H. t. 75.
The larger Sedge with a triangular Stalk and loofe Panicle.
CYPERUS 5. Major, culmo fubtriquetro, panicula ampla fparfa, foliis involucri longifimis.
This plant is very like the foregoing, of which it may be only a variation. They are both very common in the lower lands, and feldom rife above two feet and a half from the root, tho' the leaves are often more than that in length.

CYPERUS 6. Major fubtriquetrus, paniculis oblongis frictioribus.
Cyperus. Maximus, panicula minus /parfa, \& $c$, Slo. Cat. 35, \& H. t. g.
The large Cyperus with a more compact Panicle.
C Y P ER U S 7. Humilior, foliis involucri albo longitudinaliter fafciatis.
Gramen Cyperioides ficica compacta alba, ©c. Slo. Cat. 36, \& H. t. 78.
The variegated Graffy Cyperus.
C YPERUS 8. Culmo ereczo tereti fubftriato, foliis teretibus canaliculatis.

## The Ruh Cyperus.

This plant is very common between Kingfon and Hunts-bay; the ftalk is very flender, and feldom rifes above two feet and a half : it grows in large tufts, and the leaves, tho' very flender, are nearly of the fame length with the ftalk.

CYPERUS 9. Erectus cylindracius fubteres umbellatus, fpicillis comprefis diflicbe imbricatis © radiatis.
An, Cyperus Umbellatus, E'c. Pk.t. 191, f. 4, vel 415, f. 4.
The larger erect field Cyperus with a flender Stem.
CYPERUS 10. Erectus teres, Jpicillis frictis ovatis, exterioribus pedunculatis confertim nafcentibus.
Gramen Funceum aquaticumgeniculatum, $\mathcal{E}^{c}$. Slo. Cat. 37, \& H. t. 75.

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$$

Juncus. Minar barbadenfis, ESc.Pk. t. 197, f. 8.
The flender aquatic Cyperus.
CYPERUS 1I. Odoratus vifofus, fubteres maritimus, fpicillis compreflis conglobatis \& radialis.
Cyperus Longus odoratus, Eic. Slo. Cat. 35, \& H. t. 75.
The fcented Cyperus with clammy Leaves.
All thefe fpecies are found in the lower lands and fwamps of famaica: the laft fort grows generally near the fea; it has a ftrong, but agreeable fmell, feals clammy while young, and rifes commonly to the height of two feet, or better. It is pretty frequent to the eaft of Kingfon.

## $\mathrm{S} E \mathrm{C}$ T. II.

Of Juch as bave three Filaments, and two Stiles inevery Flower.
BOBARTIA I. Spicis capitalis, involucro majori foliofo tectis. An, Bobartia, Ecc. L. flo. Zey, \& Sp. Pl.

## The large-headed Grafs.

This graffy plant grows very rank in and about the Gully, that runs to the eaft of Kingtion, and is eafily diftinguifhed by its large foliated heads.

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SACCHARUM 1. Geniculatuin Eo fucculentum, panicula fpatiofá.
    Saccharum Floribus paniculatis. L. Sp. Pl.
    Arundo Saccarifera C. B. Eic. Slo. Cat. 3I. \& H.t. 66.
    Taca-Mara Pir. Pag. 108.
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## The Sugar Cane.

It is not probable that this plant was much known to the antients, their Sacchar, Saccaron, Saccharon, and Sacbar-Mambu, being more likely the produce of that large prickly reed, which itill fupplies moft of the inhabitants of the eaftern provinces of Afa, with that delicious juice which they call Mambu to this day. That plant grows commonly in thofe parts of Afic that extend along the eaftern feas, and has been always known to fupply the inhabitants of thofe parts with a pleafant drink, which they have fometimes found intoxicating (a) ; but as few vegetable juices are endowed with this quality before they are fermented, and that the other productions of this plant retain no marks of a narcotic nature, we may conclude that the people have been at all times ufed to ferment this juice; but whether this happened while the liquor was ftill running from the tree; (for we have no reafon to imagine it was ever had by any other means than by incifion, or tapping) or that it had been laid by on purpofe, is uncertain; it is however probable both from the quantity and appearance of the Sacchar (b) of the antients, that it was only the concreted oil and effential falts of that part of the juice that continued to dribble from thefe wounds, after the principal drains had been finifhed, which had criftalined about the fcar, and along the body of the reed; or the produce of fmall quantities of the juice expofed to the more intenfe action of the fun or fire : for the gummy
(d) Nearchum apud Strabo, Lib. 15
(b) Diafcorides, apud Mat. Ca. 55. Galen: de Medicamentis fimplicibus, \& Pliny, Lib. 12, Ch. 8. M m

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 THENATURALHISTORYappearance and concreted form (a) with which it has been defcribed, ferve alike to prove it of this nature ; and if we confider the various accounts left us by the moft exact antient writers both of the falt and the juice, we fhall certainly have no reafon to doubt its being really fo.

The true fugar-cane feems to have been originally a native of the Canary Iflands, and firf known to the inhabitants of Europe in the times of the Romans; for what Pliny records (b) of 'fuba's account of the Fortunate IJlands, if rightly confidered, will undoubtedly leave us but little room to doubt of either. It has not however, been propagated or known any better among us for many ages after; and probably continued fo until the Spaniards and Portuguese began to trade round the coalt of Africa, and had frequent occafions to call at thofe iflands; from whence they firft brought this plant into Spain and Portugal, where it was regularly cultivated as well as in their foreign fettlements. But though fugar had been made from it in many parts, efpecially in Madera, St. Thomas's, and the Canary Iflands, they were but poorly fupplied in Europe, until Columbus made the difcovery of America, and this plant had been introduced and cultivated there, as it was, by that time, in many parts of the Eaft Indies, and along the coaft of Africa, where it now grows almoft without culture in every rich and fertile field.

The culture of this plant, which now employs the principal part of the inhabitants of the fouthern colonies of America, and fupplies the moft confiderable branches of their exports, next deferves our attention.

To fucceed well in the culture of the fugar-cane, and to raife it fo as to anfwer both your labour and expectation, the ground you pitch upon muft be rich and deep, the bottom clofe, the mould free, and the fituation warm; and difpofed fo that you may expect a moderate fhare of every rain or dew that falls, without being too remote from a market or a miping-place. Your foyl thus chofe, cleared, and ready for the cane ; you muft next confider your ftrength, calculate juflly what quantity of land you may be able to plant annually, compute how many acres of canes your ftrength and conveniencies will allow you to manufacture the produce of one year with another ; and divide the manureable part of your eftate accordingly into three, four, five or fix parts; but you may be more free where the ground is obferved to produce a kind plant and to rattoon well.

Your land being thus laid out, and one of the parts divided into convenient pieces with proper intervals; you begin to hole, and continue to open the ground gradually until the planting feafon comes on, and your mould be well funned. To have a piece of ground regularly holed, as the beft planters are now obferved to do, it muft be lined out into oblong fquares of about three feet breadth, and each of thefe marked again with a fmall piece of ftick or twig at every three feet diftance ; by which means the whole field is foon divided into leffer areas, each containing feven or nine fquare feet according to your chofen diftances: thefe are feverally dug up and the mould raifed on the banks between them; but you feldom open deeper than four or five inches from the furface.

This plant is propagated by the gem, and people that cultivate it carefully have fpare pieces to fupply them with plants in the latter feafons, thefe are regularly drawn, cut into juncks proportionate (c) to the length of the holes, and placed three or four (d) parallel to each other, or in a triangle in the bottom of each: but it is re-
(a) Diafcorides \& Galen, \&c. loco citato.
(b) Plin. Lib. VI. cap. xxxii.
(c) The beft plants for this purpofe are thofe had from the tops of the cane, and cut fo as to have two clear fprouting eyes on one fide, and three on the other, for they are always cut flanting; the plants taken from the body of the cane ought to have three eyes on one fide and four on the other, as they are more liable to die in the ground.
(d) Poorer lands require four or five juncks, but two or three are generally fufficient in a rich mellow foyl.

## O F J A M A I C A.

markable, that the upper joints of full grown canes, or thofe that are covered by the leaves and yet foft and tender, anfwer beft for this purpofe, and are always ufed when they plant towards the end of the crop-feafon. The plants thus difpofed, are covered from the neighbouring banks, but the mould is feldom raifed above two inches over them in any dry and loofe foyl, the remainder being left to be added occafionally at the different weedings. In ftiff and clayey lands the holes ought to be fomewhat deeper, and a part of the mould upon the banks to be lodged betiveen the plants and the bottom, the remainder being employed to cover them to the height of two or three inches, which will always leave the furface of your field level.

The beft feafon for planting the fugar-cane is about the month of Auguf, where the ground is found fliff or chilly; but September and October are obferved to anfwer better where the foyl is free and warm, which is generally the cafe where the mould lies deep over a marly or gravelly bottom; and then you may expect your canes to come in feafonably in the beginning of the fecond year, which is the beft and ufual feafon for making of fugar. The latter part of this, and the beginning of the enfuing year is generally employed in building of the neceffary works and other conveniencies, if thefe be not already provided; and in the following feafons you hole and plant another part or divifion of the manureable lands, and prepare all neceffaries for boiling early the enfuing feafon.

But where the ground has been opened and in ufe, it generally requires more care to anfwer your expectation; fallowing and dunging, become requifite, though they feldom fail to overpay the toil; and peculiar care fhould be taken to adapt the manure to the nature of the foil: dung, fand and mixtures, anfwer in the different forts of poorer glebes; and burnings and lime have been always obferved to quicken vegetation in chilly loams.

The feafon being now come, and every thing in order about the works, the Negroes are provided with bills, and ordered into the moft forward field to cut canes; this they perform very dexteroully, they part the plants pretty near the root, chop off the tops, and leave the ftalks in irregular parcels to be collected and tied together by the binders; thefe are again taken up by others and put into carts, cradles or other vehicles to be carried to the mill, where the juice is expreffed by paffing them to and fro between three perpendicular rollers cafed with fteel; this, by a declivity formed in the bridge-tree is conveyed to the firft ciftern, and ftrained in its pafflage tbrough a bafket lined with hair cloth, but this is feldom regarded in Yamaica: when this is full, the liquor is difcharged by a tap placed in the bottom of the ciftern, and conveyed by proper fpouts or gutters to a large ciftern, or immediately to the firf clarifier in the boiling-houfe, where it thould be alfo Atrained and tempered; the former, however, is feldom regarded in Famaica, but the latter is always requifite in the manufacture of fugar, and generally done there by mixing a fmall quantity of good quick-lime in powder, or fome ftrong lime-water with the juice after it is put in the clarifier: the fire is then raifed gradually, and continued in a moderate ftate until moft of the filth and naftinefs with which the juices have been charged rifes to the top, and is fcummed off by fhallow perforated copper fkimmers : then it is again ftrained, by fome, through a thick coarfe blanket, and boiled to a proper confiftence in the adjoining coppers: but during this operation the fire (e) mutt be conftantly kept very quick, and the liquor Thifted gradually, as it thickens, from one copper to another, until it arrives at the fmalleft, where it is perfected, while the others are conftantly fupplied from behind: and as it is apt to fwell and boil over the rim of the
(e) The Juices of the Cane differ very much according to the foyl and the feafons; for when thefe have been wet, or that moift and chilly, the juice is waterifh and poor, and requires a great deal of boiling and a fmart active fire, which obliges the planters of Famaica (where the juice is frequently poor) to fupply themfelves with large quantities of acceflory fuel from the woods; but where the juice is rich and kind, as it is generally in St. Chrifopher's, $\mathcal{E}^{\circ} c_{c}$. the litter or thrafh that comes from the mill is frequently more than fufficient for both coppers and ftills, and the juice will often beginto grahulate in the fecond tetch.
coppe $_{r}$
copper while in a vifcid ftate, it muft be kept in conftant, and fometimes violent agitation with the fkumming or larger ladles, until it begins to granulate.

When the liquor has acquired a due confiftence, it is put into broad fhallow wooden coolers; and after it has obtained a proper and ftronger confiftence there, is carried in tubs or other veffels and emptied into pots, barrels or hogheads, according to the conveniency or fancy of the planter; thefe are placed on ftanchions underlaid with convenient flanting platforms and cifterns to receive the molaffes, which continues to dribble through every hole and crevice for fome days, but care is always taken to leave proper vents for the difcharge of this glutinous juice, which, otherwife would fpoil the grain colour and confiftence of the fugar.

When they have cut as many acres, and manufactured as much of this commodity as their ftrength and feafons will permit, they begin to hole, plant and weed again; but where the foyl is rich and kind, this labour is much lefs, for the fuckers that fhoot from the roots left in the ground the foregoing feafon, which are generally called rattoons, grow often fo luxuriant and rich, as to contribute much towards the crop of the enfuing year, nay, are fometimes found almoft equal to the firft plants, and in a very rich foyl frequently continue to anfwer for many years: but in poorer grounds thofe of the firft year only are made into fugar, and the growth of the fecond ferves for plants or is thrown up.

We fhall now give fome account of the manufacture of rum, another principal commodity obtained from this valuable plant.

In the manufacture of the former commodity, the courfe and order of the operation prevented my having mentioned the gradual addition of juice, that is conftantly fupplied in a regular fucceffion from the firft clarefiers to the laft copper, which is hung immediately over the fire-hole, that it may be the more readily managed as occafion requires, without retarding the procefs in the other coppers, or raifing the rarefaction to too great a height; this fucceffion continues until all the liquor of the day is boiled off, which holds often until late at night; and then the coppers are charged with water gradually, and the fires extinguifhed as the liquor is fhifted forwards: the coppers are well wafhed with this water early the enfuing morning $(f)$ to make them fit for the labours of the day ; and the wafhings difcharged into the common fpouts or gutters that convey the fkimmings of the juice, by which they are carried to a proper receiver in the ftill-houfe.

The general method and proportion in which the ingredients that yields this fpir rit are mixed and compounded, is, as follows, viz.

Take one third fkimmings, one third water from the wafhings, and one third cool and clear lees to warm and ferment the whole, but though this, with an after addition of a few gallons of molaffes, be the general proportion now in ufe, it may be varied with good effect by a judicious diftiller: when thefe ingredients are put together pretty cool, and well mixed, the fermentation begins foon, and will rife in twenty four hours to a proper height for admitting the firft change of molaffes, which is about three gallons for every hundred gallons of the wath or liquor; this enriches the mixture, thickens the fermentation, and about four and twenty hours afterwards it is fit for the fecond and laft charge which is nearly the fame quantity with the firft; but care muft be taken to give it this fupply before the fermentation abates, for otherwife the liquor will grow fluggifh and never yield a due proportion of fpirit. The fermentation falls gradually after the fourth or fifth day, and when the liquor grows fine, and comes to throw up its air-bubbles clear and flowly, it is fit for the fill, where the fpirit is drawn off by a conftant equal fire, during which

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great care mould be taken to keep the water cool about the worm, for the more it is fo the ftronger the fpirit will be ( $g$ ) the more in quantity and the mellower.

But though this be the common proportion and method of manageing the ingredients of which rum is made, a great many planters who diftil confiderable quantities of that fpirit yearly, mix up their liquors in the following manner, and take three parts of water, one and a half molaffes, and as much lees: but this requires a long fermentation, which generally continues from ten to twenty days, and yields a great quantity of good fpirit: And others who by being weak handed, neglect, or accident happen to have large quantities of bad canes, fcald the juice and put it to the fame ufe; but this ferments fufficiently in about three days, and never affords either a good fpirit or a confiderable quantity.

The beft managers of plantations generally get about two hundred gallons of good common proof-rum ( $b$ ) for every three hogheads of fugar; this proportion muft however vary with the cane, for in fome plants the juice is more clammy, and throws off more fkimmings and molaffes than that of others.

## P A N IC U M I. Silveftre, paniculâ rariori oblongâ, fpicis jimplicibus uno verfu floridis.

## The fmaller Panicum with fimple fikes.

This plant grows commonly in the moft fhady woods, and is feldom feen in the low lands: it rifes generally to the height of two feet or better, and is furnifhed with pretty large leaves, and bearded fpikes: fome of its floral parts are a little different from thofe of the other fpecies, and inferted here on that account.

# Periantium. Gluma bivalvis conico-ovata, valvulis arifả̉ terminatis, exteriori longiJimá. <br> Corolia Gluma bivalvis, extima calicinis fimilis Setâ minoriterminata. 

## PANICUM 2. Majus, paniculâ rariori, Jpicillis longioribus uno verfu floridis. <br> Gramen Paniceum maximum, Esc. Slo. Cat. 30. <br> Scotch Grals.

This plant is cultivated, and thrives very luxuriantly in all the low and marthy lands of Jamaica, where it is now almoft univerfally ufed as fodder for all their ftabled cattle : it is planted near the towns with great care, and found to be one of the moft beneficial productions of the Ifland ; it is propagated by the joints or root, and fet in fmall drilled holes placed about two feet and a half afunder; the young fhoots begin to appear in a few days, and as they grow, they fpread and creep along the ground, cafting a few roots, and throwing out frelh hoots from every joint, as they run; thefe foon fupply the land, and fill the field with ftanding plants, the only that are generally cut. It rifes varioufly according to the moifture and Juxuriance of the foyl, but its general growth is from two to four feet, and is fit to cut in fix months from the firft planting, and every month or fix weeks after, if the feafons fall in kindly, and due care be taken to keep the ground free from weeds. An acre of good land well ftocked with this plant in a feafonable part near either King/Ron or Spanifhtown, is computed to bring in above a hundred and twenty pounds a year; and is not attended with fo much expence or fo many inconveniencies as when

[^14]
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cultivated with any of the other productions of the Ifland; for being once planted, it holds many years; but when the main ftalk or root grows hard and lignous, the younger moots do not pufh fo luxuriantly, and they are then obliged to plant a-new; this however becomes eafy to them, as it is done gradually, for they generally fupply the pieces as they clean them, and throw up every ftubbed or failing root they find, planting a few joints in its place.

## PAN I CUM 3. Pratenfe minus, paniculâ laxâ pyramidatâ.

The little Field-panicum.
This little plant feldom rifes above thirteen or fourteen inches; it is very common in the dry Savannas, and remarkable for its rifing branched and pyramidal panicle.

> P A N I C UM An, Gramen Pratenfe, valvulâ exteriori remotâ Setaceâ. Arundinaceum balepenfe, $\bigotimes^{c} c . \mathrm{Pk} . \mathrm{t} .32 . \mathrm{f} . \mathrm{I}$

The Field-panicum with a branched panicle.
This plant feldom grows to any confiderable height, being generally found under fifteen inches; it refembles the Holcus pretty much in the form and difpofition of its flowers.

> P ANICUM 5. Erectum minus, Spica fimplici Settô.
> Panicum Spicat tereti, involucris fetaceis foliculatis unifor is fofculo quadruplo longioribus. L. Sp. Pl.
> Gramen Lagopoides, Ec. Pet. Gaz. t. 2.

## The fmaller Panicum with a fingle head.

In this plant the involucrum or outward cup is divided into fix, eight or more long capillary briftles, which feem to fupport the flower behind, and are always longer than the other parts: the cup is fmall and fupports two flowers, the one male with thinner valves and furnifhed with three and fometimes four Atamina; the other hemaphrodite and compofed of two unequal valves, whereof the exterior is ftronger, hollow and rugofe, and contains the germen with two ftiles adorned with oblong hairy ftigmata, and attended by three fhorter filaments.

The whole plant is very fimple and fedom rifes above twelve or fourteen inches. I have found it in the courfe of Mammee River.

## PANICUM 6. Panicula longifimâ, fpicis plurimis teretibus fimplicibus refertá.

## The long fpik'd flender Mountain-panicum.

This plant is common at Mr. Fones's in the mountains of New Liguanee, and rifes generaily to the height of two or three feet; the ftalk is flender, and furnifhed with many fhort and fimple fikes from below the middle to the top.

> PANICUM 7. Erectum maximum, paniculâ friçâ cylindraceâarifatâ. Panicum Indicum Jpica longifima. C. B. \& Slo. Cat. 26. Fenna H. M. P. xii. t. 79.

## The Negroe Guinea-corn.

This plant is cultivated in feveral parts of Famaica; and the more eafily preferved as its long fetæ or brifles defend it from the birds: it rifes commonly to the height of five or fix feet, fometimes more, is furnifhed with large graffy leaves towards

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$$

the bottom, and adorned with a fimple cylindric fpike at the top. The grain is a hearty food for labourers.

$$
\begin{gathered}
\text { PAN ICU M 8. Erectuni maximum, paniculâ fingulari erectâ Sparfa. } \\
\text { Milium Indicum artundiniaceo caulev Slo. Cat. p. } 5 \text {. } \\
\text { Milium Indicum Semine fufco juba larga. Muf. \& Thez. Zey. } \\
\text { Guinea Corn. }
\end{gathered}
$$

This plant is cultivated by moft people in the Ifland, efpecially in the low lands, where it feems to thrive beft; it rifes generally to the height of fix or feven feet, often lefs, fometimes more, and fhoots by a hollow jointed and foliated ftalk: the grain is round and rarely above half or three quarters of a line in diameter, it makes a fine white flower which is very nourifhing, and is generally ufed to feed their fock and Negroes in time of Scarcity.

PANICUM 9. Erectum maximum, paniculis plurimis declinatis.
Milium Indicum arundinaceo caule, ${ }^{*}$ ©c. Slo. Cat. 25.

## Guinea wheat.

This plant is very like the foregoing both in fize, grain and appearance; it has been but lately introduced to $\mathfrak{f a m a i c a}$, and is diftinguihhed from the Guinea corn by its bearing fucceffive panicles from all the upper joints.

| ARIS TIDA 1. Spicâ laxâ tenui arifis longiffimis crinitâ. |  |
| :---: | :---: |
| Aritida L. Sp. Pl. |  |
| Gramen | Avenaceum panicula minus Jparfa, Ecc. Slo. Cat. $35 . \&$ H. t. 2. |
| Gramen | Avenaceum Maderafpatanum. Pk. Pby. t. ıg1. f. 3 |
| The bearded Grafs. |  |
| riantium. | uma bivalvis unifora , fmplex. |
| Corolla. Glu | univalvis teres convoluta, in tres arifas longifimas fetaceas define |

This plant is frequent in Famaica; and feldom rifes above ten or 12 inches from the ground; the ftalk is flender and the panicles fimple and bearded.

## A R IS T I D A 2. Minor, panicula è fpicis fimplicibus compofita, glumis bexafetis.

## The fmaller bearded Grafs.

This plant is fomewhat fmaller than the foregoing,, from which it alfo differs in the formation of fome of the floral parts, which in this fpecies appear in the following manner.

Periantium. Gluma trivalvis, exterior oblonga a cuminata; media amplectens \&
Setis tribus brevioribus ornata; tertia linearis rimaque gluma
medic appofita \& tribus longioribus fetis terminata.
B R I Z A I. Tenuifama, paniculis quafi lanuginofis pedunculis brevibus $\mathcal{F}$ tenuifimis incidentibus.
Gramen Pratenfe, foliiis angufitilimis, paniculo ©ic. Slo. Cat. \& H. t. 73.
The fmall trembling Grafs.
This little plant feldom rifes above fix or feven inches, and is fuftained by a very flender weakly ftalk; it is eafily diftinguifhed by irs delicate branches, fine leaves and downy head.

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## UNIOL A 1. Panicula fpicillis longioribus © tenuioribus difticke florifer is referta.

The flender Uniola with fimple flower-fikes.
This plant is common in the low lands about the Angels, and rifes generally to the height of twelve or fourteen inches: it is temarkable for the length and flendernefs of its delicate flower-fpikes: the leaves of the cup are very fmall, and ftand in an alternate and diftich order upon the common fupporters.

UN IOLA 2. Panicula longifima, fpicis craffufculis perbneribus uno verfu floridis.
The larger long panicl'd Uniola.
This plant is fometimes met with in the hills above Bull-bay, where it generally rifes to the height of about three feet, and is furnifhed with many flower-fipikes for more than half its length; thefe are pretty thick, rife gradually one above another, and feldom exceed an inch and a half in length, having all the flowers on the outlide of them.

As I have met with fome other graffy plants in Jamaica, which I could not fo readily clafs under the Genera already eftablifhed; I chofe rather to fet them down here under the common appellation of Gramen, and to add a few of their more diftinguihhing characters; than to be at the pains of reducing them to claffes which cannot be yet fixed fufficiently to give univerfal fatisfaction.

GR A MEN I. Bicorne repens Jpicis tenuioribus \&o longioribus.
Gramen Dactilon bicorne repens, E̛c. Slo. Cat. $33,-\&$ H. 68. f. 3.
Mountain running Grafs.
Periantium. Gluma bivalvis, valvulis angufifimis villofis valvulis corolle oppgitis.
Corolla. Glama bivalvis, valvulis ovatis.
Stamina. Filamenta tria.
Piftillum. Germen fubrotundum; Ayli duo; figmata cirrofa.
Semen. Orbiculatum compreffum.
This is the moft common fort of Grafs in the midland mountains, and grows frequently in the low lands: It is a little fowerih and not liked by any fort of brutes while green; but when it is cut and well cured, it makes excellent hay, and agrees extremely well with all labouring and ftabled cattle. This difcovery is owing to Mr. Wallen, who had frequently tried the experiment before I left 'Famaica, and has always found it to anfwer beyond his expectation. He is a gentleman of a very happy turn of thought, and a great promoter of every fort of curious and ufeful induftry.

> GRAMEN 2. Cruciatum fpicis brevioribus E crafforibus, deorfum frugiferis.
> Gramen Cruciatum, Profp. Alp.
> Gramen Daction Jpicis brevibus craffs, Ec. Slo. Cat. 3.

The fhort-fhanked cruciated Grafs.
This plant is pretty common in the lower lands, and feldom rifes more than eight or ten inches from its tufted root: The corolla grow three and three together, but every bunch has a common cup compofed of two fimple valves, and each of the flowers is fupplied with its own befides: It is a hardy and kind pafturage.

GRA-

# GRAMEN 3. Cruciatum a/furgens, Spicis fubbirfutis tenuioribus \& longioribus deorfum frugiferis. <br> Gramen Dactilon Spicis gracilioribus, \&c. Slo. Cat. 33, E H. 68. Gramen Dactilum Americanum, \&c. Pk. t. 189, f. 7. Cavara-Pulli H. M. P. 12, t. 74. 

## The long fhanked cruciated Grafs.

This Grafs is rather more common than the foregoing: It is a diftinct fpecies, and grows generally to the height of fourteen or fifteen inches above the ground.

GRAMEN 4. Majus, Culmo comprefo nodofo difiche foliato atque ramofo. Gramen geniculatum foliis brevibus, \&cc. Pk. t. 189, f. 3.

## Dutch Grafs.

This plant is very common in all the fwampy bottoms round the Ifland, and grows fometimes very luxuriantly in the mountains: Its falk is compreffed, and furnifhed with many leaves and branches difpofed in a diftich order: It grows fometime to the length of two or three feet ; but the lower part of the ftalk is generally obferved to creep along the ground.

GRAMEN 5. Minimum difticbe foliatum, fpicâ frictiori fimplici creeta muticá.

Crab Grafs.
This elegant little plant is very common about Hunts-bay. The falk is a little comprefled, and feldom rifes above four or five inches from the root.

> GRAMEN 6. Majus affurgens, panicula longiori, jpicis fimplicibus comprefis ad margines villofis inferne frugiferis.
> The larger rifing Grafs.
> Periantium. Gluma bivalvis, valvulis orbiculatis compreffs.
> Corolla. Gluma bivalvis, valvulis compreflas rigidis nitidis genitalia Arite amplectentibus.

This plant is very common at the Angels, and rifes generally to the height of three feet and a half, or better; it is a coarfe fort, and not much ufed.

> GRAMEN 7. Loliaceum, panicula e spicis fimplicibus tcretibus confata, Jpicillis minimis co mprefis diflicbis alternis.
> Gramen Dactilon panicula longa jpicis plurimis gracilioribus longis. Slo. Cat. $34 . \&$ H. t. 70.

The rifing Grals with very flender flower-fpikes.
This plant rifes commonly to the height of two feet and a half, and is furnifhed with a fpreading panicle at the top, which is generally compofed of a good many delicate flender fimple fpikes.
GRAMEN 8. Minimun, fpica fimplici, calicibus ecbinatis.
The fmall Savanna Grafs with echinated Valves.
Periantium. Ghma unifora bivalvis echinata: valvula altera carinata, altera planiufeula.
Corolla. Univaluis.

This little plant grows in the Savanna about Kingfon, and feldom rifes more than four or five inches above the ground.

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ARUNDO 1. Erecta major, caudice bipolicaris diametri, foicâ \intpatiofâ.
    An, Arundo Indica cluf).
    An, Arundo Indica Bambuifpecies, altera, vel tertia.H.M.P. V. IIg.
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## The larger wild or Bambu Cane.

This plant is very common in the cooler fwampy bottoms among the mountains, and rifes frequently to the height of twelve or fourteen feet from the root; it is jointed like other reeds, is about an inch and a half in diameter near the bottom, and tapers gradually to the top; the outward coat is hard and fmooth, and the body firm, and filled with a fofter fibrous fubftance: the whole flalk is flrong and elaftic, and generally ufed for wattles in thofe countries where they cover their houfes with tyles or thatch; for in both cafes they anfwer extremely well, and are obferved to be better than any other fort, as they grow daily lighter, and found to continue longer found. I have feen them yet ftrong and perfect in fome of thofe houfes that have been built by the Spaniards in St. 'Jago de la Vega, above a hundred years ago; but thefe are montly covered with tyles, and feldom yield any accefs to rain or moifture, which is obferved to deftroy them pretty foon; efpecially as the outward bark is frequently broke, in nailing them. They are alfo uled for bafkets, but to prepare them for this purpore, they are obliged to fplit then into flender lips, and to pare off the inward more pithy part, leaving none but the outward rind and lignous fibres for ufe. The tops of the more tender fhoots of this plant are frequently pickled in America, and very much liked; they eat very crifp and tender.

## ARUN DO 2. Erecta major fluviatilis, culmo excavato policaris diametri. Arundo Maxima folio dentato, Eic, Slo. Cat. 32.

## The large hollow Reed.

This plant is pretty much like the younger fhoots of the foregoing, both in fize and appearance, but a diftinct fpecies; the joints are all hollow, and the flem rifes commonly to the height of feven or eight feet: It is frequent on the banks of $S p a-$ nifh-town river in the way to Sixteen-mile walk, as well as in fome other parts of the Illand, and does not feem to differ in any thing from the larger Spaniff reed.

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\begin{gathered}
\text { AR U N DO 3. Ereeta minor, panicula laxa foatiofa, fpicillis difichisis lan- } \\
\text { uginofs. } \\
\text { The Sea-fide Reed. }
\end{gathered}
$$

This plant is found below Oxford, in the parihh of St. Thomas's in the Eaft, and feldom rifes above three feet and a half from the ground; but it grows in a dry fandy place near the fea. Its peculiar characters are thefe :

Periantium. Gluma multiflora bivalvis, valvulis porrectis acuminatis.
Corolla. Corotula glumofa quatuor vel quinque per Spicillas languinofas compreflas diflicbo ordine dijpofita funt, Stigmata cirrofa.
A R U N D O . 4. Silveftris ramofa tenuis paniculâ laxâ Gramen Miliaceum filvaticum maximum Semine albo. Slo. Cat. $34, \& 2 \mathrm{H} . t .71$.

This plant is very common in the woods, and rifes by its flender and branched ftalks frequently to the height of fix or feven feet, but is generally fupported by the neighbouring bufhes. It is a hearty and agreeable födder for all manner of cattle.

ARUNDO 5. Tenuifima altifmè fcandens, foliis minimis rigidis acuminatis,
 An, Arundo Volubibis: Indica qua Panampu-valli: H. M. P.7. f. 99.

## The flender climbing Reed.

This plant grows only in the moft cool and lofty parts of the Ifland, and is commonly found in the Blua-mountains, and thofe of Nerw Ligiuanee: it rifes generally to the top of the higheft trees in the neighbourhood; and frequently demits a few of its more flender branches again to the ground; thefe are very tough and flexile and feldom exceed the thicknefs of a fmall pack-thread, but all the joints are full and pithy: it is commonly found in large tufts; I could never fee any of its flowers.

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## Of Juch as bave three Filaments and three Stiles in every Flower.

## Holosteum i. Foliis orbiculatis oppofitis, racemis laxis terminalibus remotis.

Holofteum Foliis fubcordatis. L. Sp. P1.<br>Alcine Americana Numelarice folio, Ecc. Slo, Cat. 87.

## The larger Amerioan Chickweed.

This plant is common, and thrives very luxariantly in many parts of $\mathfrak{F a}$ maica. It grows in tufts and feldom rifes above ten or twelve jnches from the ground : the fmaller birds feed much upon the feeds, but it is feldom put to any other ufe there. Large wads of this plant taken frefh and heated over an eafy fire, make very fuccersful applications in hard and painful ffellings; for they generally relax the parts, and difpofe the obftructions to a refolution.

## HOLOSTEUM 2, Diandrum petalis integris, foliis minoribus obovatis;" petiolis © caulibus marginatis.

## The fmaller Chickweed with two Filaments.

This plant is not common in Gamaica: the flowers have but two filaments each, and thefe are placed in the fame line with the petals or leaves of the flower, which are five in number as well as the divifions of the cup. The plant is very fmall and feldom rifes above fix or feven inches from the ground

MOLLUGO I, Minima repens, foliis linearibus verticillatis, floribus quinarius pedunctlatios confertis.
An, Molugo. Foliis verticillatis cuneiformibus, caule fubdivifo decumbenti, $2 x^{2}$

## The fmall creeping Molugo.

This plant is pretty common in the dry Savannas of Liguanee; its leaves and branches are very finall; and the ftalk feldom runs above fix or eight inches from the roit. The flowers are generally four or five together, and grow in fingle tufts on the fides of the verticills.

CLASS

## C L A S S IV.

## Of the Tetrandria, or Vegetables that have four diftinct Filaments in every Flower.

## S E C T. I.

Of fuch as have four Filaments and one Stile in every Flower.
KNOXIA 1 Littoralis, repens, foliis rigidis oblongis oppofitis, foribus Singularibus.

## The creeping fea-fide Knoxia.

This plant is pretty frequent near the fhore in the parih of St. George's, and runs commonly three or four feet, or more along the ground, cafting a few fpreading branches from fpace to fpace as it creeps alorig: the leaves are oblong, pointed and ftiff, and the flowers few and fingle, and difpofed at the alx of the upper leaves.

## K N OXIA 2. Scandens, foliis cordato-ovatis venofis, pedunculis multipartitis alaribus. Tab.3. fig. 3.

## The larger climbing Knoxia.

I found this plant in the cooler mountans of Liguanee, it is a climber, and rifes frequently to the height of fix or feven feet, or more: in the foregoing fpecies the flower-cups are cut into four deep fegments at the margin, and remain tubular and fwelling below; but in this, they are more open and campanulous towards the bottom, and furnifhed, as it were, with four fmaller leaves at the top, which increafe gradually as the feeds ripen. The flowers and fructifications of both bear the diftinguifhing marks of the Genus, tho' the latter are always covered by the cup at the bottom, and frequently much higher.

SPERMACOCE 1. Erecta fimplex, foliis lanceolatis, nervis denticulatis, floribus conjefatis ad alas.

## The larger fimple and erect Spermacoce.

This plant is common in the lower Savannas about. KingAon; it rifes generally by a fimple upright falk to the height of fourteen or fixteen inches, and is furninhed from face to rpace with fimple lanceolated leaves, that fand in an oppofite order and embrace the main flem: from the alx of thefe rife the flowers which are generally white and numerous, and gathered into compact heads that grow gradually larger and more diftinct as they draw nearer to the top.

SPERMACOCE 2. Minor erecta fimplex; foliis linearibus floribus confipatis ad alas.
The fmaller erect Spermacoce.
This plant is fo very like the foregoing in fhape and appearance that it may be eafily miftaken for a variety of it; but they are found always diftinct even in the fame field hed, which obliged me to look upon them as different' 'ns of the
leaves in this plant are not prickled, nor is the flalk fo robuft or ftrong; tho' it generally rifes nearly to the fame height.

> SPERMACOCE 3. Erecta fubbirfuta, foliis oblongis venis arcuatis refertis, Juperioribus majoribus appropinquatis, floribus conjipatis ad alas.
> Spermacoce Hijpida foliis oppofitis obovatis. L. Flo. Zey. \& Sp. Pl.
> The oval-leaf'd Spermacoce.

This plant is common about all the fields in Liguanee; it feldom rifes above twelve or fourteen inches, and is eafily known by its oblong leaves and arched veins; it is very like the worm-grafs at firft appearance, but the ftalk of this is quadrangular and hollow, that of the other roundifh and fmooth.

SPERMACOCE 4. Fruticulofa atque ramofa, foliis litearibus, foribus confipatis ad alas fupremas.

## The Ihruby Spermacoce.

This little bufhy plant is frequent enough in the low and hilly lands of Gamaica; it branches very much, is adorned with many fmall leaves like thofe of the fecond fpecies, and bears all its flowers at the upper joints of the branches.

SPERMACOCE 5. Scandens, foliis oblongis venis arcuatis refertis, fioribus paucioribus confipatis ad alas,
Spermacoce Glabra faminibus inclufis. L. Sp. Pl.
Anonymos Americana foliis parietaria. Pk. t. 136. f. 4.

## The Iron-grafs, or climbing Spermacoce.

This plant is found only in the woods; and is there obferved to be fometimes upright and fometimes a climber : when erect, it generally rifes to the height of two or three feet; but when it is affifted by the neighbouring fhrubs, it grows commonly to double and trible that length.

R U B I A. I. Subbirfuta foandens vel reclinata, foliis craciatis floribus fingularibus ad alas.
An, Rubia Foliis quaternis. Ray. L. Sp. Pl.
In bâc plantá calix quadriphyllus eft, \&o baccu gemellia monolperme calicibus impoftae germinibus fuccedunt.

The flender villous Rubia.
I found this plant in the middle mountains of Liguanee; it is very weakly, grows in tufts, and feldom rifes above two or three feet from the root.

## C A T E S Be A? 1. Fruticofa, foliis fubvillofis oblongo-avatis, foribus fingularibus.

## The fhruby Catefbea with oval leaves.

This plant grows in the mountains near Mr. Thomas Afcougt's in St. Fobn's; and feldom rifes above five or fix feet from the ground: its peculiar characters are fet down here at length, but I have not been fo exact in refpect to the appearance of the plant in general, as I had no notion of a work of this kind when I examined the flower; the parts of this however, feem to place it rather among the Didjnamia.

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Periantium. Parvum pentapbyllum, vel nionophylluin ad bafem fectum.
Corolla. Monopetala tubulata, tubus quadruncialis, limbus ampliatus patens quinque partitus.
Stamina. Filamenta quatuor inequalia longitudine tūbi foris; antherce cordiformes oblanga.
Piftillum. Germen fubrotundum, fylus lonsitudine faminum, figma vaginatum. Pericarpium. Pomum fubrotundum nucleo pulpofo. Seminibuis plarimis parvis referto praditum.
PAVETTA? I. Foliis oblongooovatis oppofitis, fipulis Jetaceis petiolis interpofitis. Tab. 6. fig. I.
The wild Jeffamine.
This fhrub is pretty common in the lower woods, and feldom rifes above five or fix feet; the leaves and branches are oppofite, and the racemous flower-ftalks ftand generally at the extremities of the branches; the flowers are pretty long and tubular, and retain both the fmell and make of the garden Jeffamine.

The following are its peculiar characters:
Periantium. Minus pragnans quadridenticulatum.
Corolla. Monopetala tubulata, tubus longus cylindraceus, limbus in quatuor lacinias lanceolatas patentes fectus.
Stamina. Filamenta quatuor tubo corollde adnata, antberis oblongis in fauce fitis. Yiftillum. Germen depreffum, Aylus fimplex, figmata biza erecza oblonga. Pericarpium. Bacca minor Jpherica unilocularis, calice coronata.
Semen. Unicum Jubrotundum bafiquadrilobum.

## PAVETTA? 2. Subarborea major.

## Pim-wood.

This fhrub feems to differ but little from the foregoing either in make or appeart ance; but it rifes generally to the height of twelve or fixteen feet or more; it is pretty common in the woods above St. Ann's Bay.

> L Y G ISTUM 1. Flexite fruticofum, folits avatis oppofitis, petioins pedatis, racemis alaribus. Tab. 3. fig. 2.

## The branched Lygiftum with oval leaves.

I found this weakly ihrub in the lower mountains of St. Mary's; it rifes by a very branched flexile ftern to the height of about feven feet, and is every where adorned with moderately large oval leaves difpofed in an oppofite order: the twigs or boughs begin to choot almoft immediately above the root; and they, as well as the fucceeding branches, rife generally to the height of the main ftem, and are furnifhed with moderate bunches of flowers towards the top, which generally rife by long branched foot-ftalks from the alæ of the leaves.

Thefe following are the characters of its flowers.
Periantium. Calix monopbyllus conico-campanulatus, ore quadricrenato.
Corolla. Monopetala tubulata infundibuliformis; limbus quadripartitus, laciniis ferè equalibus.
Stamina. Filamenta quatuor infernè tubo adnata Eo corolla duplo lonjiora, antbera fubrotunda.
Pittillum. Germen fubrotundum, fylus ad medietatem ferè bipartitus, laciniis bifidis; figmata tenuia fimplicia.

Pericarpium. Bacca globofa quadrilocularis calici impofita.
Semina. 2uatuor oblongo-ovata.

> R A N D I A 1. Foliis fubrotundis confertis, fummis ramulis bijpiniferis, floribus falitariis. Tab, 8. fis.
Randia Lin. Gen. \& Lycium, \&c. Pk. t. 97.

## The Indigo-berry.

This fmall flurub rifes by a branched ftalk, and floots commonly to the height of feven or eight feet; the main ftem is tough and hard; the branches fomewhat prickly at the ends, and the leaves of an oval form and growing in tufts: it is frequent in the low lands, and grows chiefly in the mont barren clayey foils.

It's general characters are as follow :
Periantium. Minimum monophyllum fubrotundum truncatum.
Corolla. Monopetala tubulata; tubus cylindraceus; limbus patens in quatuor lacinias obtufas equales divifus (a).
Stamina. Filamenta quatuor tubo corollo adnata, antberis oblong is in fauce tocatis.
Piftillum. Germen fubrotundum intra calicem fitum, Joylus longitudinis tubi corolla, Atigmata bina compreffa oblonga.
Pericarpium. Bacca globofa, cortice ficciori tecta, ©o pulpâ cceruleá repleta.
Semina. Sex vel plura orbiculata comprefla pulpâ obvoluta.
The pulp of thefe berries, which generally grow very numerous on the fmaller branches of the plant, is very thick, and ftains paper or linen of a fine fixt blue colour. I have tried it on many occafions, and have always obferved it to ftand tho' wafhed with either foap or acids; but it does not communicate fo fine a colour with heat. It would prove an excellent fixt blue in all manner of paints and prints if it could be obtained in any quantity : but the berry is not very fucculent, and the people as yet not over induftrious in thofe parts.

## PETESIA I. Fruticofa, foliis ovatis verticillatim-ternatis, Aipulis rigidis interpofitis, fuffentaculis florum longis ramofis alaribus.

 Tab. 2. fig. 3 .
## The oval leaf'd Petefia with long branched flower-ftalks.

## Periantium. Monophythm fubcampanulatum quadridentatum parvum germine

 pragnans.Corolla. Tubulata, tubus oblongus equalis; limbus ampliatus quadripartitus.
Stamina. Filamenta quatuor brevia ab infimâ tubi parte orta; antberce oblonga in fauce corolla fita.
Piftillum. Germen fubrotundum parvum, fylus fimplex erecfus, Aigma acutum.
Pericarpium. Bacca bilocularis globofa coronata binis nucleis unilocularibus referta.
I found this fhrub near the Waterfall in Mammee River; it grew on the fide of the clift, and was not above five feet in height.

## PETESIA 2. Fruticola foliis cvatis oppofitis, fipulis rigidis interpofitis, ra-

(a) This plant flowered in the garden of Oxford fome years ago, and was then examined and delineated by Mr. Ebret, who obferved fix filaments in every flower, and had always found the margin cut into fix pointed fegments, in which ftate it is reprefented here, my own fpecimen, having loft all its biofloms; but I have alfo added a fingle leat of the ftove-fpecimen to thew the proportion between that anci thofe that grow naturally in famaica, in which I have conftantly obferved the number of filaments and divifions of the flower to be very regular, and feldom or never more than four: this difference may be probably owing to the richnefs of the bed, and forcing heat of the flove in which the former grew.

The leffer branched Petefia with a divided cup.
PETESIA 3. Fruticofa foliis Jubvillofis ovatis oppofitis, Aipulis Setâ terminatis, racemis alaribus.
The Petefia with villous leaves.
Thefe two laft fecies grow pretty frequent in the hills above Bull-Bay; and are not uncommon in thofe between Sixteen-mileWalk and St.Mary's; they are moderately robuft, and rife generally to the height of feven or eight feet.

## COCCOCIPSILUM 1. Herbaceum repens, foliis venofis ovatis oppofitis, pedunculis brevibus fubumbellatis ad alas alternas. Tab. 6. f. 2.

## The creeping Coccokipfilum.

This plant is very like the fmalleft fpecies of the Ruellia both in leaves and appearance, and is frequently obferved in the cooler mountains of Liguanee and Mount-diable: it grows in fpreading tufts, each flalk creeping about eighteen or twenty inches from the root, and fhooting out a few lateral branches as it runs; the leaves are oppofite, and the following flowers and fructifications rife on hhort divided foot-ftalks from their alternate ala.

Periantium. Monopbyllum pragnans ad bafem ferè in quatuor lacinias lineares erectas divijum.
Corolla. Monopetala tubulata infundibuliformis; limbus patens in quatuor lacinias breves ovatas equales fectus.
Stamina. Filcmenta quatuor erecta, Tongitudinis tubi foris; antberce oblonge erecta.
Fiftillum. Germen fubrotundum calice tectum, fylus fimplex longitudinis foris ad apicem bipartitus; Aigmata oblonga.
Pericarpium. Pars infina calicis cum germine abut in capfulam fucculentam, baccatam, Spbericam, infatam, bilocularem, laciniis calicis coronatam.
Semina. Plurima parva compreffa difepimento affixa.

## SICELIUM 1. Scandens, foliis ovato-acuminatis nitidis oppoffitis.

## The climbing Sicelium.

This plant grows very common in the upper parts of Sixteen-mile Walk, and is fometimes found in the mountains towards St. Mary's: It is a climber and rifes frequently very high, but the main ftalk is pretty flender. The following are the characters of its fructifications.

Periantium. Campanulatum ad bafem leniter ventricofum, germine pragnans; collum coarctatum, limbus quadricrenatus.
Corolla. Confumilis longior \& magis profundè incifa.
Stamina. Filamenta quatuor tubo adnata, antheris fubrotundis in fauce fitis.
Pittillum. Germen fubrotundum, Aylus corolla, longior ad medietatem bipartitus, figmata tenuia Jimplicia.
Pericarpium. Bacca fpherica bilocularis intrá calicem fata.
Semina, Plurima difepimento infernè tumido umbonato affixa.
BU DDLEJA 1. Affurgens incana, foliis majoribus molli lonugine obductis, fpicis affurgentibus terminalibus.
Budlcja L. Sp. Pl.

Planta Afurgens verbafci facie, foliis majoribus ovatis oppofitis.
The long-fpik'd Budleia.
This plant is very common in the cooler hills of Liguanee; it rifes generally to the height of four feet or better, and terminates in long flender flower-fpikes: it is ufed in emollient baths and fomentations, and thought to have all the properties of the true Mullen.

> AMMANNIA 1. Hirta, foliis parvis orbiculatis, foribus fingularibus ad alas.

## The fmaller Ammannia with round leaves.

Periantium. Pedunculo tenui incidit Periantium monopbyllum campanulatum octodentatum.
Corolla. Monopetala quadripartita parva, laciniis acuminatis oblongis.
Stamina. Filamenta quatuor brevia; antheræ ovata.
Pitillum. Germen depreflum in fundo calicis fitum; flylus brevis bifidus; fligmata erecta oblonga.
Pericarpium. Capfula bilocularis calice ferè tecta, binis placentulis referta.
Semina. Pauca placentulis adnata.
This little plant is very rare in Jamaica; it grows chiefly in the mountains between St. Thomas's in the Vale and St. Mary's, and feldom rifes above four or five inches from the ground: it anfwers the characters of the clafs very perfectly.

CROSSOPETALUM 1. Fruticulofum tenue, foliis ovatis tenuiffimè denticulatis oppofitis, racemis alaribus. T.I6.f.I.

## The fmall fhruby Croffopetalum.

Periantium. Coloratum monophyllum patens in quatuor vel quinque partes Sectum.
Corolla. Tetrapetala vel monopetala ad bafem Jeeta, petalis obovatis fimbriatis patentibus.
Stamina. Filamenta quatuor brevia erecto-patentia, ad interfficias petalorum pofita; antheræ Jubrotunda.
Pittillum. Germen fubrotundum, ftylus brevis fimplex, ftigma fimplex.
Pericarpium. Capfula fubrotundo-cvata unilocularis monofpermis.
I found this little Mrub in the woods below Marta-Bree river in St. James's; it grows among the rocks, and feldom rifes above three or four feet : the flowers rife in fmall loofe bunches from the upper alæ of the leaves.

> SCOPARIA 1. Erecta ramofa, foliis linearibus denticulatis verticillato- ternatis.
Scoparia L. Sp. Pl.
Veronica Dulcis, Ec. Pk. t. 3 II. f. 4. \& 215 .f.I.
Veronica Fruticofa erecta dulcis, Ecc. Slo. Cat. 81. \& H. t. 108.
The Liquorifh-weed, or fweet Broom-weed.
This plant is very common in moft of the fugar-colonies; it grows by a very branched falk, and rifes generally to the height of eighteen or twenty inches. The whole plant, efpecially the tender fhoots at the top are frequently ufed in diluting and pectoral infufions, and may defervedly be confidered as an excellent vulnerary.

$$
\begin{aligned}
& \text { PL A N T A GO I. Foliis latioribus fubrotundis quingue-nerviis ad marginem } \\
& \text { appendiculatis. } \\
& \text { Plantago. Scapo fpicato, foliis ovatis L. flo. Lap. } 62, \& \mathrm{Sp} \text {. P1. }
\end{aligned}
$$

This plant, whether introduced here originally, or a native, is very common in moft parts of the Illand, efpecially in the cooler mountains; it is indeed found in

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many places, where we have no reafon to think it had been ever cultivated by any of the human fpecies; but the birds (the general planters of feeds and fmaller berries) might have probably done the work. Every part of the plant is confidered as a gentle fubaftringent; the feeds are frequently ufed in vulnerary waters and mixtures; and the leaves often applied with fuccefs to fores and wounds by the poorer fort of people.

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OLDENLANDIA
1. Minor caule teretimo, foliis linearibus oppofitis, ramus-
                    lis minimis floriferis EO pedunculis ramofis vel sm-
                        plicibus ad alas.
Oldenlandia. Plum. t. \({ }^{36}\).
Oldenlandia. Ehret. t. 2.
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## The flender Oldenlandia with fmall narrow Leaves.

This plant is found in the moft barren Savannas, and rifes generally to the height of 10 or 14 inches from the root: the foot ftalks of the flowers are fometimes fimple, but oftener branched, and rife immediately from the alæ of the leaves, or fhoot from the top of the fmaller ramifications: all the parts of the plant are very delicate.

# OLDENLANDIA 2. Aquatica foliis obovatis oppofitis, floribus fingularibus ad alds. <br> Oldenlandia Pedunculis jmplicifimis fructibus bijtidis. L. Sp. Pl. 

The Water-Oldenlandia.
Periantium. Quadriphyllum perffens, foliis lanceolatis germini incidentibus.
Corolla. Petula quatuor minima, wix perfipicua, ad interfitios foliorum calicis pofita.
Stamina. Filamenta quatuor brevia, foliolis calicis fuppofita; antheræ majorés eliptica incombentes.
Piftillum. Germen oblongum obverfe-pyramidatum calici fuppofitum; filus crectus longitudine ftaminum, ftigma capitatum obtufum.
Pericarpium. Capfula oblonga fefflis obverfe pyramidata quadrigona bi vel quadrilocularis.
Semina. Plura fubrotunda.
This plant is very common about the ferry; it is found frequently in the waters, and then it grows of a length proportioned to the depth of the place, and yields and bends with the ftream ; but both the leaves and ftalks are of a reddifh colour: fometimes it is found upon the banks, and then it is of a green colour, and a creeper; and generally runs more or lefs, according to the quantity of moiture it can obtain. I have, before examination, taken it for a fpecies of the Onagra.

PTEROTA 1. Subfpinofa, foliis minoribus per pinnas marginato-alatas difpoftis, spicis geminatis alaribus. Tab. 5. f. I.
Roi. Similis, Ěc. Pk. t. 107. f. 4.
Schinus Foliis pinnatis foliolis oblongis, E®c. L. Sp. Pl.
Lauro affinis Fafmini folio, ©̛c. Slo. Cat. \& H.t. 162. f. I.

## The Saven-tree, or baftard Ironwood.

This fhrub is very common in the lower lands of Famaica, and rifes by a branched and fomewhat prickly ftalk frequently to the height of eight or ten feet: the wood is very hard, and the branches abundantly furnifhed with little leaves, and fmall white flowers that rife on double fikes from the alw of the ribs. Its characters have not been yet defcribed; they appear in the following manner, viz.

Periantium. Minimum quadridentatum.

## $\begin{array}{llllllll}\mathbf{O} & \mathrm{F} & \mathrm{J} & \mathrm{A} & \mathrm{M} & \mathrm{I} & \mathrm{C} & \mathrm{A} .\end{array}$

Corolla. Tetrapetala, petalis oblongis cocbleatis patentibus.
Stamina. Filamenta quatuor erecta Corolla duplo longiora; antheræ globofe majores.
Pitillum. Germen ovatum; filus erectus Jimplex longitudine Corolle; Atigma obturufculum bilobim.
Pericarpium. Capfula Jpberica unilocularis bivalvis, ab apice ad bafem debijcens, © Jemen unicum rotundum atro-nitens amplectens.
IR S IOLA I. Triphylla, fandens © claviculata, foliis crafis ferratis. Sicyos. Foliis ternatis inci/s. L. Sp. Pl.
Bryonia. Alba, \&ec. Slo.Cat. Io6. \& H. t. 142. f. i.
Bryonoides. Pk. 152, f. 2.8 H. M. P. 7 ? t. 45.

## The fhady Irfiola with fucculent Leaves.

This plant is very common in the low lands of Famaica; it is always found climbing on the neighbouring bufhes, and is generally divided into a great many very fhady branches: the leaves are thick and juicy, and the berrics round, fmooth, and fucculent ; its flowers are fmall, and difpofed in the form of an umbrella. Thefe are the characters of the genus.

Periantium. Vix notabile quadridenticulatum.
Corolla. Tetrapetala decidua, petalis rigidis cocbleatis.
Stamina. Filamenta quatuor brevifina; antheræ fubrotunda verfatilis.
Piftillum. Germen fubrotundum, ftilus brevis, ftigma fimplex.
Pericarpium. Bacca §pherica fucculenta Semine unico nauco proprio tenui tecto referta (a).

IRSIOLA 2. Scandens, foliis oblongo-ovatis ad margines denticulis fetaceis refertis. Tab. 4, f. \& 1. 2.
An, Wattow-Valli. H. M. P. 7. t. 32 .
Bryonia. Albageniculata, Ėc. Slo. Cat. $106, \& 0$ H. t. 144. I.
The larger Irfiola, or Baftard Bryony with fimple Leaves.
This plant is common about the town of Kingfon, and generally found climbing upon all the pinquin-fences, äd other low hufhes: Its leaves are pretty large and fimple, and the ftalk-flender and flexile, The flower-bunches are very fpreading and even in all the fpecies.

IRSIOLA 3. Triphylla fandens, foliis ovatis fubdentatis, petiolo communi marginato, caliculis majoribus.
Bryonia. Alba triphylla maxima. Slo. Cat. 106, \& H. tab. 144.
The larger triphyllous Irfiola.
CORETA ı. Foliis minoribus ovatis crenatis, floribus fingularibus.
Corchorus. Capfulis linearibus compreffs bivalvibus. L. H. Upf. \& Sp. Pl. Corchoro. Afinis, ©ic. Slo. H. tab. 94, f. I. \& Cat. 50.
Corchoroides. L. H. C.

## Broom-weed.

Periantium. Nullum.
Corolla. Titrapetala, petalis ansuffis primo erectis, etate patentibus.
Stamina. Filamenta quatuor crecta longitudine floris, antheræ fimplices:

[^15]Piftillum. Germen anguftum oblongum; filus fmplex; figma ampliatum laceratum.
Pericarpium. Capfula longa teres bilocularis quadrivalvis apice quadrifariam debifcens; Juturis majoribus difcepimento oppofitis.
Semina. Plura Ingulatim pofita.
This plant is very common in all the fugar colonies, and feldom rifes above two feet and a half from the root ; it grows in dry fandy places, and feems to thrive beft in the open air; it is generally ufed in beefoms by the negroes.

CATONIA (a) 1. Foliis ovatis oppofitis venâ tenui utrinque margini parallelá.

## The fhruby Catonia with oval Leaves.

Periantium. 2uadriphyllum germini incidens, foliolis orbiculatis. Corolla. Nulla.
Stam. Filamenta quatuor longitudine calicis; antheræ fubrotunda.
Piftillum. Germen globofum calice coronatum vertice depreffo; ftilus fimplex longitudine calicis; fligma fimplex.
Pericarpium. Bacca fucculata nigra coronata.
Semina. Bina bemijpherica cum rudimento tertii \& quindoque quarti.
This little hrub is frequent in the road between Spanib-town and Sixteen-mile-walk.
I S N AR D I A? 1. Foliis Sefflibus lanceolatis auritis quaf amplexantibus, oppofitis feu verticillatis; floribus ternatis ad alas.
Ammannia Foliis femi-amplexantibus caule tetragono. L. H. C. \& Sp. Pl.

## The larger Ifnardia with lanceolated Leaves.

Periantium. Tubulatum breve fubventricofum, fere equale; limbo quadri-corniculato; corniculis minoribus erectis membranâ tenui interne veffitis atque adnatis.
Corolla. Nulla, nifı membranam illam pro corollả babere vis.
Stamina. Filamenta quatuor inferne tubo leniter adnata, © calice breviora; antheræ fubrotunda.
Piftillum. Germen fubrotundum calice inclufum, ftilus brevifimus; figma obtufum quafo quadrilobum.
Pericarpium. Capfula tenuis globofa calice tecta $\mathcal{E}$ corniculis coronata, quadrilocularis, Jeptis tenuiffimis divifa.

## Semina. 2uam plurima minima.

This herbaceous plant is pretty common about the ferry ; it grows generally by a fimple ftalk while young, but throws out a few branches the fecond year, and feldom rifes above twenty-four or thirty inches in height : the ftem is commonly quadrangular, and furnifhed with long lanceolated leaves without foot-ftalks whofe lobes fhoot obtufely backwards on either fide, by which they feem to encompafs the main ftalk; they are difpofed in an oppofite or ternate order, and embrace the flowers at their infertions; but thefe are feldom more than three together, and always joined by fhort foot-ftalks to a common pedeftal fixed clofe to the ftalk in the bofom of every leaf.

> R IVINA i. Dichotoma erecta, foliis ovato-accuminatis, Spicis laxis lateralibus affurgentibus.
$\therefore$ O Fl I A M A I G A.

Rivina. Plum. t. 39.
Rivina L. H. C. \& Sp. Pl.
Rivina. Humilis racemófa, baccis punitceis. Plüm.

## The fmaller Rivinia with Scarlet Berries.

This plant grows very common about St. Anne's, and in moft places in the mountains where the foil is fandy and well fhaded; it rifes commonly to the height of two or three feet, fometimes more, and is well fupplied with berries towards the top; thefe are very fucculent, and of a fine fcarlet colour, but the juice is apt to change (a).

## RIVINIA 2. Sarmentofa, farmentis crafioribus, foliis ovatis, foribus ppicatis dodecandris, Tab: 23. fig. <br> Rivinia. Scandens racemofa amplis folani foliis, baccis violaceis. Plum. \& L. Sp. PI. Let. b.

The Hoop Withe.
Periantium. Quadriphyllum, foliolis ovatis cocbleatis reflexis perffentibus. Corolla: Nulla.
Stamina. Filamenta duodecemparva, ab octo areolis difinetis orta, alterna geminata; antherex majores oblongice erecta caduca.
Piftillum. Germen conico-ovatum, ftilus nullus vel brevifimus, figma obtufum, fubrugofum.
Pericarpium. Bacca fubrotunda, fucculenta, fubicarulea unilocularis.
Semen. Nucleus unicus oleofus orbiculatus leniter comprefus, nauca tenui frayuti tectus.
This plant is very common in the low lands, and ftretches a great way among the neighbouring fhrubs and bufhes; the main ftalk grows to a moderate thicknefs, being feldom under an inch or two in diameter; and throws out a few flender branches towards the top, which are generally adorned with flowers at their extremities. The berries make the principal part of the food of the American thruth; or nizhtingale, while they are in feafon; they contain a very bily feed, and after that bird has fwallowed a good many of them, you may frequently obferve it to fly to the next bird-pepperbufh, and pick a few of thefe warm berries alio. Nature doubtlefs has taught it what was neceflary to promote the digeftion of that oleaginous heavy food.

The Italk is very tough and flexile, and often made înto hoops, when there is a fcarcity of thofe imported from Europe or North-America; but they are not fo ftrong or durable, and therefore ufed only in time of need.

## S E C T. II.

## Of Juch as bave two Stites or female Parts in every Flower.

C
USCUTA I. Ramofa repens, foribus conglomeratis.
Cufcuta Floribus Seffilibus. L. Sp. Pl.
Cufcuta Caule apbylla volubili repente, flo. Virg.
Cufcuta Inter majorem © minorem media, Bc. Slo. Cat.
This parafitical thready plant is frequently found creeping upon the grafs, and lower bufhes in Jamaica: it has been always efteemed as a diuretic and aperitive, and formerly ufed as an ingredient in fome of the compofitions of the fhops.
(a) This plant has no more than four Filaments in every Flower.

Of fuch as have four Stiles or female Parts in every Flower.
Рotamogeton r. Aquaticum foliis oblonyis, foribus fpicatis. Potamogeton Foliis oblongo-ovatis innatantibus. L. Flo. Lap. 68.
The aquatic Potamogeton with oblong flower fpikes.
This aquatic plant is very common in thofe little rivulets about the Ferry; the narrownefs of its leaves proceeds probably from its long continuance under water.

# C L A S S V. <br> Of the Pentandria, or Vegetables that have five Filaments in every Flower. 

## S E C T. I.

> Of fuch as bave five Filaments or male Parts, and one Stile or female Part in every. Flower.

Borrage.
This plant grows and thrives very luxuriantly in the mountains of Nero Liguanee; it has been always efteemed as an excellent cooling cordial in all febrile cafes; and may be juftly regarded as a proper fimple to be ufed in fuch over-heated ftates of the blood: it is geneally adminiftered in decoctions and infufions with other cooling medicines. A diftilled water of both the leaves and flowers of this plant has been formerly kept in the fhops, as well as a conferve of the bloffoms; but thefe are very little regarded in modern practice, efpecially in England, where moft of the difeafes proceed rather from ination and the vifcldity of the juices.

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HELIOTROPIUM 1. Herbacfum majus birfutum, foliis rugofis cordato-
                                    ovatis, Jpicis crafos geminatis terminalibus.
    Heliotropium Foliis cordato-ovatis acutis fcabriufculis, fructibus bifdis.
            L. Sp. Pl.
    Heliotropium Indicum bormini foliis latioribus. Thez. Zey. p. 120.
    Heliotropium Majus. Slo. Cat. 94. 2.
    Heliotropium Americanum caeruleum, छ่c. Pk. t. 94. f. 3.
    The larger villous Turnfole or Heliotrope.
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## O F J A M A I C A. ISI

# HELIOTROPIUM 2. Hirfutum late virens, foliis rugofis ovatis, ppicis gracilioribus /ingularibus lateralibus, quandoque terminalibus. <br> Heliotropium Indicum foliis bormini minus. Par. Bat. \& Thez. Zey. <br> Heliotropium Curafavicum bormini foliis angufioribus, Eic. Slo. Cat. 94. f. 4. <br> Jacua Acunga Pif. 229. <br> An, Heliotropium Etc. Pk.48. f. 7. 

## The fmaller hairy Turnfole.

Both thefe plants are natives of $\mathcal{F}$ amaica, and pretty common about every fettlement almoft in the lower lands; the former grows more rank and luxuriant, and generally is of a livid green colour and furnifhed with thick flower-fpikes; the other feldom rifes above two thirds of the height of this, and is always more delicate in every part; it is of a fine green colour, and bears its flowers on long and flender fpikes that rife from the fides of the upper branches, fometimes alone, and fometimes from the alx of the leaves.

> HELIOTROPIUM 3. Supinum leucopbeum molle, foliis angufis.
> Heliotripium Foliis lanceolato-linearibus glabris aveniis, Jpicis conjugatis. L. H. C. \& Sp. Pl.

> Heliotropium Monofpermum Indicum procumbens glaucophyllum. Pk. t. 36. f. 3 .

> Heliotropium Maritimum, ©̌c. Slo. Cat. 94. \& H. t. 132.
> The fupine afh-coloured Turnfole.

This weakly plant grows in tufts, and is always found fpreading about the root; it feldom fhoots above fourteen or fixteen inches in length, and is eafily diftinguifhed by its whitifh fmooth narrow leaves.

> HELIOTROPIUM 4. Fruticulofum birfutum, foliis lanceolatis minoribus, Jpicis fingularibus terminalibus.
> Heliotropium Minus Litbofpermi foliis. Slo. Cat. 95. \& H.t. 132.

## arro visd The fmall fhruby Turnfole.

This little plant grows commonly about Old Harbour, and feldom rifes above five or fix inches; the leaves are fmall and hairy, and the ftalks of a fhruby appearance.

The flower-fpikes in all the other fpecies are generally paired or double paired, and arched in a firal form, bearing all the flowers and feeds on the upper fides of them and that generally in a double range or line; but the fpikes of this laft fort are always fingle and not much bent.

> MENYANTHES 1. Aquatica Nympbea folis cordato-orbiculatis, petiolis floriferis.
> Menyanthes Foliiscordatis, corollis internè pilofsis. L. Sp. Pl.
> Nymphea Indica minor foribus cum petiolis ex foliorum pedunculis. Pk. t. 209. f. 2.

> Vedal-Ambel H. M. P.in. t. 28.

The large round-leaf'd Menianthes.
This plant grows at Mr. Price's Decoy in the mountains, and has all the appearance of a fmaller Water-lilly. The flowers fhoot from the foot-ftalks of the leaves about three or four inches below their infertions.

M Y R S.

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## MYRSTIPHYLLUM <br> 1. Minus fruticofum, folits oratoacaminatis nitidis fubrigidis oppofitis.

The fmaller Myrftiphyllum with fhining leaves.
Periantium. Minimum monopbyllum campanulatum, ore quinquedentato. Corolla. Monopetala campanulata calice duplo major, limbo quinquepartito.
Stamina. Filamenta quinque brevia birfuta ad faucem corolla porrecta, antheræ cordatce.
Pintillum. Germen fubrotundum in fundo calicis fitum, Atylus longitudinis ferè floris, ftigma ampliatum bilobum.
Pericarpium. Drupa ficca Jubrotunda bilocularis bifpermis.
This fmall fhrub is common about the Ferry and in the Savanna near Hunt'sBay; but it feldom rifes above four or five feet in height. It is eafily diftinguifhed by its tufted buiny form and fmooth leaves.

> CONVOLVULUS 1. Scandens, foliis trilobis quandoque cordatis Septinerviis, pedunculis minus ramofis alaribus.
> Convolvulus Foliis cordatis Panduraformibus, calicibus levibus. L. Sp. Pl. Convolvulus Folio lanato in tres lacinias divifo. Slo. Cat. 55. H. t. 98. Mecapatli Hernandes, 304.

> The wild Potato-nlip. ${ }^{7}$

This plant is very common in all parts of Gamaica; it fhoots by a very flender ftem, and climbs to the tops of the talleft trees in the woods. Hern. fays that a decoetion of the frefh leaves purges moderately, and deftroys the worms.

> CONV OLV ULUS 2. Polyantbos fubbirfutus, foliis cordato-avatis quandoque lobatis, floribus fafciculatis alaribus, calicibus longioribus birfutis.

The fmaller climbing Convolvulus with long hairy cups.
CONVOLVULUS $3^{a}$. Herbaceus repens minor, corollâ quinquefidâ, fylo adbafem ufque quadripartito, floribus fingularibus ad alas.

## The fmaller creeping Convolvulus.

This little plant is found on the fide of the road that leads to the foot of the long mountain in Liguanee; it creeps and roots upon the ground, but feldom grows above two or three inches in length; the leaves are roundifh, and the flowers tubular, but moderately open and divided at the margin; the ftile is divided in four parts to the very bafe, and the fruit is a capfule, and contains two or four feeds like the reft of the fpecies, nor are the ftamina very equal in their length, which obliged me to place it under this denomination.

CONV OLVULUS $3^{\text {b. Herbaceus erectus, foliis linearibus, pedunculis longis }}$ tenuiffamis bibracteatis alaribus. Tab, 10.f. 2. An, Alcines Facie Miofotis Ec. Pk. t. g. f. I.

The fmall erect Convolvulus.

$$
\mathrm{O} \mathrm{~F} \quad \mathrm{~J} A \mathrm{M} \mathrm{~A} \mathrm{C} \text { A. }
$$

This little plant is fometimes found in the low lands of Jamaica, and feldom rifes above ten or fourteen inches from the root: the ftalk is generally fimple or but very little divided, flender and upright ; the leaves are narrow and few, and throw out fo many long and delicate flower-ftalks from their alx, each furnifhed with a very fmall exterior biphyllous cup about the middle: the niles are two and bifid ; and the capfulx divided into two or four cells, and contain many feeds. The whole plant has the appearance of a very fine fpecies of the flax.

> CONVOLVULUS $3^{c}$. Erectus berbaceus fubbirfutus, foliis linearibus, pedunculis brevibus Simplicibus folitariis ad alas. Tab. x. f. 3 .

## The fmall erect Convolvulus.

This plant grows in the fame foyl with the foregoing, and is fo extremely like it that you can hardly diftinguifh the one from the other without great attention; the flower-ftalks are very fhort in this, the cups fingle, and every flower furnifhed with four ftiles.

# CONV OLVULUS 4. Herbaceus repens, foliis fubrotundis, foribus quinquecrenatis fingularibus alaribus. 

- Convolvulus Foliis fubrotundis caule repenti. L. Sp. PI. Convolvulus Minor repens Efc. Slo. Cat. 58. \& H. t. 99. f. 2. Veftnu Ilandi H. M. P.ir. t. 64 .


## The fmall creeping Convolvulus.

This little plant is very common about the Savapinas; it throws out a few flender creeping ftalks furnifhed with roundifh leaves, from whofe alæ rife fo many flowers, fupported by flender foot-ftalks and double cups: the flowers are pretty deeply crenated both in this and the foregoing fecies.

CONVOLVULUS 5. Maritimus, foliis nitidis fubrotundis emarginatis, petiolis biglandidis.?
Convolvulus Foliisemarginatis, pedunculis triforis. L. Sp. PI.
Convolvulus Maritimus major nofras छ̧c. Slo. Cat. 57. f. I, \& 2.
Convolvulus Maritimus.. Pif. 2.58.
Convolvulus Maritimus Zeylonicus Ejc. Thez: Zey.
The purging Sea-bindweed.
This plant grows generally near the fea, and is very common in many parts of Famaica; it creeps a confiderable way, and throws out forme fhort foliated branches from face to fpace as it runs: the leaves are beautifully veined and have each a fmall notch at the top; the root is a ftrong purgative, and fometimes ufed with fuccefs in hydropic cafes, the whole plant is very milky.

CONV OLVULUS 6. Minor fcandens, floribus plurimis alaribus, calicibus glabris, capsulis quadrifpermis, foliis oblongocordatis.
The fimaller climbing Convolvulus with fmooth cups:
CONVOLVULUS 70 Poliantbos glaber undique repens, racemis fubcomofis Jparfis © alaribus, capfulis monofpermis.

Convolvulus Major polianthos Esc. Slo. Cat. 55. \& H. t. 972.

Chriftmas-Gambol.
This plant is common about Spanibtown, and fpreads very thick upon all the bufhes that grow near it ; it blooms about Cbrifmas, and bears a great abundance of white flowers from the alæ of the upper leaves and branches, which are fucceeded by fo many oblong capfulx that feldom contain more one feed each. All the parts of the plant are fmooth.

> CONVOLVULUS 8. Foliis cordato-acuminatis, foribus umbellatis luteis, fuftentaculis longis alaribus.

## The yellow flowered Convolvulus.

This plant is common about the Ferry, and grows frequently in the buhes between that place and Mr. Price's; it bears beautiful yellow flowers, and the ftalks are always margined on one fide, but the capfulæ are generally fmall and oblong; and the figure of the leaves very various.

$$
\text { CONVOLVULUS 9. Repens, foliis amplifimis cordatis, pedunculis longis } \begin{gathered}
\text { ramofis alaribus. }
\end{gathered}
$$

The large heart-leaf'd Convolvulus.
CONVOLVULUS 10. Uliginofus repens, foliis amplioribus orbiculatis venofis.

## The Swamp-Convolvulus.

Both thefe plants are found in famaica, the former about Mangeneel, the latter about the Lagoons eaftward of Kingfon; both fpecies fpread generally a great way, and are remarkable enough for the fize and difpofition of their leaves.

CONVOLVULUS II. Repens floribus paucioribus, pedunculis longis alaribus, radice crafo carnofo albo: Et<br>C ONV OLVULUS 12. Etc. radice craffo carnofo luteo.<br>Convolvulus Foliis cordatis angulatis radice tuberofo. L. H. C. \& Gro. flo. Virg.<br>Bermudas Potatoes. Catefby vol. ii. t. 60.

Ages Mart. page 6. \& Jeteiba Pif. $254^{\circ}$
The Potatoe and Potatoe-flip.
Both there plants are now cultivated all over America, and fupply the Negroes and poorer fort of people with a great part of their food in many places; they are hardly diftinguifhed by the tops, but the roots of the latter are conftantly of a yellow colour, and thofe of the former white : the plant rifes equally from the bits and flips, tho' generally propagated by the latter, and is cultivated by laying a few fhort juncks of the ftem, or larger branches in fhallow interrupted trenches, and covering them with the mould from the banks. The roats grow to full maturity in three or four months, and the propagation is continued by covering the ftems, bits and fmaller protuberances with mould as they dig up the more perfect bulbs for ufe. The leaves make a very agreeable fodder for fheep, goats, hogs, rabbits and horfes upon occafion; and the roots boiled, mafhed and fermented, make a pleafant cooling drink.

## O F J A M A I C A.

> I POMEA i. Foliis capillaceis pinnatis, foribus rubellis folitariis. Ipomea Foliis pinnatifidis linearibus foribus folitariis. L. Sp. Pl. Quamoclit Foliis tenuifimis \&o pinnatis. Int. \& Thez. Zey. Convolvulus Exoticus annuus E®c. Slo. Cat. 58.
> Tsjuria-crante $H$. M. p. ıı. t. 60.

The American Jeffamine.
This plant is cultivated in many of the gardens of Gamaica on account of its beautiful flowers and thick foliage; it is a weakly climber, and feldom rifes above four feet from the ground, but its minutely diffected heavy foliage renders it very remarkable.

> IP OME.A 2. Silvefris foliis छ foribus amplifimis, tubis forum fubte$\begin{gathered}\text { retibus. }\end{gathered}$ Convolvulus $\begin{aligned} & \text { Maximus, छc. Slo. Cat. } 55 . \& \text { H. t. g6. f. I. } \\ & \text { Munda Valli H. M. p. п. t. } 50 .\end{aligned}$

The large white-flower'd Ipomea.
This plant grows in great abundance about the Ferry, and along Spaniftoren river in the road to Sixteen-mile Walk; it runs a great way among the buhhes, and is adorned with many white flowers whofe tubes are feldom under three to four inches in length : the leaves of this plant, and indeed of all the fpecies of both thefe genus's, are very variable, being fometimes of the form of a heart, and at other times lobed.

IPOMEA 3. Foliis cordatis productioribus, tubo floris arcuato, limbo crenato.
Ipomea Foliis cordatis acuminatis bafi angufioribus, pedunculis multifloris. L. Sp. Pl.

## The Ipomea with arched flower-tubes.

This plant grows pretty common about St. Fames's, and bears a beautiful redih bloffom : it is remarkable for the curved or arched figure of the tube of its flowers.

I P O M E A 4. Hirfuta repens minor pentaphylla, foliis oblongis leviter crenatis. Ipomea Foliis palmatis digitatis, fupra glabris, caule pilofo, pedunculis multifíris. L. H. Up. \& Sp. Pl.
Convolvulus Zeylonicus birfitus, E'c. Thez. Zey. 70. Pulli Schovadi H. M. p. if. t. 59.

The hairy Tiger's-foot.
I POMEA 5. Levis minor pentaphylla, calicibus bipidis, floribus quafo umbellatis.
Ipomea Foliis digitatis glabris, foliolis fefflibus caule levi. L. Sp. P. Convolvulus Indicus, E'c. Thez. Zey. 7 I .

The fmooth-leaf'd Tiger's-foot.
Both thefe plants are frequent in the low lands of Famaica, and generally found creeping upon the ground, or fpreading over the lower buthes.

I P OMEA 6. Heptadactyla major fcandens, flore majori campanulato, calice
Ipomea Foliis palmatis, lobis Septenis lanceolatis integerimis. L. H. Upf. \& Sp. Pl.

## ${ }_{5} 5^{6}$ THENATURALHISTOR Y

Convolvulus Etc. Profp. Alp. 21 I .<br>Convolvulus Major beptaphyllus. Slo. Cat. $55 . \&$ H. tab. 96. f. 2.

## The feven-year Vine, or Spanif Arbor-Vine.

This plant has been probably introduced here from fome part of the main continent, and is now cultivated in many places about the towns: it is naturally a climber, and fpreads many yards from the root, which with its thick foliage and large flowers, render it extremely fit for arbors, and very pleafing to the eye: it is much ufed for fhade in thofe parts of the world.

# ANTHELMENTHIA I. Quadriphylla, Spicis terminalibus E e centro frondis. 

Spigelia Ramis indivifs, foliis terminalibus verticillatis. Butneri.
Spigelia Linnei. Sp. \& Gen. Plant.
Arababaca 2uadrifolia fructu teficulato. Plum.
Brazeel-Parlly Etc. Pet. Gar. t. 59. f. 10.

## Worm-grafs.

This plant grows naturally in moft parts of South America, and is now cultivated in many of the gardens of Gamaica: it rifes from a fmall tapering root well charged with fibres on all fides, and fhoots by a ftreight, fmooth, roundifh hollow ftalk, which feems to grow thicker as it rifes to the height of five, feven, nine or thirteen inches, its ufual growths; the main flem emits two, four or fix lateral and oppofite branches as it rifes, which like the parent ftalk, are furnifhed with four oval, pointed, and almoft equal leaves, difpofed in the form of a crofs at the top: from the center of thefe it throws out one, two, or more fpikes, which bear all their fluwers and feedveffels on one fide of them, and are commonly from one half to two or three inches in length.

This vegetable has been long in ufe among the Negroes and Indians, who were the firft acquainted with its virtues; and takes its prefent denomination from its peculiar efficacy in deftroying of worms; which, I dare affirm, from a great number of fuccefsful experiments, it does in fo extraordinary a manner, that no other fimple can be of equal efficacy in any other difeafe as this is in thofe that proceed from thefe infects, efpecially when attended with a fever or convulfions.

The method of preparing this medicine is as follows, viz: You take of the plant, roots and all, either frefh gathered or dry, two moderate handfulls, and boil them over a gentle fire in two quarts of water until one half of the liquid is confumed ; then ftrain off the remainder, and add a little fugar, and lemon juice to give it a more agreeable tafte, and keep it from growing vifcid or clammy. It may be however obferved, that the decoction is fometimes clarified, and fweetened, and is then equally efficacious; which gives a hint to have it made into a fyrup.

The common method of adminiftering this medicine is as follows, viz. To a full grown perfon, you give half a pint at the hour of reft, and a proportionate quantity to all weaker and younger fubjects, which is to be repeated once in twenty four hours for two or three days after: but as the largenefs of this dofe may render jts operation too violent, and the ufe of it both unfafe and precarious; I would recommend the following method, as lefs hazardous and as effectual. Give about four ounces to a full grown perfon for the firft dofe, and about two or three every fix hours after, if its anodyne quality will permit; but to perfons of a weaker conftitution, it thould be repeated only every ten or twelve hours: this is to be continued for the fpace of thirty fix, or forty eight hours, when the double dofe may be again repeated; and after this takes its full effect, it muft be worked off with fome gentle purgatives, fuch as the infufion of Senna or Rhubarb with Manna, \& 8 c .

## O F J A M A I. C Ai

This medicine procures fleep almoft as certainly, and in an equal degree with opium; but the eyes feem diftended, and appear bright and fparkling as they generally do before the eruption of the fmall pox and mealles, after the fleepy effects are over. In a fhort time after this firf dofe is adminiftered the pulfe grows regular and begins to rife; the fever cools; the convulfions, if any, abate; all the fymptons appear more favourable; and the worms are generally difcharged in great quantities, by the ufe of the fubfequent purgatives, if not before; often above a hundred at a time : but when a few only come away, and thofe alive, which feldom is the cafe, the dofe muft be again repeated, and this fearcely ever fails.

I never knew this medicine ineffectual when there was the leaft probability of fuccefs; nay, have often found it ferviceable when there was not the leaft reafon to expect it: I have been however cautious in ordering it for children; for tho' I never knew it at all hurtful, its effects upon the eyes are fuch as frequiently deterred me; efpecially, as their fibres are weakly, and more fenfible of irritation, and the fevers arifing from this fource in fuch fubjects, feldom fo violent as to hinder the adminiftration of fome other medicine, that may prove equally as effectual when the fymptoms are not too urgent.

> LISIANTHIUS 1. Erectus, foliis lanceolatis floribus fingularibus terminalibus. Tab. 9. f. 1.
> Lifianthius Etc. Thez. Zeyl. 145. 2. t. 67.
> Rapunculus Fruticofus linifollis, Éc. Slo, Cat. 58. \& H. t. IOI.
> Periantium. Pentaphyllum, foliis angifis acuminatis carinatis erecto-conniventibus, ad dorfum angulatis acutis $\mathcal{E}$ fubalatis, marginibus membranaceis.
> Corolla. Monopetala tubulata; tubus longus ad apicem calicis coarEtatus, छi inde ad faucem gradatim ampliatus; limbus patulus in quinque lacinias lanceolatas divifus.
> Stamina. Filamenta quinque infimce foris parti adnata, erecta ©f tubo longiora; anthere oblongo-ovata.
> Piftillum. Germen ovato-acuminatum, Aylus fimplex longitudinis faminum, figma capitatum bilobum.
> Pericarpium. Capfula oblongo-ovata bilocularis, feminibus plurimis referta.

This elegant little plant is not uncommon in the road to Sixteen-mile Walk; and frequently met with in the mountains of St. Ann's; t grows in a dry fandy but cool foyl, and rifes generally to the height of fourteen or fixteen inches or better : it is not much divided, but all the branches fhoot commonly to the fame height, and are furnifhed with oblong, pointed leaves difpofed in an oppofite order: the flowers are large in proportion to the plant; they are generally longer than the leaves, and ftand at the extremities of the branches. The whole plant makes an elegant appearance in the woods.

## LISIANTHIUS 2. Foliis cordato-acuninatis, petiolis brevibus, foribus terminalibus quandoque geminatis. Tab. g. f. 2. <br> The heart-leaf'd Lifianthus.

This plant may be deemed a variation of the foregoing; they are at leaft fo very like in the general make and habit, that the form of the leaves is almoft the only difference obferved between them; I found this plant growing on the banks of Mammee River between the hills above Bull-bay.

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PLUMBAGO 1. Spicis ramofis terminalibus, petiolis brevibus, flore albd. Plumbago Foliis petiolatis. L. H. C. \& Sp. Pl.<br>Dentellaria Lycbnoides filvatica, Eic. Slo. Cat. 9x. \& H. t. 133.<br>Tumba Cadiveli H. M. P. 10. t. 8.

## The larger Plumbago with branched flower-fpikes.

This plant is very common among the buikes in all the low lands: it is of an acid corrofive nature.

> CEDRELA I. Foliis majoribus pinnatis, foribus laxè racemofis, ligno levi odorato. Tab. 10. fig. 1.
> Cedrus Barbadienfum alatis fraxini foliis, \&̊c. Pk. Phy. t. 157. f. I: Pruno forte Affinis Arbor maximiz, \&̛C. Slo. Cat. 182. \& H.ii. t.220. f.2. Barbadoes Cedar.
> Periantium. Monopbyllum tubulato-campanulatum quinque crenatum.
> Corolla. Monopetala calice duplo longior, ultra medietatem in quinque lacinias oblongas fecta.
> Stamina. Filamenta quinque corollâ breviora, infernè craffiora © germini adnata; fupernè libera; antheræ fubrotinde.
> Piftillum. Germen fubrotundum, fylus longitudinis faminum, fligma crafum capitatum.
> Pericarpium. Capfula ovata quinquelocularis, quinquevalvis \&o quinquefariam vel à bafi vel ab apice debijcens, ex involucro gemive conAtructa; exterius crafum ligneum, interius tenuius contiguum, Eo Seminibus immediatè Juperimpofitum.
> Receptaculum. Columnare oblongum inequale pentagonum per axem longitudinalem capfula porrectum, angulis fiffuris capfulae oppofitis.
> Semina. Plurima oblonga compreffa, infertè tumida, fuperne membranacea alato-caudata, imbricatim pofita, Eै nervo tenui per alam porrecto apici receptaculi adnata.

This tree was very common, and ftill contintues to grow in many parts of the Ifland; it is one of the largeft timber-trees in the woods, and frequently found about fix or feven feet in diameter: the trunk is covered with a rough bark marked with longitudinal fiffures, which as well as the berries and leaves, has fo difagreeable a fmell (a) while frefh, that few people care to go into the woods where any of thofe trees have been recently cut down: the timber, however, has a plealant fmell; it is very full of a dark refinous fubitance, light, porous, and eafily worked; and much efteemed for wainfcoting, and the internal partitions of moft forts of cabinet ware. It makes good planks and fhingles for houfes, but cannot be màde into cafks, as all fpirituous liquors diffolve a great quantity of its natural refin, and acquire aftrong bitter tafte from thence: it is the beft wood we know of for canoes and petiagers of a larger fize, and frequently made into worm-tubs as well as other water conveniencies.

CEDRELA 2. Foliis pinnatis, floribus fparfis, ligno graviori. Arbor Foliis pinnatis, \& Catef. Vol. ii. t. 81. \& Miller. in Appen.

## Mahagony.

${ }^{*}$ This tree grew formerly very common in Jamaica, and while it could be hat in the low lands, and brought to market at an eafy tate, furnifhed a very confiderable

[^16]branch of the exports of that Ifland; it thrives in mort foyls, and varies both its grain and texture with each : that which grows among the rocks is fmallef, but very hard and weighty, of a clofe grain and beautifully fhaded; while the produce of the low and richer lands is obferved to be more light and perous, of a paler colour and open grain; and that of mixed foyls to hold a medium between both. The tree grows very tall and fteight, and generally bears a great number of capfulx in the feafon; the flowers are of a reddifh or faffron colour, and the fruit of an oval form and about the fize of a turkey's egg, while that of the foregoing feccies hardly exceeds the fize of a nutmeg. The wood is generally hard, takes a fine polifh, and is found to anfwer better than any other fort in all kinds of cabinet-ware; it is now univerfally efteemed and fells at a good price ; but it is pity that it is not cultivated in the more convenient wafte lands of that Ifland. It is a very ftrong timber, and anfwers very well in beams, joifts, plank, boards and fhingles; and has been frequently put to thofe ufes in 'Jawaica in former times.

CEDRELA 3. Coroli folio ampliori, fruclu pentagono. Houft. apud Mill.
This plant does not grow in Famaica, and is only inferted here to thew that there is another fpecies of the kind known: it was difcovered by Mr. Houfon near the Gulf of Honduras, and is faid to grow very large.

> CONOCARPUS I. Foliis eliptico-ovatis, petiolis biglandulatis, racemis laxis, fructibus fejunciis
> Mangle Foliis elipticis ex adverfo nafcentibus. Slo. Cat. $156 . \&$ H. vol. ii. 66.

## The white Mangrove.

Periantium. Germen compre/fum bbovatum, ad utrtmque latus medio margine denticulo notatum, ad apicem excavatsm, quitinue foliolis minimis fubrotundis cocbleatis comiventibus coloratis coronatum.
Corolla. Petala quinque minima, foliolis calicis fuppofita, conniventid, decidua.
Stamina. Filamenta quinque brevia conniventia; antheræ globofa.
Piftilium. Germen ut fupra defcriptum calicula coronatum, fylus brevifimus, ftigma obtufum fungofiam.
Pericarpium. Capfula fungofocorticofa compreffa obovata, ad utrumque marginem prominula \& fubangulata, unilocularis, coronata.
Semen. Unicum oblongum, membraneá propriả obvolutum, intra capfulam germinans.

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CONOCARPUS 2. Foliis oblongis, petiolis brevibus, floribus in caput conicum collectis.
Conocarpus Erecta foliis oblongis. L. Sp. Pl.
Alnus Maritima myrtifolia corariorum. Pk. t. 240. f. 3.
Alnifructu Laurifolia Arbor, \&cc. Slo. Cät. 135 \& H. t. ı61.
The Button-tree, or Button-wood.
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Both thefe trees are very common in Jamaica, and grow very luxuriantly in all the low fandy bays and marhhes round the Ifland; they feldom rife above fifteen or fixteen feet, and are of little ufe: the bark of the latter is faid to tan leather well.

MORENDA 1. Subfruticofa, foliis oblongis angufis utrinque acutis, radice Morinda Procumbens. L. H. C. \& Sp. Pl. An, Periclimenum Surrectum, ©'c. Pk. t. 212. f. 5.

The fmaller fhruby Morinda.

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M O R INDA 2. Anguftifolia fcandens.
Periclimenum Rectum Perficie foliis, Ěc. Pk. t. 212. f. 5. The narrow-leaf'd climbing Morinda.

MORINDA 3. Scandens, foliis oblongo-ovatis.
Periclimenum Americanum è cujus radice fit atramentum. Pk. t. 212. f.40 Morinda Arborea pedunculis Jolitariis. L. flo. Zey. \& Sp. Pl.

The oval leaf'd climbing Morinda.
MORINDA 4. Fruticofa foliis amplioribus ovatis, pedunculis longioribus ramofis.
The larger fhruby Morinda.
Thefe plants ate very common about the low lands, and frequently found climbing among the bufhes in all the lower hills; the roots colour linens of a dark hue, and may probably prove a ufeful ingredient among the Dyers.

PSYCHOTROPHUM 1. Fruticofum foliis venefis ovatis oppofitis, petiolisfipulatis, racemis terminalibus, baccis compreffis.
The oval-leaf'd Pfychotrophum with redifh veins and fpikes.
Periantium. Monopbyllum conico-tubulatum, infernè comprefum pregnans quinque dentatum.
Corolla. Monopetala tubulata, tubus ferè equalis calice duplo longior, fauce (in bâc (ßpecie) villofâ; limbus erectus quinquepartitus.
Stamina. Filamenta quinque brevia ut plurimum tubo adnata; antheræ erecta ovata in fauce fitce.
Piftillum. Germen fubrotundum calice tec7um denticulifque coronatum, ftylus fimplex ad apicem bifidus; longitudinis tubi corolla;; ftigmata, in primáa Jpecie, oblonga reflexa; in fecundâ, cirrofa reflexa; in fextá, vaginata, in ceteris fimplicia.
Pericarpium. Bacca fubrotunda fucculenta calice tecta \& coronata, bilocularis.
Semina. Nucleoli bini bemi/pherici folitarii, feminibus coffece fimiles.
PSYCHOTROPHUM 2. Fruticulofum, foliis amplioribus ovatis fipulis rigidis interpafitis, ramulis crafioribus, racemis umbellulatis, fuftentaculis ternato-ternatis. Tab. 17. f. 2.
The fmaller fucculent Pfycotrophum.
The figure of the fruit reprefented here was taken from a dry fpecimen, in which the pulp had been greatly fhrunk up.

PSYCHOTROPHUM 3. Fruticofum, foliis ovatis venofis, fipulis bidentatis,
racemis terminalibus croceis. Tab.I3.f.I. \& 2.
The fmaller Pfycotrophum with a foxy top.
PSYCHOTROPHUM 4. Foliis ovatis venofis, fioribus quafi umbellatis, fuftentaculis longioribus.
The larger fhruby Pfychotrophum with fpreading flowers.

## The hairy Pfychotrophum.

## PSYCHOTROPHUM 6. Fruticofum foliis plumbeis ovato acuminatis, fioribus laxe racemofis.

The fhruby Pfychotrophum with a livid foliage.

PSYCHOTROPHUM 70 | Herbaceum repens filvaticum foliiss fubrotundo-cor- |
| :---: |
| datis oppohitis, floribus paucioribus alaribus, laci- |
| niis corollde erecto-patentibus. |

Viole folio Bacifera, Slo. Cat. 115 .
Jafminum. Inodorum repens E̊c. Barreri 63.
Karinta Kab. H. M. tab. 21.

## The fmall creeping Pfycbotropbum with Ground-Ivy Leaves.

All thefe plants are very common in Famaica; they are for the moft part hruby, and rife generally from three to fix or feven feet in height. The leaves are difpofed in an oppofite order in all of them, and the foot-ftalks generally fupported with fipule at their infertions: the flowers are commonly in loofe clufters, and terminate the ftalks and branches ; but the laft fort, whofe characters agree pretty well both with thefe and the coffee, is intirely a creeper, fhouts by a veryflender ftalk, and roots almoft at every joint: They are all natives of the woods, and grow beft in a rich fhady foil.

The feeds of all the fpecies are pretty much like thofe of coffee.
COFFEA I. Fructicofa foliis oppofitis, floribus plurimis feflilibus ad alas.
Coffea. L. Sp. Pl. \& H. Cl.
Coffea. Arabica, EC. Pk. Ph.t. 272. f. I.
Arbor Yemenfis. Fructum Coffé ferens, Ěc. Ec. Duglas.

## The Coffee-tree.

This Thrub has been long introduced and cultivated in the Illand of famaica; where it grows very luxuriantly, and rifes frequently to the height of eight or nine feet, freading its flexile branches to a confiderable diftance on every fide: it thrives beft in a rich foil, and cool fhaded fituation, where it can be duly refrefhed with a moderate fhare of moifture ; and in fuch a foil and fituation, it generally produces fo great a quantity of fruit, that the branches can hardly fuftain the weight, tho' bending to the ground; and you may frequently obferve the very trunk to yield to the load. The tree however is obferved to grow and thrive almoft in every foil about the mountains, and will frequently produce great quantities of fruit in the drieft fpots, tho' in Arabia, where this plant is a native and had been firft propagated and brought into ufe, it is obferved to be cultivated between the hills; and yet the drought of the place is fuch, that they are frequently obliged to refrefh the roors with water, which, as it is often wanted in that country is generally conveyed by gutters or chanels thro' every piece.

It is a general remark in England, and indeed a certain one, that the coffee imported from America does not anfwer fo well as that of the growth of Arabia, nor is it owing (as fome imagine) to any foreign fume, or vapours it might have contracted in the paffage, tho' great care fhould be always taken to prevent any acquifition of this nature; for even there, what is commonly ufed will neither parch, or mix like the Turkey coffee; but this has been hitherto owing to the wart

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of obfervation, or knowing the nature of the grain, moft people being attentive to the quantity of the produce, while the qualities are but feldom confidered.

I have been many years in thofe colonies; and being always a lover of coffee, have been often obliged to put up with the produce of the country in its different ftates: This gave me room to make many obfervations upon this grain, and I dare fay they are fuch as will be conftantly found true, and (if rightly regarded) will foon put the inhabitants of our Americans Colonies, in a way of fupplying the mother country with as good coffee as we ever had from Turkey, or any other part of the world: For the eafier underftanding of this affertion, I hall fet down the Remarks I have made, as they occur.

1. New coffee will never parch or mix well, ufe what art you will. This proceeds from the natural clamminefs of the juices of the grain, which requires a fpace of time proportioned to its quantity to be wholly deftroyed.
2. The fmaller the grain, and the lefs pulp the berry is, the better the coffee and the fooner it will parch, mix, and acquire a flavour.
3. The drier the foil, and the warmer the fituation, the better the coffce it produces will be, and the fooner it will acquire a flavour.
4. The larger and the more fucculent the grain, the worfe it will be, the more clammy, and the longer in acquiring a flavour.
5. The worft coffee produced in America will in a courfe of years, not exceeding ten or fourteen, be as good, parch and mix as well, and have as high a flavour as the beft we now have from Turkey, but due care fhould be taken to keep it in a dry place, and to preferve it properly.
6. Small grained coffee, or that which is produced in a dry foil, and warm fituation, will in about three years be as good, and parch as well as that which is now commonly ufed in the coffee-houfes in London.

Thefe are facts founded on repeated experiments, which I have tried from time to time, during my refidence in Famaica, tho' it be very rare to fee what a man may call good coffee in the Illand, for they generally drink it a la Sultan (a), and never referve more than is fufficient to fupply them from one year to another.

I have examined the Turkey coffee with great care fince I came to Englund, and conclude from the fize of the grain, the frequent abortion of one of the feeds, and the narrownefs of the fkin that contains the pulp, that the fhrub muft be greatly ftunted in its growth; and from hence judge, that whoever endeavours to produce good coffee, and fuch as would mellow as foon as that of Arabia; or expect feeds that may have the fame flavour, muft try what can be produced in the lower hillis and mountains of the fouthern part of the Ifland; nay, even try what the Savannas will bear; and I am perfwaded it would anfwer well in many places about the foot of the long mountain near. King/ton : an acre or two may be eafily tried in any part, and the experiment will be well worth the labour ; but whoever is for having greater crops, muft keep among the mountains, where the trees grow and fhoot out more luxuriantly. Where-ever this fhrub is cultivated, it fhould be planted at diftances proportioned to its growth, for in a dry gravelly, or mixed foil, it feldom rifes above five feet, and may be conveniently planted within that diftance of each other ; but among the mountains of Jamuica, where it frequently rifes to the height of nine or ten feet, or more, it requires a larger fcope, and in fuch a foil can be hardly planted nearer than eight or ten feet to each other; I have however frequently known them crowded in fuch places, and yet produce a great quantity of fruit.

The gentlemen of Jamaica imagine, that a great deal of the richnefs and flavour of the Turkey coffee depends upon their methods of drying it ; but this is
(a) This I take to be rather the infufion of the half-burnt flakes of new coffee, (for it never will parch, grind, or mix properly while frelh) like that cammonly ufed by the coffee-planters in Famaica, than a decoction of the coverings, as it is commonly reported to be:
an ill-grounded notion, for the berries, as well as the trees, being naturally ftunted in their growth in mott parts of Arabia, they have but little pulp, and are very eafily dried in that warm climate, where a few days fun generally compleats the work, without being at the trouble of Atriping them of any part of their more juicy coats before hand : but tho' I am fatisfied the Turkey coffee receives no addition from any peculiar method of drying it, I am equally convinced that great quantities of that produced in the woody parts of Gamaica, where the berries are large and fucculent, and the feeds lax and clammy, are greatly prejudiced by the methods ufed there ; fuch berries chould be undoubtedly ftriped of a great part of the pulp, and the feeds carried down to the low-lands, where the heat is much greater and more conftant, to be dried ; and not left foaking in their clammy juices, to dry but flowly in a damp air, as they generally do in many parts of that Illand; but this is no prejudice to the fale of it among the northern purchafers, who generally look upon the largeft and fatteft grain as the beft, nor do they chufe it by any other marks than the plumpnefs of the feeds, and a frefh colour which generally is a blueihpale in new coffee.

Such as have large coffee-walks, fhould be provided with a convenient barbakue, or platform, to dry thefe feeds more commodioully upon; and I think it would be well worth while to try whether fweating would deftroy any of the clamminefs peculiar to the feeds of the larger berries; but thefe fhould be always pulped and dried as foon as poffible; nor do I imagine but the eafe and fpeed whereby they might be dried in the low-lands, would be a fufficient recompence for the trouble of carrying them there, as they are picked from the trees.

After the fruit is well dried, it mult be hulked, and the feeds cleared from all the outward coverings, to fit and prepare them for the market. This is generally done in Jamaica by pounding the dried berries lightly in large wooden mortars, until, after a long continued labour, both the dried pulp and inward membranous coverings are broke, and fall to pieces among the feeds: The whole is then winnowed, cleared, expofed afrefh to the fun for fome days, and then cafked for the market. But the Arabians, after having dried their coffee fufficiently on matts, fpread it on an even floor, and brake off the covering by paffing a large weighty roller of fome heavy wood or tone to and fro upon it, and when the hufks are well broke in this manner, it is winnowed and expofed to the fun a-new, untilit is very well dried ; for otherwife it is apt to heat on board the fhips, and then it lofes all its flavour.

The drink prepared from the feed of this plant is now generally ufed all over Europe, and many parts of Afic and America: it is generally efteemed as an excellent fomachic, and Atrengthner of the nerves; and peculiarly adapted for ftudious and fedentary people.

The plants are propagated by the feeds, and, to raife them fuccefffully, the whole berries fhould be fown foon after they are gathered from the trees; for if they be kept but a fhort time out of ground, they are apt to fail : but when the plants rife about five or fix inches above the earth, if double, (as they generally are) they fhould be feparated, which is done by drawing oneior both, parting the roots, and planting them again in feparate beds. When the young plants are removed from a bed, or from under the parent-tree where they generally grow in great abundance, great care fhould be saker not to break or injure the roots, and to preferve the earth about them until they are replanted; for if the fibres are expofed to the air, and allowed to dry, they are very fubject to perinh, which is the reafon they have not this beautiful tree more common in the gardens about the lower lands of Jamaica, where very few tranfplants of the kind thrive, being.generally pulled up very bare, the layers laid-by commonly for thirty or forty hours afterwards, and then carried a confiderable diftance in the heat of the fun: but fuch as would have 'em profper well, fhould be careful to procure plants that are well fupplied with mould from their native beds; or to saife them immediately from the feeds.

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CHIOCOCCA I. Sarmentofa foliis myrtineis oppoftis, fpicis plurimis tenu-
    iffmis \&o terminatibus \&ex alis fupremis.
Lonicera. Racemis lateralibus Jimplicibus floribus pendulis foliis integerimis.
        L. Sp. Pl.
Jafminim. Forte folio myrtineo, aliorum adminaculo fe fufinens, Ěc. Slo. Cat.
                    169, an. Hif. II. p. 97, t. 188.
Pittonia. Plum. \& Hert. Parifienfis.
                    Snow-berry, or David's-root.
Periantium. Minimum fubtumidum pregnans, quinque denticulis coronatum.
Corolla. Satismagna monopetala conico-campanulata caduca, limbus quinque-partitus,
                laciniis acuminatis erectis brevibus.
    Stamina. Filamenta quinque erecto patentia flore longiora, antheræ ovatc.
    Piftillum. Germen minimum fubrotundum calice tectum © coronatum, filus tenuis
        fimplex longitudine fam. fligma Amplex.
Pericarpium. Bacca fubrotunda leniter compreffa pulpofa nivea bilocularis, den-
    ticulis calicis coronata.
Sémina. Duo fubrotunda, compreffa folitaria.
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This genus has been hitherto confounded with the Tournefortia, from which 1 have now juftly feparated it : The plant defcribed here grows very common in the lower hilly lands of Jamaica, efpecially thofe between Spanibo-turn and St. Faith's; it begins to branch immediately above the root, rifes by many fhoots and flender twigs, from four to feven or eight feet, fometimes more; but when fo luxuriant, it requires to be fupported by fome of the neighbouring fhrubs, without which it would not be able to fland: The flower-fpikes are very flender and numerous towards the top of the branches, and fhoot from thence as well as from the ale of the upper leaves, or leffer branches; the berries are of afnowy colour, and loofe texture, very numerous, and of a round but fomewhat compreffed figure, each containing two compreffed feeds.

The root of the plant has much the fame bitter acrid tafte with the Jeneka frakeroot, and has been a long time ufed as a ftrong refolutive and attenuant in thofe colonies: I have known it adminiftered with great fuccefs in obftinate rheumatifms, and old venereal taints; nor is it intirely ufelefs even in the Spina Ventofa (commonly called Boneake.) I have frequently obferved very ftubborn complaints eafed, and fometimes removed by the continued ufe of this, and a few mercurial alterants; but it is beft ufed in decoctions, which may be made either ftronger or weaker, or impregnated with other ingredients as occafion requires. The fmaller the plant grows the more fharp and biteing the root is, and confequently the better.

## CHIOC OCCA. 2. Scandens farmatis tenuifimis © fere indivifs.

## The climbing Snow-berry.

I have feen one plant of this kind in the woods between St. Thomas's and Mangeneel; it grew to a confiderable height among the trees, and threw down fome of its flender twigs again to the ground: I am apt to think it a different fpecies, tho' the leaves are very like thofe of the former plant.

PORTLANDIA I. Foliis majoribus nitidis ovatis oppofitis, floribus ampliffmis Tab. xi.

> An, Tecomaxachill. H. 408 ?
> An, Pk. 329.6.

The large-leaf'd Portlandia.

Periantium. Pentaphyllum, foliolis oblongo-lanceolatis, germini incidentibus.
Corolla. Monopetala tubulata; tubus longifimus (fex Scilicet vel feptem unciarum) Jenfim ampliatus, EO fere infundibuli-formis, limbus quinque crenatus.
Stam. Filamenta quinque valida longitudine fere floris; antheræ longifima.
Piftillum. Germen oblongum pentagonum, foliolis calicis coronotim, Atilus finnplex, longitudine ftam. Stigma oblongum quafi accretum.
Pericarpium. Capfula oblongo-ovata, quinque Atriis longitudinalibus fulcata, retufa, © foliolis calicis coronata ; bilocularis, bivalvis, ab apice debifcens.
Semina. Plurima fubrotunda comprefla.
This fhrub grows chiefly about the foot of the mountains, and thirives very luxuriantly among the rocks : it rifes by a branched ftem, and fhoots generally to the height of eight or nine feet ; but the trunk feldom exceeds two inches and at half in diameter, and is covered with a thick furrowed bark. The leaves are large, fmooth, and oppofite, of an oval form, and entire at the edges; the flowers are white, pretty open, and long; and the fruit a moderate lignous capfula, crowned with five diftinct leaves, and divided into two cells, adorned with five longitudinal ridges.

This plant is called by the name of Portlandia, after the prefent dutchefs of Portland, who is a great. lover of Botany, and well acquainted with the Englifh plants.

ERITHALIS I. Fruticulofa foliis obovatis crafis nitidis oppofitis, pedunculis ramofis ad alas fuperiores. Tab. 17.f. $\mathrm{f}_{3}$.

## The fhruby Erithalis.

Periantium: Subrotundum truncatum cyathiforme minimum germine pregnans.
Corolla. Monopetala in quinque lucinias linearis erecta-patentes ad bafem fecta.
Stam. Filamenta quinque erecto-patentia Corolla dimido breviora, antheræ oblonga.
Piftillum. Germen fubrotundunn margine calicis coronatum, ftilus fimplex longitudine fam. Stigma acutum.
Pericarpium. Bacca decem-locularis globofa parva feminibus plurimis referta. See tab. 17. f. 3a.

ERITHALIS 2. Arborefcens floribus racemofis foliis venofis integris.

## The arborefcent Erithalis.

Both thefe fhrubs are found about the north-eaft parts of the Illand ; the former grows among the cliffs that lie to the weft of Port-Antconio, and feldom rifes above two or three feet. I found the other about Mangenul-bay, where it grows to the height of eight or ten feet.

## MACROCNEMUM 1. Arboreficens foliis ovatis oppo弓̈tis, racemis fuften= taculis longis incidentibus. <br> The oval leaf'd Macrocnemum.

Periantium. Minimum quinquedentatum germine pregnans.
Corolla. Monopetala tubulata, minor; limbus in quinque lacinias ovidtas ereciono conniventes Sectus.
Stam. Filamenta quinque villofa longitudine', tubi fioris © inferne tubo adnata, fuperne libera; antherx ovalke compreffa in fauce corollio los cata.

Piftillum. Germen longum obverfe conicum denticulis calicis coronatum, ftilus fimplex longitudine tubifloris, fligma bilobum obtufuffulum.
Pericarpium. Capfula oblonga obverfe conica bilocularis.
Semina. Plurima imbricatam pofita.
This fmall tree is fometimes found about Mangenul; it rifes generally to the height of twelve or fourteen feet, and feems by the fruit to approach pretty near the Campanula, but the difpofition and make of the filaments are very different.

> CAMPANULA 1. Arborefcens foliis ovato-acuminatis verticillatem ternatis, Aiputis acuminat is interpofitis; capfulis quinque locularibus.

## The fhruby American Campanula's.

The fize of thefe plants, and the different difpofitions of their leaves, feem to make the whole difference between the two fpecies; the firft grows generally to the height of nine or ten feet, the latter feldom exceeds four: the flowers are yellow, and the leaves intire in both.

> BUTNERIA 1. Arborea foliis majoribus oblongo-ovatis oppofitis, floritus fite gularibus.
> An, Ebenus Arbor India Orientalis, Éc. Thez. Zey. P. gr ?
> The Bull-Apple-tree.
> Periantium. Campanulatum quinque dentatum minus, dentibus acutis reflectentibus.
> Corolla. Monopetala tubulata major fauce leniter ampliata, limbus in quinqué lacinias lanceolatas jectus.
> Stamina. Filamenta quinque brevifima; antherx longa adnate per longitudinem tubi $\mathcal{E}$ faucis floris porrectic.
> Piftillum. Germen fubrotundum calice tectum \& laciniis coronatum, ftilus jamplex longitudine tubi floris; ftigma obtufum.
> ${ }^{4}$
> Pericarpium. Pomum magnum globofum coronatum, malo punico fimillimum, uniloculare, lineâ longitudinali intere bifariam fuldatum, pulpâ repletum.
> Semina. Plurima nidulantia.

This tree grows very common in the parih of St. Fames's; and rifes generally to the height of fourteen or fixteen feet; the leaves are large, oval, and oppofite; "and the fruit very like a pomegranate both in fize and form.

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MIRA B ILIS 1. Foliis ovatis Jeminibus pulcbre reticulatis, radice carnofa.
    Mirabilis L. Sp. Pl. \& H. C.
    Jalappa Parvo fore, Eic. Inf. \& Th. Zey.
    Admirabilis Peruviana, Ezc. Slo. Cat. 91.
    Mirabilis Pertiv. Fif. 208.
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## Jalap, or the Four o' Clock Flower.

This plant is very common in the Ifland of Yamaica, and rifes generally by a branched ftalk to the height of about two feet and a half: the leaves are oval and pointed, and difpofed pretty thick along the branches; the flowers grow fingle, they are of a moderate fize, and like thofe of the tulip, change their colours with the foil,

## $\mathrm{O} F \mathrm{~F}$ A M A I C A.

and methods of culture; they are fometimes wholly yellow, often red, but commonly mixed, and change their hades to a great variety; thefe are followed by fo many roundih feeds that ftand upon the expanded cups.

The root fliced and preferved opens the body; it has been fometimes dried and powdered, and then adminittered for Jalap; it purges moderately, but requires too large a dofe to be adminiftered in fo difagreeable a form, and feldom anfwers to our wifhes even in that quantity. It is cultivated in Jamaica chiefly for the beauty of its flowers, which are always obferved to open with the cool, and from thence called Four $0^{\prime}$ Clock Flowers.

## NICOTIANA 1. Foliis amplis oblongo-ovatic, floribus comejis. <br> Nicotiana. Foliis ovatiss it L. H. C. \& Sp. Sl. <br> Petume Pif. 206.

## Tobacco.

This plant was probably firft introduced here by the Spaniards. But it is ftill cultivated by the negroes and poorer fort of white people in many parts of the Mland: it has fome narcotic qualities, but it is chiefly ufed pmong us as a fternutatory. The lighter decoction of the leaves, Ef. are both purgative and emetic, as well as the juice ; but when it continues for a confiderable time upon the fire, the more acrid particles evapcrate, and it becomes a ftrong refolutive and fudorific, and has been frequently obferved to anfwer beyond expectation in old catarrhes, and afthmas. The furmes are fometimes injected by the way of glifter in the Colica Pictonum and Miferere, and have been often found to provoke a difcharge downward when no other medicines would anfwer. The leaves pounded are frequently applied to foul or neglected fores in America, and obferved to anfwer better than any ointments in moft of thofe that lie in the depending parts. Both the infufion and juice of the plant is ufed indifcriminately to wafh and cleanfe the fores of cattle, for it has been long obferved to preferve them free from maggots, and to deftroy moft forts of vermin.

> DATURA I. Foliis profunde crenatis, fructu erecto spinofo. Datura Pericarpiis jpinofis erestis osàtis. L. H. C: \& Sp. Pl. Stramonium Zey. Thez. Zey. © humatu 1a: Ơc. H. M. p. 2. f. 28. Stramonia Altera major Jive Tatura, E̛c. Slo. Cat. 59, \& Hift. p. 159.

## The Thorn-apple or Burn-weed.

This plant is very common in moft of the low-lands of Famaica, and indeed all oves America, where it generally rifes to the height of three feet, or better. All the parts of this plant are remarkably narcotic, tho feldom adminiftered inwardly on account of thofe dreadful perturbations of the mind that generally attend the taking of it the juice however and feeds are frequently ufed with great fuccefs in external applications in thofe parts of the world; they are commonly made into ointments, and applied infealds and other painful fores, where they give very evident marks of thofe narcotic qualities with which they are plentifully endowed. The feeds have been fometimes given internally to half a fcruple.

> COLLOCOCCUS 1. Foliis rugofs venofis oblongoovatis', floribus laxe racemofis.
> Cerafo Affins Arbor baccifera, Egc. Slo. Cat. 169, \& H.t. 203.
> Cerafa Americana Filiis ruggis, fruchu vifido. Pk. Phy. t. 158, f. 1. Malpigia Ramis divaricatis. Miller.

The clammy Cherry, or Turkey-berry-tree.
Periantium. Parvum monopbyllum campanulatum perffens ore tri vel quinque crenato.
Corolla. Monopetala in quinque lacinias cvatas, © calice duplo longiores ad bafem fere feeta.

Stamina. Filamenta quinque birfuta infifuris foris oppogita © inferne tubs Corollce adnata, antheræ cordato-lamellatce.
Piflillum. Germen ovatum, flilus inferne fimplex erectus, ad apicem divijus in quatuor lacinias divaricantes; Stigmata oblonga irregularia.
Pericarpium. Bacca fubrotunda oblique \& lateraliter aucta, fucco vifcofo turgida, unilocularis, monofpermis. An aliter in germine?
Semin. Nucleus bilobus nauco offeo rugofo praditus.
This tree grows frequently in the lower lands of Famaica, and in molt of the other Iflands; but it feldom rifes above 14 or 16 feet, and fpreads pretty much at the top. The leaves are oval, rugged, obliquely veined, and difpofed alternately; the berries are red, fucculent, of the fize of out fmalleft European cherries, and difpofed in umbellated groups. The turkeys and other poultry feed much upon the fruit of this tree; the pulp is fweetifh, and of a clammy confiftence.

> COLLOCOCCUS 2. Platyphyllus major, racemis umbellatis.
> Prunus Racemofa foliis oblongis birfutis maximis, EEc. Slo. Cat. 184, \& H. 2. 130, t. 22 I.

## The Broad-leaf'd Cherry-tree.

This tree grows chiefly in the lower woods, and rifes to a confiderable height, but is feldom found above twelve or fixteen inches in diameter, and fhoots generally by a ftraight trunk. The leaves are very large and rough, and the berries white, and much of the fize of thofe of the foregoing: the heart of the tree is of a yellowifh colour, and a pretty good timber wood.

EHRETIA 1. Arborea, foliis oblongo-ovatis alternis, racemis terminalibus. Tab. 16. f. 1.
Cerafo affinis Arbor baccifera racemofa, Esc. Slo. Cat. 169. \& H. t. 203.

## The Baftard Cherry-tree.

Periantium. Monopbyllum parvum quinque crenatum perfibens.
Corolla. Monopetala campanulata ad medietatem in quinque lacinias reflexas ovato-acuminatas Jecta.
Stamina. Filamenta quinque longitudine foris, recedentia; antheræ Jubrotunda. Piftillum. Germen fubrotundum ; ftilus leniter bifidus, longitudine faminum; figmata obtufiufcula.
Pericarpium. Bacca fucculenta bilocularis, binis nucleolis bilocularibus छ઼ biJpermibus binc convexis inde planis, referta.

This tree is pretty common in the lower lands of $\mathcal{F}$ amaica, and rifes generally to the height of fixteen or twenty feet : the berries are fmall, and feldom exceed the largeft of our European currants in fize; they ferve to feed our poultry, and are fometimes eat by the poorer fort of people. This tree has been called Ehretia, after the ingenious G. D. Ebret, who has already obliged the world with many botanical difcoveries of his own, befides a great number of beautiful and accurate diffections of plants, which he has done for other people.

BOURRERIA 1. Arborea foliis ovatis alternis, racemis rarioribus terminalibus. Tab. 15, fig. 2.
Jafminum Periclimeni folio fore albo, E̛c. Slo. Cat. 169, \& H. t. 204. The Bourreria with oval Leaves.

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Periantium. Monopbyllum in quinque partes lanceolatas ad medietatem fere divifum, incijuris EJ lacinios aliquando inequalibus.
Corolla. Monopetala tubulata; tubus Cylindraceus calice duplo longior, limbus in quinque lacinias equales oblongas obtufas patentes fectus.
Stamina. Filamenta quinque, inferne tubo corolls ainata, crecta Eo tubo foris iongiora; antheræ fagittatce.
Piftllum. Germen orato-quadrigonum, filus longitudine faminum ad apicem bi. fidus; ftigmata crafiufcula.
Pericarpium. Bacca fucculenta, quatuor nucleis bilocularibus, quadantes Spbara mentientibus referta.
Semina. Nuclei biloculares bijpermes, externe fulcis membranaceis fove lamel-- Iofis parallelis oblique difpofitis ornati, lateribus glabris.

This tree grows in the Savannas, and feldom rifes above fourteen or fifteen fect from the ground; its leaves are generally of an inverted oval form, and its berries of a faffron colour. I have called it after Mr. Bourer, an apothecary of Nurembers, who was a great promoter of natural hiftory.

TOURNEFORTIA I. Scandens foliis birtis rugolis ovatis ficis ramofis.
Tournefortia. Foliis ovato-lanceolatis fpicis ramofis pendulis. L. Sp. Pl.
Heliotropii Flore frutex baccifer, folio rugofo fatido maximo fubrotundo birfuto, fructu albo. Slo. Cat. 173. \& H. t. 212.

## The larger Scandent Tournefortia.

This plant raifes itfelf generally by the help of the neighbouring trees, and hoots fometimes to a confiderable height in the woods; every plant of the whole genus feems to have a great analogy with the turnfole, for they generally bear their flowers, and throw out their fpikes in the fame manner. Plumier has always confounded the fpecies of the Claionodus, (which we have already defcribed) with there plants; and this confufion has impofed on Linnaus, who defrribes this genus with two feeds and a covered berry, but continues the fpecies like the other; they are however very diftinct, for in this the flower is perfectly the fame as that of the Heliotrope, the fpikes and difpofition nearly the fame, but the fruit is a pulpy berry, containing four feparate feeds, and is always lodged upon the calex.

TOURNEFORTIA 2. Frutefcens bumilis, foliis maximis oblongo ovatis rugofis, fpicis pendulis rarioribus, ramulis crafes fulcatis.
Tournefortia Foliis ovatis integerimis nudis, Spicis cymofis. L. Sp. Pl.
Heliotropii Flore frutex folio maximo, ©c. Slo. Cat. 173, \& H. t. 212.

## The large leaf'd Shruby Tournefortia.

This plant is fometimes obferved in the woods, and may be reckoned rather a plant of a few years ftanding than a fhrub; it trifes generally from five to feven, or eight feet in height, and is remarkable for the thicknefs of its upper branches, and the length of its pendulous flower-fpikes: the leaves are very large, fometimes a foot or more in length.

TOURNEFORTIA 3. Reclinata diffufa, © birfuta, foliis ovatis, ramulis rectis validis.
The Bafket-Withe.

This plant is pretty much like the firft fpecies, grows very luxuriantly, and ftretches fometimes many feet from the main root: it is generally, ufed for dungbafkets about the country.

TOURNEFORTIA 4. Fruticofa fandens; baccis niveis matulis nigris
Tournefortia Foliis ovatis acuminatis, peteolis reflexis caule woblubiti. L. Sp. Pl.
Pittonia Scandens bois de Chaplet Gallis dieza Dom. de Jufleeu. Brionia Nigra fruticofa, Ėc. Slo. Cat. 106, \& H.t. 143. 2.

The climbing Tournefortia with fpotted Berries and flender Branches.
This plant is very common about King/fon; it is a weakly climbing frub with very flender flexile branches, and rifes generally to the height of feven or eight feet, or better; it is very remarkable for the black fpots upon its berries, but they vary with the number of the feeds, which are fometimes one, fometimes two or more; tho' conftantly four in the germen and more perfect fpecimens.

TOURNEFORTIA 5. Subfruticofa, foliis fubinconis oblongis, fronde comofa. Thymeliæ Facie frutex marinus, Ec. Slo. Cat. H. t. 162, f. 4 .

The Afh-coloured Sea-fide Tournefortia.
This plant is found by the fea-fide, near the burough in St. Fames's; it is of a fhruby make, and feldom rifes above three or four feet from the ground.

> GERASCANTHUS 1. Foliis ovato-oblongis, utrinque productis, racemis terminalibus. Tab. 29 f. 3.
> Cordia Foliis ovatis integerimis. L. Sp. P1.
> An, Nerio affinis Arbor verficolore materie, ©̌c: Slo. Cat, $155 . \& \mathrm{H}, \mathrm{t}$. Cordix © Sebafina botanicorum.jpecies.
> Spanif Elm, or Prince-wood.
> Periantium. Cylindraceum oblongum friatum tri quadri vel quinque crenatum perffiens.
> Corolla. Monopetala infundibuliformis perffens, tubus cylindraceus calice longior fauce limiter ampliatá; limbus major patens $\mathcal{E}$ obliquus in quinque lacinias oblongas retufas, ad facem fere fectus.
> Stamina. Filamento quinque tubo corolle inferne adnate, in fauce libera erecta; antheræ oblonga.
> Piftillum. Germen ovatum intra twbum foris from, ftilus erectus faminibus brevior bipartitus, laciniis remotis bifdis; ftigmata oblonga erecta adnata.
> Pericarpium. Drupa oblongo-ovata intra calicem immutatum Eo tubum carolle dinlentum repofita, \& floreque maxcido perffitenti coronate: nux tenuis lignofus quadrilocularis, diffepimentis duobus quandow que omnibus interruptis.
> Semina. Oblongo-cvata folitaria, quorum tria pleramque abortiunt.

This tree grows in many parts of Famaica, and is generally efteemed as one of the bett timber woods in the Ifland; it rifes to a confiderable height, but feldom exceeds twenty or thirty inches in diameter, efpecially in the low lands, where it is moft common : it is pretty much branched towards the top, and furnifhed with oblong nervous leaves; the flowers are very white, and grow in great numbers at the

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extremities of the branches; but as the Germen grows larger, they fade and turn of a dark or dirty brown colour, and continue upon the tree until the whole fruit, which feldom grows to a perfect ftate, falls off. The difpofition of the cup and ftile fhew this to be very nearly allied to the clammy cherry and Cordia; but as we'are now acquainted with two diftinct fpecies of this laft fort, that have each fix Stamina conftantly, and as I have never been able to obferve above one lodge and embrio in the Germen's of the Collococcus, I have feparated them, according to rules of the fyftem I now follow. The wood of this tree is of a dark brown colour, and gently ftriped; it is tough and elaftic, of a fine grain, and eafily worked.

$$
\begin{aligned}
& \text { CHRYSOPHYLLUM 1. Frucfu majori glabofo, foliis fubtus ferugineis. } \\
& \text { Tab. 14. f. } 2 . \\
& \text { Chryfophyllum L. Gen. Sp. P. \& H.Cl. } \\
& \text { Anona. Foliis fubtus ferugineis fructu rotundo, \&o Slo. Cat. 206. H. t. } 219 . \\
& \text { Anona. Fructu rubicundo, \&ic. Muf. \& Thez. Zey. } \\
& \text { Pericarpium. Pentaphyllum foliolis minoribus cocbleatis coatis. } \\
& \text { Corolla. Monopetala campanulata in quinque lacinias ovatas erecto-patentes ad } \\
& \text { medietatem fecta. } \\
& \text { Stạmina. Fïlamenta quinque brevifima ab imá laciniarum corolla fupra faucem } \\
& \text { orta; anthere cordata conniventes. } \\
& \text { Piftillum. Germen fubrotundum decemloculare, ftilus nullus vel brevifimus, ftigma } \\
& \text { obtufufculum radiatum. } \\
& \text { Pericarpium. Bacca globefa fucculenta decemlocularis. } \\
& \text { Semina. Ovata compreffa nitentio, ad alteram marginem rugofa \&o cicatricula } \\
& \text { quafi obducla. }
\end{aligned}
$$

## CHRYSOPHYLLUM 2. Fructu minori glabro, foliis fubtus ferugineis.

## The Damfon Plumb.

The laft of thefe plants is found wild in many parts of Yamaica, but feldom grows to any confiderable fize : the other is cultivated all over the country, and thrives with very little care; it rifes commonly to a confiderable fize, and fpreads much in its growth, but its branches, like thofe of the other fort, are very flender and flexile, and hang down whenever they are charged with fruit. This, like the Achras (to whorn both the fruit, feeds, and other particulars, feem to fhew it very nearly allied) is full of milk, and the fruit retains it even in the moft perfect ftate; but tho' this juice be rough and aftringent in the bark, and other parts of the tree, and even in the fruit before it ripens; yet when it grows to full perfcction, it becomes fweet and gelatinous with an agreeable clamminefs, and is very much efteemed. The juice of this fruit (a little before it is perfectly ripe) being mixed with a fmall quantity of orange juice, (or eating both fruit at a time,) binds the body more than any thing I bave ever known, and doubtlefs would make a very powerful remedy on many occafions; but I doubt if the action of the fire would not take off a great deal of the native roughnefs of the juice, in cafe it had been inSpiffated by that means,

I doubt if this ought to be feparated from the Achras on any account, tho' the characters of the flower differ in many refpects; the Germen has ten diftinct lodges, but moft of the feeds abort, and when the fruit is ripe, it feldom contains above four or five.

# VARRONIA (a) I. Fruticofa foliis rugofis ovatis fubbirfutis ferratis alternis, capitulis fubrotundis. Tab. I3. f. 2. <br> Lantana Foliis alternis foribus corimbofs. L. Sp. Pl. <br> Periclimenum Rectum, Ėc. foliis alternatum Sitis. Slo. Cat. 164. \& H. t. 194. 

The round fpiked Varronia.
Receptaculum. Commine Jimplex in caput finctum colligit fores Sepiles.
Periantium. Monopbyllam campanulatum perffens; limbus in quinque lacinias tenuiftimas, longas reflexas vel intortas divifus.
Corolla. Monopetala tubulato-campanulata, limbus quinquecrenatus fimbriatus.
Stamina. Filamenta quinque inferne tubo corollee ad medietatem adnata Corolla bréviora, antheræ fagittata.
Pifillum. Germen ovatum liberum in fundo calicis fitum, filus fimplex longitudine fere ftam; Atigmata quatuor oblonga erecio-patentia ab apice fili affurgentia.
Pericarpium. Bacca ovata fucculenta bilacularis calice fuffulta.
Semina. Nucleoli fubrotundi folitarii biloculares, bijpermes.
$\begin{array}{cc}\text { VARRONIA } & \text { 2. Afurgens farmentofa, foliis E' capitulis oblongiso } \\ \text { An, Lantana } & \text { Foliis alternis Jpicis oblongis. L. Sp. Pl. Sed non Salvia bar: } \\ \text { badienfibus, Éc. Pk. t. 22I. f. 3. }\end{array}$
The Varronia with oblong Spikes.
Both thefe plants are common in the lower and woody lands of Famaica; they are both Chruby, but the former feldom rifes above three or four feet in height, and is furnifhed with a number of flender, crooked, and intermixed branches: the other is much of the fame make towards the top, but is generally found climbing or leaning on the neighbouring fhrubs, by whofe help it rifes frequently to the height of many feet above the root. The flowers and texture of the leaves are very like in both.

> RHAMNUS. 1. Arborefcens minor foliis ovatis venofis, lulatis, alaribus fructibus Sphericis.

The fhruby Rhamnus with bilocular Berries.
RHAMNUS 2, Arboreus foliis ovatis venofs, capfulis Jphericis inferne ad medietatem caliptratis, pedunculis umbellulatis alari~ bus, cortice glabro.

The larger Rhamnus with a fmooth Bark.
RHAMNUS 3. Foliis ovatis glabris fructibus bilocularibus fubcaliptratis,', Tab. 12. f. 1.

RHAMNUS 4. Sarmentofus folits ovatis wenofis, capfulis trigonis racemolis. Radix fruticofa lutea, E'c, Slo. Cat, $214, \& \mathrm{H}, \mathrm{II}, 185^{\circ}$

## The Chaw-ftick.

(a) Ab antiquo illo authore qui de re ruffica fcripfit, nomen defumitur.

All there fpecies of the Rhamnus are found in Gamaica; the two firf forts grow generally among the other Chrubs in the low lands, but the third is a climber, and gelverally found in the drier hills. The bark of all thefe plants is of a pleafant bitter tafte, and raifes a great fermentation in the faliva, or any rich liquor it may be agilated with. The third fort is frequently ufed to ferment, and give a flavour to thofe fmall diluting liquors called cool drinks; but is generally kept to rub and clean the teeth, which it really whitens and preferves far better than any thing I have yet known; for it ferves both as a brufh and cleaning powder upon thefe occafions.

> RHAMNUS? An Ziziphlus. Arborefcens foliis oblongo-avatio birfutis Ef leniter ferratis, foribus minimis, racemis alaribus. Tab. 12. f. 2.
> Periantium Nullum.
> Corolla Monopetala, in quinque lacinias oblongas carinatas erecto-conniventes ad bafim fecta.
> Stamina. Filamenta quinque brevia intra lacinias corollce recondita; anthera oblongo-ovata.
> Piftll. Germen ovatum, ftilus aqualis fimplex brevis, figma fimplex.
> Pericarpium. Bacca pulpofa fubrotunda nucleo unico foeta, nauco proprio tecto:

This Brubby tree grows at the foot of the hill, near Dotor Gregory's at Plantain garden river. It feldom rifés above ten or twelve feet, and throws out a great a number of loofe branches.

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CESTRUM 1. Fruticofum, foliis oblongo-ovatis, foribus fafciculatis pedunculatis alaribus.
Cefrum Floribus pedunculatis, L. H. C. \& Sp. Pl.
Jafminum Laurinis foliis flore palide luteo \&cc. Slo. Cat. 169. \& H. t. 204.
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## Blue Poifon Berries.

This thrub is very common in the lawer lands, and feldom rifes above feven or eight feet from the ground; the leaves are fmooth and oval, and the flowers difpofed in large groops at the alx of the leaves; they are fucceeded by fo many berries of the fize of off European black currants, and full of a blue pulp, but the colour is eafily changed by every acid. The nightingales are faid to feed upon the berries of this fhrub, which are reckoned very poifonous.

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SOLANUM 1, Hirfutum © Spinofum, fructu maximo, calice majorifpinofo.
    Solanum Caule aculeato fruticofo foliis repandis calicibus aculeatio, L. Sp. Pl.
    Solanum Pamiferum \&cc. Pk. t. 226. f. 3. \& Slo. C3t. 108.
    Melongena Fructu oblongo, Ec. Fior. \& The. Zey.
    Nila-Batudera, H1, M, p. 10, t. 74.
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        The Brown-Jolly, or Bolangena.
    This plant lives fome years, and feldom rifes above three or four feet in height ; it was firf imported ino jamaica by the Jeres, and is now cultivated there by many people. It generally bears a number of large berries, which floot and ripen very gradually; there fliced, pickled for a few hours, and boiled to a tendernefs, are ufed inflead of greens, and frequently ferved up in plates among the Fews.

SOLANUM 2. Villofim \&o fpinofum, fructu majori mucronato luteo.
Solanum Ciaule aculeato-berbaceo, folits cordutis quinque lobis, soligibus aculeatis. L. Vit. Chifist. Sp. Ph.

This plant is a native of $\mathcal{F}$ amaica, and makes a beautiful appearance when adorned with its large yellow berries: it grows in tufts, and bears its fruits on fingle footftalks. The fmell of the apples is faid to kill the Cock-roches.

> SOLANUM 3. Afurgens villofum \& leniter jpinofum, foliis fuperioribus ovatoangulatis geminatis, fructibus fajciculatis ©f quaf umbellulatis minoribus, fafciculis fpar fis.
> An Solanum Caule inermi fruticofo, folizs geminis altero minore, foribus cimofis. L. Sp. Pl.
> Solanum Bacciferum caule © foliis tomento incanis, Ec. Slo. Cat. Io7. \& H. t. I44.
> An Juripeba 2. Pif. I8 I.

## Turky Berries.

SOLANUM 4. Affurgens trichotomum, foliis ovatis, fructibus minoribus laxe racemofis, racemis terminalibus.

## The larger Turky Berries.

Both thefe fpecies are very common in the low lands of yamirica, and fo like each other, that they have been commonly taken for the fame plant: both forts grow much to the fame height and thickness, and feldom rife above feven feet from the ground. They bear pretty thick, and the berries, which generally are about the fize of our European cherries, ferve to feed the Turkies, from whence they have received the prefent appellation.

> SOLANUM 5. Erectum, caule tereti aculeatifimo, foliis oblongis ad bafins incequaliter porrectis.
> Solanum Spiniferum fruteftens.' Pk. t. 225. f. 5.
> Solanum Fruticofum bacciferum 反pinofum, ©c. Slo. Cat. 108. \& H. t. II:

## The Canker Berry.

This plant feldom rifes above three feet from the root; but both the ftem and branches ate every where full of harp thorns. The berries are bitterih, and thought to be very ferviceable in fore throats.

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SOLANUM 6. Humilius diffufum; foliis ovatis, ramulis marginatis, umbelbulis forum jparis.
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Solanum Caule inermi berbaceo, foliis ovatis dentato-angulatis, umbellis nutantibus, L. Sp. Pl.
An Solanum Somniferum off. Thez. Zey. E Aquara-guia, Pif. 224.

## The branched Caleloe.

This plant is very common in the low lands of Jamaica, and grows frequently in the grafs pieces; but it feldom rifes more than two or three feet from the root. It is remarkable that this plant, which is equally common in Europe, and of a virofe heavy fmell and very narcotic quality in thefe cold climates, is void of both in Famaica, where it is daily ufed for food, and found by long experience to be both 2 pleafant and wholefome green. The negroes at the ferry make ufe of it every day almoft in the year. The length of the common foot ftalks, and the length and fmoothnefs of the branches is the only difference between the two plants, if they be not wholly the fame; but the European feems to grow more twiggy and luxusiant.

SOLANUM 7. Scandens, foliis ovatis utrinque acuminatis, fafciculis forum
fobumbellulatis fparfis.
An, Solanum Caule inermi frutefcenti flexuofo racemis cymofis, \&c. L. Sp. P1.

## The Climbing Solanum.

Periantium Cyathiforme breve, vix quinque dentatum.
Corolla Infundibuli-formis, inferne tubulata, Limbus erecto patens, fere integer, crafus, ex parte rudis © ex parte coloratus. Cetera, ut in Solano vulg.
SOLANUM 8. Spinofum © villofum, foliis angulato-ovatis, baccis minoribus, fafciculis forum jparfis.

## The thorny, tufted, and hairy Solanum.

This plant grows in fpreading tufts, and feldom rifes above three feet from the ground: it is very hairy, full of prickles, and bears a great number of fmall tufted berries. The leaves pounded, are frequently applied to kill the maggots that infeft large fores in cattle; it keeps them clean, and is obferved to deftroy moft forts of vermin.

> LYCOPERSICON 1. Foliis abrupte pinnatis, radice tuberofa.
> Solanum Caule inermi berbaceo; foliis pennatis integerrimis. L. Vir. Cli. \& Sp. Pl.

## The Irifh Potato.

Great quantities of this root are annually imported into Gamaica from Laneafter and Ireland; and the plant often cultivated in the cooler mountains of the ifland, but does not thrive fo well as many other European vegetables, though frequently raifed with fuch fuccefs, as to be fold in large quantities in the public markets.

> LYCOPERSICON 2. Subbirfutum, foliis varie incifis interrupte $\mathcal{E}$ abrupte pennatis, calicibus feptempartitis.
> Solanum Caule inermi berbaceo, foliis pennatis incijs, racemis fimplicibus. L. Sp. PI.

## The Tomato.

LYCOPERSICUM 3. Subkirfutum, foliis interrupte © abrupte pennatis, calicibus quinquepartitis.
An, Solanum Caule inermi berbaceo, foliis pennatis incijis, racemis bipartitis reflexis. L. Sp. PI.

## The fmaller wild Tomato.

Thefe are all annual plants, and, except the laft, imported here from foreign parts. The berries of the fecond fpecies are often ufed in foops and fauces, to which they are obferved to give a very agreeable and grateful flavour: they are fometimes roafted, and then chiefly ufed with mutton: they are alfo fryed with eggs, and ferved up in fingle plates. The Feres make ufe of this fruit in almoft all their dihes.

Obf. The flowers in thefe plants grow chiefly on common footfalks, and are feldom above feven or eight together; they are difpofed in an alternate and diftich order, and grow commonly at fome diftance from the alæ of the leaves.

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# PHYSALIS 1. Herbacea major, foliis et fruitibus fingularibis ad divaricationes fuperiores. <br> Phyfalis Ramoffima divaricationibus germinantibus, Ecc. L. Sp. Pl. Solanum Veficarium erectum Solani vulgaris folio. Slo. Cat. 110. Alkekingi Indicum glabrum Capfici folio. H. Elt. t. n. \& The. Zey. Camiru Pifo. 223. 

## The American Winter Cherry.

This plant is frequent in moft of the low and moift lands of Jamaica; it grows by a thick fucculent ftalk, but feldom rifes above two feet and a half from the ground, and feems rather to divide than to branch in its growth: it is furnihihed with a fhady foliage, and always bears a fingle leaf and flower, or either of them, at each of the upper divifions of the plant.

The berrries have been generally looked upon as diuretic, and may be defervedly efteemed fo in over-heated or febrile habits, for they have a gentle fubacid tafte, joined with a light bitter, which renders them very agreeable to the palate in moft inflammatory cafes. The fumes of the plant (while yet pretty fucculent) burnt with wax, and received into the mouth, has been obferved to kill the worms in and about the teeth, and to eafe the tooth ach. Vid. Etmuller.

CAPSICUM r. Fructu maximo cordiformi biloculari rubro.
Capficum Indicum. Muf. \&. The. Zey.
Bell Pepper.

## CAPSICUM 2. Fructu cordiformi minori luteo:

## Goat Pepper.

The fmell of the fruit of this fpecies is very differently received in the world; fome find it extremely agreeable and reviving, while others think it as rank and difagreeable. It is much ufed in all the fugar colonies.

## CAPSICUM 3: Fructu conico oblongo majori.

Finger Pepper.

- CAPSICUM 4. Fructu minimo conico rubro. Piper Mart. 418.


## Bird Pepper.

All thefe fpecies of the Cap/icum or Indian pepper (as it is called in America) are cultivated, or vegetate naturally in moft parts of Jamaica. They grow generally in fmall tufted bufhes, and feldom rife above three feet from the ground: the laft fort however is more weakly than the reft, and when it meets with a fupport, fhoots to a moderate height ; and in fhady places, is frequently obferved to rite many feet from the root.

The capfulæ and feeds of thefe plants are full of a warm acrid oil, and generally prove an agreeable feafoning with thofe forts of food that require a gentle itimulus to promote the proper digeftion; and indeed fuch a ftimulus becomes more generally requifite in thofe warm countries, where a more free and conftant perficiration feldom fails to produce a weaknefs and languor in the bowels. They are uled by moft people in thefe colonies, and always obferved ta give an appetite, to help digeition, to promote the tonic motion of the vifcera; and in more robuft habits is fometimes obferved to purge with a heat and tenfion about the podex.

## O F J A M A I C A.

There is a mixture made and ufed in fome of our colonies, called Mandram, in which a deal of either the one or the other of there is employed, and which feldom fails to provoke an appetite in the moft languid ftomachs. The ingredients are, fliced cucumbers, efchalots or onions cut very fmall, a little lime-juice, and Madeira wine, with a few pods of bird or other pepper well mathed and mixed in the liquor.

The pods of this laft fort dried, and pounded with a fufficient quantity of falt, is the Cayan pepper or butter of the Wel-Indians.

## LYCIUM 1. Spinofum, foliis inferioribus confertis ovatis, ad petiola reflexis quandoque crenatis.

## The aculeated Lycium, or Lance-wood.

This thrub is common in moft parts of the ifland, but feldom grows to any confiderable fize or thicknefs: the leaves are oppofite in the young branches, and from the alæ of thefe it generally throws out fo many long and flender thorns,

The wood is tough and elaftic, añd chiefly ufed for lances.
LYCIUM? 2. Fruticolum foliis inferioribus minoribus ovatis vix petiolatis, superioribus oppofitis.
The fmaller Lycium, or Lance-wood.
Periantium Tubulato-campanulatum, quinque foliolis minimis quaf terminatum.
Corolla Monopetala tubulata, tubus cylindraceus calice triplo langior in fauce villofus, limbus patens quinquepartitus, laciniis ovatis.
Stamina. Filamenta quinque tubo corolla adnata, antheræ oblongce inter villos foris recondita.
Piftill. Germen conicum depreffum; Atylus bifidus; figmata oblonga; cetera, defiderantur.
Ifound this little fhrub at the entrance into Sixteen Mile-walk, on the fide of the eaftern cleft above the river; the whole ftalk was not much above an inch and a half in diameter. The appearance of the plant indaced me to range it in this clafs, tho' I had not feen the fruit.

METOPIUM I. Foliis fubrotundis pinnato-quinatis, racemis alaribus. Tab. 13. f. 3 .

Terebinthus Maxima peninis paucioribus \&c. Slo. Cat. 167. \& H. ii. tab. 199.

> The Hog-gum Tree.

Periantium Monopbyllum cyatbiforme quinquecrenatum parvum.
Corolla : Pentapetala, petalis oblongis parieti calicis inferne adnatis.
Stamina. Filamenta quinque brevia petalis fuppofita, antheræ erectice oblonga.
Piftill. Germen ovatum calice quafi inclavatum, ftylus brevis, ftigma acutum. Pericarpium. Capfula oblongo-ovata fucco aeri terebintbinaceo turgida.
Semen Unicum bilobum cap̂fulam quaf $e_{1}$ calice formatam vix replens, membrana propria teelum, et findo capfula fubfantaculo proprio ligatum.
This tree is frequent enough in $\mathcal{F}$ amaica, and well known for its medicinal gum, to which the very hogs are faid to have recourfe when wounded in the woods. It feldom rifes to more than 25 or 35 feet, and is very fpreading towards the top. It is furnifhed with round pinnated leaves, which are feldom above five on every rib: and the

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flowers, which grow in clufters, are fucceeded by fo many reddifh fucculent capfulx. It yields a great quantity of a gummy-refin; which, when pure, is of a yellow colour, and, after a fhort time, acquires a hard fragil confiftence. It is daily ufed in ftrengthening-plaifters, for which it is defervedly much recommended. It is of a warm difcutient nature, and may be ufed, with great propriety, in all fwellings arifing from colds, the weaknefs of the veffels, or poverty of the juices, both externally and internally.

The gum diffolved in water, is an eafy purgative, and thought to be an extraordinary diuretic. See Sloane.

## CUPANIA 1. Arborea, foliis oblongis crenato-ferratis diftiche © alternatins fitis, racemis laxis propendentibus.

Cupania Plum. tab. 19.

## Loblolly=wood.

This fhrubby tree is pretty common in the lower hills of Famaica, and rifes; generally, to the height of 12 or 14 feet: the leaves are pretty large, and the wood foft and ufelefs, from whence its name. Each of the feeds has a proper cup within the capfule.

> VITIS 1. Silvefris, farmentis lete repentibus, uvis minoribus nigris. Vitis fructu minore rubro acerbo, \&cc. Sl. C. 171. \& H. 104. f. 110. Vitis vinifera Sylveftris Americana, \&cc. Pk. Phy. t. 249. f. 1. Vitis foliis cordatis fubtrilobis dentatis fubtus tomentofs. L. Sp. P1. Cevalchichiltæ Hern. 128.

## The Famaica Grape-vine, commonly called Water-withe.

The withe of this grape-vine, when it grows luxuriant, as it generally does in the higher woody lands of this illand, is fo full of juice, that a junk of about 3 feet will yield near a pint of clear taftelefs water; which has faved the lives of many who have wandered long in the woods, without any other refrefhment of a liquid fort. It produces a great quantity of fmall black grapes in the lower hills; but they are of a rough tafte, and would doubtlefs make an ex̧cellent red wine, if properly managed: they feem to thrive beft in the red hills,

## VITIS 2. Vulgaris uvis nigris $\mathcal{E}$ albis.

The common Grape-vine, with black and white berries.
This grape-vine is planted in gardens, as well as the following, for the fake of their berries; but no man has yet attempted to plant them in any quantity, or to make wine of them, in this country; though the ifland affords a thoufand other fruits, to inkarge the quantity and enrich the flavour of the juice. It is faid that grapes do not ripen regularly in thofe fultry climates, and I believe the affertion is generally true; but declare I have no where feen grapes ripen more regularly than the Mufcadine, and natives $\mathrm{do}_{\mathrm{z}}$ in that illand.

## VITIS 3. Uvis majoribus albis fucco melleo turgidis.

## The Mufcadine Grape-vine.

This plant thrives very well in Famaica, and anfwers better than any of the other forts that have been hitherto introduced there. It grows well in the lower lands, ripens all its berries nearly at a time; and doubt not but it may be brought, with care, to great perfection. Its clufters are generally very large, and the grapes very mellow and fweet in thofe parts; and, doubtlefs, would produce a
mellow and rich wine, if proper care had been taken to cultivate it in any quantity.

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IRON I. Herbaceus minor foliis oblongis levifime crenatis, fipulis ciliatis, floribus fingularibus ad alas. Tab. 12. f.3.
The flender reclining Iron.
Periantium Pentaphyllum, foliolis lanceolatis erecto-patentibus. Corolla Pentapetala, petalis oblongis fimbriatis.
Stamina. Filamenta quinque brevifima, antheræ oblonga filamentis duplo longiores.
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Piftill. Germen oblongo-ovatum, ftylus longitudine floris, ftigma fimplex. Pericarpium. Caphula ovato-acuminata unilocularis.
Semina Plurima Jubrotunda parva.
This beautiful little plant rifes, generally, in an oblique direction, and feldom fhoots above ten or twelve inches from the root; the ftalk is delicate, fmooth and round; and cafts a few flender branches on every fide, without any certain order: the leaves are finall, oblong, fmooth on the upper fide, very lightly crenated, and difpofed in an alternate but irregular order; they are fixed by fhort foot-ftalks, and adorned with remarkably ciliated ears, or fipulc, on each fide, at their infertions. The plant is very rare. I have found the fpecimens, from which thefe characters are taken, in the paftures between Mount Diable and St. Ann's.

## SARCOMPHALUS 1. Foliisovatis glabris alternis ad apicem leniter emarginatis, cortice interiori ferugineo.

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An, Boflia, L. Sp. Pl?
    Baftard Lignum-Vitce Timber-wood.
Periantium Monopbyllum ultra medietatem quinquepartitum, laciniis lan-
                            ceolatis patentibus.
Corolla Nulla.
Stamina. Filamenta quinque brevia umbilico foris adnata, E` incijuris cali-
    cis oppofita, antheræ fubrotunda.
Piftillum, Germen ovatum umbilico carnofo circumductum, filus brevis
    bifidus, ftigmata fimplicia.
Pericarpium. Bacca Drupa-ve, fubrotunda bilocularis.
Semina Bina femi-ppbarica folitaria.
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This tree grows in many parts of the ifland, and rifes, generally, to a very confiderable height : the trunk is often above two feet and a half in diameter, and covered with a thick fcaly bark. The wood is hard, of a dark colour, and clofe grain ; and is looked upon as one of the beft timber-woods in the ifland.

CELOSIA r. Foliis oblongis, foribus racemofe ficatis, fere fefflibus.
An, Celofia foliis oblongo-ovatis, pedunculis teretibus fubftriatis, \&cc. L. Sp. Pl ?
Amaranthus frutefcens erectus, spica viridi laxa \& frigofa, Slo. Cat. \& H. t. 9 r .

## The fhrubby Celofia.

CELOSIA 2: Major farmentofa affurgens, foliis majoribus avatis.
Baftard Hoop-withe.

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Both thefe fpecies are common among the buthes in the low lands about Spanifs Town and King fon: the latter feems to be only a variation of the other.

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ACHIRANTHES 1. Caule geniculato erecto, foliis ovatis oppofitis, Jpicis
                                    terminatricióus, appendicious multijetis.
    Achiranthes caule erecio, calicibus refexis jpica appredes. L. Sp. Pl.
    Blitum Zeylonicum Bur. Th. Zey. EC Centauritum ciliare minus, \(\mathcal{E}^{2}\). Pk .
        t. 82. f. 2.
    An, Scoru Cadelati. H. M. P. 10. \(\mathrm{t}_{\mathrm{i}} 79\).
            The larger Acbirantbes.
        Periantium Monopbyllum in quinque lacinias amplas crecto-patentes ad
        bajum Jectum.
    Nectarium? E fuperiori parte calicis, bafim verfus, affurgit appendix e feris
        aliquot aduncis formota, qua Borem © calicem refectit.
    Corolla Nulla.
    Stamina. Filamenta quinque in orbempofita, vix calicis dimidica longitudi-
                nis, erecto-patentia; antheræ fimplices.
    Piftillum. Germen ovatum, ftilus fimplex faminibus brevior, ftigma cb-
        tufum.
    Pericarpium. Capfula membranacea fubrotunda milocularis laciniis calicis
                tecta.
    Semen Unicum oblongum cylindraceum.
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    ACHIRANTHES 2. Foliis ovatis, foribus Jpicatis, appendicibus bifetis.
                    The fmaller Acbirantbes.
    Both thefe plants are very common about the Crefence; they have much the appearance of a Blitum, and feldom rife above two feet, or two feet and a half from the ground.

RAUVOLFIA r. Fruticofa folizs verticillatis tenuifime villofs.

> Rauvolia. L. G. H. C. \& Sp. P1.

The fhrubby Raurolfia, with the leaves difpofed in a verticillated order.
This little fhrub is very common in the Savannas about the town of Kingfon, and feldom rifes above three or four feet from the ground; the berries are finall, black, and fucculent, and the leaves very beautifully covered with a light down, which is hardly perceptible to the naked eye, The whole thrub is full of milk, and, more or lefs, of a deleterious nature.

NERIUM? I. Sarmentofum, foliis oblongis acutis oppofitis fubtus cinereis, tubo floris fauce ampliato.
The marfhy Nerium.
This plant rifes by a weakly trunk, to the height of four or five feet, and throws out a few long, flender and flexile branches, that ftretch to a confiderable diftance from the main ftem.

NERIUM 2. Sarmentum foliis nitidis ovatis venolis, pedunculis longis ramofs, floribus fauce ampliatis.

> The larger Savanna-flower.

$$
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\end{array}
$$

This plant, like the former, has a weakly ftem, whereby it commonly rifes to the height of two, three, or four feet above the root; and then throws out a good many long and flender branches, that fpread and climb among the neighbouring Thrubs. All the parts of this plant are extremely poifonous.

> NERIUM 3. Foliis lanceolatis verticilliter ternatis, flore quandoque pleno.
> Nerium. H. M. P.g.t. 1, 2.
> Frangi-panier a fleur double rouge. Barreri.

The South-fea Rofe.
This fhrub is cultivated in moft gardens in Famaica on account of its full and frequent flowers; it rifes by a foft lignous ftalk, and fhoots commonly to the height of fix or eight feet, throwing out many flender and flexile branches on all fides.
It is a very agreeable flowering fhrub in a garden, and generally bears large compofite flowers; but 1 have fometimes found them fimple and fertile, with all the characters of the clafs.

NERIUM 4. Sarmentofum fcandens, ramulis tenuibus folliculis gracilibus torofos. Tab. 16. f. 2.

## The nender-branched Nerium.

This curious plant is frequent about the foot of the mountains in Liguanea; I met with it in the road thro' Mr. Elletfon's. It js a weakly plant, which commonly fuftains itfelf by the help of the neighbouring bufhes, and frequently rifes to a contiderable height among them. The branches and follicules are extremely flender and delicate.

## PLUMERIA I. Arborefcens foliis lanceolatis, foribus fauce ampliatis fubcampanulatis.

## The narrow-leafed Plumeria.

This plant grows commonly from four to feven or eight feet in height, and is always full of nender flexile branches; the flowers are yellow, and moderately open below the margin: it grows near Port Moria, in St. Mary's, and near MorantBay, in St. Tbomas's in the Eaft.

PLUMERIA 2. Arborefcens ramulis craffis, foliis oblongo-ovatis, petiolis biglandulis, foribus geminatis per Jpicas terminales.
Plumeria foliis ovato-oblongis. L. H. C. \& Sp. Pl.
Plumeria fore rofeo odoratifamo. Inf. \& Ehret. t. xí.
Plumeria Catefb. ii. t. 92. \& Pk. t. 207. f. 2.

## The Jafmin Tree.

This fhrub rifes by a robuft divided trunk, to the height of feven or eight feet, or better. It is planted in the gardens on account of the beauty and fmell of its flowers: the branches are pretty thick, and the leaves veined and oval. It always bloffoms before it throws out its leaves.

## PLUMERIA 3. Arborefcens racemis terminalibus pedunculis longis nudis incidentibus.

## The white-flowered Jafmin Tree.

This tree is very like the foregoing both in fize and difpofition; but the leaves are narrower, and ferrated; and the flowers without fmell, and difpofed in a dif-

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ferent manner. It grows in the lower mountains of Liguanea, and in the hills beyond Mrs. Guy's, in the road between Sixteen-mile-walk and St. Mary's.

ECHITES 1. Scondens folius ovatis nitidis venofs; foribus berbaceis.
Apocynum foandens majus, \&cc. Slo. Cat. 89. \& H. t. I3r. f. 2.
An, Katu-pal-valli. H. M. p. 9. t. 1 I.
The Savanna Flower, with a fimple narrow flower-tube.
Periantium Pentapbyllum parvum, foliolis angufis erecto-patentibus.
Corolla Monopetala tubulata; tubus longus angufus ad medietatem leniter tumidus, quinque frriis notatus; limbus patens in quinque lacinias oblongas contra motum folis reflexas Jectus.
Stamina. Filamenta quinque brevia, tubo corollde adnata; antheræ Jagittate langiores, in centro tubi foris comum formantes.
Nectarium? Glandula quinque minores circa germen difofite.
Piftillum. Germen ovatum obfrure bifidum; Atylas Jmplex longitudine fanminum; ftigma craffiufculum oblongum, obtufum molle antberis agglutinatum.
Pericarpium.' Folliculi duo oblongi barifontaliter reflexi angufi univalves.
Semina Numerofa imbricata pappo-longiori coronata.
Receptaculum. Fafciola membranacea per longitudinem folliculi porrecta.
This plant is common in the Savannas about King fon, and climbs on every bufh it grows by: its flowers are of apale yellow colour, with a pretty long and flender tube; and the leaves of an oval form, large and oppofite: it is (like the reft of the clafs) more or lefs of a deleterious nature. There is a fmall variation of this plant, with pointed leaves and very flender ftalks: it grows in the drier parts of the Savannas.

> CAMERARIA I. Arborea foliis ovato-acuminatis nitidis rigidis reflectentibus, folliculis alatis.
> An, Cameraria Foliis fubrotundis utrinque acutis. L. H. C \& . Sp. Pl. The Baftard Mangeneel.

This tree is frequent in Weftmoreland and St. 'Fames's; it grows commonly to the height of 29 feet or more, and is faid to be a good timber-wood, but is full of an acrid milky juice: the leaves are fomewhat like thofe of myrtle, the flowers fmatl and tubular, like thofe of the greateft part of this clafs; and the follicules or pods fwelling at the bafe, and ending each in a large membranous wing.

TABERNEMONTANA 1. Frutefcens faliis fubnitidis cratis venofis.
Tabernæmontana foliis oppojitis ovatis. L. Sp. Pl.
Tabernæmontana Citri folio undulato. Plum.
Curutu Pala, H. M. p. 3. t. 46.
The large leafed Tabernemontana.
This flrub is common in the low lands, to the eaft of Hunts-bay; it futuom rifes above five feet from the root, and is every where fupplied with large oblong leaves, not unlike thofe of a citron-tree, either in fize or form.

## S E C T I O N II.

Of fuch as bave five Filaments or Stamina, and two Styles in every Flower.


SCLEPIAS 1. Frutefcens incana, foliis majoribus fubrotundis, petiolis breviffimis, foribus umbellatis.

## O F J A M A I C A.

Afclepias foliis amplexantibus oblongo-svatis. L. Flo. Zey. \& Sp. Pl. Apofinum Indicum maximum, \&\&c. Thez. Zey. Ericum. H. M. p.2. \& Pk. t. 175 . f. 3.

## The Auriculas or French Jafmin.

This fhrub is now common in all the Savannas about Kingfon and Old-barbour; the trunk is pretty much divided above the root, and the branches furnihhed with large roundifh leaves, which feem to embrace them at their infertions. The bark of this plant is whitih and fpongy, and the leaves befet with a whitifh down; the flowers are difpofed in umbellated groups at the extremities of the branches, and fucceeded by fo many large oval follicules.

# ASCLEPIAS 2. Erecta foliis angultis acuminatis verticilliter ternatis, floribus umbellatis terminatricibus. <br> Apocynum erectum folio oblongo, \&cc. Slo. Cat. 89. \& H. t. 129. <br> <br> Wild or Baftard Ipecacuanba. 

 <br> <br> Wild or Baftard Ipecacuanba.}

This plant is very common in all our fugar-colonies; it grows upright, and feldom rifes more than two or three feet above the root: the flowers are of a fine faffron colour in the low lands, but in the cooler inland partures they change to a white. The juice of the plant, made into a fyrup with fugar, has been obferved to kill and bring away worms wonderfully, even when moft other vermifuges have failed; it is given to children from a tea to a common fooonful.

The juice, and pounded plant, is applied to fop the blood in freh wounds, and is faid to be a very powerful aftringent in fuch cafes. The root dried anit reduced to powder, is frequently ufed by the poorer fort of people as a vomit.

## ASCEEPIAS 3. Funiculacea latè fcandens, foliis rarioribus cordato-lanceolatis, floribus umbellatis. <br> Apocynum fruticofum fcandens, \&c. Slo. Cat. 89. \& H. t. 13 I.

This plant rifes by very flender weakly ftalks, and frequently fpreads itfelf to the diftance of fome yards from the main root: the plant is furnilhed with very few leaves, but it has a good many flowers difpofed in large umbellated groops: the ftalks are flender, and the whole plant of a dark green colour; it is very fullof milk, and common in the larger inland woods.

ASCLEPIAS 4. Scandens villofa major, foliis © copfulis majoribus avatis. An, Michuacanna. Hernandes, 164?

The climbing Afclepias, with large pods.
I found this plant at Mr. Farrell's, in Portland, and near Mr. Beckford's, in St. Thomas in the Eaft; it is a climber, and generally fupported by the help of the neighbouring buthes, or found creeping among the rocks: the follicules, or pods, are fmooth and oval, and feldom under two inches in the tranfverfe diameter. It has all the appearance of the Mecbuacanna of Hermandes, and do not doubt its being the fame.

## ASCLEPIAS 5. Minor fandens foliis rarifimis, floribus paucioribus racemofis racemis jparfis,

This plant is pretty much like the third fpecies, but does not fpread near fo much, nor bear its flowers in the fame manner: it is more frequent in the lower fwampy lands.

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HERNIARIA 1. Hirfuta repens ad nodos alternos forida, foliis ovatis, petiolis marginatis Jemi-amplexantibus, foribus confertis Jeflicibus.
An, Herniaria birfuta. L. Sp. Pl.
Amaranthoides bumile Curafavicum, \&cc. Slo. H. t. 86. \& Petiv. Pl. Amer. t. 3. f. 22.

The hairy Rupture worth.
This little plant is found creeping in all the low lands, and dry Savannas about King/ton; it grows generally in tufts, and fpreads about fix or eight inches from the root.

## CHENOPODIUM 1. Humile multiflorum, foliis maculatis ovatis, foribus racemofis alaribus.

## The fmaller Goofe-foot, with fpotted leaves.

This plant is frequent in all the gardens about Kingfon; it generally rifes from three or four inches to feven or eight, or more; and is remarkable for its fpotted leaves, and great quantity of flowers. It is fometimes gathered and ufed as a green.

BETA 1. Latifolia alba vel rubra. C. B.<br>Beta. L. H. C. \& Sp. Pl.

## Beet.

This plant has been introduced to, and is now cultivated in many parts of $\mathcal{F}$ amaica: it thrives pretty well in the cooler mountains; but as the ground is generaily more ftiff, and the exhalations by the leaves more abundant in thofe parts, thefe fiefhy roots feldom grow fo luxuriant, or fhoot fo direct into the ground. The root is fometimes ufed in famaica, but not much efteemed.

> GOMPHRENA 1. Erecta birfuta, foliis oblongoovatis, petiolis brevibus amplexantibus, capitulis Jolitariis.
> Gomphrena Caule erecto, foliis lanceolatis ovatis, pedunculis dipbyllis. L.H. C. \& Sp. Pl.

> Gomphrena Eic. The. Zey. pag. 15. p. 6?
> Batchelors-Button.

Whether this has been originally introduced to that ifland, or a native, I am not able to determine; it does however now grow wild about the town Savannas, and may be obferved every where among the bufhes, when the flowering feafon comes on: it rifes generally to the height of twelve or fifteen inches, and is a pretty flowering plant in a garden.

GOMPHRENA 2. Repens rufefcens, foliis linearibus crafiufculis, capitulis alaribus.
Gomphrena, foliis lanceolato-fubulatis, caule dichotomo, capitulis axillaribus pedunculatis. L. Sp. Pl.

## The Creeping Gomphrena.

This creeping plant is very common about Rock-river, and fpreads a great way among the grafs; the ftem is pretty flender, and throws out a few fibrous roots at every joint: the whole plant has a reddih-brown caft in its colour, and fomething of the appearance of Purfane.

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NAMA.I. Reclinata villofa, foliis ovatis, petiolis marginatis recurrontibus, floribus Jolitariis. Tab. 18. f. 2.

The fpreading hairy Nama.
Periantium Monophyllum in quinque lacinias lineares erectas acutas ad bafim Jectum.
Corolla Monopetala tubulata; tubus cylindraceus longitudine fere calicis; limbus patulus quinquecrenatus.
Stamina. Filamenta quinque; antheræ fubrotundc.
Piftillum. Germen oblongum; ftyli duo longitudine fere ßaminum; figmata Simplicia acuta.
Pericarpium. Capfula oblonga unilocularis bivalvis longitudinaliter debicens. Semena Plurima fubrotunda diffepimento affixa.
This little plant is not common in Gamaica: I have met with a few feecimens of it about the Angels beyond Spanifh Town; it fpreads about the root, and feldom grows above five or fix inches in length. The whole plant is fomewhat hairy, and the ftalk and branches margined.

> ERYNGIUM 1. Factidum foliis inferioribus angufis ferratis, fupcrioribus laciniatis $\mathcal{O}$ aculeatis.
> Eryngium foliis gladiatis ferrato-jpinofis multifidis. L. Sp. Pl.
> Eryngium fotidum foliis angufis ferratis., Slo. Cat. 127. \& H. t. 156.

## The finking Eyrngo, or Fittweed.

This plant is frequent in $\mathfrak{F}$ amaica, as well as in moft of the other fugar colonies; it rifes from a thick proportioned root, and fpreads a good many leaves about the crown, before it throws up a ftalk; but as the feafon advances, it fhoots into a branched ftem, which generally rifes to the height of one or two feet above the ground, and bears all its flowers in roundifh radiated heads.

All the parts of this plant are reckoned very powerful antihifterics, and 'much ufed by the negroes and poorer whites, on all occalions of that nature ; it is chiefly adminiftered in decoctions or infufions.

HYDROCOTYLE I. Foliis orbiculatis peltatis crenatis, umbellis multifloris. Hydrocotyle, foliis peltatis, umbellis multiforis. L. Sp. PI.
Hydrocotyle, foliis peltatis orbiculatis undique emarginatis. L. H. C. \& Gro. Fl. Virg.
Cotyledon aquatica, \&c. Slo. H. 212.
Hydrocotyle vulg. Tournef. Inft. 328.

## Water Pennyworth.

HYDROCOTYLE 2. Humilior, foliis Semi-elipticis crenatis, fapo florifero partiali brevi nudo.
Hydrocotyle foliis reniformibus aqualiter crenatis, L. H. C. \& Sp. Pl.
An, Afarum e terra Mariana. Pk. t. I5. f. 3?
An, Ranunculo-affinis umbelliferis accedens ejufdem. Tab. 1c6. f. 5 ? Codagen. H. M. p. 10. t. 46.

## The Mountain Pennyworth.

Both thefe plants are frequent in Gamaica: the former grows in all the marfhes and ftagnating waters about the lower lands; the other is found in the mountains between Sixteen-mile-walk and St. Mary's.

The root of the firft fpecies is reckoned aperitive and deobftruent ; but all aquatic plants of the umbelliferous clafs, are defervedly fufpected, and feldom ufed in prefcriptions.

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## DAUCUS I. Temuifolius Jubbirfutus, ambella in centro deprefa. <br> Daucus. L. H. C. \& Sp. Plant. <br> Daucus Seminibus bifpidis. Roy. ©o vulgaris. C. B.

## The Carot.

This plant is cultivated in the mountains of Gamaica, and thrives fo well in all parts of Nerw Liguanea, that moft people in the towns of King fon and St. Jago are plentifully fupplied with the root during the fummer-feafon.

ANETHUM i. Fructibus ovatis. L.H.C. \& Sp. Pl.
Fœniculum dulce. Bau. Pin.
Sweet Fennel.
This plant was, doubtlefs, firft introduced here from Europe; but it now grows wild in many parts of the illand, and thrives every where as well as if it had been a native. The roots are aperitive and diuretic; and the feeds carminative, and richly impregnated with a warm aromatic oil.

A water diftilled from the plant ufed to be kept in the fhops formerly, and was frequently ordered in ophthalmic lotions.

## APIUM 1. Foliis caulinis linearibus. L. H. C. \& Sp. Pl.

Parfly.

This plant is cultivated in every garden in Yamaica, and grows very luxuriantly in all parts of the illand: the roots are aperitive and diuretic, and frequently ordered in deobftruent apozems. The feeds are carminative, and the leaves aperitive and nutritive : they are chiefly ufed in fallets and feafonings.

## APIUM 2. Foliis caulinis cuneiformibus. L. Sp. Pl. \& H. C. Apium paluftre C. B. Ef paludapium quorundam. <br> Celeri or Smallage.

This plant is cultivated, and thrives extremely well in all the mountains of New Ligruanea: it is a gentle wholfome aperitive and diuretic; is chiefly ufed in foops and fallcts, and is fometimes ordered in aperitive apozems.

## PASTINACA 1. Foliis laceratis pinnatis. <br> Partinaca foliis fimpliciter pinnatis. L. H. C. \& Sp. Pl.

## The Parfnip.

This plant has been introduced in Famaica fome years ago, and is now frequently cultivated in the mountains of New Liguanea, where it is fometimes obferved to grow wild in great luxuriance, and to propagate iffelf without any care; but it is not liked by many in that part of the world.

It is a ftrong nutritive root, and fometimes ferved up at table like cafrots, and other roots.
S E C T I O N III.

Of Juch as bave five Filaments and three Styles in every Flower.
HUS? I. Foliis pinnatis ovato-acuminatis fubtus villofs, foribus racemofs tetrandris terminatricibus. Tab, 8. fo 3.
The villous Rbus, with tetrandrous Flowers.

# O F J A M A I C A. 18 万 

Periantium Monopbyllum minimum quadridentatum.
Corolla Tetrapetala, petalis lanceolatis reflezentibus.
Stamina. Filamenta quatuor erecta, longitudine petalorum foris; anthe: cordato-fagittate.
Pifillum. Germen Jubrotundum leniter depreffum; fylus nullus; ftigmata duo glandulofa Jubrotunda parva funmo germini impofita.
Pericarpium EOc. dejderantur.
This fmall tree grows in the road that leads from New Greenzeich to Liguanea; it feldom rifes above ten or twelve feet in height, and is plentifully furnifhed with branches towards the top: the flowers are very numerous, and blow generally before the floooting of the leaves, or very foon after.

CHLOROXYLUM 1. Foliis ovatis glabris rigidis trinerviis, floribus fingu-
laribus. Tab. 7. f. I. The Greenheart or Cogwood Tree.
Periantium Monopbyllums rotatum in quinque partes lancoolatas profunde Jectum.
Corolla Floris vicem gerunt foliola minima inaqualia, laciniis calicis adnata; aliud nullum.
Stamina. Filamenta quinque erecta ex umbilico germini circumducto affurgentia, et incifuris calicis oppofita; antherx fubrotunda?
Pitillum. Germen fubrotundum minimum umbilico craffo carnofo circumduElum; ftyli tres Jubulati breves; ftigmata acuta.
Pericarpium. Drupa ppberica unilocularis. An, germen triloculare?
Semina. Nucleus bilobus pericarpio ligneo corticato tectus et membrand propria obvolutus.
This tree is common in many parts of the mountains, and rifes by a ftrong branched trunk to a very confiderable height; the inward bark is of a light blood colour, and inclofes a ftrong greenilh timber within the fap: the leaves are fmooth, of an oval form, and adorned with three confiderable arched nerves each; they refemble thofe of the Camphire tree, both in Chape, fize, and texture. This tree bears its fruit, which feldom exceeds a naked hafel nut in fize, fcattered up and down upon the branches.

The wood is very tough and hard, and obferved to anfwer better than any other fort for the coggs ufed in the rolls of a fugar-mill. It is generally efteemed one of the beft timber-woods in the ifland, and ufed on all occafions where ftrength and durability is required.

SPATHE I. Caudice fimplici, fronde pinnata comofa, racemo fpatioffimo laxo terminali.
Aceri aut paliuro affinis, arbor caudice non ramofa, E'c. Slo. Cat. 138.
Carpinus Zeylonica fliculofa. The. Zey. 54 .

## The Maiden Plumb Tree.

Periantium Pentapbyllum coloratum; foliolis oblongis.
Corolla Pentapetala, petalis oblong is.
Stamina. Filamenta quinque inferne latiora fubbirfuta $\mathcal{O}^{\circ}$ appendicula denticuliformis utrinque referta, fuperne tenuia \& arcuata; antheræ ovatce.
Piftillum. Germen ovatum faminibus dimidio brevius; ftylus nullus; fligmata tria fubrotunda.
Pericarpium. Capfula oblonga trigona trilocularis.
Semina Solitaria triquetra oblonga.

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This tree is frequent in the rocky hills above the ferry, and makes a moft beautiful appearance in the woods when in bloom: it rifes by a fingle flender ftem, like the palms, and bears all its oval leaves in a pinnated order, on moderate ribs difpofed clofely together about the top, from the center of which the flower-fike rifes in its due feafons: this is very fpreading, and generally fhoots fo as to appear a large blooming pyramid many feet above the foliage. The trunk is feldom divided, but is fo very like what we have already defcribed under this Englifb appellation, both in fize and appearance, that I could never diftinguith them when out of flower; nor do I yet know which of the two is the true timber-tree. This would make a moft beautiful flowering-fhrub in a garden, for it feldom rifes above fourteen or fixteen feet from the ground, and its flowering-top is generally from four to fix feet in height.

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PHYLLANTHUS I. Foliis latioribus utrinque acuminatis apicim verfus cre-
                        natis, ad crenas foridis.
    Phyllanthus foliis lanceolatis ferratis, crenis floriferis. L. H. C. \& Sp. PI.
    Phyllanthus. Cat. ii. t. 26. E Hemionitidi afinis, \&c. Pk. t. 36.f. 7.
    The large-leafed Pbyllantbus.
    Periantium Nullum.
    Corolla Monopetala ad bafom ufque in quinque partes Secta.
    Stamina. Filamenta quinque brevifima; antheræ" fubrotunde circa bafmo
                germinis fite.
    Piftillum. Germen Jubrotundum; Atyli tresbreviores, ftigmata tenuia quan-
                doque lacerata.
    Pericarpium. Capfula fubrotunda tricocularis.
    Semina In fingulo loculamento bina.
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PHYLLANTHUS 2. Foliis anzufis longioribus levifime crenatis, quando-
que confertis.
Phyllanthus Americanus anguftiori et longiori folio. Pk. t. 247. f. 4.
The narrow-leafed Pbyllantous.

Both thefe fmall fhrubs are very common in the rocky hills of Gomaica, and feldom rife more than four or fix feet above the root, but are often much lower: they are both remarkable for the difpofition of their flowers and feed-veffels.

PUMILEA. I. Minima fubbirfuta, foliolis angufis profunde ferratis.
Chamæcyftus, Ec. Petiv. Gaz. t. 38. f. 9.
Chamæcyftus urtice folio, \&c. Slo. Cat. 87. \& H. t. 127.
The fmaller Pumilea.
Periantium Tubulatum infundibuliforme, bracteis geminis linearibus fuffultum; limbus quinguepartitus.
Corolla Pentapetala, petalis ovatis, unguibus anguftis tubo calicis adnatis.
Stamina. Filamenta quinque longitudine tubi calicis; antherx cordate in collo calicis fita.
Piftillum. Germen ovatum; fyli tres longitudine faminum; figmata ramofa.
Pericarpium. Capfula ovata unilocularis trivalvis.
Semina Sex Reniformia leniter compreffa.
This little plant grows about Old-barbour, and the foot of Liguanea-mountains; it is always fimple and upright, and never rifes more than two or three inches above the root: the flowers are always fingle, and difpofed at the alæ of the upper leaves.

PUMILEA?

## O F J A M A I C A.

PUMILEA? 2. Subbirfuta fimplex, foliis linearibus fubcrenatis. Chamæcyftus caule birfuto, \&c. Slo. Cat. 87. \& H. t. 127. The larger Pumilea.
Periantium Monopbyllum in quinque lacinias ultra medietatem fectum.
Corolla Pentapetala, petalis anguftis longioribus, incifuris calicis oppofitis.
Stamina. Filamenta quinque longitudine fere foris; anthere oblonge inaquales, quafi lacerata.
Piftillum. Germen ovatum; flli tres iultra medietatem bipartiti; ftigmata lacerata.
Pericarpium. Capfula fubrotunda unilocularis trivalvis, receptaculis linealibus, valvis longitudinaliter interne adnatis.
Semina Plura fubrotunda.
This little plant grows, with the foregoing, at Mr. Smith's Pen in Liguanea, and feldom rifes above four inches from the root: the plant ftands erect, and is furnimed with very narrow leaves; and the flowers grow fingle at the alx of the upper leaves.

TURNERA 1. E petiotis florens, foliis ferratis. L. H. C. \& Sp. Pl.
The yellow-flowered Turnera.
This plant grows in great abundance about the red hills, and feldom rifes above four or five feet from the root; it has a fhrubby but weakly falk, adorned with a few ferrated oval leaves, and bears large yellow flowers, that have fomewhat of the appearance of the malvaceous tribe, at firf fight.

$$
\mathrm{S} \quad \mathrm{E} \quad \mathrm{C} \quad \mathrm{~T} . \mathrm{IV} .
$$

Of fucb as bave five Filaments and five Styles in every Flower.

A
RALIA I. Arborea foliis nitidis oblongo-ovatis, umbella laxa, radiis fingulis glandula notatis.
An, Laurifolia arbor fore tetrapetalo, \&cc. Slo. Cat. \& H. t. 163. f. 2.
The Galapee, or Angelica Tree.
This tree grows at the foot of the red hills near the Angels, and feldom rifes above fourteen or fifteen feet in height; the leaves are moderately large, and the tops of the branches adorned with a great number of flowers, difpofed in an umbellated but irregular order, which are fucceeded by fo many fmall, whitifh, fucculent berries: the fmall umbellæ have-each from eight to thirty radioli.

ZANTHOXYLUM 1. Foliis oblongo-ovatis pinnatis © leviter crenatis, floribus racemofis, caudice Jpinofa, ligno fubcroceo. An, Zanthoxylum foliis pinnatis. L. Sp. Pl.?

Prickly Yellow-wood, or yellow Hercules.
Periantium Monophyllum minimum quinquepartitum, vix notabile.
Corolla Monopetala in quinque lacinias oblongo-ovatas patentes, fubcocbleatas, ad bafin fers fecta.
Stamina. Filamenta quinque erecto-patentia, flore longiora; antheræ fubrotunda.
Pifillum. Germen depreflum; Ayli, vix alli; fligmata quinque erecta oblonga, in orbem pofita.

Pericarpium. Capfula gibbofa quinqueloba, ultra medietatem divija; lobis fubovatis unilocularibus, loculamentis difinetis. Semina, ovato-angulata folitaria.
This tree is frequent in moft parts of Jamaica, and grows to a very confiderable fize; it branches pretty much towards the top, and rifes frequently to the height of twenty or thirty feet, or better: it is looked upon by many as a dye-wood, but is generally ufed in buildings, and efteemed a good timber-tree.

SURIANA I. Maritima foliolis lanceolatis, floribus fingularibus, Aaminibus fubbirfutis.
Suriana. Plum. t. 40. \& Suriana, L. H. C. \& Sp. Pl.

## The narrow-leafed Suriana.

This little Mrub is frequent by the fea-fide in the parih of St. Yames, and feldom rifes above three or four feet from the root; the branches are pretty flender and flexile, and the leaves difpofed more thickly towards the tops.

SCIODAPHYLLUM I. Foliis majoribus oblongis petiolis communibus umbellatim affixis, floribus fpicatis. Tab. 19. fig. 1, 2.
The long-leafed Sciodaphyllum.
Periantium. Margo germinis minimi quinquedenticulata, denticulis parvis obtufis.
Corolla Monopetala tubulato-campanulata quinquecrenata, \&c?
Stamina. Filamenta quinque brevifima; antheræ oblonga.
Piftillum. Germen minimum obverfe conicum, calicula coronatum; fyyli quinque breves; Atigmata obtufufcula. Cætera defiderantur.
I have never feen but one of thefe trees; it grew on the right-hand fide of the road between Mr. Fones and Mr. Adams's, in the mountains of Nero Liguanea, to the fouth, immediately under the top of the hill; the trunk was about twelve or thirteen inches in diameter, and raifed its branched top to the height of fourteen or fifteen feet from the ground. The leaves are generally from fixteen to twenty together, fimple, oblong, and fupported by moderate foot-ftalks, whereby they are faftened in an umbellated form to the top of fo many common fupporters; but thefe are generally longer than the leaves; they are of a moderate thicknefs, and fuftain their burthen with great eafe, while the others fpread themfelves like an umbrella, and caft a beautiful fhade below them: the flowers ftand on fimple robuft fikes; but as they were not grown to perfection when I gathered this fpecimen, I could not give the characters with all the exactnefs I could have wifhed.

> C L A S S VI.

Of the Hexandria, or Vegetables that have fix Filaments in every Flower.
: $\quad \mathrm{E} \quad \mathrm{C}$ T. I.
Of fuch as bave fix Filaments, anci? one Style or fensale part, in every Flower.

## O F J A M A I C A.

Spadix Ramofus, ramulis fimplicibus, Jpatbis propriis fimplicibus teetis; ita ut Spadix imbricatus evadit. Genitalia omnia bermapbrodita funt. Periantium Nullum. Corolla Nulla.
Stamina. Filamenta Jex brevia germini lateraliter adnata vel incidentia; anthere oblonga.
Piftillum. Germen parvum globofum; Atylus brevis fimplex; Atigma ainpliatum vaginatum $\mathcal{E}$ quafin infundibuliforme.
Pericarpium. Bacca unilocularis, nucleo unico nauco ofjeo tecto, referta.
This tree is frequent in Famaica, and covers whole fields in many parts of the inland: it grows both in the rocky hills, and low moift plains near the fea, but feems to thrive beft in the former. It fhoots by a fimple ftalk, and rifes generally from four or five, to ten or fourteen feet in height, It is always furnifhed with leaves of the form of a fan, fuftained by flender comprefled foot-ftalks, and bears a great abundance of fmall berries, which ferve to feed both the birds and beafts of the wood, when they are in feafon. The trunk feldom exceeds four or five inches in diameter; it is called the Thatch-pole, and is much ufed for piles in wharfs, and other buildings made in the fea; for it has been obferved to fland the water very well, and is never corroded or touched by the worms: the foot-ftalks of the leaves are very tough, and ferve (when fplit and pared) to make bafkets, bow-ftrings, ropes, and a thoufand other conveniencies, where flrength and toughnefs is required. The leaves are called Thatch, and are daily ufed as fuch in moft new tet:luments and plantations, efpecially for all the out-houfes, and is found to ftand the weather for many years; but fuch coverings are apt to harbour rats, and other vermin, which prevents a more general ufe of them.

$$
\begin{aligned}
& \text { CORYPHA? 2. Palmaeca aflurgens, foliis flabelliformibus Jemipinnatis, pe- } \\
& \text { tiolis majoribus compreflis. } \\
& \text { Corypha. L. H. C. \& G. Pl. }
\end{aligned}
$$

## The larger Palmeto.

This tree is as common in the leeward parts of Famaica, as the other is in the eaftern; and each equally fcarce in the territories of the other. It grows by a ftrong fimple ftalk, and rifes commonly to the height of fixteen or twenty feet; it is adorned with a number of large palmated leaves at the top; but the rib, which is always compreffed, and about two inches or more in breadth near the middle, tapers from the bafe to the top, and runs forward to the very center of the leaves, demitting its connected ribs or foliage equally on both fides, at the extremity; thefe are very large, and terminated by fo many radiated points in the circumference of the fan; but throw out fo many thready nerves from their interftices, as they feparate.

I have not feen the flowers of this plant, but have been induced to place it here, from its likenefs to the foregoing. The trunk is put to no ufe in that ifland, that I could learn, but doubtlefs would ferve for the fame purpofes with the foregoing, and likely better, as it grows to a larger fize. The foot-ftalks of the leaves are fometimes fplit and made into bafkets; and the leaves much ufed for thatch, and, probably, are much better than the others, as they are extremely tough; they are alfo fplit into fmall flips, and ufed for mending old chairs.

TRIOPTERIS 1. Erecta fruticofa, foliis oblongis acuminatis ramulis gracilibus. Tab. 18, f. 1.
Triopteris, L. Sp. Pl.

## THE NATURALHISTORY

Carpinus forte vijcofa, \&cc. Bur. Th. Zey.
Aceri vel palicero affinis angufo oblongo ligufri folio. Slo. Cat. 138. \& H. t. 162.

## The Switch-Sorrel.

Periantium Iripbyllum, foliolis ovatis cocbleatis amplexantibus. Corolla Nulla.
Stamina. Filamenta fex tenuia brevifima; antheræ majores inequales oblonga A leniter arcuata, Ariata ereczo-conniventes.
Piftillum. Germen fubrotundum triquetrum; flylus fimplex erecus brevis; Atigma obtufe trilobum.
Pericarpium. Capfula membranacea oblonga triangularis, tribus alis membranaceis aucta, trilocularis.
Semina Oblonga folitaria.
This flender fhrub is very common in the moft barren parts of the red hills, and feldom rifes more than fix or feven feet above the root: both the trunk and branches are very flexile and tapering. The tafte of the whole plant is acerb and bitterih.

> BROMELIA 1. Fructu conico-ovato, carne lutea, foliis coronie brevioribus. Bromelia. Plum. t. 8.
> Bromelia folits ciliato-jpinofs, mucronatis; spica fubtus carnofa. L. Sp. Pl.

## The Sugar-loaf Pine-Apple.

This plant is now common in Jamaica, and cultivated by moft people in their gardens; it is propagated both by the crown and the fprouts or fide-branches; but thefe come to perfection earlier, tho the other feems the moft natural gem, as it always cafts its roots in the fruit itfelf, while yet in a growing ftate: they thrive beft in a rich mould and a warm fituation, but feldom rife above three feet from the ground; the ftalk fhoots from the center of the leaves (which are generally difpofed very thick about the root) and bears a large fingle fruit, or rather a heap of fmall fucculent capfulæ concreted into a common mafs towards the top; but the fibres of the main item continue their courfe thro' the center of this mafs, and, in moft fpecies, turn into a Chort foliated fprout, or young plant, at the top, cafting a few tender radiculi on every fide, into the pulp of the fruit.

This has been always efteemed the richeft and beft fruit in America; and indeed its form, fize, and flavour, contribute alike to give it the pre-eminence: it is in general agreeable to the flomach; but the natural mellownefs of its juice renders it more agreeable to the natives and old ftandards, than it poffibly can be to new comers, who generally think it too rich and cloying. The following forts are thought to be only variations of this, but they are feldom fo lufcious, grow generally of a different fhape, and are vaftly more agreeable to heated ftomachs. The juice fermented would make a good wine; it is fometimes mixed with the rumliquor, when it ferments, and is thought to give it a pleafant flavour: it is ferved up with other fruit at moft gentlemen's tables in America.

BROMELIA 2. Fructu oblongo turgido, carne fublutea, foliis coronce longioribus.
Kapa tsjakka. H. M. p. 10. t. I \& 2.

## The Black Pine-Apple.

BROMELIA 3. Fructu rotundiori, carne albida Seminibus vidua, foliis corona brevioribus quandoque inermibus,
The Queen Pine-Apple.

## O F J A M A I C A.

Thefe two laft fpecies are more common than the firft, and planted in moft gardens in this country; their fruit is generally larger and roundifh, but grows feldom yellow, even in the furface, nor is the pulp of the fruit fo rich, tho' generally more agreeable to new comers, and people of a warm habit.

Pifo fays, p. 195. Animum languidam recreat, fomacbum naufeabundum refituit; liquor vel vinum urina fuppreffioni fuccurrit.

> BROMELIA 4. Caule afurgenti, racemo terminali, fructibus fejunctis. Bromelia foliis ciliato-jpinofs mucronatis, racemo terminatrici. L. Sp. PI。 Caraguata Pif.

## The Pinguin.

This plant is very common in Famaica, and grows wild in moft of the Savannas and rocky hills, where it has been firft carried either by chance or defign; the edges of its leaves are very prickly, and thefe generally arched backwards, which makes them extremely hurtful to either man or beaft, that may chance to fall among them; and are, for this reafon, generally ufed in all the fences and inclofures round the country. The leaves are very thick about the root, and from the center of thefe fprings the ftalk, which generally rifes to the height of twelve or fixteen inches above the foliage, and divides into a number of little lateral branches, that bear fo many fingle flowers. When the plant begins to fhoot into bloffom, all the leaves become of a fine fcarlet colour towards the ftalk, and continue fo until the fruit begins to ripen, but it then begins to change, and afterwards fades gradually away. The fruits of this plant are feparate, and each nearly of the fize of a walnut; the pulp has an agreeable fweetnefs joined with fuch a fharpnefs, that if you make much ufe of it, or let it lie for any time in the mouth, it will corrode the palate and gums, fo as to make the blood ouze from thofe tender parts. The pulp nliced and laid in fugar or fyrup over night, is frequently given to children for the worms; and I doubt not but it may be very effectual on thofe occafions. The leaves of all the forts (but this in particular) being ftripped of the pulp, yields a ftrong thready fubftance not much inferior to hemp, which is commonly ufed in ropes and whips by the wainmen in that part of the world, and made into hammocks among the Spaniards. Induftry may probably find better ufes for this fubftance in time.

# RENEALMIA I. Parafitica, caule fliformi ramofo, geniculato, longifimo; foliis Jubulatis. 

$$
\begin{aligned}
& \text { Renealmia fliformis intorta. L. H. C. \& Sp. Pl. \& Gro. Virg. } \\
& \text { Vifcum Cariophylloides tenuifimum, \&c. Slo. Cat. } 77 . \& \text { H. to } 122 . \\
& \text { Old-man's Beard. }
\end{aligned}
$$

This flender parafitical plant is found upon the trees in many parts of Gamaica, but does not grow fo common nor fo luxuriantly there as it does in the more northern provinces of the main continent, where it is faid to over-run whole forefts. It is frequently imported to Famaica from North America, for the ufe of the fadlers and coach-makers, who commonly ftuff their pannels, culhions, $\mathfrak{F} 6$. with this weed.

In Louifiana, or New France, and the other neighbouring fettlements, this plant is very carefully gathered and flripped of the bark; and the fibres, which are very like, and no ways inferior to horfe-hair, made into matreffes, cufhions, pannels, $\mathcal{E C}^{c}$. Thefe fibres are only the lignous or internal body of the weed, which is manufactured there in the following manner, viz. When they have gathered as much of the plant as they think neceffary, they tie it loofely into bundles, and fink it in water, or bury it under ground in a moift place, until the bark rots; it is then taken up, boiled in water, and wathed until the fibres are quite cleared of the pulp; and thefe are not only ufed inftead of horfe-hair, but are fo very like it, that a man

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cannot diftinguifh the one from the other, without a ftrict examination, and that even with a glafs, unlefs he obferves the branchinge of it.

The Bonana bird's neft is always made of the fibres of this weed, and generally found hanging by a few threads from the tops of the mof expanded branches of the molt lofty trees, efpecially thofe that fpread over ponds or rivers.

TILLANDSIA 1. Parafitica parva pruinofa, fcapo tenui biforo.
Renealmia foliis fubulatis fcabris, pedunculis unifloris. L. Sp. Pl.
Vifcum Cariopbylloides minus \& pruinofum, \&cc. Slo. Cat. $77 . \&$ H. t. 121. I.
The fmall frofted Tillandfia, commonly called Old man's Beard.
TILLANDSIA 2. Parafitica parva, foliis tenuiffimis erectic, fpicabreviori fimplici dificha.
Vifcum Cariopbylloides minus foliorum imis viridibus, \&cc. Slo. Cat. 77. \& H. t. 122.

The fmall narrow-leafed Tillandfa.
TILLANDSIA 3. Media parafitica, foliis oblongis obtufis, foribus comofis terminalibus.
An, Tillandfia, foliis limonii ligulatis integerrimis bafß ventricofs. L. Sp. PI.

Vifcum Cariopbylloides maximum, capitulis in fummitate conglobatis. Slo.H. t. 122.

The Tillandja, with tufted flowers.

## TILLANDSIA 4. Parafitica major foliis attenuatis bafi ventricofis, racemo laxo Jpatiofo afurgenti.

Tillandfia culmo paniculato. L. Sp. PI.
The loofe-headed Tillandfia, or Wild-Pine.
TILLANDSIA 5. Parafiticamajor, foliis amplioribus attenuatis bafi ventricofis; Jpicáa a Jurgenti, comprefla, brachiatáa, floribus fere Selalibus.
Vifcum CateJb.v. ii. t. 89.
TILLANDSIA 6. Parafitica foliis majoribus obtufis; fpica affurgenti divija, Squamofa.
The larger Tillandfia, with obtufe leaves.
TILLANDSIA? 7. Parafitica maxima, foliis amplioribus obtufis, ciliatofubjpinofis, racemo a/Jurgenti piramidato.
Tillandfia foliis fuperne dentato-spinofis. L. Sp. Pl.
The largeft Tillandfia, or Wild-Pine, with a variegated flower-fpike.
All thefe fpecies of the Tillandfia are frequent in Jamaica, and go among the people there by the name of Wild-Pine: they grow upon, the trees, and by the eafy bend, and broad hollowed bafe of the leaves, become fo many natural refervoirs, which hold a fufficient quantity of the water that falls in the rainy feafons, to fupply them with moifture for a confiderable time, in long continued droughts; and in fandy defarts have been frequently ferviceable to both men and beafts.

PANCRATIUM 1. Foliis comprefis obtufs, fcapo nudo, floribus umbellatis.

# Pancratium Jpatbâ multiflorâ, foliis lanceolatis. L. H. C. \& Sp. PI. <br> Lilio-narciffus maximus Zeylonicus, \&cc. The. Zey. p. 142. 

## The White Lilly.

This plant grows wild in moft parts of $\mathcal{F}$ amaica, as well as in the other fugarcolonies, and feldom rifes above fixteen or eighteen inches in height; the leaves are pretty large in thofe countries, and the flowers numerous and white, which renders it an agreeable flowering-plant in a garden: the root is pretty acrid, and has been fometimes ufed in poultices by antiquated and pale-faced ladies, to raife a forced bloom in their fading cheeks.

> AMARYLLIS I. Flore croceo nutanti, jcapo nudo unifloro.
> Amaryllis Jpatba multifora, corollis aqualibus campanulatis, genitalibus declinatis. L. H. C. \& Sp. Pl.
> Lilio-narciffus Indicus feu narcifus lilifforus, \&cc. Pk. 246. f. 2.

This plant, like the foregoing, grows wild in many parts of the ifland, and is now cultivated in moft gardens for the fake of its flowers: it thrives beft in a rich foil and fhady place.

PONTEDERIA 1: Aquatica caulefcens, foliis majoribus orbiculatis nitidis, foribus Jpicatis ad alas.
An, Pontederia foliis cordatis foribus Jpicatis. L. Sp. Pl. \& H. C. Michelia. Houftoni.

The round-leafed Water-Plantain, or Pontederia.
Periantium E finu petioli fupremi furgit fpica fimplex, foribus plurimis geminatis referta, \& prima atate Spatba univalvi obducta; aliud nullum.
Corolla, Monopetala tubulata infundibuliformis. Tubus angufus ftriatus et quafi canaliculatus. Limbus in Sex partes divijus, quarum tres, quafiexteriores, oblonga et erecta fint: tres vere interiores inaquales; laterales exterioribus fimiles et alternata, pauloque minores funt; tertia fuperior eft et major, erectaque, et in fauce maculata:
Stamina. Filamenta fex, quorum tria fuperiora longiora funt E® inaqualia, ad bafim tubo adnata; tria vero inferiora breviora \& inequalia, in fundoque floris fita. Antheræ omnibus erecta oblonga.
Pitillum. Germen oblongum; ftylus fimplex longitudine fere floris; ftigma craffiufculum.
Pericarpium. Capfula oblonga trilocularis.
Semina Plurima parva.
I obferved this plant in moft of the Lagoons and rivers about the Ferry: the leaves are roundifh, thick, and fmooth; the flowers moderately large ; and the ftalk about an inch in diameter: it grows very luxuriantly, and throws up its flower-fpike 2 good way beyond the furface of the water.

> ORNITHOGALUM? I. Herbaceum, foliis gramineis, foribus geminatis pedunculis longiffomis alaribus incidentibus.
> Ornithogalum, Virginianum luteum, \&c. Pet. Gaz. t. 1.
> Ornithogalum, $\mathcal{E}_{\mathrm{c}}^{\mathrm{c}} . \mathrm{Pk} . \mathrm{t} .350$ f. 8.

The grafly-leafed Ornittogalum.

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Periantium Nullum: fpatha minima linearis ad bafim finguli foris, calicis vicem Jupplet.
Corolla Monopetala tubulata; tubus cylindraceus fimplex; limbus patens in fex lacinias oblongas ad faucem tubi jectus.
Stamina. Filamenta fex, brevia, erecto-patentia, e margine interiore tubi orta; antheræ fagittatce.
Piftillum. Germen oblongum, tubo floris inmerfum E8 adnatum; Atylus conicus brevis; fligma obtufusforlum.
Pericarpium. Capfula oblonga obtufe-trigona trilocularis.
Semina Plura fubrotunda minora.
This beautiful little plant is frequent in Sixteen-mile-walk, and in many parts of the road over Mount Diable; it has no ftalk, and its graffy leaves feldom fpread above five or fix inches from the root: the foot-ftalks of the flowers rife from the alm of the upper leaves; they are generally above three inches in length, and fuftain each two ftar-like yellow flowers: the plant grows beft in a rich and cool foil.

> ALLIUM r. Caule planifolio bulbifero, radice compofita, faminibus tricuJpidatis. L. H. Upf. \& Sp. Pl.
> Allium radicis bulbo multipartito, capitulo bulbifero, \&c. L. H. C.

## Garlick.

ALLIUM 2. Scapo nudo ventricofo informi © longiori, foliis teretibus concavis. L. H. Upf. \& Sp. PI.

Cepa fcapo ventricofo, folio longiori, radice deprefa. L. H. C.

## The Onion.

> ALLIUM 3. Caule planifolio umbellifero, radice tunicata, faminibus tricufpidatis. L. H. Upf, \& Sp. Plant.
> Porrum radice ambienti tunicata, oblonga, jolitaria, L. H. C.

## The Leek.

ALLIUM 4. Foliis fubulatis, radicibus oblongis conglobatis. L. Sp. PI。 Cepa foliis Jubulatis, radicibus oblongis conglobatis. L. H.C.

## The Efchalot.

All thefe plants are now cultivated in the mountains of Famaica, and thrive fo luxuriantly in thofe parts, that moft people of the, illand are now fupplied with a fufficient quantity of the roots from thence; efpecially, with thofe of the firft, third, and laft forts.

> ASPARAGUS 1. Caule berbaceo erecto, foliis Jetaceis, Aitpulis paribus. L. Flo. Sw. \& Sp. Pl.
> Afparagus bortenfos © pratenis. C. B.

Sperage, or Sparrow-grals.
This plant has been introduced, and is now cultivated with great care in Famaica, where it frequently grows to a pretty moderate fize; but the exhalations are too great, and they feldom bury it deep enough, or crop it fufficiently to bring it to any great perfection. It is remarkable that this plant grows without any fort of care, and in great perfection, in the fand-hills near Catwich in Holland; from whence we may conclude, that it naturally requires a depth of free loofe foil, as well as heat.

# O F J A M A I C A. 

The root of this plant is reckoned a good diuretic and aperitive; but the tender fprouts, efpecially thofe of the fixth and feventh growth, are chiefly ufed for food; they are very delicate eating, and ealy of digeftion.

> SCURRULA? 1. Parafitica foliis ovatis oppofitis, racemis rarioribus alaribus.

The larger Scurrula, or Mifletoc, with hermaphrodite flowers.
Periantium Duplex; germinis, triphyllum parvum: foris, margo germinis
Corolla Hexapetala, quandoque pentapetala, petalis lanceolatis conniventibus.
Stamina. Filamenta fex vel quinque, petalis adnata © breviora: antheræ oblonga.
Piftillum. Germen ovatum, calice proprio fuffultum, © Jummitate forem fuffinens; ftylus erectus fimplex, longitudine foris; fligma fimplex.
Pericarpium. Bacca oblongo-ovata fucculenta fuperne fufca, ad bafim crocea, nucleo unico, nauco ligneo tecto, referta.
This plant, as well as the following, approaches very much to the Vifcum, both by its berry and nature, but all the flowers are hermaphrodite; and as Linneus has already conftituted a genus under this denomination, that feems to be much of the fame nature, I have placed thofe under it: I have however difpofed them according to the number of the famina I myfelf have obferved in the freh plants. This fpecies is frequently found on the Mangeneel trees about Hunts-bay; and has been obferved to grow into fmall twiggy fhrubs beyond the Carecning-place, on the Palifados.

SCURRULA? 2. Parafitica foliis majoribus fubrotundis, fpicis-forum fime, plicibus, alaribus.
Vifcum latioribus \& fubrotundis foliits. Slo. Cat. 168. \& H. t. 200. An, Vifcum foliis ovatis racemis lateralibus? L. Sp. PI.
The largeft Scurrula, or Mifletoe, with hermaphrodite flowers.
All the flowers of this plant have fix filaments and petals conflantly; but the germen burfts, as it were, out of the fide of the flower-fpike, and is confequently deprived of a proper cup. I found this plant upon fome pomegranatetrees in Mr. Hall's garden, near Hope-river in Liguanea.

POLIANTHES I. Caule fimplici laxè spicato, Spatbis vagis imbricato.
Polianthes. L. Gen. \& Sp: Pl.
Tuberofa. Heirt.

## The Tuberous.

This plant is raifed, and thrives very well, in all the gardens about King fon: it is planted much for the fake of its fweet-fcented blofoms, and makes a pretty ornament in a flower-garden.

ALOE I. Foliis turgidis ciliato-dentatis purpurafcentibus, fapo forifero aflurgenti jpicato.
Aloe foliis Jpinofis confertis dentatis vaginantibus planis maculatis. L. H. C. \& Sp. Pl.

Aloe Diofc. \& aliorum. Slo. Cat. 115 .
Caraguata $3^{\text {a }}$. Pif. 193.
The Aloes Plant, or Semper-vivie.
Fff
This

This plant was originally introduced to Jamaica from Bermudas, and is now found in many parts of the illand, where it has grown without any care. It is generally cultivated in the moft dry and barren foils where few other vegetables are obferved to grow, and thrives wherever it finds mold enough to cover a part of its roots: it is propagated by the fuckers that hoot from the ftumps of the old plants, which they fet in little fhallow pits placed from fix to twelve inches afunder; but great care muft be taken to keep them free from weeds for a confiderable time after they are planted. When the plants are grown to a perfect fate, and every thing ready for the manufacture of this commodity, the labourers go into the field with tubs and knives, and cut off the largeft and moft fucculent leaves clofe to the ftalk; thefe are immediately put into the tubs, and difpofed one by the fide of another in an upright pofition, that all the loofe liquor may dribble out at the wound. When this is thought to be almoft wholly difcharged, the leaves are taken out one by one, paffed through the hand to clear off any part of the juice that may yet adhere, or ftick in their lefs open veins; and the liquor put into fhallow flat-bottomed veffels, and dried gradually in the fun, until it acquires a proper confiftence. What is obtained in this manner is generally called Succotrine Aloes, and is the cleareft and moft tranfparent, as well as the higheft in efteem and value: but the method of making the common Aloes is not fo tedious, nor does it require fo much care; for in manufacturing this fort, all the leaves are cut off, fevered into junks, and thrown into the tubs, until all the loofe liquor runs out; they are then hand-fqueezed, and the liquor mixed with a little water (about a quart to every ten quarts of the juice) to make it more fit for boiling; it is then put into convenient cauldrons, and boiled to a proper confiftence; which may be eafily known by dropping a fmall quantity from time to time upon a plate, and obferving the thicknefs as it cools; but this is readily difcovered by the touch or the eye, after a little experience: when the liquor comes to a proper thicknefs, it is emptied out into large coolers; and after it it has acquired a convenient confiftence in thefe, it is put into gourds, or fmall barrels, which commonly hold from one to twenty pints a-piece.

The Aloes is naturally purgative, and an active warm fomachic; it is an excellent medicine in all weakneffes and obftructions of the vifcera proceeding from colds, inaction, an over-load of the veffels, or languor of the fibres; it brings on the menfes and hæmorroids, promotes digeftion, raifes the appetite, and ftrengthens the ftomach. It is frequently prefcribed for the worms, and defervedly efteemed one of the moft effectual medicines in nervous cafes proceeding from inaction, of a vifcidity of the juices: it is often given with great fuccefs in many diforders of the head arifing from indigeftion, or a foulnefs of the vifcera; but is generally ordered mixed up with other medicines that are more ready in their operations, and of a warm or purgative narture. It is an ingredient in many compofitions of the flops, but is always obferved to be moft effectual when mixed with the more gummy juices of the plant.

This commodity has been alfo lately put to fome mechanical ufes, and tried, with great fuccefs, in thofe mixtures with which they cover the bottoms of thips trading to the Eaf and Weft-Indies, where the water-infects are obferved to burrow through all the planks that lie below the furface, in every veffel that anchors for any time in the harbours of thofe feas; and it will probably be the means of faving many thoufands a year, both to the merchants, and the crown, when it is more nuiverfally known and employed: its refinous quality renders it a very fit ingredient in the compofition, and its bitter and naufeous acrimony, a very proper defence againt all forts of infects. Nor can the fcarcity of the commodity prevent the general ure of it; for the Savannas, and more barren hills of Yamaica alone, would produce more than could be employed for all the fhips belonging to the dominions if Great-Britain: but to render the application more effectual, a thin coat of this alone may be laid within the common coat, or the planks wathed over with a ftrong fofution of it, fome time before the common mixture is laid on.

# AGAVE 1. Foliis fubcomprefis mucronatis, ad margines fpinofo-dentatis; fcapo valido afurgenti, racemo spatiofo ramofo. Agave foliis dentatis, faminibus corollam aquantibus. L. Sp. P1. Aloe fecunda feu folio in oblongum aculeum abeunti. Morif. \& Slo. Cat. 117. Aloe Americana jobolifera. Herm. H. Lugd. t. I7. 

Coratoe, or Curaça.
There are but few plants more common than this in Jamaica. It grows naturally in the moft barren rocky hills, and, when it flowers, affords the moft pleafing fight of any fhrub or plant in that part of the world; which is ftill more curious, as fo blooming a plant cannot be well expected to thrive in that foil where it's moft commonly found growing. This curious plant throws out fome fharp-pointed indented leaves, that fpread into a tuft about the root at firft ; and continues to increafe, though flowly, both in fize and quantity of foliage, for many years: at length it acquires a certain degree of perfection, and then it throws up a ftem from the center of its leaves, which generally rifes to the height of eight or ten feet above the root. This is fimple and naked immediately above the leaves, but very much divided and branched towards the top, where it bears almoft an infinite number of moderately large yellow flowers, by which it may be diftinguihed for many miles. The ftalk is very hort during the firft ftage of the plant, and the leaves difpofed clofely together, ftanding in an oblique, or erecto-patent pofition, and mooting gradually one above another; while a few of thofe neareft to the ground, wither wholly away. But when it begins to throw up a ftalk, the circulation grows very ftrong, and this part is generally compleated and fully adorned with its blofloms in a few weeks: the natural operations of propagation are then carried on with great vigour, and the whole top foon after appears adorned with a thoufand vegetated feeds; or rather plants, furnifhed with a convenient number of roots and leaves, to feek and raife the neceffary food, whenever they fall from the parent-ftalk; but this feldom happens until they have acquired a ftated degree of perfection, and then they are blown off gradually by every wind that fhakes the withering ftem, which, with the leaves, now dies gradually away, and ends its life with the completion of the laft, leaving fo many thoufands to renew the kind.

The leaves of this plant are pretty fucculent, and generally ufed to fcour both floors and kitchen-utenfils, in moft of the fugar-colonies in America. The pulp is a warm pungent deterfive, and would probably prove a very active medicine in many cafes, had it been properly prepared, and adminiftered with caution. The inward fpungy fubftance of the decayed flalk takes fire very rea ily, when thoroughly dried; and for this reafon is generally ufed inftead of tinder, by moft travellers, and all mariners that refort to thofe parts.

PARSONSIA x. Herbacea, foliis ovatis oppofitis, floribus Mngularibus foliis ad alterutrum latus interpojitis. Tab.21. f. 2.

## The fmall reclining Parfonfia.

Periantium Monopbyllum tubulatum firiatum, bafi leniter ventricofo, ore fex denticulis (quandoque tontum quinis) ornato.
Corolla Petala fex oblonga emarginata patula, unguibus teretibus parieti calicis adnota.
Stamina. Filamenta Jex inaqualia, ex infima tubi parte orta, longitudine calicis; anthere fubrotunde, in fauce tubi locate.
Piftillum. Germen oblongun liberum in fundo calicis fitum; ftylus brevis; ftigma obtufrufculum.

Pericarpium. Capfula tenuis membranacea oblongo-ovato unilocularis, intra calicem Jita.
Semina, Bina, quaterna, vel Sena, orbiculata compreffa, placentulde adnata.

This little plant grows pretty common in Clarendon-Park, and is fometimes found in the Savannas about Spanifb Toron. It rifes from a fmall fibrous root, and fhoots in an oblique direction, but feldom exceeds ten or fourteen inches in length. The ftalk is llender, and throws out a few fmall branches towards the top. The leaves are fmall and oppofite, and the flowers rife fingle from the intermediate face between the leaves, on the one fide or the other, but feldom or never on both. I have called it after Dr. Parfons, who has publifhed a treatife on the feeds of vegetables, and many other curious remarks on different parts of natural hiftory.

> ACHRAS I. Fructu eliptico fcabro wajori, floribus folitarits alaribus, cicatricula Jeminis ultra mucronem porreeta. Tab. 19. f. 3.

The Sapodillia Tree.
Periantium Hexapbyllum, laciniis ovato-acuminatis perffentibus, tribus magis externe fitis.
Corolla Monopetala tubulata erecta, fere aqualis; limbus in fex partes breves 8 O acutas Jectus.
Nectarium. E fauce tubi furgunt nectaria quinque, oblonga, compreffa, conniventia; incifuris floris fuppofita, © laciniis fere fimilia.
Stamina. Filamenta fex brevia, e tubo corolle orta, E antheris cordatofagittatis in fauceque fitis, pradita.
Pittillum. Germen ovatum, umbilico villofo circumductum; ftylus brevis craflus; ftigma obtufum, truncato-radiatum.
Pericarpium. Bacca fucculenta Jubrotunda duodecimlocularis.
Semina Nuclei folitarii (Sed maxima parte plerumque abortiunt) naucis propriis nitidis fuboffeis, ad alteram marginem cicatricula rugofa notatis, teeni.
This tree is cultivated in many gardens in Jamaica, and rifes, like moft of the other fpecies, to a confiderable height, throwing out its branches on all fides as it fhoots: the leaves are fmooth and beautiful, and the fruit, which generally grows among them, of a moderate fize, and when ripe, of a delicate mellow talte. All the tender parts of thefe trees are full of a milky juice, which is extremely harfh and bitterith; but the fruit, tho' full of this, while young, is very fweet and agreeable when it ripens, which it generally does upon the tree; but if full grown, it will foften and maturate in a few days, tho' plucked from the branch.

The fhells that cover the feeds of thefe plants are generally of a fhining or glofly brown caft; but the inward edge, or margin, is always whitifh and rugged. The kernel has a bitter tafte, and may be ufed occafionally in ftrengthening emulfions.

ACHRAS 2. Bracbiatus diffufus, fructu fubrotundo, cicatricula mucrone breviori.
Sapota. Plum. t. 4.
Anona Cateff.v. ii. t. 87.
Anona folitis laurinis glabris, \&cc. Slo. Cat. 206.
The Nifberry Tree.

ACHRAS 3. Caudice altifimo, fructu minori, femine mucronato.
Anona maxima, \&c. Slo. Cat. 206. \& H. t. 169.

> The Bully, or Nifberry Bully-Tree.

This is called the Bully-tree, becaufe it generally grows the talleft of all the trees in the woods: its fruit is fmall, and the feeds oblong and narrow. It is efteemed one of the beft timber-trees in famaica.

ACHRAS 4. Fructu coriaceo fubrotundo verucofo, feminibus anyuftis, marrinibus rectis.
An, Xylobocion baccifera frondofa. Pk. t. 238. f. i.
Beef-wood.

This tree is commonly called by the name of Beef-wood by moft people in $\mathcal{F} a$ maica, from the flefhy colour of the interior bark.

## ACHRAS 5. Fructu maximo ovato, feminibus paucioribus oblong is turgidis.

Malus Perfica maxima foliis magnis integris. Slo. Cat. 180. \& H. t. 218. The Mamee-fapote Tree.
ACHRAS? 6. Fructibus minoribus glabris per ramos fparfis, feminibus fubrotundis, cicatriculá minimâ ovatâ.

## The Baftard Bully-Tree.

ACHRAS? 7. Fructu minori glabro, foliis ovatis, foribus confertis alaribus. The Mountain Baftard Bully-Tree.
ACHRAS? 8. Foliis oblong is nitidis utrinque productis, foribus confertis, faciculis infra frondes jparfis. Tab. 17. fig. 4.
Salicis folio lato Jplendente arbor, ©c. Slo. Cat. 170. \& H. t. 206.
An, Arbor, Ejc. Pk. t. 360 . f. 4.
The White Bully-Tree, or Galimeta-wood.
Periantium Parvum penta-vel bexapbjllum, foliolis fubrotundo-ovatis.
Corolla Monopetala campanulata, calice major; limbus in quinque vel fex tacinulas ereétas oblongas Jectius.
Neetarium. E fance tubi jurgunt nectaria totidem laceratt, lacinis for is interpofita Sed breviora, conniventia.
Stamina. Filamenta quinque vel fex flore longiora, laciniis corolla fuppofita Eo e tubo orta; anthere oblonga.
Pifillum. Germen fubrotundum; ftylus brevis; ftigma crafiufoulum.
Pericarpium. Bacca fucculenta bilocularis. An quinque 10 vel 12 locular is in germine?
Semina. Nuclei folitarii oblongi, naucis propriis atronitentibus fulco longitudinali notatis, tecti.
This tree grows to a confiderable height, and is generally furnifhed with many branches towards the top; but thefe rife irregularly, and at diftant tages, as they ufually appear in moft of our Firrs in Europe. It is commonly obferved to grow ftraight and tapering, and moff frequently found in the lower lands, efpecially about Liguanea and Mangencel: it is of a pale yellow colour, and reckoned a good timber-wood, but is mofly ufed in fuch parts of the building as are leaft expofed to the weather. The berries of this tree are black, fmooth, and very fmall; and no part of the plant milky. All the fpecies of this genus are found either growing naturally in the woods, or cultivated in the
gardens,

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gardens, for the fake of their fruit, which is generally agreeable in moft of the forts, elpecially the firf five; but the laft of thefe thrives only in a few paris of the inlund: its fruit is very large and pleafant, and its feeds proportioned, and moderately tumid, having feldom more than one or two that come to perfection.

The bark of each of the firft four fpecies is reckoned very aftringent, and all indifriminately now go by the name of Cortex famaicenfs; their bitter afringent tafte having for a time impofed on fome of the people, who thought either the one or the other to be the true Fefuits Bark, and on this account had frequentiy adminitered them among the negroes, where they were often obferved to anfwer all the putpofes of that medicine, as all bitter afringents will do in robuft conftitutions, when the difeafe proceeds immediately from a weaknefs of the vifcera, and a grofs undigeitud chyle: this brought them firf into fome vogue, and they have been frequently, fince that time, brought into England for further experiments; but are much more likely to prove fuccelsful here than in America, where thofe fevers that generally put on the appearance of intermittents, are attended with nervous fymptoms, and often mortal; therefore matt require medicines that act more effectually on the whole habit, and whofe active particles can ftimulate and provoke the ofcillations of the nervous filaments in the more remote parts of the body. Thefe different barks yield a large quantity of extract, which in tafte and appearance feems to be the fame with that of the Fefuits Bark, which has occafioned it to be frequently fubftituted in the room of that drug; and this, I am perfuaded, coft many a life in thofe colonies, where romitent fevers are fo frequent and mortal. It is, however, an excellent aftringent, and a very convenient and elegant preparation in that form, which may be adminiftered with great propriety and fuccefs, whenever aftringents of a long continued action are properly required.

## CORDIA i. Foliis amplioribus birtis ovatis, tubo foris fubaquali. <br> Cordia foliis oblongo-vvatis refandis faabris. L. Sp. P1. <br> Cariophyllus fpurius inodorus, \&c. Slo. Cat. \& H. t. 164. <br> The bufhy Cordia, with large fcarlet flowers.

Periantium Monop的llum tubulatum friatum aquale, ore tridentato erecto.
Corolla Monopetala tubulata, fatis ampla, fere infundibuliformis: tubus rectus cylindraceus fubfriatus, vix ampliatus, calice duplo-longior; limbus amplus patens crippatus, in Jex Jegmentas fubfulcatas obtufas ad trientem divifus.
Stamina. Filamenta fex tubo corollie ad faucem fere adnata, Juperne libera erecta, tubo floris paulo longiora; antheræ angufte oblongre.
Piftillum. Germen ovatum calice immerfum; fylu's erectus, longitudine fere tubi corolla, fuperne bipartitus, laciniis remotis bifidis; Atigmata oblonga, ex parte adnata, defuxa.
Pericarpium. Drupa ovata calice difento tecta jed non adnata, nauco lignofo quadriloculari referta.
Semina Solitaria, fed, prater unum vel alterum, plerumque abortiunt.
This fhrub grows on the banks above the beech lying between the fmall Lagoon eaftward of Kingfon, and Capt. Cornifh's; and is faid to grow in great abundance on thofe little iflands about Old-barbour. It feldom rifes more than feven or eight feet above the root, and is furnifhed with rough oval leaves, and adorned with large bunches of fine fcarlet flowers, the moft beautiful and agreeable of any I have yet obferved in America; but the form of them is quite different from that delineated by Plumier, wherein the tube fwells above the cup, and confequently muft be confidered as a different fpecies. This would make a moft agreeable flowering-hrub in a garden or a foreft; and may probably be ufeful,

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\begin{array}{lllllllll}
\mathrm{O} & \mathrm{~F} & \mathrm{~J} & \mathrm{~A} & \mathrm{M} & \mathrm{~A} & \mathrm{I} & \mathrm{C} & \mathrm{~A} .
\end{array}
$$

could it be brought to bear perfect fruit, which it hatdly ever does in the flate I have obferved it.

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\begin{array}{lllll}
\mathrm{S} & \mathrm{E} & \mathrm{C} & \mathrm{~T} . & \mathrm{II} .
\end{array}
$$

## Of fuch as bave fix Filaments and two Styles in every Flower.

ORYZA I. Culmo fubfriato nodofo, panicula fparfa. Oryza. Raii Hift. Slo. Cat. 24. \& L. H. C.
Oryza. L. Sp. Plant.
This plant is now cultivated in fmall fots in many parts of 7 amaica, and thrives extremely well in moft of the moif bottoms between the mountains. Mr. Wallen planted fome at the Ferry, a little before I left that ifland, but I could not yet learn how it fucceeded there. It is a nourihhing grain, and very beneficial whenever it thrives: it grows almof like oats.

## S E C T. III.

Of $V$ egecables that bave fx. Filaments and three Styles in every Flower.
UMEX I. Sylveftris fcandens, foliis cordato-angulatis, ab altera parte majoribus.
An, Begonia. L. \& Plumeri. Gen.
Aceris fructu berba anomala, flore tetrapetalo albo. Slo. Cat. 83. \& H. t. 127.

Teria Narinampul. H. M. p. g. t. 86.

## The large climbing Sorrel.

This plant is very common in the woods of Jamaica, and raifes itfelf frequently to a confiderable height by the help of the neighbouring fhrubs. The leaves are of an irregular heart-form, and generally increafe more from one fide of the middle vein or rib than they do of the other. The whole plant joins a bitter with the acid, which chiefly prevails; but when it grows in a more free and open air, the flowers have an agreeable flavout, and are fometimes ufed in making of whey, where wine can't be admitted, and the other acids are thought too active and irritating for the fomach.

SAURURUS I. Foliis amplis orbiculato-cordatis, finu aperto, petiolis vaginantibus.
Aquaxima. Pif. 197.
Piper longum racemofum malvaceum, \&xc. Slo. Cat. 45.
The open-leafed Colt's-foot, or Santa-Maria leaf.
This plant is very common in the woods of $\mathcal{F}$ amaica, and feldom tifes more than three or four feet above the roots: the leaves are very large and round, and the foot-ftalks embrace the ftem at the infertion. Pifo affirms, that the root of this plant is a warm, active remedy againft poifons. There is a fyrup made of it, in many parts of our fugar-colonies, which is much ufed by the inhabitants in colds and catarrhs.

SAURURUS 2. Foliis amplis orbiculato-cordatis, peltatis; petiolis vaginantibus.
The larger Colt's-foot, with umbilicated leaves,

This is only a variation of the foregoing, or is fo like it, that the difpofition of the finus of the leaves makes the whole difference between them: it is not, however, ufed like the other in thofe colonies.

SAURURUS 3. Repens foliis craffis fubrotundis glabris, fpicis terminalibus.
The fmaller creeping Saururus, with roundifh fucculent leaves.
SAURURUS 4. Major repens, folizs crafis obverfeovatis, bafi angufatis © fimbriatis.
Piper longum bumilius, \&cc. Slo. Cat. 45.
The larger creeping Saururus, with thick oval leaves.
SAURURUS 5. Repens, foliis parvis oblongis crafis E fucculentis.
The creeping Saururus, with oblong leaves.
SAURURUS 6. Minimus repens foliis orbiculatis tumentibus.
Piper longum minimum berbaceum fcandens rotundifolium. Slo. Cat. $45^{\circ}$
The fmall creeping Saururus, with round fwelling leaves.
SAURURUS 7. Minor repens foliis cordatis quinque- vel Septinerviis.
The fmall creeping Saururus, with nervous leaves.
SAURURUS 8. Erectus minor, foliis orbiculatis verticillatis tumentibus, Jpicis terminalibus.
The fmaller erect Saururus, with round verticillated leaves.
SAURURUS 9. Erectus minor foliis ovatis trinerviis verticillatis, spica multiplici.
The fmaller erect Soururus, with veined verticillated leaves.
SAURURUS? 10. Affurgens fimplex, foliis trinerviis lanceolatis oppofitis, petiolis brevibus.

I have found all thefe fmall fecies of the Saururus in the woods of $\mathcal{F}$ amaica, and can avouch them to be very different from each other in the general form and texture of their parts; but none of them exceed eight or ten inches in length. The laft plant rifes above eighteen or twenty inches, by a fimple ftalk: I have found it about the Upper Water-fall in Hope-river, but do not know if it be really of this kind, as I never had an opportunity of feeing it in bloffom.

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\begin{array}{lllll}
\mathrm{S} & \mathrm{E} & \mathrm{C} & \mathrm{~T} . & \mathrm{IV} .
\end{array}
$$

Of Plants that bare fix Filaments and many Styles in cevery Flower.

A
L ISMA I. Foliis lunulato-fagittatis venofis, fapo afurgentivamofo, angulatofulcato; ramulis ternatis, verticillato-verticillatis.
Alima foliis cordatis obtulis. L. Sp. Pl.
Sagitta. Caft, Dur. \&cc. Slo. Cat, 76.
Culi-tamara. H. M. p.11. t. 45 .
The Great Water-Plantain.

## O F J A M A I C A.

This plant grows very common in all the ftagnating waters about the Ferry, and rifes generally to the height of two or three feet above the root: all the flowers are hermaphrodite, and furnifhed each with twelve filaments, and a numerous family of gems, or germens. The whole plant has fo much the appearance of an arrowhead, that it feems to have exchanged flowers with the plant we defcibe under that denomination, which has all the appearance of a Water-Plantain, though it anfwers the characters of the other very'perfectly.

## C L A S S VII. <br> Of the Heptandria, or Vegetables that have feven Filaments in every Flower.

## S E C T. I.

Of fuch as bave feven Filaments and one Style in every Flower.
COMINIA I. Arborea foliis undulatis pinnato-ternatis, foribus minimis, racemis terminalibus.
Baccifera Indica trifolia, fructu rotundo monopyreno, \&c. Raii. \& Slo. Cat. 170. \& H. t. 208.

Arbor Jamaicenfis denfiori tilice folio, \&cc. Pk. t. 147. f. 5.

## The trifoliated Cominia.

Periantium Minimum coloratum, quafi trithbyllum.
Corolla Irregularis; monopetala videtur quadri- vel quinquecrenata.
Stamina. Filamenta Septem brevia; antheræ oblongo-ovata.
Piftillum. Germen parvum fubrotundum; Aylus erectus fimplex, flore longior ; Atigma bipartitum laciniis revolutis.
Pericarpium. Bacca parva Jubrotunda unilocularis, rubra.
Semen Solitarium fubcompreffum, orbiculatum, nauco fragili tectwn.
This little tree is frequent about the Angels, and in the upper parts of Liguanea; it grows in the hedges, and feldom rifes above eight or ten feet in height: the leaves are roundifh, and the berries very thick and fmall. The whole plant feems to have fomething of the appearance of a Rbus.

I have defcribed the characters exactly as I have obferved them in the fref fpecimens; but they are very fmall, and not eafily obferved, even by the help of glaffes.

HALESIA 1. Arborefcens, foliis fubrotundis fubtus argenteis; fpicis forum bigeminis, fuftentaculis longis alaribus infidentibus. Tab. 20. f. 1.

## The round-leafed Halefia.

Periantium Monopbyllum breve, tubulatum, fere truncatum, pragnans.
Corolla Monopetala tubulata; tubus anguffus aqualis cylindraceus, calice quadruplo longior; limbus patens, in quatuor, quinque, wel fex lacinias oblongas obtufas rquales ad bafim Jectus.
Stamina. Filamenta, ut plurimam feptem (quandoque pauciora) brevia © ex tubo nata; antheræ oblonge fagittata, in fauce foris fite.
Piftillum. Germen fubrotundum depreflion in fundo calicis firum © adnatum; frylus fimplex aflurgens; ftigma oblongum, obtufufcuilum, inter antber as locatum.
Pericarpium. Bacca videtur quadri- vel plurilocularis feminibus folitariis referta, calice tecta \& coromata.

This fmall tree grows pretty frequent in Sixteen-mile-roalk, and may be always feen in the fmall wood beyond the church: the bark is fmooth, and the leaves large and roundih. The plant feldom rifes above eight or ten feet in height, or exceeds three or four inches in diameter, and the difpofition of the flowers is very remarkable, as well as the texture and form of the leaves: I have not feen any of the fruit in a perfect ftate. It is called after the reverend Dr. Hales, author of the Vegetable Statics, \&cc. one of the greateft philofophers of the prefent age.

## C L A S S VIII. Of the Octandria, or Vegetables that have eight Fildments in every Flower.

## S E Crr I.

Of fuch as bave eight Filaments and one Style in every Flower.

H
ALIMUS I. Minimus, foliolis oblongis fucculentis tumentibus, fummis ramulis denfflame fitis.
An, Portulaca erecta Sedi minoris facie, \&oc. Slo. Cat. 88. \& H. t. 129?
The fimaller woolly Halimus.
Periantium Biphyllum minimum, foliolis lanceolatis.
Corolla Monopetala campanulata, in quinque lacinias ovatas erecto-pntentes profunde fecta.
Stamina. Filamenta octo, quandoque decem, quandoque pauciora, erecta; alternis minoribus. Antheræ Jubrotunda.
Pifillum. Germen ovatum parvum; ftylus fimplex longitudine faminum; ftigma obtufum tri- vel quadripartitum.
Pericarpium. Capfula ficca membranacea fubrotunda, unilocularis, in duas partes cquales borizontaliter debijcens.
Semina Pauca Jubrotunda, funiculis propriis fundo capfulce affixa.
This little plant is frequent in the dry Savannas about Spanib Torwn and Kirgfon: it grows in beds, and fpreads a little upon the ground, but the ftems feldom exceed two or three inches in length : the leaves are difpofed pretty thick at the top of the branches, and the flowers blow in the center of them. There is a fort of cotton fhoots about the flowers, as the weed grows old, which in time fpreads over moft parts of the plant.

SAPINDUS I. Foliis oblangis, vix petiolatis, per cofam ample alatam difpofitis.
Sapindus. L. Gen. \& H. C.
Sapindus foliis pinnatis. L. Sp. Pl.
Prunifera racemofa folio alato, \&c. Slo. Cat. 184. \& H. ii. I 3 I.
Prunifera five nuciprunifera, $\mathrm{Pk}, \mathrm{t} .217 .7$.
Guity Pifonis. 162.

## The Soap Tree.

Stamina OCto, inferne birfuta, longitudine fere foris; antherx, erecte cordata.
Pinillum. Germen ovatum trilobum, quandoque quadrilobum; flylus brevis fimplex, Aigma obtufiufculum. Cætera ut in Linneo.

## O F J A M A I C A.

This fornbby tree is very common in the Savannas to the eaftward of King/ton, and in many other places about the low lands. It branches pretty much towards the top, and feldom rifes above ten or fifteen feet in height: the leaves are always of yellowith pale green, and the flowers fmall and white; and difpofed in loofe bunches at the tops and fides of the branches.

The feed-veffels of this plant are very deterfive and acrid; they lather freely in water, and are frequently uled inftead of foap; for a few of them will cleanfe more linnen than fixty times the weight of that compofition; but they are rather too Sharp, and obferved to corrode or burn the linen in time; and the water, in which the tops or leaves have been fleeped or boiled, are obferved to have the fame quality in fome degree. The feeds of this tree are round and hard, have a fine polifh, and are frequently made into buttons and beads among the Spaniards. The whole plant, efpecially the feed-capfules, being pounded and fteeped in ponds, rivulets, or creeks, are obferved to intoxicate and kill the filh.

# SAPINDUS 2. Fruticofus caudice © ramis fpinoffimis, foliis ovatis pinnatis. Tab. 20. f. 2. <br> An, Sapindus, Ec. Pk. t. 392. f. I ? 

## The Licca Tree.

I found this Chrub in the Borough in St. 'Fames's: it is very remarkable for the pricklinefs of its trunk, which feldom exceeds feven or eight feet in height, or two or three inches in diameter. The fruit of this tree is much fmaller than that of the other fpecies; and though the embrio's are always trilocular, as in the other, no more than one of the cells and feeds ever grows to perfection: the capfulx are, however, marked with longitudinal futures, that run down between the two abortive embrio's, which have been formed by the laceration of the ftyle in the growth of one of the loculaments; for there is no more than one flyle in any of the flowers of thefe fpecies.

TROPEOLUM 1. Foliis fubquinquelobis peltatis, petalis obtufis. L. Sp. P1. Tropeolum foliis peltatis orbiculatis. L. H. C.

## Indian Crefs.

Whether this plant was introduced to 'famaica, or be a native of that place, is not certain. It grows and thrives very luxuriantly in the cooler mountains of New Liguanea, and runs frequently to the length of fifteen or twenty feet from the root. The flowers have a great deal of the tafte of water or garden-creffes, and may be ufed with equal propriety in fallets. It is a beautiful flowering-plant, and makes a pretty appearance in all the gardens of New Liguanea.

DODONEA. I. Arborefiens, foliis pinnatis ovatis glabris alternis integerrimis, cofta marginata, racemis terminatricibus.

## The fmooth-leafed Dodonea.

Periantium Parvum monophyllum, ad medietatem in quinque partes fectum. Corolla Nulla.
Stamina. Filamenta octo, quandoque pauciora, brevia. Antherx oblonga. Pintillum. Germen fubrotundum; flylus brevis fimplex; Atigma trilobum. Pericarpium. Catfula Jubrotunda triloba trilocularis. Semina Solitaria.
I found this tree in the upper parts of Sixteen-mile-walk; and below the Decoy, in the mountains of St. Mary's.

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HYPELATE I. Fruticofa, foliis obovatis pinnato-ternatis, petiolo mar-
    ginato affixis.
The trifoliated Hypelate.
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Periantium Tetrapbyllum, foliatis ovatis.
Corolla Tetrapetala tenuis; petalis ovatis fotiolis calicis Jmilibus.
Nectarium. Umbilicus carnofus germini circumductus.
Stamina. Filamenta octo, germen inter E umbilicum enata; inde defexa, E umbilico quaja adnata; Juperne libera, erecto-patentia. Antheræ fubrotunda.
Piftillum. Germen minimum oblongum angulatum truncatum; ftylus brevis; ftigma acutum.
This fhrubby tree is very common in the low lands, and feldom rifes above eight or nine feet in height. It is full of flender branches, and furnifhed with many leaves of the fame texture and grain with thofe of Lignum-vita; they are, however, remarkably different both in form and difpofition. I have never feen the fruit of this plant in the perfect ftate.

OENOTHERA I. AJurgens glabra, foliis lanceolatis alternis integerrimis, floribus Jolitarizs alaribus.
The fmooth Primrofe-willow.
OENOTHERA 2. Afurgens birfuta, foribus folitariis.
The hairy Primrofe-willow.
OENOTHERA 3. Herbacea repens.
The fmall creeping Primrofe-willow.
Thefe three species are natives of Jamaica, and found about moft of the rivulets, lagoons, and marfhy lands in the ifland: the laft fort is frequent in the low lands about Plantain-garden river. All the plants of this tribe are mild fubaftringents and vulneraries, which may be very properly adminiftered in infufions, upon all occafions were fuch medicines are required.

AMYRIS. I. Arboreus, foliis bijugatis ovatis glabris, racemis laxis terminalibus.
Lauro affinis, Ee lignum Rodium. Slo. Cat. 137. \& H. t. 168.

## White Candlewood, or Rofe-wood.

Periantium Minimam monopbyllum quadridentatum.
Corolla Tetrapetala, petalis oblongo-ovatis, atate reflectentibus, cito deciduis.
Stamina. Filamenta oEto ere8ta, quorum quatuor cateris paulo breviora funt E petalis Juppofita; antheræ fubrotunda.
Piftillum. Germen oblongoocvatum; ftylus nulhus vel breviffimus; ftigma obtufum fubrotundum.
Pericarpium. Bacca oblongo-ovata unilocularis, nucella unica, quandoque gemina, Jolida, uniloculari referta.
This tree is found in the woods of St. Ann's, and thofe back of Bull-bay, in the parifh of Port-Royal; it grows to a confiderable fize, and is confidered as one of the moft valuable timber-trees in the ifland, but is not common. The wood is white, and of a curled grain when young, but grows of a dirty clouded ath-colour with age: it bears a fine polith, and has a fine fmell. The younger trees are frequently cut for fire-wood in the mountains; they are full of refin, burn very freely,
and with a moft agreeable fmell. The wood is heavy, and in great vogue among our cabinet-makers.

All the parts of this tree are full of warm, aromatic particles, and may be ufed in baths and fermentations, upon occafion. The berries are of an oblong form, and have much of the tafte of the balfam Copaiba.

## AMYRIS 2. Fruticofus minor, foliis orbiculatis venofis, pinnato-ternatis; racemis terminatricibus.

The fmaller fhrubby Sweetwood.
This little plant is very common in the hills about the Ferry; it grows chiefly among the rocks, and feldom rifes above four or five feet in height, or exceeds an inch and a half in diameter. The leaves are very round, and diftant from one another; and the flowers fmall, and difpofed in loofe bunches at the tops of the branches. The leaves and outward parts of this thrub have no remarkable warmth, nor does the trunk burn with that fragrance, tho' it contains a great quantity of the like aromatic particles.

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\begin{aligned}
& \text { AMYRIS? 3. Arborefcens foliis ovatis glabris, vetufioribus confertis; petiolis } \\
& \text { fubmarginatis; floribus folitariis. } \\
& \text { The buhy Amyris. } \\
& \text { Periantium Monopbyllum minimum quadridentatum. } \\
& \text { Corolla Tetrapetala, petalis lanceolatis, erecto-patentibus, reflectentibus, in- } \\
& \text { terne verfus bafim hirfutis. } \\
& \begin{array}{c}
\text { Stamina. Filamenta octo, corolla dimidio breviora; antherx oblonga. } \\
\text { Piftillum. Germen ovatum; fylus fimplex longitudine faminum; ftigma } \\
\text { obtujufculum. } \\
\text { Pericarpium. Drupa baccave oblongo-ovata unilocularis, nuculo unico uni- } \\
\text { loculari referta. }
\end{array}
\end{aligned}
$$

I found this fhrubby tree in the road near the river Grandee in St. George's; it was very buthy, and divided much towards the top, tho' not above eight or nine feet in height. The trunk of the tree was about four inches and a half in diameter, and very fimple towards the root: the leaves are not above an inch in length, of an oval form, and difpofed very thick uopn the fmaller branches.

## COCCOLOBIS. 1. Foliis crafis orbiculatis, finu aperto.

Uvifera foliis fubrotundis amplifimis. L. H. C. \&
Polygonum foliis fubrotundis caule arboreo, \&c. Sp. PI.
Uvifera littorea foliis amplioribus, \&\&c. Pk. t. 236. fo. 7o
Prunus maritima, \&c. Slo. t. $129 . \&$ Catelb. ii. t. 96.
Nuli Tali. H. M. p. 4. t. $56 \& 32$.

## The Mangrove or Sea-fide Grape.

Periantium. Monopbyrlum perfatens, in quinque lacinias coloratas obovatooblongas, erecto-patentes, ad bafim fectum.
Corolla Nulla. Nectarium? Umbilicus carnofus germen cingit.
Stamina. Filamenta oEto, quandoque feptem vel pauciora, erecto-patentia laciniis calicis breviora \& ex umbilico orta, decidua.
Pifillum. Germen ovatum; ftylus, brevis; Atigma laceratum.
Pericarpium. Calix, pof faminum delapfum, erigitur, germen involvit, ascrefcit, $\mathcal{F}$ abit in baccam fucculentam fubrotundom znilocularem, ad apicem fellatam.
Semen. Nucleus unicus cordsto ovatus bafi quinquelobus, nauco tenui lignofo tectus.

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This tree is common in moft of the fugar-colonies, and is generally found near the fea. It grows frequently to a confiderable fize, and is then looked upon as a beautiful wood for all forts of cabinet-ware, but it feldom rifes Itraight or regular. The leaves are large, round, fmooth, thick, and open at the bafe; the foot-ftalks are ftrong, and vaginated at the bottom in all the fpecies, and the flowers imall, and placed on flender fikes at their alw.

The berries are generally about the fize of common grapes; they have an agrecable flavour, but the pulp is not confiderable. The kernel is lobed at the bottom; it is a very great aftringent, and may be ufed in enfulfions, bolus's, or etectuaries, of that nature, with great propriety; but its action is not of a long continuance: it has all the tafte of Bitort.

COCCOLOBIS 2. Arborea foliis orbiculatls integris.
An, Scortea arbor Americana, \&xc. Pk.t.222. f. 8. vel 431. f. 6?
The Grape-Tree, with whole leaves.
This tree is very common between Kingfon and Bull-bay; but it feldom rifes above five or eight feet in height. The berries of this fpecies are not efteemed.

COCCOLOBIS 3. Folizs oblongo-ovatis venoff, wvis minoribus punctatis. Uvifera arbor Americana fructu punctato. Pk. t. 237. f. 4.

## The chequered Grape-Tree.

COCCOLOBIS 4. Montana major arborea, foliis fubrotundis, cortice leoi. An, Guanabanus montana. Pk. t. 363 . f. 4.

## The Mountain Grape-Tree.

This tree is frequent about the Crofs in Clarendon: it grows to a confiderable fize, and is looked upon as a fine timber-wood.

COCCOLOBIS? 5. Frutefcens, foliis Jubrotundis, fructu minori trigono. Tab. I4. f. 3.
The fmall Grape-Tree, with dry triangular berries.
This tree grows among the rocks in the hills above Bull-bay. The cup is feldom divided into more than three parts, and the nut is triangular; but all the cutward parts, and the natural appearance of the plants, agree.

The bark and kernels of all the fpecies are looked upon as powerful aftringents; and the flowers are always difpofed on fimple fikes in each of them.

MELICOCCUS I. Foliis ut plurimum bijugatis ovatis, per pennas alatas
Nux Americana, cofa foliorum appendiculis auta. Pk. t. 207. f. 4.

## The Genip Tree.

Periantium Parvum monopbyllum, in quatuor lacinias lanceolato-ovatas, pao tentes profunde fectum.
Corolla Petala quatuor oblonga, ad incifuras calicis fere fita.
Stamina. Filamenta octo brevia, erecta, in orbem circa germen pofita, ad bafim fere adnata; antheræ erecta oblonge.
Piftillum. Germen ovatum; ftylus brevis; ftigma vaginatum.
Pericarpium. Bacca ovata bilocularis, binis nucleis naucis propriis fubofeis glabris tectis, referta.

## O F J. A M A I C A. 211

This tree was brought to Famaica from Surinam, and is cultivated with great care by one Guaf, a 'Jew. It thrives very well in the low lands about King fon, and rifes fometimes to the height of fixteen or eighteen feet, or better. The fruit is very mellow, and grows to the fize of a large plumb; but it feldom brings more than one ftone or feed to perfection, and that is generally found in the center.

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RHIZOPHORA 1. Utrinque bracbiata; foiiis eliptico-ovatis, fummis ramis
                    dipoofitis.
    Rhizophora foliis acutis, fructibus fubulato-clavatis. L. Sp. Pl.
    The Mangrove of Catefb. ii. t. 63 .
    Mangle arbor pirifolia, \&c. Pk, t. 204. f. 9.
    Mangle pirifolia cum fliquis longis, \&c. Slo. Cat. \(155^{\circ}\)
    Kandel. H. M. p. 6. t. \(34^{\circ}\)
    Guaparaiba. Pif. 204.
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    The Mangrove, or Black Mangrove Tree.
    This tree is generally found on the borders of the fea, in whofe waters alone it feems to thrive; and there, only in fuch places as have a foft and yielding bottom. Its larger branches. frequently emit foft and weakly appendicles, that have the appearance of fo many flender aphyllous branches, and bend always downwards: but as thefe are fofter, and furnifhed each with a large column of a lax fpongy pith in the center; they grow more luxuriantly than the other parts of the tree, and reach the mud in a thort time; where they throw out a numberlefs feries of flender fibres, which in time turn into roots, to fupply the ftem more copioully with nourimment, while they become fo many props or limbs to the parent tree Thus it continues to enlarge its bulk, as its weight increafes, or its branches fpread, (thefe conftantly throwing out new appendicles as they multiply their hoots;) and by thofe means fornis thofe interwoven groves we fo frequently meet with on the fea-hore in thofe parts of the world; which, befides many other advant ges, ferve to flop the mould that is confantly wathed down by thofe rapid floods that come from the inland parts; and thereby, in time, turn, what might have otherwife continued ufelefs ponds, or open creeks, into rich and fertile fields.

The fruit of this tree germinates within the cup, and grows from the top downwards, until it acquires a due degree of weight and perfection: thicn it falls off; and as the root part is always thickeft, and hangs loweft, it drops in that direction, and is thus received in the natural polition in the mud below: the leaves immediately unfold, and in a few minutes you fee a perfect plant, fometimes of ten or twelve inches in length, which foon begins to fhoot its roots, and pufh its growth like the parent ftem; for the germen is frequently a foot in length before it falls, and always furnifhed with two leaves at the top; but thefe are folded up and inclofed within the cup while it continues upon the tree.

The trunk of the Mangrove feldom grows to any confiderable thicknefs, but the wood is very tough and hard, bears the water well, and is much ufed for knees and ribs in long-boats, and other fmall craft; for which the archings and angles of its limbs moft naturally adapt it. Its lower branches become frequently the fupporters of the American oyfter, which has given rife to the fabulous account of the growth of this Chell-fifh. Pifo fays, that a piece of the root toafted, and applied warm to the painful wounds infected by the fting of the fifh Nigui, cioes foon quiet the pain.
N. B. The number of the Filaments varies from four to twelve, in the flowers of this plant; but eight is the mon conftant number of them in that part of the world.

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## Of fuch as bave eight Filaments and two Styles in every Flower.

WINDMANNIA 1. Fruticofa foliis fubrotundis ferratis, per pennas cordato-
alatas diSpofitis; racemis terminalibus; pennis \&
ramis oppofitis.

The flender Windmannia, with winged ribs.
Periantium Tetrapbyllum parvum, foliolis ovatis erecto-patentibus.
Corolla Tetrapetala, petalis foliolis calicis majoribus \&o alternatis.
Stamina. Filamenta octo erecta, brevia; e finu petalorum foris $\mathcal{E}$ foliorum calicis pariter orta. Anthera fubrotunde.
Piftillum. Germen fubovatum; ftyli duo longitudine faminum; ftigmata fubacuta fimplicia.
Pericarpium. Capfula oblongo-ovata, coriacea, bilocularis, birofrata, Seminibus jex vel octo referta, parvis \& fubrotundis.
I have met with this elegant little fhrub on the top of the blue mountains in Nero Liguanea, in the road between Mr. Fones's and Cold Spring; and have once before obferved it in the mountains above the fulphur, in Mountferat, but never in any other part of either ifland. It rifes by a weakly flender ftem, and fhoots frequently to the height of fix or feven feet. The branches are few, $\mathfrak{A l e n d e r , ~ a n d ~}$ oppofite, as well as the ribs, which we have always found beautifully alated or winged between the leaves; but the flowers rife in loofe bunches at the extremities of the branches. The whole plant feems to have fomething of the appearance of a Sumack.

## S E C T. III.

Of Plants that bave eight Filaments and three Styles in every Flower.
OLYGONUM 1. Glabrum, foribus bexandris, fylis bifdis, vaginis fubmuticis.
Polygonnm foribus bexandris femidigynis, foliis lanceolatis, fiipulis fubmuticis. L. Sp. Pl.
Perficaria procumbens longifima. Slo. Cat. 47. \& H. t. 3. Scovanna-Mudela, Ec. H. M. p. 12. t. 77.

## The fmooth Arfe-fmart.

POLYGONUM I. Subbirfutum, vaginis fetofis, foribus octandris, fylis trifidis.
Polygonum foribus octandris trigynis racemo/ss, caule patulo: L. Sp. Pl. Perficaria Maderafpatina, EJc. Pk. Phy.t. 2 Io. f. 7. Velutta-Mudela. H. M. p. 12. t. 76.

The hairy Arfe-fmart.
Both thefe plants grow naturally in Famaica, and are very common about all the lagoons and rivulets in the ifland.

PAULINIA I. Sarmentofa, foliis ternato-ternatis, ad apices crenatis; infimis minoribas, quandoque tantum auritis.
Paulinia foliis bipinnatis, petiolis marginatis. L. Sp. Pl.
Paulinia. H. C.

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Planta fruticofa fcandens, \&cc. Slo. Cat. $214 . \%$ H. t. 23 ro Cordis Indi folio $\mathcal{O}$ facie frutefcens, $\mathcal{E}^{c}$. Pk. t. 168. f. 6.
Cururu-ape. Pif. $25^{\circ}$

## Souple Jack.

This plant is very common in the woods of Gamaica; it has a flender, lignous, flexile ftalk, and raifes itfelf frequently to a very confiderable height among the bufhes. The ftem of this plant is fo tough and yielding, that it is commonly cut into junks, barked, and ufed for riding-fwitches, or carried in the hand, in thofe parts, as we do fmall ratans in Europe.

> CARDIOSPERMUM I. Scandens, foliis ternato-ternatis, acuminatis, Cardiofpermum. L. H. C. \& Spatis. Pl. Cor Indum ampliori folio fructu majori. The. Zey. The larger Cardiofpermum. CARDIOSPERMUM 2. Villofum, Aylo bifido, faminibus fubcoalitis oppofito. Cor Indum five Halicacabum peregrinum minus, \&ec. The. Zey.

## The imaller hairy Cardiofpermum.

Both thefe plants are natives of Famaica, and frequently found climbing in the lower woods. The firft fort is very common; it has but a flender ftem, and climbs to the top of the talleft trees in the forefts. I have feen only one or two plants of the other fort; they grow in the low lands towards the foot of the Long-mountain in the upper part of Liguanea: the leaves are minutely divided, and have fomething of the appearance of Parly. All the filaments of the flower are connected at the bafe in this laft fpecies; and difpofed, as it were, in a tuft on one fide, and oppofite to the Ayle.

## C L A S IX.

Of the Enneandria, or Plants that have nine Filaments in every Flower.

## S E C T. I.

Of Jucb as bave nine Filaments and one Style in every Flower.
AURUS 1. Foliis oblongo-ovatis, alternis, venofis; racemis terminalibus, calicibus fimplicibus.
Laurus foliis lanceolatis perennantibus venofs planis, foribus racemofs. L. Sp. Pl. \& H. C.
Laurus folio longiore, \&c. Slo. Cat. \& H. t. 165.
Laurus Catefb. t. 63. \& Pk. t. 176. f. 2.

## Sweetwood.

This tree grows to a confiderable fize in Famaica, and is looked upon as one of the beft timber-trees in the ifland: it grows in great abundance in the lower hills; Kkk
but its leaves vary between the oval and the oblong, according to the foil, and the age of the tree. The wood, leaves, and flowers, have a very agreeable fmell.

> LAURUS 2. Foliis venofis ovatis, fructu majori, calicibus tumidis, laciniis reflexis.
> Laurus, EOC. Pk. t. 304. f. 1. \& t. 369.f. 4.
> Loblolly Whitewood, or white Sweetwood.

I have feen this tree in the mountains of St. Ann's; its berries are as large as cherries, plump and black; and the cups pretty thick and fwelling. The leaves and tender fhoots is excellent fodder for all forts of cattle.

LAURUS? 3. Foliis obverfe ovatis Jubtus cinereis, fructibus oblongis foarlis,
The fmaller Laurel, with oblong berries.
I found this tree in the road between Mount Diable, and the thickets in St. Ann's; it divided into a great number of branches toward the top, was about twelve feet in height, and four inches in diameter near the root. The berries of this feecies are oblong and even, of an ecliptic form, and feldom under an inch or better in length: they are of a black colour, very fucculent, and contain each a fingle bilobed kernel, without any partial covering. I have not feen the flowers,

LAURUS? A. Foliis oblongooovatis, fructu obverfe ovato, pericarpio bum tyraceo.
Laurus foliis ovat is coriaceis, floribus corymbofis. L. Sp. PI.
Perfea Plum, t. 20.
Prunifera arbor fruíu maximo, \&c. Slo. Cat. 18.5. \& H. H.t. 222. Plotanus Mart. 513.

The Avocato, or Alligator Pear-Tree.
This tree grows commonly to the fize of our larget apple-trees in Europe, and fpreads pretty wide at the top. The branches are very fucculent and foft; the leaves oblong and veiny, and the fruit of the form of a pear; but the pulp is covered with a tough fkinay coat, and contains a large rugged feed, which is wrapped up in one or two thin membeanous covers. The fruit of this tree is one of thofe that is beld in the greateft efteem, among all forts of people in thofe colonies; the pulp is of a pretty firm confifence, and has a delicate rich flavour: it gains upon the palite of moft people, and becomes foon agreeable even to thofe who cannot like it at firft; but is fo rich and mild, that moft people make ufe of fome fice or pungent fubftance to give it a poignancy; and for this purpofe, fome make ufe of wine, fome of fugar, fome of lime-juice, but moft of pepper and falt. Moft forts of creatures are obferved to feed on this fruit with pleafure; and it feems equally agreeable to the horfe, the dog, the cow, and the cat, as well as to all forts of birds; and, when plenty, makes a great part of the delicacies of the negroes.

The tree requires fome care, a rich foil, and a warm lituation, to raife it to perfection. It was firf introduced there from the continent.

> VOLKAMERIA I. Arborea, foliis oblonga-pvatis, alternis, faperne glabris, fubtus fubvillafis \& nervofis; foicis ramofis, terminalibus. Tab. 21. f. I.
> An, Baccifera arbor caliculata, foliis laurinis, \&cc. Slo. Cat. 165. \& H. t. 198.

The Volkameria, with oblong leaves.

## O F J A M A I C A.

Periantium Monophyllum campanulatum, ultra medietatem in quatuor vel quinque lacinias ovatas jectum.
Corolla Monopetala, in quatuor vel quinque lacinias ovatas, conniventes, ad bajim fere Jecta.
Stamina. Filamenta novem brevia; antheræ cordatce erecta.
Piftillum. Germen fubrotundum parvum, vaginulâ urceolatâ inclufum;
ftylus brevis fimplex; fligma tribobum, trithartitum, obtufum.
Pericarpium. Bacca trilocularis, tribus Seminibus oblongis, folitariis, referta.
This fhrubby tree is very common in Sixteen-mile-walk, and rifes generally to the height of twelve or fourteen feet. It feems to have a near refemblance to the Locuf-berry tree, which we have placed among the Malpigia; but it is really very different, for the parts and difpofition of the flowers are entirely peculiar. The filaments rife from the bottom of the flower, juft about the germen, and are not fo long as either the petals, or the cup.

The flower-tops are rather fo many bunches compofed of fimple fpikes, rifing gradually one above another; but each of the flowers are fupported by a fubulated ftipula, or ear, while young.

We have called this tree by the name of Volkameria, to perpetuate the memory of that famous botanift; having ranged the fhrub that ufed to go under that denomination with the Clerodendrums, of which it is a fpecies.

## MELANIUM 1. Herbaceum reclinatum, foliolis ovatis oppofitis, foribus fingularibus ad alas alternas.

## The reclining Melanium, with fingle flowers.

Periantium Monophyllum tubulatum, ad imum, ab altero latere, prominulum; tubus rectus aqualis, ore in fex crenas fectus.
Corolla Hexapetala, petalis oblongis fauci calicis adnatis.
Stamina. Filamenta novem vel octo, cum rudimento unius vel alterius, brevia, incqualia, inferne tubo adnata; anthere cordata in fauce calicis fite.
Piftillum. Germen oblongum intra calicem fitum; flylus fimplex longitudine fere faminum; ftigma acutum.
Pericarpium. Capfula membranacea oblonga unilocularis.
Semina Pauca (tria inter © Jena) placentulis propriis adnata.
I found this vegetable among the cane-pieces in Capt. Fuller's eftate at Luidas; it is but a weakly plant, and grows generally with a flender ftem well fupplied with branches towards the top. The whole plant has a difagreeable fharp fmell, which approaches much to that of the Guinea-Henweed, but is more fubtile and lefs perceptible when placed clofe to the nofe. I had frequent occafions to obferve the fmell of this plant while it was under examination, but never found any more difagreeable befides that of the Guinea-Henweed. The leaves and flowers are very much like thofe of the Parfonfia, as well as the difpofition and make of the capfulx, but that plant does not branch fo much, nor has it any thing of this fmell. I am at a lofs whether to place it among the Enneandria or Decandria; the number of the flower-leaves feems to clafs it with the former.

## C L A S S X.

## Of the Decandria, or Vegetables that have ten Fild-- ments in every Flower.

## S E C T. I.

Of fuch as bave ten Filaments and one Style in every Flower.
N. B. We place thofe that have their Filaments, in an erect and regular pofition, before the reft.

B
ARBILUS 1. Foliis cordato-ovatis nitidis pinnatis, floribus recemofis, cortice Scabro.
The Barbilus, with pinnated leaves, or Baftard Iron-wood.
Periantium Parvum campanulatum, quandoque quadrifidum, quandoque quinquefidum.
Corolla, Vel tetrapetala, vel pentapetala; petalis parvis lanceolatis, margini interiori calicis affixis.
Stamina. Filamenta vel oEto, vel decem, comprefa latiufcula erecta, e fundo calicis orta; antherx parvae ovate.
Piftillum. Germen ovatum; ftylus brevis fimplex; ftigma obtufufculum, fubrotundum.
Pericatpium. Capfula trilocularis ovata; fingulis loculamentis Seminibus, binis refertis.
This tree is very rare in Gamaica. I have feen it only once in the woods at the back of Bull-bay, where it grew to a confiderable fize, and mounted to the height of about forty feet. The trunk is generally ftraight, and covered with a rough furrowed bark; the wood is of a light brown catt, with a free porous texture, and is thought to be a good timber-wood; the leaves and tops are fmooth, and refemble thofe of the Mabog any tree pretty much. I have examined a great number of the flowers of this tree, and found them fo equally divided between the two claffes, that I was for a time in doubt which to refer it to; nor have I placed it now with any certainty, tho' the formation of the fruit feems to fhew it more nearly allied to this. It feems to be very nearly a-kin to the Tricbilia, tho' the filaments are not connected.

CUPHEA 1. Erecta foliolis oblongo-ovatis, oppofitis; floribus Jpicatis terminalibus.
The fmall erect Cuphea, with the flowers difpofed in fpikes.
Periantium Monopbyllum tubulatum coloratum ad imum, ab alterolatere, prominulum; tubus anguffus aqualis, ad faucem leniter ampliatus, recurvus, villofus, quinque crenatus.
Corolla Pentapetala, petalis obovatis, unguibus tenuibus fauci calicis ad crenas infertis.
Stamina. Filamenta decem brevifima, e tubo orta, in fauce libera; antheræ globofa, corolla coloris.
Pitillum. Germen oblongum calice inclufum; ftylus fimplex longitudine fere faminum; ftigma obtufufculum.
Pericarpium. Capfula membranacea oblonga unilocularis.

# O F J A M A I C A. <br> Semina Plura orbiculata compreffa, receptaculo oblíque adnata. Receptaculum Columnare, in centro catfula pofitum. 

This little plant was found in Clarendon; it has a delicate flender ftalk, emits but a few branches, and feldom rifes above ten or twelve inches in height. It bears its flowers in fpikes at the extremities of the branches.

> ACISANTHERA 1. Erecta ramofa, ramulis quadratis, foliolis trinerviis ovato-crenatis, oppofitis; floribus fingularibus ad alas alternas. Tab.22. f. 1.

The branched Akifantbera.
Periantium Monopbyllumi ventricofum pragnans, ore profunde quinquidentatum.
Corolla Pentapetala, petalis obverfe ovatis, fauci calicis infertis.
Stamina. Filamenta decem, vix aqualia, declinata, corolla breviora; antheræ oblonga fagittata \& fubarcuate, verfatiles.
Piftillum. Germen fubrotundum calice teEtum \& coronatum; Itylus brevis fimplex, ftigma acitum.
Pericarpium. Capfula Jubrotunda bilocularis, binis placentulis referta.
Semina Plurima parva jubrotunda, placentulis affixa.
This plant grows in the paftures eaftward of Luidos, and feldom rifes above fourteen or fixteen inches in height. The ftem is pretty firm and fquare, and emits a good many branches towards the top; the leaves are fmall, and remarkable; and the flowers rife fingle from the alternate alæ, or bofoms of the leaves.

Mr. Ebret's delineation does not anfwer exactly to this defription, which was taken from the plant while frefh; but this, I fuppofe, may be owing to fome variation, or defect in the fpecimen.

SAMYDA I. Fruticofa foliis nitidis cordatis, leviffime crenatis; rudimentis mollibus rubentibus; racemis tenuioribus alaribus. Tab. 23. f. 3.

The fhrubby Samyda, with waxen rudiments; Or the larger
Cloven-berry Bufh.
Periantium Monophyllum coloratum, campanulatum, in quinque partes ovatas ultra medietatem fectum.
Corolla, Alia nulla.
Stamína. Filamenta erectabrevia e pelve calicis orta; in aliis octo, in alits novem, in aliis decem; rudimentis totidem, variis, interpofitis; antheræ ovatce caducce, flamentis tantum conceffe.
Piftillum. Germen globofum in fundo calicis fitum; Atylus brevis fimplex; ftigma craffiufculum, obtufum.
Pericarpium. Capfula carnofa fubrotunda unilocularis trivalvis, tribus lineis nota; valvis maturitate reflexis, © a receptaculo columnare pulpofo recedentibus.
Semina Plura nidulantia, receptaculo pulpofo erecto perfjlenti immerfa.
SAMYDA 2. Foliis ovatis cum acumine, fructibus plurimis minoribus confertis.
Arbor baccifera foliis oblongis acuminatis. Slo. Cat. 173. \& H. t. 211.
The fmaller Samyda, or Cloven-berry Buth.
L 11
SAMYDA

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SAMYDA 3. Foliis ovatis villofis, floribus confertis, fafciculis fparlis. Samyda. L. Sp. Pl.<br>Frutex baccifera folio oblongo integro, \&cc. Slo. Cat. 173.

The hairy Samyda, or Cloven-berry Bufh.
There fpecies of the Samyda are frequent in Famaica, and grow commonly in the low lands; they are all of the Chrubby kind, tho' neither of the two laft forts ever rifes above four or five feet in height; but the firft fhoots fometimes to the height of feven or eight. The pigeons are faid to feed much upon the feeds, and the pulp of the berries of the laft fort, when in feafon; and the bitterifh tafte of both has probably given rife to the notion: but I am apt to think that that flavour, fo peculiar to the wild pigeon, proceeds rather from the fruit of the Xylopicron, which is always in feafon about the fame time, and an agreeable wholfome bitter, on which they are well known to feed.

The firft fpecies has no more than eight filaments in each flower; but the tws laft always have nine or ten, with as many villofe rudiments.

> TRICHOGAMILA 1. Fruticofa, erecta, indivifa; foliis orbiculatis alternis. The fimple erect Trichogamila.

Periantium Duplex; exterius diphyllum, parvum, decidaum; interius monophyllum cyathiforme, in quinque partes ovatas ad medietatem Sectum.
Corolia Pentapetala, vel monopetala ad bafim Secta; laciniis oblongis retufis, erecto patentibus.
Stamina. Filamenta decem tomentofa, erecta, corolla breviora; anthere fubrotunda.
Piftillum. Germen minimum in fundo calicis fitum; Atylus tomentofus longitudine ftaminum; ftigma obtufufculum.
Pericarpium. Drupa Jpharica lignea tenuis, $\mathcal{F}$ tenuiter corticata, unilocularis, inflata, Juperficie Jubinaquali.
Semina Nuclei bini bilobi oblongo-ovati, quorum alter ut plurimum abortit, minorque, laxatus, © divinctus eft; alter vero fundo druper affigitur, nee dimidium loculamenti replet.
This Chrubby plant grows clofe to the beach at Bull-bay, and feldom rifes above three or four feet from the root. The flem is ftiff and fimple, and feldom exceeds three or four lines in diameter: the leaves are round, fmooth, and alternate; the flowers fmall and whitih; and the berries of the fize and appearance of gall-nuts, but light and hollow.

> RUTA I. Foliis decompofitis, laciniis latiufculis, petalis fubvillofis.
> Ruta foliis decompofitis. L. Sp. PI. \&cc.
> Ruta Off.

## Rue.

This plant has been long introduced to, and cultivated in Famaica; but does not grow fo luxuriantly as many other European vegetables; nor is it indeed fo neceffary in this climate. It is an active, warm, nervous medicine, and much impregnated with fubtile penetrating particles of a very volatile nature, and contains a great quantity of a more fixt refinous fubftance. It ftimulates the folids to a more vigorous ofcillation, rarefies the juices, promotes both fweat and urine, provokes the menfes, refolves obftructions, ftrengthens the vifcera, and attenuates the blood. It is recommended equally in peftilential fevers, and thofe arifing from a lentor of the juices; is found very ferviceable in moft hyfteric and fcorbutic cafes; and often ordered,

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ordered, with other antielminthics, in extemporaneous prefcriptions, for worms. It is generally adminiftered in infufions or bolus's; for which purpofes both a conferve of the leaves, and the freth or dried plant, is generally kept in the fhops, as well as the oil.

> MELASTOMA 1. Subirborefcens foliis oblongis, petiolis marginato-fimbrintis, racemis terminatricibus, flore majori.

Melaftoma. Bur. The. Zey. t. $7^{2}$.
The Cock-roch Tree.
MELASTOMA 2. Arborefcens, foliis ovatis fubtus cinereis, racemis terminatricibus, floribus majoribus.
Melaftoma foliis integris ovato-lanceolatis fubtus fericeis, nervis ante bafint coadunatis. L. Sp. Pl.
Groffularice fruclu arbor maxima jpinofa. Slo. Cat. 164. \& H. t. 196. f. 2.
The arborefcent Melafoma.
MELASTOMA 3. Fruticofa minor, foliis tenuibus ovatis, racemis terminalibus.
Melaftoma foliis lanceolatis fcabris. L. Sp. Pl.
The fmaller fhrubby Melaftoma, or Indian Currant-Tree.
MELASTOMA 4. Hirfuta, foliis cordatis reticulatis fcabris, fioribus laxe racemofis ad alas:
Melaftoma foliis denticulatis lanceolatis quinquenerviis, caule bipido. L. Sp. Pl.
Groffularice fructu, \&c. Slo. Cat. 165. \& H. t. 197. f. 2: \& Pif. 217. The hairy Melafoma.
MELASTOMA 5. Subbirfuta; foliis cordatis fabris, minutiffme denticulatis § pulcbre reticulatis; racenis minoribis alaribus. Tab. 24. f. 3 .
The hairy Melafoma, with delicate leaves.
MELASTOMA 6. Foliis amplifimis fubtus ferrugineis, racemis terminatricibus.
Melaftoma foliis denticulatis ovatis acutis. L. Sp. Pl.
The large-leafed foxy Melafoma.
MELASTOMA 7. Foliis amplioribus, per petiolum recurrentibus \&ं contractis; fafciculis florum Jparfis. Tab.24. f. 1. \& 2.
Melaftoma foliis denticulatis ovatis acuminatis, nervis interioribus ante bafim coadunatis. L.Sp. PI.
The large-leafed Melafoma, with the flowers difpofed in fcattered tufts.
MELASTOMA? 8. Foliis ovatis nitidis minutifime denticulatis, venis © ramulis purpurafoentibus.
An, Groffularice fructu arbor maxima, \&c. Slo. Cat. 164. \& H. t. 196?
The fmooth-leafed Melafoma, with purple veins.
MELASTOMA?

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MELASTOMA? 9. Minima fcandens, farmento tenui, foliis quinquenervitio

## The fmall climbing Melaforta.

All thefe fpecies of the Melafoma are frequent in 'famaica, and found fome in one part, fome in another part of the ifland. The eithth fpecies is a native of the coldel mountains of Liguanea; the others grow chiefly in the hills and lower mountains: they are all of the fhrubby kind, and feldom exceed five or fix feet in height; we muft, however, except the two firf fpecies, which are fometimes obferved to rife by moderate trunks, and to put on the appearance of fmaller trees. The leaves, in all the fpecies, are furnifhed with three or five veins, that run in an arched form from the foolftalk to the top; and the fpaces between thefe are beautifully nerved or areolated, and of a very fingular ftructure.

TRIBULUS r. Foliis fex jugatis fubcequalibus, flore amplo odorato.
Tribulus foliis fex jugatis fubcqualibus. I, Sp. Plo
Tribulus foliolis jex parium pinnatis. L. H. C.

## The Turkey Bloffom.

This plant, whether a native, or originally introduced to Jamaica; is now very common about King fon, and grows very luxuriantly both in the eaftern and weftern limits of that town. It is planted in many of the gardens for the fake of its flowers, which yield a pleafant agreeable fmell. It is a fpreading creeper, and runs frequently the length of three or four feet from the main root, throwing out many lateral branches on all fides. The fowls are obferved to feed much on the bloffoms of this plant where it grows wild, and is thought to heighten the flavour, as well as to contribute to the fattening of them.

TRIBULUS? 2. Foliis fenis pinnatis, extimis majoribus, foribus fingularibus:
Tab. 21.f. 3.
Tribulus foliolis trium parium pinnatis, L. H C. © quadrijugis Sp. Pl. Tribulus tereftris major, \&cc. Slo. Cat. 90. \& H. t. 132.

## The field Tribulus.

Pedunculo Oblongo, excavato obverßè conico, ad apicem applanato incidit periantium pentaphyllum, foliolis angufis acutis birfutis, $\mathcal{E}$ remotis; primo atate ereais, maturitate reflexis.
Corolla Monopetala decidua, in quinque lacinias orbiculatas, calice breviores ad bafim jeeta.
Stamina. Filamenta decem brevia : antheræ fubrotunde; alternce tantillo minores.
Piftillum. Germen fubrotundum mucronatum; fylus vix ullus, ftigma conicum, decem friis notatum.
Receptaculum Columnare capitatum erectum, in cestro fructificationis locotum.
Pericarpium Nullum.
Semina "Decem angulata fubrugofa Eo fubcomprefa, ad bafim columnce in orbem pofita, tandem decidua.
This creeping plant is fomething like the foregoing, both in fize and difpofition: it grows in all the paftures, is frequently gathered with the other fodder-plants, and fed upon indifcriminately by all forts of cattle.

# HeMALOXYLUM r. Spinofum, foliolis pinnatis, racemis terminalibus. 

 Hæmaloxylum. L. H. C. \& Sp. Plant.Lignum Campechianum, Jpecies quadam Braf. \&sc. Slo. Cat. 213. \& H. t. 23 I.

Coatli, Efc. Hernandes 1sg. \& Lignum Nepbriticum. Off.
Logwood.
This Chrub was firf introduced to Gamaica from fome part of the main, and is now cultivated in many parts of the inland. It thrives bett in low fivampy lands, or fhallow waters, where the bottom is rich and moderately firm; and feldom rifes above twelve or fourteen feet in height, or exceeds feven inches in diameter; but the trunk is generally fhort and uneven. This wood is the chief ingredient in all purple dyes, and a principal one in our beft blacks. It gives a purple tincture by infufion, which is eafily changed, or heightened, by acid or allalious admixtures; and varies its appearance in different pofitions, like the Opol, or the feathers of a peacock. Both the bark and gum of this tree are gentle fubaftringents; but the laft excels, and adds a fweetnefs to its virtue, which makes it the more agreeable to the palate.

> BUCERAS I. Ramulis flexuofis tenuioribus, foliis obcentis comfertis, foicis plurimis terninalibus. Tab. 23. f. I.
> Mangle Gulifera, foliis fubrotundis confertis, \&xc. Slo. Cat. 156.
> Periantium Monophyllum urceolatum, inferne ventricofun fubrotundum, collo coarctatum; limbus erecto-patulus, integer.
> Corolla Nulla.
> Stamina. Filamenta decem erecto-patentia, limbo paulo longiora fio e collo calicis enata. Anthere erectaciordate.
> Pifillum. Germen oblongum in fundo calicis fitum $\mathcal{O}$ adnatum; fylus fomplex longitudine faminum; Atigma acutiufculum.
> Periearpium. Calix una cum germine mutatur in capfulam urcoolatam unilocularem, que fimen unicum oblongo-ovatum involvit.

This tree is called the Black-Olive in Jamaica; but in Antigua, where it is equally common, goes by the name of French Oar. It is a native of the lower fwampy lands, or adjoining banks, and grows to a very confiderable fize: it is frequent about the Ferry, and remarkable for its flender crooked branches, and the tufted difpofition of its leaves. On the flower-fpikes of this tree you may fometimes find one or more fructifications, that fhoot into a monftrous fize, being feldom under three inches in length, tho' never above a line and a half in diameter; and fomething in the form of a bull's horn. It is reckoned an excellent timber-tree; and the bark is greatly efteemed among the tanners.

HYMENÆA r. Foliis geminatis parallelis, paginis inequalibus, racemis terminatricibus.
Hymenæa. L. H. C. \& Species Plant.
Courbaril Plum, t, $3^{6}$, fed corolla inaccurate delineata eft.
Ceratia diphyllos Antegoana, Ecc. Pk. Phy., t, 8z, f. 3.
Refina Lutea pallida, Ec. Slo, Cat. pag. 216. \& H. 186.
Jataiba. Pifo 123.

## The Locus Tree.

Periantium Duplex; exterius bipbyllum amplexum deciduum; interius pentaphyllum, vel monothylitim ad bafom fere fectum; laciniis ovatis.

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> Corolla Pentapetala, petalis ovatis erecto-patentibus, fere aqualibus.
> Stamina. Filamenta decem brevia fimplicia declinata; antheræ oblongaovata.
> Piftillum. Germen oblongum comprefum parvum; flylus brevis intortus, incurvits; ftigma acutum.
> Pericarpium. Capfula ligneo-corticea, magna, leniter compreffa, oblonga, utrinque retufa, filique formis, unilocularis, pulpâ fari-naceo-fibrofâ repleta.
> Semina Pauca, tria fcilicet vel quatuor, fubrotunda Ee leniter compreffa, nidulantia.

The flowers of this tree were very young when I examined them; but the parts have been fufficiently diftinct, and appeared in the fame form that we have defcribed them here. It grows to a very confiderable fize, and is looked upon as an excellent timber-tree; but it mult be very old before it is cut, otherwife the heart will be but fmall. It is a fpreading Thady tree, and found in many parts of Liguanea; but whether a native, or originally imported there, I can't determine. It is very common in Antigua, and there I am fatisfied it does grow naturally.

This tree yields a fine clear refin, which is called Gum Anime in our Chops, and makes the fineft varnith now known; but this is beft made without a mixture. It is diffolver unly by the moft dephlegmated fpirits, but it burns readily, and with a clear flame, and grateful fragrant fmell, for which it is fometimes ordered by way of fumigation, in the bed-chambers of people labouring with afthmas, or fuffocative catarrhs.

PARKENSONIA 1. Aculeata, foliolis minutifimis pinnatis, penná longiorì. compreffa.

## Parkenfonia. L. H. C. \&\& Sp. Pl. <br> The Jerufalem Thorn.

This chrub was firft introduced to Yamaica from the main, but it now grows wild in many parts of this, as well as the other iflands, where it has been originally cultivated for the ufe of inclofures. It feldom rifes above eight feet in height, and is well fupplied with ftrong thorns on every part. The branches are flexile and fmail, and the trunk feldom grows to any confiderable thicknefs.

CASSIA I. Arborea, foliis paucioribus ovatis atque pinnatis, filiqua maxima cylindracea.
Caffia foliis quinquejugatis ovatis acuminatis glabris, petiolis glandulofis. L. Sp. Pl.

Caffia fifula, \&cc. Thez. Zey. pag. 56.
Caftia nigra, feu fiftula prima, \&cc. Slo. Cat. \& H.
Caffia Jolutiva Bontii \& Offic.
Conna. H. M. p. 3. t. 22

## The Caffia-ftick Tree.

This tree grows in many parts of Fameica; but I believe it was firf introduced there from fome other part of the world. The pulp that furrounds the feeds between the feptr, in the long cylindric pods of this plant, is an eafy gentle laxative, which may be fafely ufed on every occafion, where a perfon would avoid raifing a ftrong irritation in the fibres of the inteftines, and yet lies under a neceffity of opening the paffage : but it is apt to grow rancid when it has been long out of the cells, and generally acquires an acrimony that renders the adminiftration of it precarious or dangerous in that ftate.

# O F J A M A I C A. 

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CASSIA 2. Foliis plurimis oblong is pinnatis, flore rubello, fliliquis maximis,
craffioribus trinerviis. Caflia foliis duodecim-jugatis oblongis obtufis glabris, glandula nulla. L. $\mathrm{Sp} . \mathrm{Pl}$.
Caffia nigra, feu ffulofa fecunda, \&cc. Sio. Cat. \& Hift.
The Horfe-Caffia.
This tree grows to a moderate fize, and ftretches frequently to the height of eighteen or twenty feet. The leaves are fmall and oblong, the flowers reddifh, and the pods very large, having each three confiderable nerves running the whole length of them, from the foot-ftalk to the top: two of thefe are clofe together, and tun along the back future; but the other is alone, and fixt oppofite to them. It is a pargative, like the foregoing, but not fo agreeable.

## CASSIA 3. Arborefcens diffufa, filiquis longis comprefis.

The Senna Tree.
This Chrub is very common in the low lands about King foon, and rifes frequently to the height of twelve or fifteen feet: the branches are flender and fpreading, the leaves pretty fmall, the pods long and compreffed, and the flowers difpofed in thick bunches at the ends of the branches;

CASSIA 4. Fruticofa erecta, foliis ovatis acutis quinquejugatis, fligù compreffa, glandula ad imulum.
The fhrubby Senna, with flat pods.
CASSIA 5. Fruticofa erecta, foliis plurimis pinnatis ovato-acutis, filiquis tur: gidis.
The fhrubby Senna, with fwelling pods.
Thefe feecies are very like each other, but neither of them grows above four or five feet in heights or exceeds half or three quarters of an inch in diameter. They are both common about the Angels.

CASSIA 6. Fruticofa, foliis minoribus obverfe ovatis fexjugatis, foribus gemiz. natis vel bigeminatis, racemis alaribus:

## The flowering fhrubby Semna.

CASSIA 7. Fruticofa foliis acuminatis, fliculis fubrotundis mono/permis.
The fhrubby Senna, with fmall round pods.
I found a branch of this feecies preferved among my fecimens, but do not remember when I gathered it, nor the particulars of its growth; though, from the fpecimen, it appears to be a fhrub with very flender branches, and very different from all the other feecies.

CASSIA 8. Viminea, foliis oṽato-acuminatis, bijugatis; racemis laxis alaribus, filiquis brevioribus comprefis.

The weakly Senna-fhrub.
This plant is a native of the coldeft mountains of Liguanea, and rifes frequently to the height of feven or eight feet, among the bufhes; but it is very weakly, and could
could not fupport iffelf upright without their afliftance. I found it on the lide of the hill near Cold-Spring.

> CASSIA 9. Siliquis quadrialatis, fpicis terminalibus; foliis plurinis pinnatis, majoribus obovatis.
> Caffia foliis octojugatis ovali-oblongis, inferioribus minoribus; Jitulis patulis. L. Sp. PI.
> Cafia filiqua quadrangulari. H. Ett. t. 63I. \& The. Zey. pag. 56.

## The Ring-worm Bufh.

This plant is a native of Gamaica, and common about the Ferry, and in the upper parts of Sixteen-mile-walk. It lives but a few years, though it puts on the appearance of a fhrub in its growth; and when cultivated, rifes fometimes to the height of feven or eight feet, but feldom exceeds four in its native foil. The ants are very fond of the flowers of this plant. The juice of the leaves or buds is faid to cure the ring-worms.

CASSIA 10. Herbacea major erecta ramofa, fohis ovatoacuminatis, fliquis anguftioribus compre(tis, fpicis laxioribus terminalibus affurgent tibus.
An, Caffia foliolis quinquejugatis ovato-lanceolatis margine fcabris. Ls, Sp. PI.
Senna occidentalis odore opiz virofo, \&xc. Slo. Cat. \& Hirt. Paiomirioba. Pif, 185.

## Stinking-weed.

This plant is very common about King fon, and rifes generally to the height of two feet and a half, or better: it is loofe in its ramifications, and well fupplied with flowers, difpofed in loofe fpikes at the extremities of the branches. The ribs on which the leaves are fet, are, in almoft every fpecies of this kind; furnifhed with a gland, which in fome is placed higher, in others lower upon the fhank, and in many between the leaves themfelves; but in this particular fort it is fituated very low, and near the infertion of the rib.

Pifo fays, that the juice of this plant applied outwardly, or injected, is a fpecific in the inflammations of the anus; and Markgrave adds, that the root is a powerful diuretic and antidote: but the top is the only part that is ufed in famaica, where the plant is commonly employed in all refolutive baths, and is accounted a very powerful ingredient on fuch occafions.

CASSIA in. Herbacea major diffufa, foliis obverfe ovatis trijugatis, fliquis Caffia minor fruticofa bexappylla Sence foliis. Slo. Cat. $146 . \&$ H. t. 180. Paiomirioba ii. Pif, 185.

## The tufted Senna, with obtufe leaves.

This plant is common among the bufhes in all the Savannas about King fon, and feldom rifes above two or three feet in height. The gland is yellow in this fpecies, and placed between the loweft pair of leaves.

CASSIA 12. Suffruticofa erecta birfuta, foribus fingularibus alaribus. Caffia foliolis multi-jugatis linearibus, ઉc. Aipulis fetaceis. L. Sp. P1: Senna occidentalis filiqua fingulari, foliis mimofe, \&c. Slo. Cat. \& H.

The hairy flender divided Senna, with fmall leaves.

## O F J A M A I C. A.

This little plant grows in many parts of the ifland, and feldom rifes above two feet and a half in height: the ftem and branches are very flender, and the leaves narrow and fmall. It is rather fubdivided than branched in its growth.

CASSIA 13. Suffruticofa erecta, foliis linearibus plurimis pinnatis; foribus fingularibus vel geminatus, Jpar/is.
Caffia foliolis multijugatis, glandula pedicellata, fipulis enfformibus. L. Sp. Pl.
An, Sena bumilis Americana, berbe mimofe filiquis ereatis, \&c. Pk. t. $223^{\circ}$ f. 3.

The fmooth Senna, with flender branches and fmall leaves.
CASSIA 14. Suffruticofa \& fubbirfuta, minor; foliolis paucioribus pinnatis, floribus fingularibus alaribus.
The little fhrubby Senna, with few finall leaves.
This plant is very common about the upper parts of Liguanca, but feldom rifes more than ten or fourteen inches above the root; tho' its flalk be tough and roody, like thofe of the three foregoing forts: nor do the leaves ever exceed three of four pair, on each of the common ribs; but in all other refpects it is like the twelfth fpecies.

CASSIA 1 . Herbacea, tenuifima, procumbens; foribus fingularibus alaribus. Caffia foliolis multijugatis, caule procumbente. L. Sp. Pl.

## The flender berbaceous.Caffia, with very fmall leaves.

This little plant grows every where in the paftures of Yamaica, and crceps among the grals: its ftalk is very weakly, and not much thicker than a middlefized pin, but ftretches generally to the length of fourteen or fi:teen inche from the root. It does not feem to have any of lthat ranknefs peculide to this clafis, no more than the three other fpecies mentroned juft before it.

POINCIANA I. Aculeata, foliis bipinnatis, foribus croceis pulcberrimis, pedunculis long is Jpicatis incidentibus.
Poinciana aculeis geminis. L. H. Upf. \& Sp. Pl.
Crifta pavonis fore elegantifimo. The. Zey.

Frutex pavoninus feu chrifta pavonis Breynii Cent.

## Barbadoes Pride.

This plant has been, I fancy, firft carried to Gamaica, from fome of the other colonies, of which it is a native: but it now grows wild in many places about Liguanea, and makes a beautiful thew when in bloom. The flowers of this plant feldom fhoot fo luxuriantly in that illand, tho' the fhrub rifes frequently to the height of five or fix feet.

All the parts of the plant are thought to be very powerful emmenagogues, and are frequently ufed for that purpofe among the negroes.

[^17]
## 226 THENATURALHISTORY Lignum-Vitce.

This tree grows in great abundance on the fouth-fide of 'famaica, but feldom or never in any other part of that inand. It is an ever-green of a dark gloomy caft, which continues its verdure in the moft droughty feafons, and, at times, throws out a great number of blue bloffoms, which are fucceeded by fo many compreffed berries of a roundifh form. The tree grows frequently to a very confiderable fize, but takes up a feries of years, to come to that perfection: the roots are thick in proportion to the growth of the tree, and run a great way into the ground, in a perpendicular direction; contrary to the ufual growth of timber-trees in that country, which generally fhoot the largeft prongs of their roots in an horizontal direction, and are commonly obferved to run very near the furface: the bark is thick and fmooth; the wood of a dark olive colour, and crofs-grained; the ftrata running obliquely into one another, in the form of an X. It is a hard, heavy timber-wood; and anfwers on all occafions where ftrength and duration is required, and its weight no impediment. It takes a fine polifh, and anfwers well in the turner's lathe; but is now chiefly ufed for thip-block:

The frefh bark opens the body, and is deemed a fweetner of the blood; bat the pulp of the berries purges and vomits very violently (three or four of thefe are a dofe) (a). The refinous parts of the tree are of a warm active nature, and found (by long experience) to attenuate and diffolve the blood: they are efteemed fpecifics in old venereal taints, chronical rheumatifms, and other diforders arifing from the fizynefs of the juices; and generally adminifered in decoctions (the refin fometimes, in bolus's) ordered for a continuance: but great care mult be taken to moderate or temper the native acrimony of thefe medicines in the beginning of a courfe, and to prepare the body for the ufe of them; the neglect of which has keen frequently the caufe of very difmal confequents in thofe warm climates, and may probably have the like effects fometimes in colder regions.

There is a tincture made with the gum of this tree, that has been fometimes adminiftered with fuccefs, as well as the powder itfelf, in obflinate intermittent and remittent fevers; in which cafes they commonly procure a few ftools, as well as promote a general difcharge by the fkin. The foliage of the tree is of a very deterfive nature, and frequently ufed to fcour and whiten the floors in moft houfes about Kingfon: the infufion of them is alfo ufed to wafh painted linens, and other ftained garments; which it is faid to do very effectually, without changing or diminifhing the luftre of the dyes.

ANACARDIUM 1. Fructu obverfè ovato, nuce reniformi, racemis terminalibus.
Anacardium. L. H. C. \& Sp. Pl.
Pomifera, feu potius prunifera, \&c. Slo. Cat. 187. \& H.
Acaiaiba. Pif, $120 . \&$ Acaju Bontii 198.

## The Cafberw Tree ; and Cafberw Tree of CateS. App. t. 9.

This tree is very common in moft parts of Famaica; and feems to be a very different fpecies from the Anacardium of the eaft, and of the fhops, whofe nuts are of the form of a heart moderately compreffed, and not fo large as thofe of this fpecies. It grows frequently to the height of twelve or fixteen feet, and fpreads much as it rifes; for the trunk feldom fhoots above four or five feet before it begins to divide and branch. It yields a great quantity of gum, not inferior to Gum Arabic either in virtue or mechanical ufes; and carries a light aftringency with it, which in many

[^18]cafes renders it fuperior to the other. The fruit is very agreeable, and full of a fubaftingent cooling juice; which has been fometimes expreffed in confiderable quantities, fermented, and obferved to make a fine rough wine, that may be ufed with great propriety on many occations, efpecially where the vifcera of folid fyftem has been greatly relaxed; and in fuch cafes the crude juice is fometimes allowed with fuccefs. The thell of the put contains a great quantity of cauftic oil, lodged in the cells between its laminx; with which fome of our American beauties dkin their faces from time to time. This troublefome operation they undergo with great patience; during which they are obliged to refrain from all manner of company and converfation, and to keep in elofe confinement: it holds generally for fourteen or fifteen days; and the inflammations raifed, during the procefs, frequently give thofe ladies reafon to repent of this piece of vanity; for it leaves the countenance fometimes more deformed, than any foots or freckles could have made it. Happy, had they been fo intent on the improvements of the mind, which they but too frequently neglect; while they bear fo much pain, with a thorough refignation, to imitate our fnakes and adders.

The almond or kernel is of a delicate tafte, and thought not inferior to any of our European delicacies of this fort; but you have it generally roafted; for they are obliged to burn the fhell, to procure the kernel free from the taint or acrimony of the oil.
N. B. Some of thefe trees bear a yellow, and fome a red fruit; but this variation I take to be owing to fome difference in the foil or culture.

CÆSALPINIA 1. Arborea, inermis; foliis minoribus paribus bipinnatis, ligno
kermefino.
Cæælpinia foliolis ovatis integerrimis. L. Sp. Pl. \& M. Med. Pfeudo-Santelum croceum, \&c. Slo. Cat. $213 . \&$ H. t. 132.

## Brafiletto.

Periantium Monophyllum, inferne ventricofum, in quinque lacinias profunde fectum; quorum fuperiores aquales;' erecto-patentes; poxima laterales ${ }^{\text {minores }}$; infima maxima, carinata \& fimbriata.
Corolla Pentapetala; petalis fere aqualibus; infimum pulcbre variegatum.
Stamina. Filamenta decem, difincta, declinata, longitudine germinis, intra laciniam infimam calicis repofita. Antheræ fubrotunda.
Piftillum. Fulchrum brevifimum; germen oblongum, longitudine Ef fitu faminum; flylus fimplex affurgens; fligma obtufum.
Pericarpium. Siliqua membranacea compreffa major oblongo-rbombaa bivalvis unilocularis.
Semina Tria vel quatuor remota compreffa rbombea.
This tree grows in every part of Famaica where the foil is dry and rocky: it is an excellent timber-wood, but feldom exceeds eight or ten inches in diameter, in the moft perfect ftate. The wood is elaftic, tough, and durable; and bears a fine polifh: it is of a beautiful orange-colour, full of refin, and yields a fine full tincture by infufion; but is feldom cut for the dyers ufe in famaica.

CESALPINIA 2. Spinofa, folizs minoribus obverjè cordatis, bipinnatis; racemis terminalibus.
Sena Jpuria arborea Jpinofa, \&cc. Slo. Cat. \& H. t. 18 I.

## Baftard Nicarago.

This prickly fhrub is common about the Ferry, and the lower Jands of Liguanea; but it feldom rifes above eight or ten feet in height : the wood is of a brown colour,

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the foliage is of a dark gloomy green, and the flowers of a fine yellow, which are fucceeded by pods of a thickihh oblong form. The lower fegment of the cup is not fringed, nor any of the flower-leaves variegated in this fípecies.

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GUILANDIA 1. Spinofa, foliis bipinnatis ovatis cum acumine, feminibus ci-
                    nereis.
    Guilandia aculeata foliolis ovatis acuminatis. \(\mathrm{L} . \mathrm{Sp}\). Pl.
    Lobas ecbinatus fructu cafio, foliis longioribus, \&c. Slo. Cat. 144.
    Acacia gloriofa Lentifú folizs. Pk. t. 2. f. 2.
    Acacia qui lobus ecbinatus. Cluf. \& The. Zey.
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        The Grey Nickar.
    This weakly plant grows in many parts of $\mathcal{F}$ amaica, and fpreads a great way about the root; or rifes among the neighbouring buhhes, if it finds but a due fupport. The falk and branches are very full of thorns thar arch backwards. The feeds are of a grey colour, and commonly ufed inftead of marbles by all the boys in our fugar-colonies. It grows chiclly by the fea-fide, but thrives well in the inland parts alfo.

GUILANDIA 2. Inermis, feminibus favefcentibus.
Lobus ectinatus fruchu. Alavo, foliis rotundioribus. Slo. Cat. 144. \& H.
Guilandia foliis Jubpinnatis, foliolis inferioribus ternatis. L. Sp. Pl. \& Fl. Zey.

## The yellow Nickar.

This plant refembles the foregoing both in growth and appearance, but it is not prickly: the feeds are round and yellow, and not inferior to thofe of the other fort in hardnefs. It grows more frequently in the inland parts of the ifland.

The feeds, bark, and root of both thefe fpecies are thought to be affringents, and faid to be fometimes given in gleets. The feeds toafted and powdered are given to provoke the menfes. H. M.
N. B. The flowers are all hermaphrodite, in thefe fpecies; tho' fome of them frequently abort. The germen is always oblong, and a little hairy; and the $\mu y l e$ arched, pointed, and of the fame length with the fila ments.

## S E C T. II.

Of Plants that bave ten Filaments and two, three, or four Styles in every Flower.

D
YANTHUS 1. Floribus folitariis, Squamis calicinis fubovatis, corollis crenatis. L. Sp. Pl. \& H. C.

## The Clove-gilliflower.

This plant is frequently cultivated in the gardens of Famaica: but tho' it generally grows well there, and throws up a few branches, it feldom appears in flower to any fatisfaction.

SPONDIAS I. Diffufa, foliis plurimis minoribus pimnatis, penna compreffa fulcata, floribus pracocibus.
Cryfobalanus Linnei. H. C. \& Sp. Pl.

## Myro-

Myrobalanus minor, folio fraxini, alato, fructu purpureo, \&cc. Slo. Cat. 182. \& H. t. 2 19. Jed male depiEta.

Mombin. Plum. t. 22.

## The Spanifs Plumb Tree.

Periantium Monophyllum parvum, ad medietatem quinquepartitum.
Corolla Pentapetala, petalis parvis lanceolatis, erecto-patentibus.
Stamina. Filamenta decem, quorum quinque petalis interpofita funt; catera vero paulo minora funt © petalis fuppofita. Antheræ cordate.
Piftillum. Germen ovatum; ftyli ut plurimum tres, quandoque quatuor, breves; ftigmata obtufufcula.
Pericarpium. Bacca fucculenta Jubrotundo elongata unilocularis, linea longitudinali notata.
Semina. Naucum ligneo-fibrofum folidum inequale tri- vel quadriloculare, nucleis folitariis refertum.
This is a fmall fpreading tree, which feldom rifes above ten or twelve feet in height: its foliage is of a dark gloomy green, and generally begins to thoot as the bloffoms fall. It is cultivated by many for the fake of the fruit, which is pretty pleafant, although not held in any great efteem in Famaica, where they are always furnifhed with a great variety of the richeft fruits. There is a variation of this plumb, called the Leatber-coat, from the appearance of its fkin ; but this proceeds from the dry foil in which it is produced. This, as well as the two following fpecies, the firft fort of maiden-plumb, the filk cotton-tree, and fome other American plants, vegetate fo eafily, that a limb or branch ftuck into the ground, feldom fails to thoot up a-new; and generally appears, in a few weeks, fupplied with roots and leaves like the parent falk.

It is remarkable that in this, and many other American bacciferous plants, where the cup ftands under the germen, the embrio is always furrounded by a flefhy navel, which fwells as that increafes, and forms the pulp gradually about it.

# SPONDIAS 2. Foliis paucioribus pinnatis ovatis nitidis, racemis terminalibus. 

Spondias. L. H. C. \& Sp. Pl.
Prunus Braflienfis. Slo. Cat. 182. \& H.

## The Hog Plumb Tree.

SPONDIAS 3. Foliis plurimis pinnatis ovatis, racemis terminalibus, cortice interne rubenti.
Myrobalanus folio fraxini alato, fructu luteo. Slo. Cat. \& H. t. 219. 1, 2.
The yellow, or Gamaica Plumb Tree.
It is not eafy to determine, whether the two laft plants are variations, or different fpecies; they are indeed very like each other, and rife generally to a very confiderable height, whether they grow in the low lands or the mountains. The leaves are large and oval in both, and the fruit much of the fame appearance: but the nut or thell, appears as if it had been compofed of lignous fibres ftrongly interwoven and connected into a mafs together, in all the fpecies. The filaments of the flower ftand upright, and grow in an even circular order round the germen in thefe two forts; and the Afyles are always four, compreffed, and enlarged at the top. The fruit of the fecond fpecies is much efteemed by fome people in thofe inlands, and fupplies the principal part of the food of the wild hogs in the feafon.

## MALPIGIA , Viminea foliis oblongis bifpidis, racemis alaribus. <br> Malpigia. Plum. t. 36.



## The Cowhage Cherry.

This weakly fhrub grows frequently about the town of King fon, and is remarkable for the itchy feta upon its younger leaves: there are very delicate, and lie lengthways parallel to the furface; they are double-pointed, and fuftained by pedicles of the fame fragile and tranfparent fubftance, defiending from the middle of them: thefe are eafily broke, but the fetre enter pretty deep in, and fick clofe to whatever has forced them off. The leaves ftand in an oppofite order in almoft every species of this and the following genus.

> MALPIGIA 2. Fruticofa erecta, foliis nitidis ovato-acuminatis, floribus umbellat is, ramulis gracilibus.
> Malpigia foliis ovatis integerrimis glabris, pedunculis umbellatis. L. Sp. Pl. The fhrubby erect Malpigia, with ilender branches.
This is a fmall fhrub, which feldom rifes above fix or feven feet in height ; it is erect in its growth, and divided into very delicate flender branches.

> MALPIGIA 3. Fruticofa erecta, ramulis gracilibus patentibus, foribus folitarits.
> Malpigia mali punici facie. Plum.
> The Chereeze, or Barbadoes Cherry Tree.

This hrub has been but lately introduced to, or cultivated in Famaica: it has much of the appearance of a pomegranate plant, is full of flender flexile branches, and feldom riles above feven or eight feet. The fruit is of the fame fize and make with our common Englifb cherries; very fucculent, they are of a light reddifh colour, and a pleafant fubacid tafte: but the cup, flower, and feeds, anfwer the common characters of the genas perfectly well.

## MALPIGIA 4. Humilis E minus divija, foliis ovatis nitidis, baccis durioribus.

## The fmaller fhrubby Malpigia.

This plant is a native of Gamaica, and common in the lower hills of St. Elizabeth: it feldom rifes above three feet in height, but throws out many flender upright branches, and bears large hard berries, which are faid to be much ufed by the turkeys, and other large fowls, in the feafon.

MALPIGIA 5. Altiffimè fcandens, farmenio valido.

## The larger climbing Malpigia.

This plant is a native of famaica, and pretty frequent in the parifh of St. Elizubeth. The ftem is fometimes above an inch and a half in diameter; and it climbs with eafe to the top of the talleft trees in the wood. The berries are fmall and hard, and the leaves roundifh and fmooth.

> MALPIGIA 6. Arborea floribus Jpicatis, foliis ovato-acuminatis.
> Malpigia foliis ovatis integerrimis fubtus tomentofis, \&cc. L. Sp. Pl.
> Baccifera Arbor caliculata, foliis lourinis, \&cc. Slo. Cat. 165. H. to 198. \&
> Titice afinis laurifolia arbor, \&c. Ejuf. H. t. 163.

This tree is very common in the lower hills of Liguanea, and rifes frequently to the height of thirty or forty feet, or better. The flowers and cup unfwer the characters of the genus thoroughly; but two of the feeds generally abort in the berry. The leaves, while young, are covered on both fides with down; but this falls off gradually, and they appear pretty fmooth and thining after a fhort time. There is a remarkable fipula, or ear, at the ala of every leaf, which, with its oppofite, feems to embrace the ftalls.

> MALPIGIA 7. Arborea, foliis fubrotundis, alternis, inferne fublanuginofis; Jpicis crafis compofitis terminalibus.

## The larger Locus-berry Tree.

The upper branches of this tree terminate in loofe bunches of flowers; but each of the divifionis is fimple, as well as the top of the main fupporter, which terminates alfo in a fingle fpike. The glands of the calix, or cup, are remarkably diftinct in this fpecies, whicis feems to have all the habit and appearance of the Cominia.

> BANIS TERIA 1. Foliis ovatis, Seminibus unialatis glabris, racemis lateraBanifteria foliis ovato-oblongis acuminatis, Seminibus patentibus, L. Sp. Pl. Serjania. Plum. t. 350

The oval-leafed Baniferia, with one-winged feeds.
BANISTERIA 2. Foliis orbiculatis, petiolis biglandulis, Jeminibus unialatis, rugofis, racemis Jubumbellatis alaribus.
Acer fcandens minus, ${ }^{\text {appoyni facie. Slo. H. t. } 162 .}$
The round-leafed Baniferia.
BANISTERIA 3. Seminibus trialatis, foliis ovato-acuminatis, racemis terminalibus.
The oval-leafed Baniferia, with three-winged feeds.
All thefe fpecies of the Baniferia grow in the gravelly hills about Kingfon and t. Fames's: they are climbers, and generally rife by flender ftems to the heignt of feven, ten, or fourteen feet, among the neighbouring buthes. They differ from the Malpigice chiefly by the nakednefs of their feeds.

## $S$ E C T. III.

Of Plants that have ten Filaments, and five or more Styles in

OXALIS I. Caule erecto ramofo, pedunculis multiforis. Gronov. Fl. Virg. Oxalis caule ramojo, pedunculis multifforis. L. H. C.
Trifolium acetofum corniculatum luteum, \&xc. Slo. Cat. 90. Oxis fore luteo vulgaris minor, \&tc. 'The. Zey.

The yellow Wood-Sorrel.
This plant is very common in the woods, and cooler inland parts of Famaica, where is gows very luxuriantly. It is a pleafant cooler and diuretic, and was forherly adminiftered often in inflammatory cafes; but is little ufed, fince the
more agreeable acid fruit-trees have been fo much cultivated and fpread among us. It may be ordered, upon occafion, in cooling and other diluting infufions.

> PHYTOLACCA I. Erecta, fimplex aut vix divifa; foliis integris, fufentaculis Jpicarum rotundatis.
> Spanifb Calaloe.

This plant is a native of Gamaica, and now cultivated in moft of the kitchengardens in the ifland. It is a palatable wholfome green, and, as fuch, commonly ufed at moft people's tables : the tender ftalks are frequently ferved up for young Sperages, and often prove a very agreeable fuccedaneum. The plant tifes generally to the height of two or three feet, and branches but very little: it fhoots up fpontaneoufly in every fertile fpot in the illand.

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PHYTOLACCA 2. Afurgens ramofa, Jpicis florum longifmis, Jyfentacu- lis trigonis.
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Phytolacca foliis integerrimis. Gro.Fl. Virg. \& Lin. Sp. Pl.
Mountain Calaloe, or Poke-weed.
This plant is a native of Gamaica, and commonly found in all the cooler hills and mountains of the ifland, where it grows very luxuriantly: it rifes generally to the height of four or five feet, and divides pretty much towards the top. It is called either red or white, from the colour of the flower-ftalks; for all the branches terminate in long and flender fpikes of thofe colours. The leaves and more tender fhoots are frequently ufed for greens, by the negroes, inftead of the other fort.

The infpiffated juice of this plant has been for fome time in ufe among the inhabitants of North America, and there, is thought to be a fpecific, or, at leaft, a very powerful remedy in open cancers; it is applied plaifter-ways, and has fucceeded in fome cafes that had all the appearance of beginning cancers.

It is hoped the ingenious gentleman, who publifhed his remarks on thofe occafions, will continue his obfervations, and (if he finds the medicine prove fuccefsful) give the world a further and more fatisfactory account of its action.

## C $\begin{array}{llllll}\mathrm{L} & \mathrm{A} & \mathrm{S} & \mathrm{S} & \text { XI. }\end{array}$ <br> Of the Dodecandria, or Vegetables that have twelve Filaments in every Flower.

## S E C T. I.

Of fuch as bave twelve Filaments and one Style in every Flower.

TRIUMFETTA I. Subvillofa, foliis rotundioribus undulatis atque dentatis; dentibus pofiremis in Setas inermes abeuntibus, floribus alaribus. Tab. 25. f. I.
The round-leafed Triumfetta.
As the characters of thefe different fpecies differ more or lefs from one another, I fhall give a particular account of the flowers and fructifications of each o them feparately.

| Periantium Pentaphyllum deciduum, foliolis coloratis angufis. |  |
| :---: | :---: |
| Corolla Pentapetala, petalis angufis oblongis patentibus. |  |
| Stamina. $F$ | Filamenta duodecim, eresta, longitudine foris; antheræ fubrotunda. |
| Pifillum. | Germen oblongum, obtufe trigonum; flylus fimplex longitudine faminum; ftigma obtufum. |
| Pericarpium | Capfula oblonga prifmatica obtufe trigona trilocularis, angulis bifulcatis verruco is. |
| Semina | fubrotunda triplici jerie dijpofita. |

This plant is a native of Gamaica, but not common there. The ftem and branches are very flender, and rife two or three feet above the root; the leaves are roundifh, jagged, and undulated, and the bark of a brown colour.

Though I am very uncertain of the genus of this plant, which feems to claim a place between the Bartramia and the Triumfetta, the difpofition of the petals and filaments induced me to range it with the latter; but I am fatisfied, from the natural habit of both, that they do belong more properly to the next clafs.

TRIUMFETTA 2. Villofa, foliis inferioribus angulato-ovatis, ferrato-dentatis; floribus ternatis; fafciculis geminatis, foliis fuboppoitits.
Triumfetta. Plum. $\mathfrak{t} .8$.
Triumfetta. L. H. C. \& Sp. Pl.
Agrimonia lappacea inodora, \&c. Slo. Cat. 92. \& H.
Lappula Bermudien/s, \&cc. Pk. t. 245. f. 7 .
The Bur-Bark.
Periantium Pentapbyllum, foliolis lanceolato-linearibus; prima atate, ereEtis, छ agglutinatis; provectiori vero patentibus, deciduis.
Corolla Pentapetala, petalis angufis erecto-patentibus. Nectarium: glandula minima fingulares, ad infertiones petalorum floris.
Stamina. Filamenta duodecim inter © octodecim, erecta, fimplicia, longitudine foris; antheræ cordate.
Piftillum. Germen minimum fubrotundum; ftylus erectus fimplex, longitudine ftaminum; fligma obtufufculum.
Pericarpium. Capfula fubrotunda quadrilocularis, ab apice ad medietatem Setis validis uncinatis armata.
Semina Solitaria, quandoque duplicata.
$O b f$. The antberce are always of the form of a heart in the flowers of this plant; and the bloffoms, which generally grow in two diftinct parcels near the alæ of the leaves, are fuftained by a few narrow flipulx, that perform the office of an Involucrum; and half the capfula is echinated, the other fmooth.

The plant is common in Famaica, and rifes frequently to the height of fix or feven feet, where the foil is rich and well fupplied with moifture. The leaves and tender buds, when infufed for any time in water, yield a fine clear mucilage; from whence we may conclude it to be an excellent emollient. The bark is tough and ftrong, and ferves for ropes, and other little conveniencies of that kind, among thofe that inhabit the inland parts of the country.

PORTULACA 1. Foliis cuneiformibus, floribus fefflibus. L. Sp. Pl.

## Purflane.

This is one of the moft common plants in all the fugar-colonies, and frequently, a very troublefome weed in the gardens and cane-pieces. It is never ferved up as a

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fallet in thofe parts, but is fometimes ufed by the fervants and poorer fort of people, as a green, with falt provifions; and its fubacid, nitrous tafte renders it not only agreeable, but wholefome, to all thofe that are obliged to make frequent ufe of fuch food in thofe warm countries. It bears every fort of weather well, and grows very luxuriantly, almoft, in every foil in Anverica.

ANACAMPSEROS 1. Foliis radicalibus, mollibus, ovatis, glabris; fcapo af Jurgenti, paniculato.

## The round-leafed Anacamperos.

Periantium Pentapbyllum, foliolis fubrotundis cocbleatis erecto-patentibus. Corolla. Petala quinque vel fex, foliolis calicis fimilia.
Stamina. Filamenta duodecim inter © oitodecim, erecto-patentia; antheræ fubrotunda.
Pifillum. Germen Jibrotundum; Atylus erectus, trifidus, longitudine faminum?; fligmata $\operatorname{simplicia}$ obtufufcula patentia.
Pericarpium. Capfula ovata, unilocular is trivalvis.
Semina Plura Jubrotunda.
I found this plant in the road thro' Cambridge-bill. The leaves are round and fucculent, and all difpofed about the bottom of the ftalk, which rifes generally to the height of fixteen or twenty inches above the root. It is a beautiful plant, and grows in a gravelly foil in that place.

ANACAMPSEROS? 2. Supina minor, foliis linearibus turgidis, foribus Jummis ramulis confertis, fiylo quinquefido.

## The creeping narrow-leafed Anacampleros.

This plant is cultivated in many of the gardens about King fon, where it has been introduced, on account of its conftant greennefs, and the frequent thooting of its flowers. It is a native of the Keys, or fmaller fandy iflands beyond Port-Royal; and grows in fpreading tufts, or beds, about the root. All the parts of the plant are very bitter, and frequently ufed by the poorer fort of people as a ftomachic, and provocative of the menfes. It roots from the lower joints, and is very eafily propagated; but thrives beft in a warm rich foil.

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Of Plants that bave twelve Filaments, and two or three Styles in every Flower.

UPHOR BIA I. Reclinata minor fubbirfuta, foliis ferratis oppofitis, florum fafciculis axillaribus.
An, Euphorbia dicbotoma foliis ferratis, ab altero latere majoribus; floribus fafciculatis terminalibus. Catal. nofrio.
Euphorbia dicbotoma, foliis ferrulatis ovatis acuminatis, pedunculis capita, tis axillaribus, caulibus pilofis. L. Sp. Pl.
Tithymalus Botraides Zeylonicus. Burm. The. Zey.
Cajatia. Pif. \& Trap. pag. 138.
The creeping hairy Spurge.
This little plant is common in all the dry Savannas of Famaica: it is a weakly. reclining herb, and feldom grows above feven or eight inches in length. Pi/a reckons it a fpecific againft cold poifons, and directs it to be given either in powder
or decoction. It, probably, is a powerful refolutive and deobftruent; for it provokes both fweat and urine very abundantly; and, I doubt not, may be given with fuccefs in moft difeafes arifing from a lentor, or fpiffitude of the juices.

> EUPHORBIA 2. Minima reclinata, foliolis ovatis denticulatis ab altero latere majoribus; floribus quafo umbellatis, terminalibus \& lateralibus.
> Tithymalus erectus acris, \&xc. Slo. Cat. 82. \& H. t. 126. The fmall fmooth Spurge.

This little plant is very common about the Ferry; it is a flender weakly creeper, and feldom runs above three or four inches from the root: its branches are fmooth and flender, and the leaves fmall and oval.

## EUPHORBIA 3. Tricbotoma, foliis ovatis verticilliter ternatis, fafciculis florum Jparjis.

The trichotomous Spurge, with verticillated leaves.
This plant grows very common on both fides of the road, between Kingfon and Hunts-bay; it is furnifhed with moderately thick branches, but feldom riles above four feet in height.

## EUPHORBIA 4. Dicbotoma erecta tenuis, foliis linearibus, floribus quaf umbellatis terminalibus.

The fmall erect Spurge, with linear leaves.
This is greatly recommended as an antidote by Pijo; and is the Cajacia of Trapbam, page 138. who extolls it as an excellent ingredient in baths, for people afflicted with the dry belly-ach : but there is no need either of this, or any other herbage, on that occafion; warm water alone being generally fufficient to give immediate eafe. It is, however, requifite to take fome active warm medicines after a paffage is procured, to recover the tone of the veffels; and I take this to be as powerful a remedy as can be given upon that occafion; or any other, where refolutive medicines are required. A decoction feems to be the moft appropriated way of adminiftering it.

> EUPHORBIA 5. Erecta minor, ramulis oppofitis, Aipulis minoribus rigidis cuneiformibus patentibus al nodos, foribus comofs terminalibus.

The fmall erect Spurge, with narrow leaves.
EUPHORBIA 6. Ereeta, foliolis ovatis oppofitis, ramulis tenuibus alternatis.
The erect Spurge, with oppofite oval leaves.
Thefe three plants are pretty much like one another in the make and delicacy of their ftalks and branches, which feldom rife above twenty-four or thirty inches in height, when they grow moft luxuriant; but rarely exceed ten or twelve inches in the low lands.

> EUHORBIA 7. Trichotoma fruticofa; ramulis craffis tumentibus; foliis longis anguftis, ad Jummitates crebris, inferioribus deciduis.

The narrow-leafed fhrubby Spurge.
This is a native of the rocky hills of Port-Royal: it is a thrubby plant; rifes by a moderate ftalk, and fwelling branches, commonly, to the height of

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five or fix feet. The leaves are long and narrow, and difpofed pretty thick about the extremities of the branches: the flowers are red, and rife on long branched foot-ftalks from the upper divifions, or extremities of the branches. It grows very near the Waterfall in Mammee-river.

EUPHORBIA 8. Minima fupina rufefcens, foliolis fubrotundis nitidis oppoJitis, ramulis floriferis foliolatis ad alas alternas.
The fmall creeping Spurge.
This little plant is very like the fecond fecies, and common in all the unfrequented ftreets and gardens about Kingfon: it has a weakly flender falk like the other, and feldom fhoots above three or four inches from the root; but the leaves are whole, and the flowers feem differently difpofed.

EUPHORBIA 9. Humilior erecta; ramulis rarioribus, verticilliter ternatis; foliis inferioribus orbiculaiis, fuperioribus obovatis.
The fmaller erect Spurge, with verticillated branches.
This is a native of the cooler mountains, and feldom rifes above twelve or fourteen inches in height.

## S E C T. III.

Of Plants that bave twelve Filaments and many Styles in every Flower.

C
LUSIA 1. Arborea, foliis crafis nitidis, obovato-fubrotundis; floribus folitariis. Clufia foliis aveniis. L.Sp. P1.
Terebinthus folio fingulari non alato, \&c. Slo. Cat. 167. \& H. t. 200. Cencramidea Catefb. vol, ii. t. 99. \& Pk. Phy. t. 157.

## The Balfam Tree.

Periantium Polypbyllum imbricatum, ex Squamis Sex vel oito Jubrotundis, quatuor Seriebus difpofitis, conflata; Juperioribus fenfim majoribus.
Corolla Tetrapetala, petalis crafis oblongo-ovatis chocbleatis.
Stamina Filamenta duo, quandoque tria ad fingula petalorum interfitia, brevia, erecto-patentia $\mathcal{E}$ ex areolis difinctis orta; antherce fubrotunde.
Piftillum. Germen craflum fubrotundum, obtufe quadrigonum, truncatum; ftylus nullus; ftigmata duodecim difincia, in orbem circa verticem germinis depreflum pofita.
Pericarpium. Capfula craffa fubrotunda plurivalvis, in duodecim loculamen-
ta, a vertice ad bafim debicentia, divifa; Seminibus plurimis fubrotundis, pulpa crocea obvolutis, referta.
This fhrubby tree is frequent enough in Famaica, and rifes generally to the height of fourteen or fifteen feet: it grows moftly in the lower hills, and delights in a dry ground; but thrives in moft light foils alfo. Wherever the trunk or larger branches of this tree are wounded, they throw out a thick refinous gum, which is fometimes ufed as a vulnerary among the inhabitants of Famaica; but it has no extraordinary fmell, or pungent tafte.

## C $\quad \mathrm{L} \quad \mathrm{A} \quad \mathrm{S}$ S $\quad$ XII.

Of the Icofandria, or Vegetables that have twenty Filaments in every Flower.

Note, The filaments, in this clafs, vary from twenty to a great number; but the difpofition of them conftitutes the diftinguifhing mark of the order, for they rife from the fides of the cup in all the genera.

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Of fuch as bave twenty, or more, Filaments, and one Style in every Flower.

ACTUS I. Sarmentofus foliatus B' $^{3}$ Sinofus, fpinis geminatis recurvis, foliis mollibus ovatis.
Cactus caule tereti arboreo Jinofo, foliis lanceolato-ovatis. L. H. Up. \& Sp. Pl.
Perefkia. L. H. C. \& Plum. t. 26.
Groffularice fructu majori arbor Jpinofa, \&cc. Slo. Cat. 165. \& H.
The Goofeberry, or Barbadoes Goofeberry Bufh.
CACTUS 2. Bracbiatus $\mathcal{O}^{\circ}$ articulatus, articulis ovatis comprefis, aculeis longifimis confertis.
Cactus articulato-prolifer, articulis ovatis, Jpinis fetaceis. L. Sp. Pl.
Cactus compreffus articulatus ramofifmus, \&cc. L. H. C. \& Gronovii. Flo. Virg.
Opuntia major folio oblongo rotundo, jpinis longifimis. Slo. Cat. \& H. t. 224.
The prickly Pear.
CACTUS 3. Brachiatus 8 articulatus, articulis oblongo-ovatis comprefis, caudice tereti erecto ferocifimo, aculeis bracbiorum brevibus confertis.
Cactus articulato-prolifer, articulis ovato-oblongis, fpinis fubulatis. L. Sp. PI. Opuntia major Jpinofa caulefcens, \&c. Slo. Cat. \& H.

The upright prickly Pear, with fcarlet flowers.
CACTUS 4. Bracbiatus $\mathcal{E}$ articulatus fubinermis major, articulis oblonsis E leniter comprefis.
Cactus articulato-prolifer, articulis ovato-oblongis fubinermibus. L. Sp. PI. Opuntia maxima, folio oblongo rotundo majori. Slo. Cat. \& H.

The Cocheneal Indian-Fig.
CACTUS 5. Mitis minor, farmento flexili rotundo; frondibus longis compref. fis crenatis, ad erenas foridís.
Cactus prolifer enfformi-compreflus, ferrato-repandus. L. Sp. Pl. Cactus folits enfformibus obtufe ferratis. L. H. C. Opuntia non fpinofa minima coulefiens, \&c. Slo. Cat. 216. \& H. The jointed Ingo of Petiv. Gaz. t. 59. f. 12.

The fmall Cactus, with long notched leaves.

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CACTUS 6. Debilis, bracbiatus, aqualis, triquetrus, fiandens vel repens; fpinis brevifimis confertis. Cactus, repens triangularis. L Sp. Pl.
Cactus triangularis jcandens articulatus. L.H.C.
Ficus-Indica folio triangulari enfformi, \&c. Slo. C. \& H.
The Strawberry Pear.
CACTUS 7. Cylindraceus, fulcatus, pufllus, repens; aculeis fetaceis confertis. Cactus repens, decemangularis. L.Sp.Pl. E' Cereus minimus, \&c. Ehr, t. II. Opuntia minima Jerpens Americana. Slo. Cat. 197. \& H.
The creeping Indian Fig, with a round furrowed ftalk.
CACTUS 8. Cylindraceus erectus fulcatus major, fummitate obtufus; aculeis confertis.
Cactus erectus longus fuboctangularis, angulis obtufis. L.Sp. Pl.
Cactus novemangularis longus erectus, angulis obfoletis. L. H. C.
Cereus craffifimus, fructu utrinque rubro. Slo. Cat. 1g6. \& H.
The larger erect Indian Fig, or Dildo Pear Tree.
CACTUS 9. Erectus cylindraceus fulcatus tenuior, fummitate attenuatus; aculeis confertis.
An, Cactus erectus longus Jubnovem angularis, angulis obsoletis, Spinis lana brevioribus. L. Sp. Pl.
Cereus altijfimus gracilior, fructu flavo, \&c. Slo. Cat. 197. \& H. ii. 158.
The fmaller erect Indian Fig, or Dildo Pear Tree.
CACTUS ı. Humilis fubrotundus fulcatus $\widehat{o}$ coronatus, 分inis confertis. Cactus quatuordecim-angularis fubrotundus. L. Sp. Pl. \& H. Cl,

The Turk's-head, or Pope's-head Indian Fig.
CACTUS II. Parajiticus, inermis, apbyllus, ramofus, propendens; ramulis gracilibus, teretibus, friatis.

## The flender parafitical Currant-Cactus or Indian Fig.

This plant is pretty frequent in St. Mary's, and grows chiefly on the largeft trees in the wood, hanging commonly to the length of three or four feet from its faftening, or root. Moft of thefe fpecies of the Cactus, or Indian fig, grow in many parts of Jamaica; but the fourth fort is more rare than any of the reft. All the fecies bear fucculent berries, which are no ways difagreeable to the palate; but the fruit of the fixth and ninth fpecies are moft efteemed, and fometimes ferved up at table with other fruit. The pulp of the fecond fort is of a delicate red colour; but it is of a gummy nature, and can't be fixt fo as to ferve either for the dyers or painters purpofe. Moft of the fpecies thrive beft in a dry gravelly foil, and a warm fituation.

PSIDIUM i. Fruticofum, foliis ovatis venofis, fructu majori.
Pfidium ramis tetragonis. L. Sp. Pl. \& H. C.
Guajanus. Mart. 537. \&
Guajavas fructu palide dulci. Bur. Thez. Zey.
Malo punica affinis pomifera, \&cc. Slo. Cat. 198. \& H.

## The Guava Tree.

This Chrub is very common every where in the paftures of Famaica, and rifes generally from eight to twelve feet in height. It bears a round fruit of a maderate fize, which is much efteemed among the natives: this, while immature, is

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altringent, like all the other parts of the tree; but when it ripens, it is rather laxative, and then much ufed both in jellies and cream-difhes; tho' in thefe cafes, the inner pulp and the rind is thrown away, and the flemy part of the fruit only ufed: this is boiled, and when brought to a fufficient degree of tendernefs, it is fet to cool, and afterwards ferved up with cream, as we do ftrawberries or rafpberries in many parts of Europe. The wood is very tough, and generally ufed for bows in cattle-yokes.

PSIDIUM 2. Arboreum maximum, foliis ovatis nitidis, ligno fufco, fibris un-

## The Mountain Guava.

This is one of the largeft trees in the woods of Famaica, and grows frequently to the beight of fixty or feventy feet, with a proportioned thicknefs: it is an excellent timber-wood, of a dark colour and curled grain; works eafily, and takes a fine polifh. It makes very beautiful walking-fticks, and is very different from the foregoing fecies.

PUNICA 1. Fruticofa bumilior, ramulis gracilibus patentibus.
Punica. L. H. C. \& Sp. Pl.

## The dwarf Pomegranate.

PUNICA 2. Fruticofa major, ramulis crafioribus erectis.
Malus punica fativa, aliis fimplici fore. Slo. Cat. \& H.

## The Pomegranate.

Both thefe fpecies, or variations, are cultivated by many people in Famaica, and thrive very well in moft parts of the illand. The flowers, when double, are the balauftia of the fhops, which is reckoned a powerful aftringent, as well as the rind of the fruit: they are both in ufe, and commonly kept in our hops.

> DALEA 1. Arborefcens, foliis majoribus venofis ovatis; racemis plurimis, per ramos infra frondes Jparfis.
> An, Malo-poenna. H. M. p. 5. t. g.

The Dalea, with oval leaves.
Periantium Minimum, monopbyllum, campanulatum, truncatum,
Corolla Nulla.
Stamina. Filamenta numerofa, antheris minimis fubbirfütis.
Piftillum. Germen fubrotundum calice immerfum; flylus brevis; ftigma acutum.
Pericarpium. Bacca minima fubrotunda, nucleo unico nauco duro tecto, referta.
This fmall tree is common in the cooler woods of Famaica, and very remarkable, for the number of fmall loofe clufters of little berries, that grows upon its branches, below the leaves. The tree is of a fpreading form, and rifes commonly to the height of fourteen or fifteen feet. The flowers and fruit are very fmall, and difpofed like thofe reprefented in t. 3 I. of Burm. Tbez. Zey. but the leaves and flowers of this feem to be different from thofe reprefented there,

CHYTRACULIA 1. Arborea, foliis ovatis glabris oppofitis, racemis terminalibus. Tab. 37. f. 2.
An, Chytraculia, \&ec. Pk. t. 274. f. 2?
An, Belluta. H. M. p. 5. t. 20?
Baftard Green-heart.
Periantium

Periantium Monophyllum obverfè conicum, concavum, operculo proprio fubconcavo \& lateraliter adnato, prima atate tectum.
Corolla Nulla; fed operculo maturitate reflexo, obviam Se produnt
Filamenta Plurima longiora contorta caduca, e parietibus calicis orta; antheræ Jubrotunda.
Piftillum. Germen minimum in fundo calicis fotum; ftylus fimplex longitudine ftaminum; fligma acutum.
Pericarpium, Ecc. defiderantur.
This tree grows chiefly in the parih of St. Yobn, and is generally reckoned an excellent timber-wood; but it feldom exceeds fourteen or fifteen inches in diameter. The fize and fhape of the under part of the cup, with its filaments, is very well reprefented in $P k$. tho' I very much doubt if he intended the fame plant. I have not feen any of the fruit or enlarged germina of this tree, though I have examined many of the flowers in all ftates.

## SUZYGIUM i. Fruticofum, foliis ovatis nitidis © ramulis ubique jugatis. Tab 7. f. 2.

The fhrubby Suzygium, with coupled leaves and branches.
Periantium Urceolato-globofum apertum, ad apicem truncatum. Corolla Nulla.
Stamina. Filamenta numerofa e parietibus calicis orta; anthera irregulares.
Pittillum. Germen fubrotundum deprefum, calice tectum © coronatum; ftylus Simplex, Alaminibus paulo longior; Atigma acutum.
Pericarpium. Bacca globofa calice coronata, quatuor Seminibus glabris, fubangulatis, referta: Obf. femen unum vel alterum tantum, plerumque ad maturitatem pervenit.
This fhrub grows near the Ferry, and feldom rifes above ten or twelve feet in height: the whole plant is buhhy, and bears black berries, crowned with the margin of the cup. I have never feen but one tree of the kind; it grew at the corner of the road under the hill, as you turn directly towards the bridge.

> PHILADELPHUS? I. Arborefcens, foliis myrtineis nitidis oppofitis, ramulis gracilibus, pedunculis bipartitis alaribus. An, Eugenia foliis integerrimis, pedunculis uniforis. L. Sp. Pl? Myrtifolia arbor cortice argenteo, \&c. Slo. Cat. 162. \& H. t. 187. An, Eugenia, Éc. Mich. Hill. t. $2^{\text {a }}$.?

The fhrubby Pbiladelphus, with Myrtle leaves; or the Silver Tree.
Periantium Duplex; inferius, feu fructus, bipbyllum, foliolis ovato-acutis: fuperius feu floris, monopbyllum pregnans; limbus quadripartitus.
Corolla Tetrapetala, petalis majoribus fubrotundis.
Stamina. Filamenta numerofa, e fundo calicis \& jummo germine orta, longitudine corolla; antheræ fubrotunda.
Piflilhm. Germen ovatum deprefum, calice tectum $\delta^{\circ}$ coronatum; fylus fimplex, longitudine :foris; fligma obtufiufculum.
Pericarpium, Bacca Jive capjula carnofa bilocularis feminibus plurimis referta.
This little tree is frequent in the red hills, and remarkable for its flender branches and myrtle leaves: it is now commonly called Rod-wood by the negroes, and is looked upon as a grod timber-wood; but it feldom grows above four or five inches in diameter. There is a variation of it with finaller leaves, but they are juft of the fame make. It is common in the lower parts of the parifh of St. David.

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PHILADELPHUS? 2. Arborefcens, foliis ovato-acuminatis, leniter crenatis, oppofitis; racemis lateralibus.
The larger Pbiladelphus.
Both thefe plants are pretty frequent in Gamaica; but neither of them has any thing of a warm tafte. The latter rifes frequently to the height of fifteen or fixteen feet, and has fomething of the appearance of Myrte. The parts of the flower agree very perfectly in both; but as 1 have not feen the fruit of either ripe, 1 can't determine whether it be a berry or a capfule, though the germen fhews the difpofition of the fruit, as to its formation and parts, to be perfectly the fame in both: and I think they belong more properly to the following clafs; for the leaves of the flower rife in an alternate order with the fegments of the cup, and the filaments fhoot immediately from the top of the germen.

AMYGDALUS I. Foliis oblongis ferratis, Serraturis acutis; pericarpio molli. L. Sp. Pl.

The Peach Tree.
AMYGDALUS 2. Foliis petiolatis, ferraturis infimis glandulofis. L. Sp. Pl. \& H. C.

## The Almond Tree.

Both thefe plants were introduced to Famaica fome years ago, and have been fince cultivated both in the higher and lower mountains; but do not thrive well enough to bear fruit in either.

$$
\mathrm{S} \quad \mathrm{E} \quad \mathrm{C} \quad \mathrm{~T} . \quad \mathrm{II} .
$$

## Of Vegetables that bave twenty Filaments, and five Styles, in every Flower.

PYRUS I. Foliirs ferratis, pomis baf concavis. L. Sp. Pl. The Apple Tree.
A great many variations of this tree have been introduced to famaica, from time to time; and cultivated in the cooler mountains of the ifland: but they do not grow to any great perfection, and feldom have any feeds in the fruit, which is generally very tart, and ufed only becaufe uncommon.

AIZOON 1. Repens, foliis oblongis turgidis, floribus feffilibus fingularibus ad alas.
Portulacca Aizoides maritima procumbens, Stc. Slo. Cat. 88.
The creeping Aizoon.
This plant is very common in all the low lands about the Ferry, and grows in thick beds, on every fpot of ground that rifes above the level of the water. It is very fucculent, and full of a neutro-alkalefcent falt, which may be eafily extracted; and would probably anfwer all the purpofes for which the falts of the Kali are now ufed.

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## S E C T. III.

## Of Plants that bave twenty Filaments, and many Styles, in every Flower.

## R <br> OSA I. Caule aculeato, pedunculis levibus, calicibus femipinnatis glabris. L. Sp. Pl. <br> Rofa rubra, flore valde pleno © Semipleno, \&c. L. H.C.

 The Rofe Plant.This plant was introduced to Gamaica fome years ago, and cultivated in many parts of the inland with fuccefs. It thrives fo luxuriantly in the mountains of Nere Liguanea, that, with a little care, it may be kept conftantly in bloom almoft the year round; and, even without any borrowed affiftance, is now obferved to produce a moft amazing number of flowers, in a gradual, and almoft perpetual fucceffion: but the flowers are feldom fo large, and open rather too foon in that climate. The leaves of the flowers vary their qualities more or lefs, with their colours; they are more aftringent with a deeper red, and more laxative when of a paler caft. There is a fimple water and a conferve, as well as the dried leaves of the flowers, commonly kept in the fhops.

RUBUS 1. Aculeatus, foliis digitato-quinatis, ferratis, fubtus argenteis.
Rubus foliis quinato-digitatis ternatijque; caule petiolifque aculeatis. L. Sp. Pl.
Rubus foliis longioribus, \&cc. Slo. Cat. 173. \& H. t. 212.

## The Blackberry Bramble.

This plant is a native of $\mathcal{F}$ amaica, and grows frequent in the mountains of St. Mary's, and thofe beyond Mount Diable, towards St. Ann's; but is feldom feen in any other part of the ifland.

RUBUS? 2. Maximus, vix aculeatus; foliis ternato-ternatis, ovatis, quandoque crenatis.
The larger climbing Bramble.
This plant grows in many parts of Famaica, and is frequently found climbing among the talleft trees in the wood; though it feems to grow more freely in the more open parts of the mountains. I have not feen any of its flowers, and placed it here only from its appearance. The ftem and foot-ftalks are fometimes furnilhed with a few prickles.

## FRAGARIA 1. Flagellis reptans. L. H. C. \& Sp. PI. Fragaria vulg. C. B.

## The Strawberry Plant.

This plant has been carried to Famaica from Europe, and is now cultivated, with fuccefs, in the mountains of Liguanea: but it does not bear above once a year; nor, then, fo luxuriantly as it is obferved to do in the northern climates.

# O F J A M A I C A. <br> <br> C $\quad \mathrm{L} \quad$ A $\quad$ S $\quad$ S XIII. <br> <br> C $\quad \mathrm{L} \quad$ A $\quad$ S $\quad$ S XIII. <br> Of the Polyandria, or Vegetables that have many Filaments in every Flower. 

## S E C T. I. Of Juch as bave many Filaments and one Style in every Flower.

YMPHÆA 1. Foliis amplioribus profunde crenatis, fubtus areolatis. Nymphæa foliis cordatis dentatis. L. Sp. Pl.
Nymphæa Indica tuberofa, foliis ad marginem crenatis, \&c. The. Zey. Nymphæa Indica folio in ambitu ferrato. Slo. Cat. 120.
Nymphæa \& Lotus Egyptia autborum.
Ambel. H. M. p. in. t. 26.
The Agyptian Lotus, or Water-Lilly, with crenated leaves.
This plant is very common in all the ponds, lagoons, and rivers, about the Fer$r y$; and throws up fome beautiful large white flowers, fuftained, each, by a fimple long cylindric foot-ftalk. All parts of the plant may be ufed for the fame purpofes, for which thofe of the common water-lily are recommended; for it is, like that, an excellent cooler, and, probably, would anfwer well in the yellow fever, where fuch gentle cooling calmers alone can be adminiftered with fuccefs.

NYMPH厌A 2. Foliis orbiculatis, peltatis, fubtus radiatis; fructu obverfe conico, Seminibus majoribus nidulantibus.
Nymphæa foliis undique integris. L. Sp. Pl. \& H.C.
Nymphæa Indica maxima, fare albo fabifero. Mur. \& Thez. Zey.
Nymphæa Kgyptia fabifera, pedunculis afperfis. Pk, t. 322. f. I.
Nelumbo. Tournefortii.
Faba 厄gyptia authorum.
Tamara. H. M. p. 11. t. 30.

## The Agyptian Bean, or Great Water-Lilly.

This plant is pretty common in the lagoons beyond the Ferry; but I have not obferved it in any of the deeper waters. It feems to grow beft in a loofe boggy ground, where the leaves may ftand in open air, while the roots, and lower parts of the ftem are plentifully fupplied with moifture.

I thall not mention any thing of the doubts and confufion, which the ambiguous defcriptions and accounts, left us by the ancient writers, concerning the form and ufes of this plant, have occafioned in the works of our moft noted botanifts: But were I to give my own thoughts upon the occafion, I thould, without hefitation, attribute it to a miftake in the original writers; who, under the title of Faba Esyptia, have given a thorough defcription of the upper parts of this plant; and as accurate an account of the roots of the leffer Collocoffa, now commonly called Caccos, in Yamaica. This is fo agreeable to truth, that every man who is acquainted with both thefe plants, may, by feparating the parts of the defcription, form a thorough idea of each; and fo exact a one, as to anfiver all the effential marks and noted characters peculiar to the refpective parts of both; tho' they never agree with either, in the thole; nor with any other known plant, even in a confiderable part. And from hence we may conclude, that the whole confufion proceeds from an error in the original defcriptions, arifing, probably, from fome erroneous information.

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MARCGRAVIA 1. Scandens, foliis caulinis fubrotundis, ad margines glandulatis; ramorum integris, ovatis, alternis, difictbe fitis; floribus umbellatis terminalibus. Tab. 26.

Marogravia. L.Sp. Pl. \& Plum. Gen.

Pbilitidi fcandenti affinis major, \&cc."Slo. Cat. 15.8 H. t. 28.

## The climbing-Marcgravia.

This curious plant is frequent in the woods of Gamaica; and appears in fuch various forms, that it has been often miftaken for different plants, in the different ftages of its growth. It is but a flender weakly climber at firft, (See Tab. 26. f. 1.) and, as it rifes, throws out a few leaves, fomewhat of the form of a heart, on both fides: thefe are fuftained by very fhort foot-ftalks, and ftand always oppofite to a number of flender radical fibres, whereby it flicks and grows to its fupporter. By thefe means the plant continues its growth, until it gains the top, and lays its trunk more commodioufly over fome of the larger branches of the tree: then it begins to ftrengthen, and cafts many flender, dependent, and fubdivided, branches from the upper parts. But as it increafes at the top, the ftem grows thicker, feparates from the fupporter, throws off its now ufelefs leaves and roots, and appears a ftrong withey fhrub, whofe trunck iş frequently no lefs than four or five inches in diameter.

The branches of this plant hang always downwards, (See Tab. 26. f. 1.) bearing their leaves, in an alternate but diftich order. The flowers are fuftained by long footftalks, and difpofed in the form of an umbella, about the extremities of the branches; but the fummit, or crown of the fupporter, is conftantly adorned with four, five, or more hollow, divergent, glandular bodies, that occupy the center of the umbella: there are of an arched oblong form, obtufe and roundihh; they are hollow within, and affixed by very fhort foot-ftalks, that rife immediately from one fide of the aperture, or opening of the gland; which is fo difpofed, as to receive the water that dribbles down along the branch in rainy weather. What the real ufe of thefe may be, is not eafily determined: it is, however, remarkable, that the leaves of the branches are plain, of an oblong oval form, with a fmooth membranous edge; while thofe of the younger plants are always obferved to have many little glands, fet gradually round the margin.

> ARGEMONE I. Spinofum fucco luteo turgidum.
> Argemone capitulis quinquevalvibus, foliis fpinofs. L. Sp. Pl. \& H.C. Papaver fpinofium。C. B.

## The yellow Thifte.

This plant is pretty common in all the fugar-colonies, where the feeds are looked upon as an excellent remedy, and frequently adminiftered by the inhabitants, in diarrhœas, and bloody-fluxes: they have a pungent warm tafte; but it does not manifeft itfelf for fome time upon the palate. They work both by ftool and vomit, and have been frequently adminiftered in the dry belly-ach, by the good women; but we have much fafer and better medicines for both thefe diforders; though this may be adminiftered with fuccefs, where the parts are relaxed or weakly; or the diforder proceeds from an indigeftion; which is frequently the cafe in thofe climates.

As this medicine is given only by the country people, the dofe is yet very various; for they commonly meafure the feeds with a thimble, and give from one to five of thefe (well pounded) at a time. The juice is very deterfive, and generally ufed in the difeafes of the eyes: but the infufion is looked upon as a fudorific and refolutive, which may be ufed, with fuccefs, on many occafions.

# O F J A M A I C A. <br> Bocconia. L. Gen. Sp. Pl. \& H. C. \& Bocconia. Plum. t. $25^{\circ}$ <br> Cheledonium majus arboreum, \&c. Slo. Cat. 82. \& H. t. $125^{\circ}$ <br> <br> Parrot-Weed. 

 <br> <br> Parrot-Weed.}

This fhrubby plant is pretty common in all the fhady gullies, that lie among the hills and mountains, in the inland parts of the ifland: it is full of a thick yellow juice, like the Argemone and Celandine; and rifes commonly to the height of eight or nine feet.

> CALOPHYLLUM? 1. Foliis tripedalibus obovatis, floribus per caulem $\mathcal{O}$ ramos ppar/is.
> An, Calophyllum foliis ovatis obtu/is. L. Sp. PI.
> Palmis affinis malus perfica maxima, \&c. Slo. Cat. 179. \& H. t. 2x6, 17.
> The Anchovee Pear Tree.
> Periantium Monophyllum integrum cyathiforme, atate in quatuor partes, ut plurimum, laceratum.
> Corolla Tetrapetala, petalis fubrotundis craf/s cocbleatis.
> Stamina. Filamenta numerofa e fundo foris orta, corolla longiora; antheræ fubrotunde.
> Piftillum. Germen leniter depreffum, calice immerfum; ftylus nullus; fligma craffum quadrigonum, cruciatim in follulam excavatum.
> Pericarpium. Drupa magna eliptico-ovata utrinque acuminata, unilocularis.
> Semen Nucleus magnus Jolitarius, nauco ligneo molliori, octo vel decem fulcis longitudinalibus notato, tectus.

This beautiful tree is frequent in many parts of 'famaica, and grows, generally, in low moift bottoms, or thallow waters. It rifes commonly to the height of twenty or thirty feet, or more; and is furnifhed with large oval leaves about the top: but bears all its fruit and bloffoms from the body and larger limbs of the tree; which, with its upright growth and large leaves, gives it a very elegant appearance. The feeds grow very readily, wherever they meet with a fufficient quantity of moifture, and propagate fo thick, that the trees are always found formed into thickets, or large clufters, wherever they grow.

THAMNIA I. Foliis ovatis levifime crenatis latè virentibus nitidis alternis, petiolis brevibus, pedunculis geniculatis.
The fhrubby Thamnia, withr a light green foliage.
Periantium Nullum.
Corolla Tetrapetala, petalis fubrotundis cocbleatis.
Stamina. Filamenta numerofifima brevia, ad bafin leniter coadnata; anthere fubrotunda.
Piftillum. Germen ovatum; fylus nullus vel brevifimus; Atigma obtufum, Ariato-radiatum.
Pericarpium. Bacca videtur unilocularis nucleo unico referta. Immatura \& minora tantum objervare licuit.
This flrub was found in the red hills, above the Angels: it is not common in the inand.

MUNTINGIA 1. Fruticofa © villofa; foliis ferratis oblongis, ab uno latere
brevioribus.

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Muntingia. Plum. t. 26.
Muntingia. L. Sp. Pl. © Muntingia pedunculis unifloris. H.C.

## The villofe Muntingia.

This fhrub is frequent in all the hills and lower mountains of Famaica, and rifes commonly to the height of ten or twelve feet. The branches are very irregular and fpreading, the twigs flender, and the leaves hairy and narrow, ftretching much further back on one fide of the foot-ftalk, than they do on the other.

BREYNIA I. Fruticofa, foliis oblongis obtufs. Tab. 27. f. 1.
Breynia. Plum. t. 16.
Breynia foliis oblongo-ovalibus. Roy. Ef L. Sp. PI.
Cynophallophoros five penis caninus, \&c. Pk. t. 172. f. 4. An, t. 221. f. I?

Accaciis affinis 今iliquofa arbor. Et cerationica afinis, \&c. Slo. Cat.\& H.

## The fhrubby Breynia.

BREYNIA 2. Arborefcens, foliis ovatis utrinque acuminatis, filiqua torofa longifima.
Breynia, Éc. Pk. t. 327 . f. 6.
Agati. H. M. p. $3 . \mathrm{t}^{2} 5$ I.

## The larger Breynia.

The firft of thefe plants is very common in the lower hilly lands of Jamaica; it grows in a tufted form, and feldom rifes above five or fix feet in height: but the other is more rare, and grows into a thrubby tree. I have feen only one plant of this fecond fort : it grew near Port Antonio.

BREYNIA 3. Fruticofa, foliis fingularibus, oblongo-ovatis, fuperne nitidis, foliquis minoribus teretibus aqualibus. Tab. 27. fig. 2.

The Muftard-fhrub, with a willow-leaf.
This plant is common in all the Savannas, and low lands about Kingfon. It grows generally to the height of nine or ten feet, and throws out a number of flender fub-erect branches, adorned with oblong leaves; which appear dirty and opake, as if they were dufted, underneath. All the parts of the plant have a ftrong pungent fmell and tafte, like moft of the muftard tribe.

CRATEVA I. Arborea triphylla, foliis ovatis glabris, racemis terminalibus. Arbor Americana tripbylla, \&cc. Pk. t. 147. f. 6.

The thin-leafed Crateva, or Garlick Pear.
Periantium Monopbyllum campanulatum, ad marginem incrafatum, foliolis quatuor linearibus ornatum.
Corolla Tetrapetala, petalis anguftis inequalibus declinatis, e margine interiori calicis ungubbus tenuibus ortis, $\mathcal{E}$ interfititis foliorum periantii oppofitis.
Stamina. Filamenta octodecim, vel plura, ab imulo fuflentaculo germinis orta, corolla duplo longiora, declinata; anthere oblonga.
Piftillum. Suftentaculum inferne craffum, Aylobatiforme; juperne attenuatum, \& longitudine faminum; germen fubrotundum parvunz fuftinens: ftylus Jupra, nullus: fligma obtufufcilum, germini impofitun.

Pericarpium, Capfuld carnofa, maturitate baccata, in duo loculamenta bicellulata, Septo membranaceo femidivija.
Semina Pluranidulantia.

> CRATEVA 2: Arborea triphylla, foliis crafis ovatis.
> Crateva inermis. L. Sp. Pl.
> Anona trifolia, \&c. Slo. Cat. $205 . \&$ H. t. 225 . Tapia Pifonis.

## The Garlick Pear Tree.

CRATEVA 3. Fruticofa; foliis jingularibus oblongis utrinque acutis, fubtus quafi villofs; floribus octandris, racemis comofis alaribus. Tab. 28. f. i.

## The Muftard-fhrub, with willow leaves.

This plant is common every where in the low lands of Gamaica, and ftrongly impregnated with an acrid volatile falt; like moft of the muftard tribe, among whom it ought to be placed. The two firft fpecies are very like each other, and rife frequently from ten to twenty feet in height : but the laft fort feldom hoots above eight or nine; and is more regular in the form and difpofition of the cup and flower-leaves, as well as nectaria; which we find to agree in every refpect with the general difpofition of the Tetradynamia, to which clafs it properly belongs. It may be ranged in a peculiar divifion with the Cleome of Linneus.

## CARYOPHYLLUS 1. Foliis oblongo-ovatis oppojitis, racemis lateralibus $\mathcal{E}$ terminalibus.

The Bayberry Tree, and Bayberry of Hughes. Pl. x.
This tree is common enough both in Antigua and Famaica, as well as Barbadoes, and grows generally to a confiderable fize. It fills the woods with the fragrant fmell of its leaves, which nearly refembles that of cinnamon; but the bark has no warmth of that fort, tho' the berries refemble our cloves very much, both in form and flavour.

As the characters of this plant differ but very little from thofe of the following fpecies, we will content ourfelves, at prefent, with the defcription of the parts of the other. This fort is called the Wild Cinnamon or Wild Clove tree, by moft people, both in Antigua and Famaica.

> CARYOPHYLLUS 2. Foliis oblongo-ovatis glabris alternis, racemis terminalibus \& lateralibus.
> Myrtus foliis alternis. L. Sp. Pl.
> Caryophyllus aromaticus Americanus, \&c. Pk. t. 155. f. 4. Myrtus arborea aromatica, \&c. Slo. Cat. 16 1. \& H. t. 17 I. An, Cambery. Pif. 178 ?

Pimento, or All-fpice.
Periantium Duplex: fructificationis minimum quadridentatum; floris monopbyllum germini impofitum, in quatuor partes fubrotundas fectum.
Corolla Tetrapetala, petalis interfitiois calicis oppofitis.
Stamina. Filamenta numerofa e parietibus calicis © fummitate gerninis orta, ereclo-patentia; antheræ fubrotunda.
Piftillum. Germen fubrotundum calice foris coronatum; Aylus erectus fimplex, longitudine flaminum; ftigma obtufum.

Pericarpium.

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Pericarpium. Bacca fúcculenta globofa bilocularis.
Semina Orbiculato-reniformia, leniter comprefla, folitaria.
This tree grows naturally almoft every where in 'famaica; and is now cultivated, with great care, in many parts of the ifland, where it is planted in regular walks. The trees begin to bear in three years after they are firft planted, but are not perfect under feven; and then they begin to pay the labour beftowed upon them very abundantly. They thrive beft in thofe rocky lands, that can be hardly put to any other ufe; but they alfo grow very luxuriantly, and bear very plentifully, in every rich mould that ftands upon a gravelly bottom; and feldom fail the expectation, be they planted where they will. The root is branched, and fpreading; the trunk fmooth and fhort, and feldom above eight or ten inches in diameter; tho' you may fometimes meet with fome above fourteen. The tops of the trees are generally pretty much divided, and rife in clofe tufts: the leaves and bark are very warm, and full of aromatic particles, which makes them extremely cautious of fire, in all Pimentowalks, where, if it hould once catch, it runs with great fury.

When the berries arrive to a full growth, they are picked: (but this muft be done before they begin to ripen) they are then dried in the fun, upon barbicues or boarded floors, raifed a little from the ground, and edged, and divided into four or more lodges; that each may contain a day's picking. During the firft and fecond day, they are turned very often, to expofe them the more to the fun; but when they begin to dry, they are frequently winnowed, and put into theets, that they may be the more eafily preferved from the dew or rain; ftill expofing them to the fun every day, until they are fufficiently dried, which is known by the colour, and the rattling of the feeds in the berries; and then they are put up in bags, or hogtheads, for the market. Such of the berries as come to full maturity, do, like many other feeds, lofe that aromatic warmth for which they are efteemed, ard acquire a tafte perfectly like that of Juniper-berries; which renders them a very agreeable food for the birds, the moft induftrious planters of thefe trees.

Some of thefe trees are frequently obferved to be barren, which has introduced a notion among the people of Famaica, of their being male and female trees, in general ; and that fome of the male, or barren trees, were requifite in every walk; which, as they are commonly many, is a vaft detriment. It is, however, certain, that all thofe I have obferved, were hermaphrodites: and I am credibly informed that thofe they call males, when lopped and broke like the reft, for one or two years, do bear very well: which I am the more apt to believe, as I have never obferved a diftingt male or a female flower on any of them.

The berries of this tree have an agreeable aromatic and fubaftringent tafte, which recommends them beyond any other fpice, both in the kitchen and the fhop. We now have a delicate aromatic oil diftilled from them, which anfwers all the purpofes, for which the oils of cinnamon and cloves have been generally ufed; and is thought to be rather better than either, as it joins an aftringency to its warmth. All the parts of the tree are more or lefs aromatic and fubaftringent; but the leaves feem to abound moft in volatile warm particles.

## CARYOPHYLLUS 3. Fruticofus, foliis lanceolatis oppofitis, floribus geminatis alaribus. Tab.25.f. 3 .

## The narrow-leafed Caryopbyllus.

This is a very beautiful little fhrub, and rifes commonly to the height of three or four feet, fometimes more: it anfwers the characters of the genus in every part of the flower and fruit; but does not fhew the leaft warmth in the tafte. I had it from Mr. Robertfon, a furgeon, in Clarendon, who found it growing in that parifh.

MAMMEA 1. Maxima, foliis longioribus, cortice fulcato cinereo. Mamei. Plum. t. 4.
An, Mammea faminibus flore lorgioribus. L. Sp. Pl. Mali Perfica Mammex dista folio longiori. Slo. Cat. 180. An, Dhumba Zeylonenfibus?

The large-leafed Mamee Tree.
MAMMEA 2. Foliis ovalibus nitidis, fructu fubrotundo fabro. Mammea Aaminibus fore brevioribus. L. Sp. Pl. Malus Perfica maxima, \&̌́c. Slo. Cat. 179. \& H. t. 21 17. Pythakaya, \& Mameia. Mart.

## The Mamee Tree.

Thefe trees grow wild in all the inland woods of Famaica; but the firft is more rare, and feems to fhoot higheft: though the other grows to a very confiterable fize, and is generally looked upon as one of the largeft trees in the ifland. Both abound with a ftrong refinous gum, and are efteemed among the beft timbertrees of the place. The leaves and younger branches of both are full of a yellow milky juice: and the fecond fpecies bears a large agreeable fruit; but it is too ftrong and grofs for a weakly ftomach, and leaves a bitternefs behind it, that continues for a confiderable time upon the palate. When this fruit is in a perfect ftate, it contains four rugged, oblong, and angular nuts, which contain fo many kernels of the fame fhape.

MENTZELIA r. Setis uncinatis munita, foliis lobatis, fructibus fingularibus Seffilibus ad divaricationes ramorum.
Mentzelia. Plum. t. 6.
Mentzelia. L. Sp. Pl. \& H. C.

## The tufted herbaceous Mentrelia.

This plant is very common among the buthes in all the dry Savannas about King/ton; and edfily diftinguifhed by its yellow flowers, tufted form, and ftiff uncinated biiftes. It feems to be an annual plant, and feldom rifes above three or four feet in height. The fruit is a fucculent cylindric capfule, well furnihed with fhort, rough, unchinated briftles, like the reft of the plant, and contains only three or four rugged feeds, compreffed on one fide, and difpofed at fome diftance from each other, in the pulp.

GUIDONIA I. Foliis ovatis utrinque porrectis, alternis, quandoque crenatis; racemis laxis alaribus. Tab. 29, f. 4. An, Samyda. L. Sp. Pl.

## Rod-wood.

## Periantium Tetra vel pentaphyllum, foliolis oblongo-ovatis

Corolla? Siccam © imperfectam tantum obfervare lictuit.
Stamina. Filamenta numerofa longitudine calicis; antherx fubrofunda.
Piftillum. Germen fubrotundum obtufê quadrigonum; ftylus fimplex longitudine faminum; fligma?
Pericarpium. Capfula craffa carnofa quadrivalvis unilocularis.
Receptaculum. Cuique valvula adnajcitur placentulo propria, maturitate decedens.
Semina Plura ovata placentulis illis adnata.
Ttt

In the fruit of this tree, (which feems very nearly allied to the Samyda) the lines between the valves are of a beautiful red colour, as well as the placentac; and the filaments of the flower very numerous. The tree grows to a confiderable fize, and is efteemed a fine timber-wood: it is much ufed in all forts of buildings.

> CHRYSOBALANUS 1. Fruticofus, foliis orbiculatis alternis, floribus laxe racemofis. Tab. 17. f. 5.
> Chryfobalanus. L. Gen. \& Sp. Plant. Icaco. Plum. t. 5. \& Pk.t. 217 .f. I \& 2。

## The Cocco Plumb Tree.

This Mrub is very common both in St. Elizabetb's and Portland, and feems to thrive beft in a cool moift foil. It grows generally to the height of feven or eight feet, and bears a fruit not unlike our European plumb, either in fize or fhape: of thefe, fome are black, fome white; but no effential difference appears in the frrubs that bear them. The fruit is infipid, and contains a large nut, marked with five longitudinal furrows: it inclofes a fingle kernel of a very pleafant flavour; which makes up abundantly for the infipidity of the pulp; and for which it probably had been fo much efteemed by the native Indians. When this fhrub is planted in a dry funny foil, the fruit remains always a dry $d r u p a$; the nut being covered only by a thin fkin or bark.

> SLOANEA? I. Foliis majoribus, oblongo-ovatis, integris, venis arcuatis refertis.
> An, Sloanea. Plum, pag. 49. to 15.
> An, Jacapucaia. Pif. 155 . An, arbor, \&cc. Thez. Zey. pag. 255 ?
> The large oval-leafed Sloanea, or Brake-axe Tree.
> Pericarpium. Capfula magna, cordata, obtufe quadrigona, crafa, lignea, e fibris radiatis texta, \& denticulis erectis rigidis numerofiffimis oppofita; quadrivalvis, quadrilocularis, quadrifariam ab apice erl bafom debifcens.
> Semina. Nuclei duo, tres, vel plures in Jingulo loculamento pericarpii, pulpâ crocá obducti.

I have feen only one tree of this kind in Famaict; but it is faid to be pretty common in the mountains of St. Ann's, and efteemed as one of the beft and largeft timber-trees in the wood: though fo very hard, that it is found a difficult matter even to cut it down; and from thence it takes its common appellation. The leaves are about five inches in length, and two and a half in breadth. The fruit is about two inches and a balf in diameter; and contains fome bilobed kernels, of an agreeable tafte, inveloped in a foft mucilaginous fubftance, of a fcarlet colour. The feeds are much coveted by the mackaws and parrots, the only birds that can break thro' thofe thick and lignous feed-veffels, which are not eafily broken, even with a hammer: but when they are thoroughly ripe, they fplit naturally into four parts, and drop or expofe their feeds.

> XYLOPICRUM? I. Fruticofum; foliis ovato-acuminatis, productiv, alternis; capfulis punczatis; foribus confertis ad alas. Tab. 5 . fig. 2.
> An, Xylopicron, Ec. Pk. t. 238. f. 4 ?
> The fmaller Bitter-wood.
> Periantium Monophyllum, breve, cyathiforme, tri- vel quinquedentatum, perffens,


Corolla Hexapetala, petalis lanceolatis, tribus quaf exterioribus, majoribus. Stamina. Filamenta plurima parva, e pelvi calicis orta, germini appropinquata, É quafi adnata; antherx oblonge.
Piftillum. Germen ovatum; ftylus fimplex longitudine floris; ftigma obtufufculum.
Pericarpium. Capfula Jubrotunda unilocularis mono/permis.
Semen. Nucleus amygdalino-glutinofus, cavus.
I found this little tree at the foot of the mountains in Sixteen-mile-walk, where it grew to the height of fifteen or twenty feet. I have made no remarks upon the bark or wood of this fpecies.

> XYLOPICRUM 2. Foliis ampiioribus, nitidis, ovatis; petiolis brevibus; fruEibus glabris.
> An, Xylopicron arbor Barbadienfibus Bitter-wood, Ev. Pk. t. 238. f.4. The larger Xylopicron, or Bitter-wood.

Pericarpium. Capfula coriacea, unilocularis, duplex; interior tenuior membranacea.
Semen. Nucleus fubrotundus amyydalinus, primo cetate gelatinofus, © nucleorum palmaruth more, cavus, fuccoque lento repletus.
I met with this tree in the mountains, back of Bull-bay, where it grew to a very confiderable fize, and raifed its branches to the height of fifty or fixty feet above the root. The wood, bark, and berries, have an agreeable bitter tafte, not unlike that of the orange-feed; and would probably prove excellent medicines, had they been brought into ufe. The wild pigeons feed much upon the berries, and owe all that delicate bitterih flavour, fo peculiar to them in the feafon, wholly to this part of their food. I have eat many of the berries juft off of the tree, and found them both agreeable to the palate, and grateful to the ftomach. The bark is alfo richly impregnated with this fame juice, as well as the wood; and both yield a very agreeable bitter in the mouth, while freh : but that delicacy diminifhes greatly after they are dried. The wood is eafily wrought, and efteemed as a good timberwood; but muft be ufed where it may it may not be eafily expofed to the weather.

This tree ought to be cultivated, for it will, probably, be found very ferviceable in time : it feeds at Mr. Anderfon's mountains, near the Mine. I have not feen any of the flowers in a perfect ftate; but fuch imperfect ones as came under my examination, feem to fhew it of the fame clafs and genus with the foregoing plant.

> MIMOSA 1. Tortuofa, aculeis rectis geminatis, foliis tenuifimis, jpica globofa, fliquis crafis.
> Acacia Americana fliqua ventricofa, \&cc. Slo. Cat. \& H.
> Acacia Zeylonica jpinis maximis albis, fore globofo, \&cc. Bur. Thez. Zey:

## The common Acacia, or Acacee-bufh.

There is no plant more common than this, in the low lands of Jamaica, though but of little fervice; for the fmell of the whole plant, is fo rank and ditagreeable, that it can't be ufed even for fire-wood. It rifes commonly from five or fix to ten or twelve feet in height; and is well fupplied with ftrong, ftraight, white thorns, and minute pinnated leaves. The cattle are faid to browfe upon its more tender fhoots, in dry weather, to whom maft people attribute the ranknefs of the milk in that illand. The pods are richly impregnated with a flicky aftringent gum, which may be eafily extracted; and would prove an excellent medicine, where rough aftringents are requifite.

## $25^{2}$ THENATURAL HISTORY <br> MIMOSA 2. Diffufa, fpica oblonga, fliquis longioribus compreffis.

## The Poponax.

This fhrub has been introduced to Gamaica, from the main continent, and thrives very luxariantly in many parts of the low lands, where it is obferved to rife, frequently, to the height of fourteen or fifteen feet, or better: it is not fo prickly as the foregoing fpecies, and its leaves are rather larger. It is of a fpreading growth, and furnifhed with oblong flower-fpikes.

> MIMOSA 3. Arborea, cortice cinereo, Spica globofa, fliqua interne rubenti, Seminibus Jpbaricis atro-nitentibus.
> Acacia arborea maxima non fpinofa, pennis majoribus. Slo. Cat. \& H. t. 182 .

The mountain or wild Tamarind Tree.
This is a native of Famaica, and found in moft parts of the ifland: it grows to a very confiderable fize, and is looked upon as an excellent timber-wood. The leaves are fmall, and bipinnated, and the feeds of a f̣hining black colour.

MIMOSA 4. Fruticofa, foliis ovatis binato-binatis; feminibus comprefis, atronitentibus, flocculis rubellis adnatis.
Mimofa inermis, foliis bipinnatis, leguminibus /piraliter circumvolutis, \&c. L. Sp. Pl.

Acacix quodammodo accedens, ECc. Pk. t. I. f. 4. G' Avaramotbemo. Pif. Acacia arborea major jpinofa, pinnis quatuor majoribus, \&c. Slo.
Acacia folizs ampliaribus. Catefb. ii. t. 97.

## The Black-bead fhrub, or large-leafed Mimofa.

This plant is frequent in moft parts of America, where it generally grows from feven to ten feet in height. Pijo defervedly mentions the bark of this tree, as a great aftringent, and recommends the decoction of it by way of lotion, or fomentation, when the parts are more than ufually relaxed in the other fex: but fuch applications fhould be ufed with great caution, and only at particular times.

> MIMOSA 5. Fruticofa, pinis aduncis undique armata; cortice cinereo, foliis minutis pinnativ, Jpicis globofs.
> Mimofa foliis conjugatis pinnatis, foliolis aqualibus, caule aculeis incurvis munito. L. Sp. Pl.
> Acacia aculeata multifora, folios pinnas avium referentibus. Bur. Thez. Zey.

## Fingrigo, or the thorny Mimofa.

This prickly fhrub is frequent in moft of the fugar-colonies, efpecially in Antigua; where the leaves are frequently ufed, mixed with corn, for their riding-horfes; and is thought to free them from botts and worms. It grows in a tufted form, and feldom rifes above five or fix feet from the ground; tho' it fpreads a great deal more in its growth.

## MIMOSA 6. Fruticofa inermis diffufa major, fpicis globofis, pinnulis minutiffime foliolatis. <br> Acacia arborea maxima, flore flavo odoratifimo, \&cc. Slo. Cat.

The fmooth Accacee.
'This plant is common about Spanibs Town, and feems very like the firft fpecies; but it grows larger, and is of a more fpreading form. The branches are very delicate and flender, and the leaves very fmall and fenfitive; I have obferved them to fpread and contract, after they have been for a month or fix weeks in paper.

## MIMOSA 7. Fruticofa major, diffufa © inermis; pinnis longifimis; pinnulis minutiflime foliolatis.

The fpreading long-winged Acacee, or Senfitive.
This fpecies, like the foregoing, feems to be but a variation of the firft fort; but the wings are very long, in proportion to thofe of the others; and the branches, which are long and flender, fo peculiarly difpofed, that I could not but give it a feparate place. The flower-fpikes are round, in this fhrub, and the pods flender and cylindric: it grows pretty frequent in the road between Mr. Price's Pen, at the Caymanas, and Spanibs Toron.

## MIMOSA 8. Frutefcens media inermis, filiquis comprefis falcatis © umbel latis, pedunculo longifimo.

The larger fmooth Senfitive.
This plant has been introduced to Gamaica, from fome other part of the world; and is now cultivated at Mr. Ellis's garden at the Caymanas, where it grows very luxuriantly. The branches of this feecies are moderately thick and fucculent, and and the pods pretty broad and compreffed.

MIMOSA 9. Fruticofa erecta inermis, cortice cinereo, foribus laxe conglobatis, Jpicis plurimis comofis terminalibus, foliolis minimis bi-, pinnatis.

## The fhrubby wild Tamarind.

This fhrub refembles the wild Tamarind, both in its foliage and colour; but it is never obferved to rife above feven or eight feet in height, rarely fo much. The difpofition of the flowers diftinguifhes it fufficiently from any of the reft.

MIMOSA 10. Foliis majoribus ovatis, per pinnas alatas \& glandulatas dijpofitis; foribus Jejunctis.
Mimofa foliis pinnatis quinquejugis, petiolo articulato-marginato. L. Sp. PI. Iuglandis folio fruticofa, \&zc. Slo. Cat. \& H. t. 283. Inga fore albo fimbriato, fructu dulci. Plum. pag. 13.

The Inga Tree, or large-leafed Senfitive.
This Chrubby tree is pretty frequent in St. Mary's, and rifes commonly to the height of fifteen or twenty feet : the pod is pretty long and compreffed; and marked with two ridges along each future.


## The thorned Senfitive, from Panama.

This is the moft curious plant of the fort, I have obferved in that part of the world; it was introduced to 'Jamaica from the main continent, and is now cultivated in fome of the gardens of the curious; but is yet rare. It is a fhrubby plant, and rifes commonly to the height of leven or eight feet; but the fmaller

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branches and ribs are full of fhort recurved thorns: and each rib again emits a number of long and flender aculei, from the inter-fpaces of its foliations, or fmalleft ribs; which, like fo many needles, guard and defend their tender leaves. The branches of this fhrub are moderately thick; but the leaves are fmall, and very apt to move on every occafion. The fliliques, or pods, are compreffied and hairy; and, when ripe, divide into as many fegments, or parts, as there are feeds, which fall off feparately: thefe parts or portions are held, in the natural ftate, between two ribs, that run along the margins of the pod; in the inward grooves of which they move with great eafe, when contracted and detached from each other.

## MIMOSA 12: Nobilifima armata repens, pinnis bigeminatis pinnatis.

The prickly creeping Senfitive.
This little plant was, probably, introduced to Famaica from fome other part of the world; but it is now cultivated in many of the gardens about King fon: it grows in fmall tufts, and fpreads generally from one, to two or three feet about the root. Its leaves are very fmall, and the flower-fpikes oblong; but the pods feldom ripen in that ifland. The foliage of this plant is extremely fenfitive, and moves readily with every perturbation; or even, a fudden change in the atmorphere.

MIMOSA 13. Minima berbacea, vix tripolicaris; capfulis monofpermibus birfutis.
An, Mimora foliis conjugatis pinnatis, partialibus bijugatis Jubrotundis, caule berbaceo inermi. L.Sp. Pl.
Mimofa berbacea non jpinofa minima repens, \&cc. Slo. Cat, \& H. t. 182. 7.
The fmalleft creeping Senfitive of Famaica.
This little plant is frequent in many of the paftures of Jamaica, efpecially thofe fituated at the foot of the mountains, in Sixteen-mile-walk, and St. Thomas in the Eaft. It grows in beds, and creeps by very delicate ftalks along the ground; but thefe feldom exceed three or four inches in length. It is very fenfitive, and contracts its leaves on every flight touch, or fudden change of the atmofphere.

## BIXA 1. Foliis cordatis cum acumine, foribus racemofis terminalibus. <br> Bixa. L. Sp. Pl. \& H. Cl. <br> Mitella maxima tinctoria. Tourn. <br> Urucu Pif. © Urucu of Knivet. Slo. Cat. 150. \& H. t. 13 I. f. I. <br> The Roucou, or Arnotto Tree.

This curious thrub is pretty frequent in the cooler vales of Jamaica, and rifes commonly to the height of eight or nine feet, fometimes more: it thrives beft in a cool rich foil, and thoots moft luxuriantly near fprings and rivulets. All the feeds of this plant are covered with wax, which is carefully gathered in many parts of America; and is what generally goes by the name of TerraOrellana, Roucou, and Arnotto. This commodity is manufactured in the following manner, viz. When the feed-veffels are full grown, and in a perfect ftate of maturity, they are picked off and opened; and the feeds gathered and put into convenient jars. When they have a quantity of thefe, proportioned to their veffels and defign, they throw in as much hot water as may be fufficient to dilute and fufpend the pulp or wax, with eare, which is gradually wathed away from the feeds, both with the hands and fpatula. When all the wax is wathed off, and the feeds appear quite naked, they are taken out, and the wath left to fettle: but when the wax is thoroughly fubfided, the clear incumbent waters are decanted off, and the fediment put into fhallow veffels, to be dried gradually in the fhade. When this mafs acquires a due confiftence, it is made into balls, or cakes,
and left to dry in fome open airy place, until it grows firm and hard; and then it is fit for ufe, or the market.

This plant is propagated by the feeds, and may be cultivated with great eafe, in every moilt and fertile vale among the hills. The wax is a cool agreeable rich cordial, and has been long in ufe among the Indians and Spaniards in America, who ftill mix it with their chocolate, both to heighten the flavour, and raife the colour. It is faid to be a fuccefsful remedy in bloody-fluxes: it is alfo ufed as a pigment; and not unfrequently mixed up with other ingredients, both by the painters and the dyers. The roots have much the fame properties with the wax ; but thefe are obferved to work more powerfully by the urinary paffages: they are ufed by fome people in their broths, and feem to anfwer all the purpofes of the pulp; but in a more faint degree.

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Of Plants that bave many Filaments, and four or more Styles in every Flower.

TETRACERA? I. Foliis amplis ferratis, obovatis cum acumine; capfulis bigeminis.
Arbor maxima forte prunifera, cortice canabina, \&c. Slo. Cat. 184. \& H. t. 130.

An, arbor Americana convolvulacea, \&cc. Pk. t. i46. f. I.
The Broad-leaf Tree.
This tree is pretty frequent in the woods of Famaica, and commonly looked upon as one of the beft timber-trees in the ifland. It grows to a very confiderable fize, and rifes, generally, by a ftraight well-proportioned trunk; bearing its foliage chiefly about the extremities of its branches. I have not met with any of the flowers of this plant in a perfect ftate, fo that I am obliged to range it from a very uncertain examination.

CLEMATIS 1. Scandens, foliis quinquenerviis ovatis nitidis pinnato-ternatis. Clematis. Mufei \& The. Zey.
Clematis prima five fylveftris latifolia, \&cc. Slo. Cat. 84. \& H. t. 128.
The three-foliated Climber, or Traveller's-Joy.
I found this plant in the red hills; it is a climber, and raifes itfelf frequently to the top of the largeft trees in the wood: the ftalk is tough and flender, and the leaves roundifh and fhining.

> ANNONA I. Foliis oblongo-ovatis nitidis, fructibus fpinis mollibus tumentibus obfitis.
> Annona foliis ovali-lancolatis nitidis planis, pomis muricatis. L.Sp. Pl. \& H. C.
> Anona maxima, \&c. Slo. H. t. 225. E Anona fructu conoide viridi, \&c. Pk. t. 135. f. 2.
> Anona fructu virefcenti. Muf. \& The. Zey.
> Guanabanus. Plum. 9. t. 10.

## The Sour-fop Tree,

This Ihrubby tree grows wild in all the low lands of Famaica, and is one of the moft common plants in every Savanna. It rifes generally to the height of tweive or fifteen foot, fometimes more; and bears a very large fucculent fruit, which is generally agreeable to all new comers, and moft other over-heated habits: but it is fo com-

### 2.5 THENATURALHISTORY

mon, and fo much in ufe among the negroes; that it is now hardly ever ufed among the better fort of people.

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ANNONA 2. Foliis oblongo-ovatis undulatis venofs, foribus tripetalis fructi-
    bus mamillatis.
    Annona foliis oblongis, fructibus obtufê Squamofs. L. Sp. Pl.
    Anona foliis odoratis, \&cc. Slo. Cat. 205. \& H. t. \(227^{\circ}\)
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    The Sweet-fop, or Sugar Apple Tree.
    This, like the foregoing, is a native of the low lands, and Savannas of Fa maica; but it feldom grows fo large as that. The fruit of this fpecies is pretty much efteemed by many of the fair fex, tho' foldom ferved up at table.

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ANNONA 3. Foliis oblongis undulatis venofis, frutibus areolatis.
    Annona foliis oblongis, fructibus ovatis reticulato-areolatis. L. Sp. Pl.
    Anona maxima, \&c. Slo. Cat. 204. H. t. 226.
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## The Cuftard Apple Tree.

ANNONA 4. Uliginofa, foliis nitidis ovatis, fructibus areolatis odoratis. Anona aquatica. Slo. Cat. 205. \& H. t. 228 . Anona Americana juxta fuviorum ripas innajcens. Pk. t. 240. f.6. Anona, E8c. Thez. Zey. p. 30, 5 .

> The Alligator Apple Tree, or Cork-wood.

Both theife fpecies are common in the low lands. The firft grows in dry places, and bears a fruit, which is much efteemed by many people: the other is moft commonly found in foft marfhy places, and bears a fine fweet-fcented fruit, of no difagreeable flavour; but it is faid to be a ftrong narcotic, and is not ufed on that account. The wood of this tree is fo very foft, even after it is dried, that it is frequently ufed by the country people, inftead of corks, to ftop up their jugs and calabathes; from whence it has now univerfally obtained the name of Cork-wwod in Famaica.

ANNONA 5. Foliis amplioribus Serrato-crenatis, fructu rotundo fpinis mollibus ornato.
The Amona, with ferrated leaves.
I found this fpecies near the cave in Wefmoreland, but have never feen a fecond plant of the fort: it grows much of the fame fize with the other fpecies, but the fruit is much fmaller, and the prickles more clofe. The difpofition and form of the leaves diftinguifh it fufficiently from all the others.

## C L A S S XIV.

Of the Didynamia, or Vegetables that have four Filaments in every Flower; of which two are remarkably longer, and more perfect than the reft.
$N . B$. The flowers of this clafs are generally irregular and labiated.

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Of fuch as bave only one, two, or four naked feeds to fucceed every flower; and thefe difpofed regularly in the bottom of the empalements.

M
ESOSPH压RUM 1. Hirfutum, foliis cordatis ferrato-fubfinuatis, foribus verticilliter Jpicatis. Tab. 18, fig. 3.
Marrubium odorati/imum betonica foliis. Burm. The. Zey. t. 71.
Mentaftrum maximum. Slo. Cat. 64. \& H. t. 102.
Spikenard.
Periantium Monopbyllum tubulatum, rectum, leniter ampliatum, decem Ariis notatum; ore fubobliquo, quinque fetis rigidis terminato.
Corolla Monopetala tubulata: limbus bilabiatus: labium fuperius rectum, bifidum, fauce variegatum; inferius tripartitum, patens, collo anguftum; laciniis lateralibus ovatis; mediâ minori, reflexa, ad apicem compreffá, carinata.
Stamina. Filamenta quatuor, quorum duo inferiora funt $\mathcal{E}$ longiora, tuboque floris ad faucem ulque adnata; duo vero Juperiora, libera © breviora; antheræ fubrotunda.
Piftillum. Germen bilobum oblongum; ftylus bifidus, longitudine faminum; ftigmata acuta.
Pericarpium Nullum; calix in finu Jemina fovet.
Semina Duo fubcompreffa, oblongo-quadrata, fulicâ longitudinali per medium ducta, notata.
This plant grows wild in many parts of Jamaica, efpecially in the low gravelly lands about Kingfon and Old-barbour, where it commonly rites to the height of two or three feet. It is one of the moft grateful cephalics, and alexipharmics, of this clafs of plants; and may be ufed, with great propriety, in moft diforders of the nerves, and vifcera, where fuch warm medicines are required.

> TEUCRIUM 1. Subbirfutum; foliis ovatis, dentato-ferratis; Jpicis feritioioibus, craffis, terminalibus.

## The hairy Teucrium.

This is a native of 'famaica, and pretty frequent in the lower parts of St. Mary's, where it grows very luxuriantly; tho' it feldom rifes above two feet and a half in height. The flower-cup feems a little inflated in this plant.

## $25^{8}$ THENATURALHISTORY

LAVANDULA 1. Incana, foliis lanceolatis integris, ficis nudis. L. Sp. P1. $\& \mathrm{H} . \mathrm{C}$.

> Lavender.

This plant was introduced to Fameica fome years ago, and bas been fince cultivared in many parts of the ifland; particularly in the mountains, where it is obferved to thrive extremely well. lt is a grateful warm cephalic, and a principal ingredient in a fpirituous tincture, and a compound water, now kept in the flrops; which take their common appellations from the plant.

## GLECOMA 1. Repens, folis reniformibus crenatis, L. Sp. Pl. \&H.C. <br> Ground-Ivy.

This creeping plant grows now wild in the mountains of Liguanea, and in fome other parts of the ifland, where it had been formerly planted: but it does not thrive in many places; for it requires to be well fhaded, and a loofe rich foil. It is a mild aromatic, and a good vulnerary; and is mach recommended in the diforders of the breaft, and vifcera.

## SIDERITIS 1. Viminea, foliis minoribus obovatis, pedunculis triforis alaribus.

The weakly All-heal.
This curious plant is a native of the cooler mountains of Liguanea: it grows. among the buthes, and Ipreads its flender weakly branches to a moderate diftance; ftretching feldom lefs than fix or feven feet from the root. All parts of the plant have an agreeable aromatic fmell.

> MENTHA 1. Supina, caule rubenti; foliis oblongo-oratis, dentato-jerratis; spicis terminalibus.
> Mentha foribus Jpicatis, foliis oblongis ferratis. L. H. Up. \& Sp. PI.

## The herb Mint.

This plant was, doubtlefs, firt introduced to Famaica, from fome part of Europe; but it grows fo luxuriantly in the mountains, that it may be now confidered as a native; for it is found wild in many parts of the ifland, where nothing but chance, or the birds, could have planted it.

MENTHA 2. Floribus verticillatis, foliis ovatis obtufis fubcrenatis, caulibus


> Pennyroyal.

This plant was alfo introduced to that ifland fome time ago; and is now cultivated in many places in the mountains, where it thrives beft. Thefe plants are agreeable warm ftomachics, and pretty much ufed, both, in the kitchens and the mops.

> NEPETA 1. Afurgens villofa; foliis cordatis, acuminatis, crenatis; Spica craffa foliolata.
> Nepeta maxima, fore albo, \&cc. Slo, Cat. $65^{\circ}$
> The large villofe Nepeta.
> GALEOPSIS I. Spica multiplici, tenui © longiori; foliis orato-acuminatis, ferratis.

The fmaller Galeopfss or Dead-nettle, with flender flower-fpikes.
This plant is pretty frequent in the pariin of St. Mary; but it feldom rifes above two or three feet in height.

GALIOPSIS 2. Procerior; foliis ovato-acuminatis, ferratis; picis majoribus, compofitis, terminalibus; jpicillis geminatis, unoverfu foridis.

## Wild Spikenard.

This plant is a native of Jamaica; and very common in all the low lands, and dry Savannas, about King/ton and Spanijb Town. It rifes, generally, to the height of five or fix feet, or beiter; and bears its flowers very thick, and curioully difpofed on the fmallett flips of its branched tops. All the parts of the flowers are very fmall; and the neck of the cup, as well as the filaments, commonly covered with down.

THYMUS 1. Minimus berbaceus, foliis orbiculatis crenatis, floribus fingularibus ad alas.

The fmaller berbaceous Thyme.
Pedunculo brevifimo incidit periantium tubulatum angafum, in fauce villofum, quinquedentatum.
Corolla Monopetala ringens, labium fuperius leniter bipartitum, erectum; inferius tripartitum, ereefo-patens; lacinia media majori, cordatá.
Stamina. Filamenta quatuor, quorum duo multo breviora; antherx fubrotunda.
Piftillum. Germen quadrigonum; ftylus fimplex, flore longior; fligmata bina attenuata.
Semina Quatuor ovato-turbinata, in fundo calicis fita.
This little plant is a native of Gamaica, and grows wild in many parts of the inland. I have met with it in plenty at the Decoy; and in the bottom below Mr. Bright's, in St. Mary's.

THYMUS 2. Ereçus, foliis margine reflexis ovatis, floribus verticillato-fpicatis. L. Sp. PI. \& H.C.

Thyme.
This plant grows very plentifully in all parts of the mountains, and is now much cultivated there.

CLINOPODIUM I. Subbirfutum, foliis crenatis utrinque acuminatis, foribus conglobatis pedunculis long is alaribus incidentibus. Et foliis rugofs, capitulis axillaribus, pedunculatis explanatis radiatis. L.Sp. Pl.
Sideritis foicata foropbularia folio, \&c. Slo. Cat. 65. \& H. tab. 109.
Wild Hops.
Involucrum Commune, e radis paucioribus linearibus potenti-reflexis conflatum.
Periantium Monophyllum tubulatum oblongun incurvum ed utrupque extremum angiffiorem, ore quinque denticulis fetaceis infructum.
Corolla Tubulata ringens.

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Stamina. Filamenta quatuor erecta, ferè cequalia, corollâ longiora; antheræ oblongre.
Pifillum, Germen Jubrotundum quadrilobum; Atylus longitudine tubi floris: Atigma acutum.
Pericarpium Nullum. Calix immutatus in Jinu Jemina fovet.
Semina 2zatuor oblonga.
This plant is common in moft parts of the country: it grows chiefly in rich and fhady places, and feldom rifes above three feet in height.

ORIGANUM 1. Foliis covalibus obtufs, 六icis fubrotundis compactis pubefcentibus. L. Sp. Pl. \& H. C.

Marjorum.
This plant is cultivated in the mountains of New Liguanea, where it thrives well, and is propagated with eafe.

MELISSA r. Floribus ex alis inferioribus ferme feffilibus. L. H. C. \&
Meliffa racemis axillaribus verticillatis; pedicellis fimplicibus. Sp. P1.
Baum.
This plant is cultivated in fome of the gardens of Famaice; but it feldom thrives with that luxuriancy, that many other European plants do.

SCUTELLARIA I. Syluefris, erecta, ramofa; foliis ovatis; foribus ternatis Jeffliitus, per Jpicas terminales oppofitis.
Ocimum rubrum medium. Slo. Cat. 65.

## Wild Bafi.

This plant is met with in all parts of the country; and may, with great reafon, be deemed one of the natives of the ifland. It has much the fame make, fmell, and tafte, with the common garden Bafil; from which it differs only by the inverfion of the flower, and formation of the cup.

OCYMUM i. Erectum ramofum \&o picatum, foliis ovatis glabris. Ocimum foliis ovatis glabris, calicibus ciliatis. L. Sp. PI. \& H. C.

## Great Bafil.

There is no plant more common than this, in the gardens of Jamaica; nor one that thrives more luxuriantly in every foil, and part of the ifland.

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Of fuch as bave their feeds inclofed in convenient feed-veffels.

> E UPHRASIA 1. Repens, foliis oblongis integris, capfulis longioribus Jub-

The creeping Eyebright.
This is a native of Mountferat : it is a low creeping plant, and generally fpreads about feven or eight inches round the root. It grows near Mr. William Lee's, at the foot of the main mountain.

STEMODIACRA 1. Maritima odorata; foliis minoribus, fefflibus, denticulatis, baftatis; florzbus folitariis alaribus. Tab. 22. fig. 2.
Scordium maritimum, \&c. Slo. Cat. 66. \& H. t.IIo. f. 2.
The Sea-fide, or Baftard Germander.
Periantium Monophyllum, in quinque lacinias angufas erectas ad bafim fere lectum.
Corolla Monopetala tubulata; tubus longitudine fere calicis, fubaqualis; limbus erecto patens, bilabiatus; labium fuperius integrum ovatum; inferius tripartitum, laciniis ovatis © fere agualibus.
Stamina. Filamenta quatuor fiubaqualia, bibrachiata, longitudine tubi corolla, antheris geminis inflructa; fingula foilicet, fingulo bracbio filamenti.
Piftillum. Germen oblongoovatum; fylus fimplex, longitudine faminum; ftigma obtufufculum.
Pericarpium. Capfula obiongo:ovata bilocularis bivalvis.
Semina Plurima difepimento affixa.
This plant is a native of Famaica, and very common by the fea-fide, in all the fouthern parts of the illand: it has a pleafant aromatic fmell, with a biterith tafte; and will, probably, prove an excellent ftomaciic and aperitive; but it is not yet much ufed. The leaves are pretty thick upon the branches, and flightly belet with down.

BLECHUM I. Foliis oblongo-ovatis, spicis craffis foliolatis conico-quadratis fubbirfutis.
Brunella elabor flore albo. Slo. 65 \& H. t. 1cg. f. I.
An, Wadapee. H. M. p. 10. t. $37,8$.
The thick-fpiked Blectum.
Periantium Parvum monophyllym, in quingue lacinias angufas acutas profunde Jechum.
Corolla Monopetala tubulata; tubus anguffus calice longior; faux inflata; limbus in quinque lacinias oblongas, erecto-patentes, fere aquales' Jectus.
Stamina. Filementa quatuor, quorum duo pawlo breviora; antherx oblonga in fauce floris: jita.
Piftillum. Germen compreffum ovatum; fylus fimplex, longitudine faminum; Atigma ligulatum.
Péricarpium. Capfula compreffa ovatá bilocularis bivalvis, valvis carinatis.
Semina Plura comprefla fubrotunda, umbilico capjula adnata.
This plant is pretty frequent, in moft dry and Chady places, among the lower hills: it thrives beft in a gravelly foil; but feldom rifes above two feet and a half in height.

> GESNERIA I. Erecta, foliis lanceolatis rugofis birfutis, pedunculis longifemis ramofis ex alis juperioribus.
> Gefneria foliis lanceolatis crenatis birfutis, pedunculis lateralibus longifints corimbiferis. L. Sp. PI \& H. C
> Digitalis folio oblonga, \&ic. Slo. Cat. 60. \& H. t. IO \&. f. 4.
> The hairy erect Gefteria, with open flowers.

This plant is common about moft of the river-courfes in the ifland, efpecially where the banks are dry and rocky. It has a firm upright ftalk, furnifhed with leaves; and rifes commonly to the height of four feet. The flowers are large and
open, in this fpecies, and the difpofition of the filaments fomewhat like that of the Saze; but the capfule is bilocular, and crowned with the divifions of the cup, as in the following plant.

GESNERIA 2. Rupeftris indivifa, foliis ablongis rugofos fummo caule difpofitis, foribus fingularibus ad alds.
Rapunculo affinis, \&c. Slo. Cat. 59. \& H. t. 102. f. I.
The fmall tufted Gefneria, with fcarlet flowers.
Periantium Monopbyllum, germine pragnans, in lacinias angufas profunde fectum.
Corolla Coccinea, monopetala, tubulata; tubus longus, arcuatus, Jubincurvus, leniter ventricofus, fere cqualis, ore coardatus, quinquecrenatus.
Stamina. Filamenta quatuor, corollá paulo breviora, fere aqualia; antherx fimplices fubrotunde.
Piftillum. Germen obverfe ovatum, calice inclavatum, El laciniis coronatum; Atylus fimplex, corolla paulo longior; Atigma obtufiufculum.
Pericarpium. Capfula calice tecta $\mathcal{E}^{3}$ coronata, bilocularis. Semina Plurima minima.
This plant grows in the fiffures of the rocks, on both fides of the road, between Spanib Town and Sixteen-mile-walk: the ftem is always fimple, and creeps along the rocks, bearing a pretty large tuft of leaves at the extremity; from whofe alo fpring fo many fingle flowers.

ELLISIA I. Frutefcens quandoque Spinofa; folis ovatis, utrinque acutis, ad apicem fèrratis; Jpicis alaribus. Tab. 29. f. ı.
An, Alaternus, Éc. Pk. Phy. t. 126. f. 3?

## The Tea-leafed Ellifra.

Periantium Monophyllum parvum cylindraceum erectum quinquedentatum.
Corolla Monopetala tubulata; tubus aqualis fubarcuatus, calice duplo longior; limbus patulus, in quinque partes fere aquales jectus.
Stamina. Filamenta quatuor, quorum duo paulo longiora \& ultra medietatem tubi porrecta funt; antherx fubrotunda.
Piftillum. Germen fubrotundum calice tectum © coronatum; flylus fimplex, longitudine faminum; ftigma crafiufculum.
Pericarpium. Bacca fubrotunda calice tecta \& coronata, nucleis ofio, naucis quatuor ofleis bilocularibus angulatis tectis, referta.
This hrub grows chiefly in the low lands, and rifes frequently to the height of fix or feven feet. The leaves are oppofite, and fo very like the leaves of green tea, that I was obliged to try fome experiments, before I could be fatisfied it was not the fame plant. The branches of this plant are fometimes befet with thorns, but often otherways. I have named it after Mr. Ellis, a gentleman who has lately publiched fome curious obfervations on the plant-like marine productions of an animal nature.

CLERODENDRUM 1. Fruticofum, /pino/um; foliis inferioribus confertis, Juperioribus oppofitis; pedinculis tripartitis, trifloris, alaribus. Tab. $30 . \mathrm{f} 2$.
Volkameria, Jpinis petiolorum rudimentis. L. Sp. Pl.
Paliuro affinis, liguftrifolia, \&cc. Slo. Cat. I $37 . \&$ H. \& Pk. t. 352. f. 2. The fmall-leafed Clerodendrum.

> Periantium Monophyllum campanulatum breve, in quinque lacinias lanceotas reflectentes fectum.
> Corolla Monopetala tubulata; tubus longus angufus; limbus patulus, in quinque lacinias oblongas ad bafim oblique lectus.
> Stamina. Filamenta quatuor fere cequalia, corolla duplo longiora, Eo tubo floris ad faucem fere adnata; anthere cordatie.
> Piftillum. Germen fubrotundum in fundo calicis fotum; ftylus longitudine flaminum; Itigma acutum.
> Pericarpium. Bacca fubrotunda, nuculis binis bilocularibus referta.
> Semina. Nuctei oblongi jolitariz.

This thorny fhrub is one of the moft common plants in the low lands of Fa maica: it grows in a dry gravelly foil, and feldom rifes above five or fix feet in beight. It is very common in moft of the other fugar-illands, as well as in that ifland.

BONTIA? 1. Foliis integris oblongis oppofitis, petiolis crafis breviffmis fub amplexantibus, floribus racemofis.
Mangle lauro-cerafí foliis, flore albo tetrapetalo. Slo. Cat. 156. \& H. ii. p. 66, 7.

## The Olive Mangrove Tree.

Periantium Polypbyllum imbricatum, foliolis fubrotundis.
Corolla Monopetala quafí perfonata; tubus brevis cylindraceus; limbus quadripartitus, inaqualiter fectus; lacinits patentibus ovatis.
Stamina. Filamenta quatuor tubo longiora; (borum duo paulo breviora funt ;) anthera biloba fubrotundx.
Piftillum. Germen oblongum ovatum; fylus brevis fubulatus; figma acutum, quandoque bifidum.
Pericarpium. Capfula coriacea, compreffa, fubrbumbaa, oblique elongata, unilocularis.

Semen Unicum quadrilobum germinans, lobis-foliaceis.
This tree is frequent near the fea, both on the north and fouth fide of Jamaica; and remarkable on account of its cineritious colour, and the narrow form of its leaves. It grows in a low moift giound, and rifes commonly to the height of fifteen or eighteen feet. Its capfules are compreffed, and fomewhat roundifh; but irregular, and obliquely lengthened; and contain each a compreffed foliaceous feed, that fwells and germinates before it falls.

> BIGNONIA I. Pentapbylla arborea, flore fubrubello.
> Bignonia foli is digitatis integris.. L. Sp. Pl. \& H.C.
> Bignonia, Ec. Pk H. 200. \&. 4.
> Nerio afonis atbor fliquofa, folio palnato, \&c. Slo. Cat. I $54 . \&$ H. ii. 62.
> White Cedar, or White-wood.

This tree is found in many parts of 'Jamaica; tho' it feldom thrives there, fo well as it does in fome of our other fugar-colonies: it grows beft in a free foil, and a low warm fituation; but is more frequently met with in the hills, and more woody inland parts of that ifland. It grows to a confiderable fize, when faifed in a kind foil, and is generally looked upon as a good timber-wood; but when its growth is not luxuriant, it is only fit for cattle-yokes, and fuch other fmall conveniences as require a tough yielding wood. The juice, and tender buds, of this tree, are faid to be an antidote againft the poifonous juice of the Mangeneel: they are indeed bitter, and may ferve to prevent excoriations, or blifters, for a time; and thereby protract the operation of that cauftic juice, until a part of its virulency wears off, or other affiftance
can be obtained: but emulfions, and oily medicines, will be always found to anfwer much better on thofe occafions.

> BIGNONIA 2. Arborea, foliis ovatis verticillito-ternatis, flizqua gracili longifima.
> Bignonia foliis fimplicibus cordatis, caule erecto, floribus diandris. L. Sp. Pl.

French Oak.
Obf. Periantium Biphyllum, foliolis Jubrotundis coobleatis, fingulis denticulo acuto terminatis.
Stamina. Filamenta quatuor, quorum duo longiora funt $\mathcal{E}$ ad facem , corolla porrecta, antberifque comprefis duplic atis (quarum altera erecta (edet, altera reflectitur), ornata: duo vero brevifina abortiva, in fundo foris fita Junt; antberifque irevgularibus donata.
This beautiful tree is now cultivated in many parts of Jfamaica; efpecially in the low lands, and Savanias, where it feems to thrive very luxuriantly. It grows to a confiderable fize, and is generally looked upon as an excellent timber-tree. Its numerous flowers, and flender filiques, add a peculiar grace to its growth.

$$
\begin{aligned}
& \text { BIGNONIA 3. Fruticofa, foliis pinnatis Serratis ovatis, foribus luteis. } \\
& \text { Apocyno afine Jelfaminum Indicum, \&cc. Slo. Cat. } 216 . \\
& \text { The Afh-leafed fhrubby Bignonia. }
\end{aligned}
$$

This fhrub is very common in all the fugar-iflands: it grows chiefly in a dry, rocky, or gravelly foil, and feldom rifes above feven or eight feet in height. The flowers are yellow, and difpofed in loofe clufters towards the top. The leaves are of an oval form, and pinnated; and the trunk fmall and woody.

> CITHAREXYLON I. Fruticofum; cortice cinereo, foltits oblonroovatis oppofitis, petiolis marginatis pedatis, floribus Jpicatis, fructu majari.

> Citharexylum. L. Sp. Pl.
> Citharexylon arbor, Ěc. Fiddle-wood Barbadienfibus dicta. Pk. t. 162. f. 1.

## The Old-woman's Bitter.

Periantium Monopbyllum tubulato-campanulatum quinque crenatum.
Corolla Monopetala tubulata; , tubus calice longior; limbus patulus quinque partitus, laciniis ovatis.
Stamina. Filamenta quatuor, cum rudimento quinti, inferne tubo adnata, fere eequalia; antherx ovata biloba, in fauce corolla locatce.
Pitillum. Germen ovatum; flylus fimplex longitudine tubi foris; ftigma bilobugr obtufum.
Pericarpium. Bacca fucculenta, nuculis binis bifdis fuboffeis, binc convexis, inde cocbleatis, bilocularibus, referta.
Semina. Nuclec jolitarii.
This plant is very common in all the Savannas of Famaica: it is but a fmall Chirub, and feldom rifes above eight or nine feet in height. The veins of the leaves, and all the tender buds, are of a brown colour; and the bark of the trunk and lower branches, of a whitifh alh-colour.

# O F J A M A I C A. 263 <br> CITHAREXYLON 2. Foliis rugofs ovatis oppofitis, petiolis geniculatis, racemis terminalibus, calicibus quadrifidis. An, Berberis fructu arbor maxima baccifera racemofa, \&cc. Slo. Cat. I7o. 

## Black-heart Fiddle-wood.

This tree grows chiefly in the low lands, and Savannas; where it is frequently obferved to rife to the height of forty or fifty feet: and is generally looked upon as one of the hardeft and beft timber-trees in the illand. The body of the tree grows to a confiderable thicknefs, and is covered over with a thick whitim bark, which, like the grain of the wood, winds in a loofe firal form. The leaves are pretty long, rugged, and flightly ferrated; and the bloffoms difpofed in bunches, at the extremities of the branches. The berries are fmall, and of a yellow colour; they contain each two hemifpheric fhells, that contain twice fo many feeds as in the foregoing fpecies; but the nuts, or nuculi of thefe, may be eafily parted into two lobes, or fegments. The berries are fometimes eat by the negroes:

## CITHAREXYLON? 3. Erectum, foliis oblongis, cortice levi, fructibus Jparfis.

## White Fiddle-wood.

This tree is moft frequent in the more hilly inland parts of the illand: it grows to a very confiderable fize, and is commonly looked upon as a good timber-tree; but hould be ufed where it may not be expofed to the weather. I have feen many of thefe trees in the mountains of St. Elizabetb's; but I have not obferved any in bloffom, and have oply ranged them in this clafs, from the appearance of their berries, which agree in every refpect with thofe of the other fpecies.

> CITHAREXYLON? 4. Foliis venofis ovatis alternis, cortice fcabro longitudinaliter fifo.

## The Green-heart Fiddle-wood.

This tree is frequent in the woods about the Ferry, where it grows to a very confiderable fize; and is generally looked upon as one of the beft timber-trees in the ifland. I have not feen any of its fruit, or flowers; therefore could not clafs it with any certainty: but have placed it here, from its outward appearance, and the grain and texture of its wood.

## CITHAREXYLON 5. Fruticofum, folizs fubelipticis, petiolis pedatis, calicibus truncatis, Spicis terminalibus longioribus. Tab.

 28. f. 2.
## The long-fpiked Fiddle-wood.

This is but a fhrub, which feldom grows above ten or twelve feet in height ; and bears a grear number of imall berries, difpofed on divided fikes at the extremities of the branches. It is pretty common about Sixteen-mileazalk.

$$
\begin{aligned}
& \text { CRESCENTIA 1. Arborefcens; foliis confertis, obovato-oblongis, bafi anguftio- } \\
& \text { ribus; fruçu Jpharico maximo. } \\
& \text { Crefcentia, fotiis lancolatis utrinque attenuatis. L. Sp. Pl. \& H. Cl. } \\
& \text { Arbor Cucurbitifera Americana folio fubrotundo, \&xc. Slo. Cat. } 206 . \& \mathrm{H} . \\
& \text { The larger Calabah Tree. }
\end{aligned}
$$

This tree grows chiefly in the low lands, and feldom rifes above fixteen or twenty feet in height. The trunk is generally irregular, and the branches crooked and

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fpreading: they bear all their leaves in tufts, and are fometimes adorned with a fers fingle flowers, from fpace to fpace. The wood is very tough, and flexile, which renders it very fit for the coachmakers purpofes; where it is obferved to anfwer better than any other fort of timber hitherto known. The fhell of the fruit makes a light and convenient drinking-cup, and is frequently large enough to hold a gallon, or more, of any fluid. The pulp is eat by the negroes, upon occafions, but not looked upon as either agreeable, or wholefome: it is much ufed by way of poultice; fot which purpofe it is thought to anfwer extremely well.

The fhell of the fruit is fo thin and clofe, that it ferves to boil water, or any other fluid, as well as an earthen pot; and is obferved to bear the fire equally, on repeated tryals. The thicker parts of it are frequently ufed for button-moulds, in all the colonies.

CRESCENTIA 2. Arborefcens, foliis confertis, fructu ppbarico minori.
CRESCENTIA 3. Arborefcens, foliis confertis, fructu oblongo-ovato minori.
The Calabafh Trees, with fmall fruit.
Both thefe fpecies feem to be but variations of the foregoing: they grow generally to the fame fize, and of the fame form ; but the fruit is conftantly lefs, and of thofe ftated thapes. All the parts of thefe trees are put, indifferently, to the fame ufes with thofe of the other fort.

CRESCENTIA 4. Arborefcens, foliis fingularibus ovatis nitidis, fructu minori.

## The larger Calabafh, with fingle oval leaves.

I have feen one tree of this fort, at Mr. Denis's, in St. Mary's: it grows pretty ftraight, and is much larger than any of the other feecies; from which it differs very remarkably in every refpect. I have feen no part of the fructification befides the fruit, which was then pretty thick upon the tree, and perfectly anfwered the characters of the clafs.

```
CRESCENTIA? 5. Scandens, farmentis cralioribus, foliis majoribus ovatis
                        nitidis oppofitis.
    The large-leafed withey Crefcentia.
    Periantium Monopbyllum, ventricofum, truncatum, integerrimum.
    Corolla Monopetala, campanulata, jubcompreffa, quinquecrenata, bafi coar-
        Eata.
    Stamina. Filamenta quatuor fere aqualia, tubo corolla breviora; cum ru-
        dimento quinti. Antherx cordata.
Piftillum. Germen quadrato-fubrotundum; ftylus fimplex, longitudine tubi
                floris; ftigma bilobum.
Pericarpium. Drupa, jeu potius capfula craffa corticofa fubrotunda unilocu-
                laris, fed interne bifariam notata, © pulpa bifariam lo-
                bata,\mp@code{repleta.}
```


## Semina Plurima nidulantia.

This weakly plant fuftains itfelf, generally, by the help of the neighbouring trees; or is found Ipreading upon the ground, where it does not meet with a fupport. Its ftem is moderately thick, and ftretches frequently about feven or eight feet from the root. The leaves are thick; oval, and fhining; and the fruit round, and fmooth. It is found about Port Antonio; near the Cafcade, in St. Ann's; and in many parts of the mountains, efpecially thofe between Sixteen-mile-zvalk and Luidas.

# CRESCENTIA? 6. Scandens, foliis inferioribus pinnato-ternatis, fuperioribus geminatis clavicula interpofitis. <br> Cucurbitifera fruticofa tripbylla fcandens, \&cc. Slo. Cat. 207. \& H. ii. 175. 

## The trifoliated climbing Crefcentia.

Periantium Monopbyllum oblongum tubulatum truncatum integrum.
Corolla Monopetala, tubulata, longifima, (beptapollicaris;) tubus cylindraceus, anguftus, ad faucem leniter ampliatus; limbus ereato patulus, in quinque lacinias ovatas fere aquales fectus.
Stamina. Filamenta quatuor, cum rudimento quinti, tubo adnata, in fauce libera; anthelx oblonga, biloba, quaf geminata.
Piftillum. Germen Jubrotundum liberum in fundo calicis fitum; ftylus fomplex, longitudine flaminum; Aligma bilamellatum obtufum.
Pericarpium. Drupa magna oblonga unilocularis, fed interne bifariam notata, EJ pulpá bifariam lobata, repleta.

## Semina Plurima nidulantia.

This climbing plant is frequent in many parts of the ifland; but feems moft common between St. Elizabetb's, and Wefmoreland. It rifes, with great eafe, to the top of the talleft trees in the woods; and then fpreads a great way over the limbs of the neighbouring trees, or bends again towards the ground. It is generally more luxuriant towards the top; and as this part requires a greater fupport, nature has fupplied it, in a peculiar manner, with tendrels: for the leaves, which are always three on every common foot-ftalk, towards the root, are never more than two at the top; but the extremity of the common ftalk, which generally holds the third leaf in the lower branches, fhoots, here, into a long winding tendrel, by which it holds and fticks to every twig, or branch, it meets.

> VITEX 1. Arboreus, foliis ovatis, crenatis, quinato-digitatis; petiolis communibus oppojitis, racemis laxis alaribus.
> Vitex foliis quinatis ternatifque Jerratis, floribus racemofo-paniculatis. L. Sp. P1.

## The larger Chafte-Tree, with jagged leaves.

This tree is frequent in St. Mary's, and grows generally to a very confiderable fize: it is eafily diftinguifhed by its crenated leaves, bunchy flowers, large berries, and the variegated under-lip of its bloffoms; the main divifion of which, is of the figure of a heart. The fylle is bifid, and each part pretty fhort.

RUELLIA i. Procerior, fubcinerea, birfuta; pedunculis ramofis; flore multiplici.
Ruellia pedunculis dichotomis paniculatis, foliis petiolatis. L. Sp. Pl. Ruellia pedunculis multiforis dicbotomis, foliis longioribus. L. H. C. Speculum veneris majus impatiens, \&cc. Slo. Cat. 59. \& H. t. 100.

Chriftmas Pride.
This plant is very common about Spanifh Torw, and in many other parts of the low lands; where it generally blows in the months of December and Fanuary: and makes a very beautiful appearance among the bufhes, in that bleak featon of the year. The plant is weakly, and feldom rifes above a foot or two, if alone: but when fupported by any of the frall neighbouring fhrubs, or bufhes, it runs frequently to the diftance of three or four feet from the root, and bears a great number of flowers. they are quite infipid.

RUELLIA 3. Ca力fulis crafforibus, foliis oblongis vix petiolatis, floribus folitarizs vel geminatis fubjeflibibus ad alas.
The fmaller Ruellia, with a thick capfule.
I found one or two plants of this fort in Sixteen-mile-walk: it is the finallert of all the forts that grow in Jamaica, and feldom rifes above nine or ten inches in height.

> CAPRARIA I, Erecta ramofa, foliis alternis ad apicem fermatis, floribus enngularibus alaribus, pedunculis tenuijemis.
> Capraria foliis alternis corollis quinquefidis. L. Sp. Pl. \& H. C.
> An, Chichival. Hern. 172?

The fhrubby Capraria, or Goat-weed.
This plant is very common in Famaica; it grows about moft houfes in the lower Savannas, and thrives very luxuriantly every where: but it feldom rifes above three feet and a half in height, tho' it divides into a great number of flender fuberect branches. The leaves are narrow at the bottom, and ftand on very fhort foot-ftalks; and the peduncles of the flowers are very flender.

If this be the Cbicbival of Hern. that author recommends it as an admirable febrifuge.

> LANTANA I. Erecta minor fubaffurgens, foliis verticillato-ternatis, pedunculis longis, Jpicis ovatis.
> Lantana foliis ternis, Jpicis oblong is imbricatis. L. Sp. Pl.
> The Lantana, with verticillated leaves.
> LANTANA 2. Frutefcens, foliis cordato-ovatis, for alibus linearibus; foribus croceis, pedunculis longis.
> Lantana foliis oppofitis, caule inermi ramofo, foribus capitulo umbellatis. L. Sp. Pl.
> Camara. Pifo. pag. 177.
> Periclimenum rectum urtica folio birfuto majore, \&c. Slo. Cat. 163. \& H. t. $195^{\circ}$

## Wild Sage.

LANTANA 3. Frutefcens, foliis cordatooovatis, floralibus orbiculatis; floribus fubcarneis.
Periclimenum reatum Jalvic folio fore albo, \&c. Slo. Cat. $163 . \& \mathrm{H}$.
Wild Sage, with white flowers.

LANTANA 4. Frutefcens Jpinofa, foliis amplioribus fubrotundo-ovatis, pedunculis longifimis, floribus kermefinis.
Lantana folis oppofitis, caule ramofo aculeato, florum capitulis umbellatis. L. Sp. Pl.
Viburnum Ansericanum Spinofum, \&c. Pk. t. 114. f. 4.

## The prickly Lantana.

Thefe fpecies of the Lantana are frequent in moft parts of Jamaica: they grow chiefly in the hills, and lower lands; but feldom rife above two, three, four, or five feet in height. The fecond and third fpecies are ufed by many people in America, inflead of European Sage; and are obferved to anfwer the fame purpofes: but thefe plants feem to be of a more active nature ; and contain a large thare of refin.

MONIERA 1. Minina repens, foliis fubrotundis, floribus fingularibus alaribus. Tab.28.f.3.

## The fmall creeping Moniera.

Periantium Heptaphyllum; foliolis lanceolatis; duobus exterioribus, lateralibus, anguftioribus, erecto-patentibus, atate provectiori deciduis; tribus intermediis, majoribus, erectis © equaliter in orbem fitis; duobus vero interioribus, lateralibus, angufioribus, amplexantibus, exterioribus oppofitis.
Corolla Monopetala tubulato-campanulata; tubus rectus, longitudine calicis; limbus patulus, in quinque partes fere aquales fectus.
Stamina. Filamenta quatuor; quorum duo longiora funt, tubum corolla fere aquantes; antheræ compreffa fubrotunda.
Piftillum. Germen ovatum; ftylus fimplex, longitudine tubi corolle ; figma obtufum.
Pericarpium. Cappfula ficca ovata bilocularis, bivalvis, bifariam debifcens. Semina Plura parva, Septo medio incrafato utrinque affixa.
This little creeping plant is very common in every ouzey fpot, about the harbour of Kinyfon: it fticks very clofe to the earth, and cafts a few fibrous flender roots, from every joint, as it creeps. The whole plant feldom exceeds feven or eight inches in length, reckoning from the firft roots: but it grows generally in beds, and fpreads thick upon the ground; throwing out a few fimple fide-branches, from fpace to fpace; which give it a pretty beautiful appearance, when in flower, and makes it exceedingly remarkable. It has a bitterifh tafte, and thrives beft in a low moift foil.

The name of Moniera was given to this plant by Monf. Bernard de Jufreu, who raifed it in the garden of Paris. Doctor Scbloffer was kind enough to let me examine a fpecimen of it, with which he was favoured, among other curious productions, by that worthy gentleman; and obferving the plants to be the fame, I have, in deference to the author, continued the appellation he was pleafed to give it. The characters are fet down here as they appeared in the recent plant.

PHeLYPEA 1. Erecta; foliis feflilibus, anguftis, auritis, ad apicem ferratis, oppofitis vel verticillatis; floribus Jngularibus alaribus.
Veronica caule bexangulari, foliis faturia. Slo. Cat. 8r. \& H. t. 124. An, Lifinachia galearica ejufdem, p. 66.

## The erect Pbelypea.

This plant is very common in the road between Paffage Fort and Spanifh Town; and grows chiefly in thofe floughs, where the mud has been worked up by the

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different carriages, in the rainy feafons. It rifes generally to the height of twelve or fourteen inches; and bears its leaves, fometimes two, often three, and fometimes Four, in an oppofite or verticillated order. The flowers of this plant are variegated in the gorge, and more regularly labiated than thofe of the foregoing; and the cup (if I remember right) is made up of five lanceolated leaves: but the reft of the characters are, very nearly, the fame in both plants.

SESAMUM I. Foliis inferioribus trifdis dentatis, fuperioribus oblongis ferratis.
Sefamum foliis inferioribus trifidis. Roy. \& L. Sp. Pl.
Digitalis orientalis fefamum dizta Tournefortii, Eic. Th. Zey. t. $3^{8}$.
Selamum veterum, \&c. Slo. Cat. 59. \& Pk. t. 109. f. 4.

## The Vanglo, or Oil-plant.

SESAMUM 2. Foliis omnibus oblongis ferratis.
Schit-Elu. H. M. p. 9. t. 54.
The $V$ anglo, with fimple leaves.
Thefe plants were introduced to famaica by the $\mathcal{F}$ eres, and are now cultivated in moft parts of the ifland: the feeds are frequently ufed in broths, by many of our Europeans; but the 'fews make 'em chiefly into cakes. The plants are in great efteem among many of the oriental nations, who look upon the feeds as a hearty wholefome food; and exprefs an oil from them, that is not unlike, or inferior to, the oil of almonds; which ufed to be formerly kept in the fhops, in many parts of Europe. A decoction of the leaves, and buds, is looked upon as a good refolut tive; and frequently ordered in inflammations of the eyes, where warm fomentations become requilite. The Sefamum plant is cultivated in Carolina, with great fuccefs; and it is computed there, that nine pounds of the feed yield upwards of two pounds of neat oil, which they find to grow more mellow and agreeable, with age ; and to continue without any rancid fmell, or tafte, for many years.

ERIPHIA 1. Foliis ovatis ferratis oppofitis, venis obliquè arcuatis, floribus, confertis ad alas.

## The Eripbia, with ferrated leaves.

Periantium Monopbyllumi ventricofum quinquedentatum pragnans.
Corolla Monopetala tubulata; faix leniter ampliata; limbus quinquepartitus, laciniis parvis fubrotundis.
Stamina. Filamenta quatuor, cum rudimento quinti, inferne tubo adnata, Superne libera, arcuata, conniventia; antheræ agglutinata.
Piftillum. Germen globofum, calice tectum; fylus fimplex, longitudine tubi corolla; ftigma bifidum.
Pericarpium. Bacca globofa, calice tecta \&o coronäta, unilocularis, fed bifariam longitudinaliter notata.
Semina Plurima minutijima, umbilica columari adnati.
I met with this plant in fome part of Sixteen-mile-walk; but do not directly remember where, nor the peculiars of its growth. The characters are put down juft as they were taken upon the fpot.

## ACHIMENES 1. Major, berbacea, fubbirfuta, oblique affurgens; foliis ovatis crenatis oppofitis, alternis minoribus; floribus geminatis ad alas alternas. Tab. 30 . f. 3 . <br> Rapunculus fruticofus, foliis oblongis integris, \&c. Slo. Cat. 58. \& H. t. Ioo. The larger hairy Acbimenes.

Periantium Monopbyllum, magnum, utrinque birfutum, bafi leniter ventricofum, collo coarclatum; in quinque lacinias lanceolatas, pinnatifidas, erecto-patentes, ad bafin fere fectum.
Corolla Monopetala, tubulata, calice longior, externe birfuta, variegata ringens; tubus oblongus, ad bafinz fuperne gibbus, in neEbarium prominulum concavum obtufum turgens; fauce leniter ampliatus: limbus erectus, in quatuor lacinias inaquales, incqualiter Sectus; lacinia fuperior recta, latiufcula, profunde crenata, Ave bifida; laterales oblong e of a fuperiori oblique decedentes; infima angufa patula, ad medietatem foris incija, longifrma.
Stamina: Filamenta quatuor, tenuia, erecta, aqualia, longitudine fere corolla: antheræ comprefa, quadrata, oblique incumbentes, marginibus agglutinate, coronam liberam figmati formant.
Pifillum. Germen ovatum liberum, in fundo calicis fitum; flylus longitudine faminum; ftigma liberum, bilobum, obtuflum, antberis fibpofitum.
Pericarpium, Cap̧ula bilocularis ovata, Seminibus plurimis parvis referta.
This beautiful vegetable is a native of the cooler mountains; and moft commonly met with in the woods of Nero Liguanea, and St. Ann's. It is a very fucculent plant, and grows luxuriantly in every rich and fhady foil ; throwing its branches frequently to the height of four or five feet; and higher, when fupported by fome neighbouring ftump, or fhrub. The ftem is pretty thick, and the leaves oppofite, and alternately larger. The flowers are large, beautifully variegated, and hairy on the out-fide, like the other parts of the plant. The divifions of the cup are of a fingular ftructure; and pinnated at the fides, fomewhat like thofe of the garden rofe. The whole plant has an uncommon, but beautiful appearance; and deferves to be cultivated in all the flower-gardens, in the cooler parts of the ifland, where it is mont likely to thrive.

> ACHIMENES 2. Minor, erecta, fimplex; foliis crenatis, ovatis, oppofitis vel ternatis; floribus petiolatis fingularibus ad alas. Tab. 30. f. I.

## The fmaller erect Acbimenes.

I found this beautiful little plant near Hope-river, in the lower mountains of Liguanea: it has a flender even ftem, furnifhed with fome oval leaves, difpofed in an oppofite or verticillated order, at fated diffances; and feldom rifes above ten or fourteen inches in height. It throws out a beautiful fingle reddifh flower, from the ala of each of the upper leaves: and, tho' it agrees in the moft effential parts with the foregoing, it differs much from it in appearance; for the divifions of the cup are fimple, and narrow; and the lower part of the germen connected to the bowl of the empalement. The tube of the flower is more open, though equally furnifhed with a nectarium, of the fame form, at the bafe. The limb, or margin, is pretty much expanded, and flightly, but unequally, divided. The filaments are longer than the flower, and fomewhat twifted as they rife: but the formation and difpofition of the antbera, is the fame as in the foregoing fecies; and the figma. is divided into two flattifh lobes, in this, alfo.

This little plant has a great deal of the beauty and elegance of the foregoing fpecies; and richly deferves to be cultivated in all the flower-gardens in America. It thrives beft in a cool gravelly foil, well furnifhed with moifure, and intermixed with rich mould.

## C $\begin{array}{lllll}\mathrm{L} & \mathrm{A} & \mathrm{S} & \mathrm{S} & \mathrm{XV} \text {. }\end{array}$

Of the Tetradynamia, or Vegetables that have fix Filaments in every Flower; whereof four are equal, and longer than the reft; and the two fhorteft always placed oppofite to each other.

## S E C T. I.

Of fuch as have their Filaments difpofed regularly round the Germen, or baje of the Fulchrum; and bave only one Style in every Flower.
> rOCHLEARIA 1. Foliis radicalibus lanceolatis creñatis, caulinis incifis. L. Sp. Pl. Ěc.

Horfe-radifh.
This plant has been long cultivated in the mountains of Yamaica, where it grows and feeds fo luxuriantly, that it has all the appearance of a native; and thrives frequently without the leaft care.

LEPIDIUM I. Erectum ramofum, foliis inferioribus oblongis pinnatifdè lobatis, fuperioribus anguftis Serratis.
An, Lepidium foliis oblong is multifidis. L. Sp. Pl?
Iberis bumilior annua Virginiana, \&c. Slo. Cat. 80. \&t H. t. 123:
The upright branchy Pepper-grafs.
This plant is a native of Gamaica, and grows wild in all the cooler hills of the illand. It feldom rifes above ten or twelve inches in height; and fpreads all its branches in the form of an umbrella, towards the top.

> SISYMBRIUM r. Aquaticum; foliis fubrotundis, abrupte pinnatis, bafincqualibus.
> Sifymbrium fliquis declinatis, foliis pinnatis, foliolis fubcordatis. L. Sp. Pl.
> Nafturtium aquaticum vulgare, \&cc. Slo. Cat. 79.
> Water-Crefs.

This plant is a native of Famaica, and grows very luxuriantly in all the runningwaters about the Ferry, and in many other parts of the ifland: but it is rather too warm, and raifes too great a ferment in the blood, to be much ufed in thofe climates. It is an excellent antifcorbutic, where the diforder proceeds from inaction, or a vifcid chilly flate of the juices; but, in thofe parts, it generally overheats the blood, and raifes a high florid colour in the fkin immediately.

## RAPHANUS 1. Siliquis teretibus torofis bilocularibus. L. Sp. Pl. \& H. C. The Radifh.

This plant was, doubtlefs, firft introduced to Jamaica. It is now cultivated in the mountains, where it thrives and feeds very plentifully; and is often obferved to grow wild in many parts of New Liguanea.

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BRASSICA 1. Radice caulefcente tereti carnofa. L. Sp. Pl. \& H. C.
Cabbage.
BRASSICA 2. Radice caulefcenti orbiculari deprefa carnofa. L. Sp. Pl. \&
H. C.

## The Turnep.

Both thefe plants have been introduced to, and cultivated in Fanaica, from time to time; but they do not generally anfwer, in thofe parts of the world, fo well as many other European vegetables. I have, however, fometimes obferved the firft fort to grow very large, and to produce a good head there; and then it is generally much better tafted than that which grows in Europe: for it lofes all that rawnefs, or crudity, with which it is commonly attended in the colder climates; and acquires a mellownefs, and delicacy, that recommends it in a country, where a hundred other forts of tender, wholefome, and palatable greens grow naturally.

> SINAPIS I. Siliquis bipidis, roltro obliquo longifimo. L. H. C.
> Sinapi folizs fibrotundis ferratis, femine rufo. Slo. Cat. 79 .

The Muftard Plant.
SINAPIS 2. Erecta berbacea, foliis oblongis, floribus folitariis. Leucoium nimimum, feuk Keiri, Ėc. Slo. Cat. 79. \& H. t. 123.

## The fmall Savanna Muttard.

It is hard to determine whether thefe plants were originally introduced to $\mathcal{F a}_{\text {a- }}$ maica, or are really natives; for both fpecies are now common, and grow wild in every part of the ifland, where the land is clear, and well manured. The firft fpecies is fometimes culcivated for the fake of the feed; but the other is of no ufe, and commonly found wild among the grafs, in all the Savannas.

## S E C T. II.

Of fuch Plants as bave their Filaments more irreqularly fituated, and frequently adbering to the Fulcrum, or Foot-ftalk of the Fruit.
$N . B$. In thefe, the filaments are, commonly, as irregular in their numbers, as in fituation; tho' the difpofition of the fruit, and general properties of the clafs, appear evidently in all of them.

C
LEOME 1. Afurgens ramofum \&i fpinofum, beptaphyllum; fpica multiplici foliolato.
Sinapiftrum $\neq$ Egyptitum beptapbyllum, \&cc. Slo. Cat. 8.
The prickly branched Sambo.
CLEOME 2. Erectum triphyllum, foribus folitariis alaribus.
Cleome foribus dodecandris. L, H. C.
Sinapiftrum indicum triphyllum. Slo. Cat. 80. \& H. t. 124.
The erect trifoliated Sambo.
CLEOME 3. Procumbens pentaphyllum, Spica longiore terminali.
Cleome floribus gynandris. L.H.C.
Sambo.

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Thefe plants are natives of Famaica, and pretty common in moft parts of the low lands. The firft, and third, thrive beft in a dry loil; but the fecond grows chiefly in moift bottoms. The firft fpecies divides into many branches, and rifes generally to the height of three or four feet. The fecond is pretty fimple, and feldom rifes above twenty or twenty-five inches. But the laft is generally found growing in tufts, upon the ground, and feldom runs above eight or ten inches in length: it is, however, more fucculent than either of the others, and generally looked upon as a very wholefome green; but it has a bitterifh tafte, and requires long boiling, and the waters being frequently fhifted, to render it palatable. It is deemed a prefervative againtt the dry belly-ach; and, doubtlefs, claims a precedency, if any green can be frid to be effectual, that way.

Obl. The Crateva, and other plants referred to that genus, do, undoubtedly, belong to this clafs; and ought to be injerted after the Cleomæ.

## S E C T. III.

Of Plants that bave fxu unequal Filaments, and four, or more, Styles, in every Flower.

PETIVERIA 1. Foliis oblongo-ovatis, Jpicis longioribus terminalibus. Petiveria. Plum. t. 39. \& Lin. Gen. \& Sp. Plant. Verbenæ feu Scorodoniceaffinis, \&cc. Slo. Cat. 64.

## Guinea Hen weed.

Periantium. Periantii fefflis vicem fupplent fquama tres, lineares, ereciopatentes, laterales.
Corolla. Squamas inter Bi Sicam emergit Pos tetrapetalus, perffens; petali is lancelatis, angufis, juventute albidis, erecto-patentibus, Senectute erectis, virentibus.
Stamina. Filamenta fex, quorum duo cateris breviora funt of oppofita; anthere Jubrotunda.
Piftillum. Germen fubbirfutum, breve, obtufum; ftyli quatuor, tenues, fetacei, reflexi; ftigmata acutifima.
Pericarpiom. Capfula coriacea, oblonga, obtufa, compreffa, unilocularis, bicornis; fingulis fetis binis rigidis reflexis, munitis.
Semen Unicum oblongum, ad apicem appendiculâ ligulatâ rêflexá inflructum.
This' plant is very common in all the lower lands of Jamaica; and fo remarkably acrid, that you can hardly bear either to fmell or tafte any part of it. It is thought to be much coveted by the Guinea hens; and frequently a part of the food of other animals: but, on chewing a little of any part of the plant, it burns in the mouth, and leaves the tongue black, dry, and rough; as it fiequently appears in malignant fevers. It thrives beft in a dry gravelly foil, and a chaded fituation.

## C L A S S XVI.

Of the Monadelphia, or Vegetables that have all the Filaments of every Flower, joined into one hollow column, or tube, at the bafe; but more or lefs diftinct at the top.

S E T. I.

Of fuch as bave no diffinct Filaments in their Flowers; but bear the Anthere on the outfide of a truncated Cone, or Cylinder, that fands round the Germen, and the Style.

CANELLA I. Foliis oblongis obtufis nitidis, racemis terminalibus. Tab. 27. f. 3.

Laurus folies enervis. L. Sp. Pl. \& Winterania. L. H.C.<br>Arbor baccifera laurifolia aromatica, \&c. Slo. Cat. 165. \& H. t. Ig I. Arbor Cinnamomiformis. Mart: 7. Caffia Lignea Jamaicenfs, \&cc. Pk. t. 8 1. f. I.<br>Canella alba off. and Winter's-Bark of Catelb. ii. t. 50.

Canella, or Winter's-Bark.
Periantium Monopbyllum, Jubcampanulatum, ultra medietatem tripartitum; laciniis fubrotundis, cocbleatis, crenulatis.
Corolla Pentopetala, petalis oblongis calice duplo longioribus.
Stamina Nulla; fed vicem corum Jupplet tubus tenuis, levis, fimplex, conicus, truncatus, longitudine fere foris; externe, e medietate fere ad apicem, antheris fexdecim circiter, angufis, oblongis obfitus, a Se invicem remotis, \& in orbem regulariter fitis.
Piftillum. Germen ovatum; flylus longitudine tubi; ftigma obtufum bi-vel trifidum, lobis obtujufculis.
Pericarpium. Bacca fubrotunda bi-vel trilocularis.
Semina, In fingulo loculamento, gemina, cordata.
This tree is very common in all the lower woods, and rocky hills of Famaica, where it grows without any care; and is chiefly propagated by the induftry of the birds. For the berries, like thofe of the Piemento, Black Pepper, and other aromatic plants, grow foft and pulpy, when ripe, and lofe all that pungency that is natural to them in the immature ftate: they are then greedily devoured by the wild pigeons, and other inhabitants of the woods, who difperfe the feeds up and down in their dung. The tree grows pretty much like the Piemento, and feldom exceeds fixteen or eighteen feet in height ; or is more than five or fix inches in diameter. The bark is whitifh, and warted; the branches pretty erect; the leaves fmooth and oval, having the fmaller end towards the foot-ftalk; and the berries difpofed in depreffed clufters, at the extremities of the branches.

The bark of this tree is the Canella alba of the flops: it is a pungent warm aromatic, and would, doubtlefs, anfwer all the purpofes for which moft of the other fpecies are employed; but it is too cheap to be fo much efteemed. By diftil, lation it yields a warm aromatic oil, which is often fold for, and generally mixed with, the oil of Cloves; nor is the adulteration any prejudice to the medicine.

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## S E C T. II.

Of fuch as bave the Staminal-Tube divided into five diffinct Filaments, towards the top.

ALTHERIA 1. Foliis angufis ovato-acuminatis rugofis ferratis, floribus confertis, ad alas.
The fmall fhrubby Waltheria, with rugged leaves.
WALTHERIA 2. Fruticofa Subbirfuta, foliis oblongo-ovatis ferratis, foribus capitatis, pedinculis, communibus longiufoulis, fingulis folio fingulari arnakis.
The dhrubby Waltheria, with the leaves rifing out of the footftalks of the flowers.
WALTHERIA 3. Foliis fubrotundis undulatis ferratis, floribus confertis alaribus.
Waltheria foliis ovatis' jerratis undulatis. Raii. \& L. S. Sp. Pl.
The fmaller Waltheria, with roundifh waved leaves.
All thefe fpecies of the Waltheria are found in the lower hills of $\mathcal{F}$ amaica, and feldom rife, any of them, above four or five feet in height. The fecond fpecies is very fingular; it sears fis flowers in clofe compact heads, fuftained by long common foot-ftalks, each furnifhed with a fingle leaf towards the bottom. I found buth this, and the firft fort, at Mr. Smittis Pen, at the foot of the mountains in Liguanea.

MELOCHIA I. Frutefcens, foliis fubincanis, villofis, oblongo-ovatis, crenatoJerratis; floribus racema/is, cortice fufco.
The larger fhrubby Melochia,
This plant is very common in moft parts of America, and grows generally in every dry gravelly foil. It is a Chrub, and rifes frequently to the height of fix or feven feet, fometimes morc. The bark of the whole plant is of a darkih brown colour, the leaves whitin, and the flowers of a light flefh colour.

## MELOCHIA 2.. Erecta minor, foliis avatis ferratis, petiolis geniculatis.

The fmaller Melochia, or Broom-weed.
This plant is found in many parts of $\mathcal{F}$ amaica, and rifes commonly to the height of two or three feet, throwing out a few flender flexile branches on all fides. The leaves of this plant fread themfelves every day, about noon, to receive the heat of the fun more freely; but as the air grows cooler, they generally rife upright, and ftand almoft parallel to the ftem, or branches. This mechanifm of the leaves is greatly forwarded by the knee in the foot-ftalk of each.

> MELOCHIA 3. Herbacea tenuifima ramofa, foliis oblongo-ovatis, forum umbellulis lateralibus foliis approximatis.

The flender weakly Melochia.
I found this plant among the Pinguin buthes, near Old-barbour; where it commonly fhoots to the height of three feet, or better: but the ftem is very ilender and weakly, and generni" iires fome fupport to hold it up. The flowers are difpofed

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difpofed in fmall umbellx; which are generally placed pretty near, and on one fide of, the foot-ftalks of the leaves; each little umbella being compofed of five or fix radii, fixed upon a common foot-ftalk. It is a very elegant little plant.

> BOMBAX г. Foliis digitatis, bracbiis crecto-patentibus.
> Bombax foliis digitatis, caule aculeato \& non aculeato. L. Sp. Pl.
> Goflipium arboreum maximum fpinofum, EO non finofum. Slo. Cat. 157. $\& \mathrm{H}$.
> Gofinium alterum. Mart. 562.
> The Silk Cotton-Tree, with erect branches.
> Periantium Monopbyllum, ventricofum, Jubcampanulatum, erectum crenatum; crenis incertis.
> Corolla Pentapetala; petalis oblongo.ovatis, fubcocbleatis, unguibus angufis inferne tubo ftaminum adnatis.
> Stamina, Filamenta quinque, inferne coalita in tubum brevem, collo coarEtatum, petalis adnatum, germini impofitum; fuperne libera, erecto-patentia, longitudine foris: antherx maxima cordata.
> Piftillum. Germen ovatum, tubo ftaminum tectum; flylus fimplex, longitudine flaminum, intra tubum tenuifimus; fupra faucem, tumidus, gibbus; inde aqualis, declinatus: ftigma, obtufum quinquelobum.
> Pericarpium, Capfula fubrotundo-ovalis, quinquelocularis, quinquevalvis. Semina Plurima Jubrotunda tomento obvoluta.

BOMBAX 2. Foliis digitatis, bracbiis borizontaliter porrectis. Bombax foliis digitatis caule levi. L. Sp. Pl.

## The Silk Cotton-Tree, with horizontal branches.

It is not eafy to determine whether thefe are different fpecies, or variations of the fame plant : but the difpofition of the branches is remarkably different, in different trees; and that even in thofe that grow within the fame field. The trees are very common both in the Eaft and Weft-Indies; they grow generally in the low lands, and rife frequently to the height of eighty or an hundred feet, and more, by a ftraight and well-proportioned ftem. The genus is evidently of the Mallows tribe, and partakes diftinctly of all the natural characters of the clafs; but by what chance it happened to be fo varioufly ranged, by Linneus, I can't determine. The flowers grow in large tufts; and fhoot commonly in great abundance, before the leaves appear: they are moderately large, and of a dirty white colour. The trunk, while young, is always armed with thorns; but thefe feldom appear, after it has acquired a degree of height and ftrength, fufficient to protect it. The cotton of this tree makes very good beds, but does not bear the water for the batters ufe, nor has it a ftaple to ferve for any other purpofe. The leaves, while young and tender, are often boiled for greens, and frequently ufed by the negroes; and the trunks of the full-grown trees ferve for Conoas (a), or long-boats. It is a ftately fhady tree, while it flands; but when it falls, it becomes a neft for Macaccas, and other infects; and the chief bed, or mould, for the table muhhoom ; and is of little ufe befides. The bark of the root has been fometimes ufed with fuccefs, as a vulnerary and fubaftringent; and the feeds may be adminftered, with propriety, in emulfions and pectoral infufions.

[^19]
## S E C T. III.

Of fuch as bave the Staminal-Tube divided into ten difinet Filaments at the top.

ERYTHROXYLUM I. Foliis elipticis, lineis binis longitudinalibus fubtus notatis; fafciculis florum Sparfis. Tab. I4. f. 3. \& Tab.38. f. 2.
An, Bucephalon. Plum. t. 20.
An, Malifolia fubtus albicanti arbor baccifera, \&cc. Slo. Cat. 170. \& H. t. 206?

Red-wood, or Iron-wood, with oval leaves.
Periantium Campanulatum parvum, ultra medictatem in quinque partes lanceolatas fectum.
Corolla. Petala quinque oblongo-ovata, appendiculis totidem foliaceis, fimbriatis, ad bafim interne ornata.
Stamina. Filamenta decem, brevia, inferne coalita, fuperne diftinEtijima; antheræ oblonga.
Piftillum. Germen oblongo-ovatum; flyli tres, erecto-patentes, ab ip fa fummitate gerninis orti, recedentes, faminibus longiores; ftigmata glabofa crafiuffoula.
Pericarpium. Bacca parva oblonga unilocularis. Semen. Nucleus unicus trilobus incqualis, nauco ligneo tectus.
This is a fmall, but a beautiful tree: the leaves are of an oval form, and marked with two flender longitudinal lines upon the back, which were the utmoft limits, of that part of the leat that was.expofed, while it lay in a folded ftate. The flowers grow in little clufters, and are very thick upon the branches. The inward bark is of a flefhy colour; and the wood of a reddifh brown. It is reckoned an excelicnt timber-wood, for the fize of the tree, which feldom exceeds fixteen or eighteen feet in height, or five or fix inches in diameter.

> ERYTHROXYLUM 2. Foliis minoribus fubrotundis confertis, Jyylis brevif fimis, ramulis tenuifimis.

The fmall round-leafed Erythroxylum, or Red-wood, with very flender branches.
This tree differs much from the foregoing, both in thape and the manner of its growth; but it anfwers the effential characters, thoroughly. It grows in the low lands, like the other; and rifes commonly to the height of eighteen or twenty feet. Its leaves are roundifh, and fmall; and the branches very flender.

> TRICHILIA 1. Subbirfuta, foliis pinnatis ovatis, racemis alaribus.
> Evonimus caudice non ramofo, folio alato, \&c, Slo.Cat. 171. \& H. t. 210. An, Guidonia Plumeri?
> The Ahrubby I'ricbilia.
> Periantium Campanulatum minimum quadri- vel quinquecrenatum.
> Corolla Pentapetala, petalis oblongis patentibus catate reflexis.
> Stamina. Filamenta decem, comprefla, in tubum corollá breviorem coalita; antherx erecta, affurgentes, e margine tubi orte, deciduce.
> Piftillum. Germen obovatum, obtufê trilobum; ftylus brevis; figma capitatum tridenticulatum.

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Pericarpium. Capfula fubrotunda, obtuje triloba, trilocularis, trivalvis, debifceris.
Semina Subovata, membrana propria carnofâ teeta; in fingulo loculamento fingula, quandoque gemina.

TRICHILIA 2. Foliis oblongoovatis, pinnatis, nitidis; racemis laxis, rario-
ribus,
An, Pruno forte affinis arbor, Ec. Slo. Cat. 182 \& H.t. 128 \& 2.20 . The Ahrubby Trichilia, with fmooth leaves.
Both thefe flrubs are very common in the Savannas about Kingfon: they thrive beft in a dry gravelly foil, and feldom rife above eight or ten feet in height.. The feeds of all the fpecies are generally inveloped in a farlet waxen fubfance, within their cells; which generally burft open as foon as the capfule is ripe, and expofe them to the fun; all the valves ftretching out almort in an horizontal pofition.

$$
\mathrm{S} \quad \mathrm{E} \quad \mathrm{C} \quad \text { T. } \quad \text { IV. }
$$

Of fuch as have the Staminal-Tube, divided into a great number of Filaments, at the top.

Z
YGIA I. Arborefcens, foliis ovatis paucioribus jugatis, floribus Jpicillatis. Tab. 22. f. 3.

Periantium Minimum, cquale, quinquecrenatum.
Corolla Monopetala, tubulata, quinquedentata, ansufa, longa, perfifens: Stamina. Filamenta fexdecim plura, inferne in tubum fimplicem anguflum, germen frite amplexantem, redacta; fuperne libera, tenuiffima: anthere minma fubrotunda.
Piftillum. Germen oblongum; ftylus fimplex, longitudine tubi ftaminum; ftigma fimplex.
Pericarpium. Legumen longum comprefum, Seminibus octo vel novem fubrotundis, refertum.
Semina Oblonga, compreffa, remota.
This fhrub is very common in St. Mary's : it grows chiefly in low moift lands'; but is fometimes found in the mountains, where it commonly rifes to the height of ten or twelve feet, or better. The wood is pretty tough, and fometimes cut for hoops.

SIDA 1. Erecta fubincana villofa, ramulis brevioribus, foliis oblongocordatis ferratis, floribus confertis ad alas fuperiores.
Althea Zeylonica incana, flore luteo parvo, \&cc. Bur. The. Zey. Althea flore luteo parvo, \&c. Slo. Cat. 96.

## The Marfhmallow of Jamaica.

This plant is very common in all the low lands and Savannas of the ifland: it grows generally upright, and throws out a number of fhort branches towards the top; but it feldom rifes above two or three feet in height.

The flowers, and tender buds, are full of a fine mucilage; and generally ufed inftead of Marfhmallow, in all the fhops of 'Jamaica.

SIDA 2. Fruticulofa, vijcofa E villofa; foliis cordato-acuminatis, fuperioribus leniter $\mathcal{E}$ acute crenatis; petiolis longis, pedunculis tenuibus folitariis ad alas.
Alcea populi folio villofo, \&c. Slo. Cat. 98.
The Sida, with very flender foot-ftalks to the flowers.
This little fhrubby plant feldom rifes above four or five feet in height. The trunk is pretty lignous, and covered with a whitih bark. The leaves and fmaller branches are a little villofe. The feed-veffels are but few, flatted at the top, and compofed of many cells.

> SIDA 3. Erecta, glabra; foliis cordato-acuminatis, fubtus incanis, integris; pedunculis longifimis, tenuifimis, fingularibus, alaribus.
> Sida foliis cordato-lanceolatis integerrimis. L. Sp. PI.
> Althea fomonii folio, floribus albis, \&c. Pk. t. 74. f. 7.
> Sida, Efc. Thez. Zey. pag. 2ax. Pl. $2^{\text {a }}$.
> The heart-leafed Sida, with a loofe rifing flower-fpike.
> SIDA 4. Erecta, foliis cordato-acuminatis integris, fubtus fubvillofis; pedunculis longifimis, tenuifimis, ramofis, per fpicam laxam afurgentem dipooftio.

The flender erect Sida, with whole leaves.
This is fo like the foregoing, in fize, colour, and the form of its leaves, that it is generally confounded with it ; but the difpofition of the flowers and flower--ftalks, diftinguifh it fufficiently.

> SIDA 5. Humilior, foliis ovatis ferratis alternis, difliche fitis; petiolis $\mathcal{B}$ pedunculis brevibus, ramulis floriferis foliolatis alaribus.

## The broad-leafed Broom-weed.

This plant is very common in all parts of the ifland: it grows very much like the fecond fpecies of the Melochia; and nearly refembles the fixth fort of Mallows. The leaves and tender buds of this plant contain a great quantity of mucilage; and lather, like foap, with water: they are frequenily ufed in fhavingwathes, by fuch as can't conveniently bear the fmell or acrimony of foap. The leaves are purgative.

SIDA 6. Hirta urticata, foliis cordatis ferratis, foribus capitatis, pedunculis communibus alaribus.

The Nettle Sida.
SIDA 7. Foliis cordato-acuminatis, ferratis; pedunculis longis, tenuijmis, alaribus, inferioribus fimplicibus, Juperioribus ramofs.
The Sida, with long capillary flower-ftalks.
This plant is a little villofe; it grows upright, and rifes generally to the height of three feet, or better. The foot-ftalks of the flowers are extremely delicate.

SIDA 8. Humilior ramofa teres, foliis cordatis ferrato-crenatis, pedunculo fimplici unifloro © altero biforo foliolato ad alas.<br>Althea morifolia, \&cc. Pk. t. 132. f. 1.<br>The fmall Sida, with roundifh leaves.

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This plant feldom rifes above a foot and a half, or two feet, in height: it is pretty frequent in the low lands about King fon.

> SIDA 9. Erecta, fubvillofa, ramofa, tenuis; foliis cordato-acuminatis, refleCtentibus, lenter © acutè crenatis; flore Jongulari © ramulo florifero foliolato ad alas.

The fhrubby Sida, with reflected leaves.
This plant is very common in the hills about the Ferry, and rifes qenerally to the height of four or five feet. The flowers are difpofed chiefly towards the top, and the leaves commonly reflected a good way backwards.

There is a variation of this plant, with very fmall leaves.

> SIDA 10. Hirta afurgens, foliis angulato-cordatis, obtufê lobatis, atque dentatis; floribus conglobatis, capitulis foliolatis, pedunculis validis alaribus.
> Sida capitulis pedunculatis tripbylits feptemforis. L. Sp. Pl.

> Batard Ocbro.

This plant grows chiefly in low rich bottoms, and is frequently met with in marhy places. The ftem is pretty thick and fucculent, the leaves large, and all the parts of the plant rough and hairy. The tender buds are full of mucilage, and a little purgative.

> SIDA i1. Major, alfurgens, fubfruticofa \&o fubvillofa; foliis cordatis, quandoque angulatis; capfulis deprefles; pedunculis longioribus jolitariis ad alas.
> Bolocrin. H. M. p. 6. t. 45.

The larger Sida, with crowned feed-veffels.
I found this plant near the cod of the bay, beyond Rock Fort; and there it grows naturally, on the banks above the beach. The whole plant is viliofe, and of a whitifh colour: the leaves are large, and angular, or of the figure of a heart: the flowers are fingle, and ftand on long foot-italks at the alæ of the leaves; and the feed-veffels, which are pretty large, are compofed of about twenty particular depreffed lodges.

The American matrons fometimes order an infufion of the leaves, and tender buds of this plant, for women in difficult labours; and deem it a very powerful medicine in fuch cafes.

## URENA 1. Fruticulofa, foliis ferratis, oblongis; foribus conglobatis, pedunculis longi/fimis terminalibus incidentibus.

## The fhrubby erect Urena, with bearded feeds.

This plant is very common in the woods, and grows generally to the height of four or five feet, fometimes more. The leaves are pretty large; and the 1eed-veffels, which are compofed, each, of five cells loofely connected together, carry three long bearded briftles, or fetæ, on the top of each cell; whereby they adhere to every thing that touches them.

URENA 2. Foliis profunde quinquelobis; lobis inforne angufioribus, denticulatis; floribus confertis ad alas.
Malva five alcea fruticofa ribefii foliis, \&cc. Slo. Cat. g6. \& H. t. ii. £. 2. Alcea Indica frutefcens, \&c. Pk. t. 5. f. 3. © Alcea Indica. Thez. Zey.

The branched Urena, with lobed leaves.
This plant grows commonly in the lower hills: it is remarkable for the lobed form of its leaves, and the compreffed make of its rugged capfulx.

> MALVA I. Repens, foliis orbiculatis crenatis, petiolis longinimis, pedunculis binis vel ternis, Jimplicibus ad alas.
> Malva, caule repenti, foliis cordato-orbiculatis objoletè quinquelobis. L. Sp. Pl. © c.

The Mallows of the Ahops.
This plant was introduced to Jamaica by Capt. Jones; who planted it in the mountains of New Ligumea, where it now grows without any care, and is likely to thrive very well. Its emollient qualities are too well known to need being mentioned here.

$$
\begin{aligned}
& \text { MALVA 2. Minima fupina, foliis oblongis ferratis, pedunculis uniforis mo- } \\
& \text { nophyllis, calice exteriori remoto, foliolis angulifimis ciliatis. } \\
& \text { Malva minor fupina, \&c. Slo. Cat. } 96.85 \text { H. t. I } 37 \text { f. f. 2. } \\
& \text { The fmall creeping Mallows. }
\end{aligned}
$$

This little creeping plant is very common in the low lands, and feldom runs above feven or eight inches in length. The flowern grow fingle; and each of the foot-ftalks is generally adorned with one leaf, and three ciliated Itipula; which compofe the outward cup: but thofe towards the top of the plant, are very fhort, fo that the flowers appear as if they were difpored in fimall heaps at the alx of the leaves.

MALVA 3. Humilior fubvallofa, foliis ovatis ferratis, floribus confertis alaribus.
The fmall flender Mallows, with oval leaves.
MALVA 4. Humilior, foliis Serratis, ovatis, difichis, alternis; petiolis longioribus, pedunculis brevibus folitariis ad alas.

The Broom-weed Mallows.
MALVA 5. Affurgens, Jubvillofa, viminibus tenuioribus lentis, Jooribus Jejfilibus, jpicis oblongis terminalibus \& alaribus.
The erect Mallows, with long flender branches.
MALVA 6. Affurgens villofa, ramulis tenuibus, floribus Jeflilibus; Jpicis fubrotundis alaribus, inferioribus pedunculatis.
The erect Mallows, with long flender branches, and round flowerfpikes.
Thefe laft fpecies are common in all the low lands. The third and fourth feldom rife above fixteen or eighteen inches; but the fifth and fixth grow generally to the height of four feet, or better.

GOSSIPIUM I. Procerius, foliis trilobis, Seminibus minoribus virentibus.

## French Cotton.

This Mrub is planted in a few gardens in Famaica, but is not much cultivated: for the Cotton is not thiught in be fo good; and the feeds are fo fimall, that it is a difficult matter to iparate them fiom the wool. It grows, however, more luxuriant than the

## O F J A M A I C A.

other, and rifes generally from feven to nine feet in height, bearing a great number of feed-veffels on all the branches.

> GOSSIPIUM 2. Fruticofum, foliis trilobis, Cuminibus major:bus. Gofipium foliis tritobis integerrimis. L. Sp. Pl. Goflipium. Mart. 7. \& Goflipium Brafilanum fore flavo Hern. Slo. Cat. I 56.

## The Cotton Ahrub.

This plant is of a quick luxuriant growth; and rifes, generally, from four to fix feet in height, throwing out a good many branches from all parts, as it fhoots. It is now cultivated much in Gamaica, and fupplies a very confiderable and beneficial branch of the exports of that ifland. It thrives beft in a rich gravelly foil, and generally yields two crops a year; the one in May; the other in September. It is planted in regular walks, and at a moderate diftance from each other, fo as to let the branches fpread; which, however, are fometimes pruned, if the ground be too rich, and the growth over-luxuriant. When the pods are full grown, and ripe, they burft, and expofe their feeds, wrapt up in their mative flocks, to the fun: and when a great part of them are thus opened, the negroes begin to gather the wool with the feeds, from which it is afterwards cleared by a convenient machine, commonly called a Gen; which is made of two even, fmooth, and fmall rollers, placed clofe, and parallel to each other in a frame: thefe are faftened to different wheels, at the oppofite fides of the machine, and turned in contra-directions by the fame foot-frame. The cotton is put to thofe rollers, as they move round, and it readily paffes between them, leaving the feeds, which are too large for the inter-fpace, behind. What paffes in this operation, is afterwards hand-picked, and packed up in bags for the market.

All our fuftians, calicoes, Manchefter velvets, $\mathcal{E}$ c. are made of this commodity; which now maintain a very confiderable branch of the commerce of Great Britain: for they are generally worn in all parts of the world, particularly in thofe countries fituated more immediately under the fun. Nor can there be any other fort of cloaths, fo appropriated to thofe climates; for it eafily exhales the vapours of the flin, and is not fo eafily moiftened by them, as either linnen or woollen; nor does it yield or rot fo foon.

The greateft part of the cotton now produced, annually, in Jamaica, is imported into England, and wrought up chiefly about Manchefter; where, I am credibly informed, there are no lefs than 120,000 people, conftantly employed in the different branches of the manufacture of this fingle ftaple. And indeed it is from this place that nofl foreign markets are now fupplied with the varicus forts of cotton cloaths; there being but little worked up in the places of its growth, except what is made into dammocks; and even that little branch of induftry has not yet reached Jamaica.

The plant is propagated by the feed, which is generally fowed in September, or OEtober; but the ground muft be kept very clean about the young plants, until they rife to a moderate height; for they are, otherways, very much fubject to be deffroyed by caterpillars. The feeds ought to be but flightly covered with mould, at firt: and the earth hould be well loofened about them; that the young plants, which are very tender, may take a proper root in time.

An emulfion of the feeds is recommended much in bloody-fluxes: they yield a great quantity of oil by expreffion; and fupply many plantations with a fufficient quantity of that commodity, for their boiling-houfe lamps.

ALTHEA 1. Erecta minor, foliis ferratis, bajtato-cordatis; pedunculis temuibus fingularibus ad alas.<br>The fmaller erect Marfhmallows.

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Obf. Periantium exterius octopbyllum, foliolis linearibus; capjula quinquelocularis, quinquefpermis.

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ALTHEA 2. Maritima, arborefcens, diffufa; foliis orbiculato-cordatis, leniter crenatis, Jubtus cinereis.
Malva arborea, folio rotundo, cortice ductili, \&cc. Slo. Cat. 95. \& H. t. 134.
An, Hibifcus foliis cordatis intererrimis. L. Sp. Pl. \& Fl. Zey. Pariti. H. M. p. 3. t. 30 .
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The Moboe, or Bark-Tree.
This tree is frequent by the fea-fide, in many parts of famaica; and grows very luxuriantly in feveral places. It rifes commonly to the height of fixteen or eighteen feet, and throws out fome large flowers, which generally appear of a yellow, or faffron colour. The bark of the tree is very tough, and not much inferior to either hemp, or flax, on many occafions: it is naturally white, and of a fine, foft, filamentous texture; which muft, undoubtedly, render it extremely fit for the papermill. The negroes, and country people, make all their ropes of it; which, had they been tarred and well twifted, would probabiy be no ways inferior to thofe that are made of the beft hemp.

All the parts of the tree, efpecially the flowers, abound with a fine mucilage; and are both emollient and laxative.

## ALTHEA 3. Uliginofa frutefcens, foliis cordato-acuminatis leniterque crenatis, Jpicis laxis terminalibus.

Malva maritima folio fubrotundo minori. Slo. Cat. $95.80 \mathrm{H} . \mathrm{t} .134$.

## The fmaller Moboe.

This fhrub grows, in great abundance, in all the marthes about the Ferry; where it generally fhoots to the height of five or fix feet: but the flowers are much fmaller, and the bark not fo ftiong as that of the other fpecies. It ferves to tie up the $S \operatorname{cotc} b$ grafs, and is fometimes made into ropes.

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HIBISCUS I. Arboreus, foliis angulato-cordatis, flore amplo croceo, ligno violaceo.
Hibifcus foliis cordatis crenatis, angulis lateralibus extimis parvis, caule arboreo. L. Sp. Pl. \& H. C.
Bupariti. H. M. p. \(3^{\text {a }}\). t. 29.
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## The Mountain Mohoe.

This tree grows commonly to a confiderable fize: it is frequent in the inland woods about Bath; and is generally reckoned an excellent timber-tree. The wood is of a dark olive colour; the bark pretty fmooth; the trunk tall and ftraight; and the flowers large and open, and not unlike thofe of the yellow lilly, either in fize or appearance. All the tender parts of the tree abound with a delicate mucilage, and may be ufed, upon occafions, inftead of the more ufual medicines of this tribe.

> HIBISCUS 2. Frutefcens, foliis angulatis, cordato-acuminatis, crenatis; petalis ab uno latere auritis.
> An, Hibifcus foliis cordatis crenatis; angulis lateralibus folitariis parvis. L. H. C?

> The fhrubby Mountain Moboe, with eared petals.

This frub is very common in the woods, but feldom feen in the lower lands. The flowers are of a deep fleh-colour, and fucceeded by fo many moderately large capfules.

> HIBISCUS 3. Ramofus, birfutus; foliis lobatis, irregulariter crenatis, fructu longiori.
> Hibifcus foliis quinquepartito-pedatis, calicibus interioribus latere rumpentibus. L. Sp. Pl.
> Alcea maxima, malva rofa folio. Slo. Cat. 98. \& Hift. tab. 133.
> Guinambo 2a. Pif. 211. An, Guanambanus. Bont. 155?

## The Okro Plant.

The pods of this flrubby plant are full of a nutritive mucilage; and the principal ingredient in moft of the foops, and pepper-pots, made in America; difhes frequently ufed in thofe parts of the world. They are generally boiled feparately, and added juft before thefe meffes are taken off the fire: but the feeds may be boiled in broth, like barley or any other ingredient; for they are not fo mucilaginous. The pods, boiled and buittered, make a rich plate: but they are ufed only in private families, in this form,

> IHIBISCUS 4. Hippidus, foliis quinquelobis, lobis acutis, femine mufato.
> Hibifcus foliis peltato-cordatis, Jeptangularibus ferratis bijpidis. L. H. C. \& Sp. Pl.
> Guinambo $1^{3}$. Pifonis 210 .
> Ketmia Fegyptia Semine mufato. Inf. \& Thez. Zey. P. I34.
> 'The Mufk Okro.

The feeds of this plant, when grown to full maturity, have a ftrong and perfect fmell of mulk; a few grains being fufficient to perfume a whole roorn. It may be, undoubtedly, ufed, with great propriety, in powders and pomatums, E̛c. inftead of that fearce commodity: nor do I doubt but they might be ufed, with as much elegance, in emulfions, in many medical cafes.

HIBISCUS 5. Rufefcens acetofus, foliis trilobis.<br>Hibifcus inermis, foliis ferratis, inferioribus ovatis integris, fuperioribus triTobis. L. H. C. \& Sp. P1.<br>Ketmia Indica Gofipii folio, acetofe Sapore. Inf, \& Thez. Zey. I35.

Red Sorrel.

The flower-cups and capfulæ, freed from the feeds, are the only parts of this plant that are ufed: they make very agreeable tarts; and the decoction of them, fweetned and fermented, is what people commonly call, Sorrel Cool-drink, in America: it is a fmall diluting liquor, that is much ufed in all our fugar-colonies, and reckoned very refrefhing in thofe fultry climates.

There is a variation of this fpecies, that is thoroughly green; which is ufed, in all refpects, like the other.

HIBISCUS 6. Arboreus; foliis fubrotundo-angulatis, in junioribus aculeatifimis.

## The prickly Bark Tree.

This tree is very rare in 'Jamaica: I have feen it in the woods back of St. Atrn's bay, where it grows pretty ftraight and tall. The leaves of all the younger fhoots are full of thorns, on both fides; which preferves them from injuries, while in that

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tender fate; but, as the tree rifes, that defence becomes ufelefs, and the foliage grows, almoft, quite fmooth. The inward bark is very tough, and fit for ropes; but it is more coarfe and fibrous than that of the Moboe.

HIBISCUS 7. Fruticofus, brachiatus; foliis cordato-lobatis; fore variabili.
Hibiicus foliis cordato-quinqueangularibus, obfolete Jerratis; caule arboreo. L. Sp. Pl.

Hibifcus foliis cordato-quinqueangularibus obfolete ferratis. L. H.C. Ketmia Sinenfis fructu jubrotundo, \&c. Thez. Zey. 133, 8. Hina-paretit. H. M. p.6. t. 38, 9 .

The Cbinaije Rofe.
This thrub is cultivated in many parts of Jamaica, on account of its flowers; which appear of a pale white in the morning; turn to a light flefh-colour, after they bear the action of the fun, for fome hours; and contract and clofe with the night, to be ready for the like changes the enfuing day.

HIBISCUS 8. Fruticofus diffufus, foliis cordato-angulatis cum acumine ; capfulis $\mathcal{E}$ interne $\mathcal{E}$ externe birtis, prurigino is.
The fhrubby Moboe, with briftly capfules.
HIBISCUS 9. Hijpidus, foliis cordato-acuminatis, Jerrato-dentatis, auritis; floribus fingularibus ad alas.
The fmall Nettle Hibijcus, or Moboe.
HIBISCUS 10. Arborefcens, trichotomus; foliis amplifimis, cordato-angulatis; Seminibus laná obvolutis.
The Bombaft Moboe, with very large leaves.
This tree is frequent on the banks of Spani/b Town river, in the road to Sixteen-mile-watk. The capfulx are very long and thick; and the loculaments full of a fine down, which invelopes the feeds.

The leaves of this tree are fometimes above a foot and a half in diameter.

## C $\quad$ L A S S S XII. <br> Of the Diadelphia; or Vegetables that have the Filaments of their Flowers connected into two diftinct columns at the bafe, but loofe and feparate at the top.

## S E C T. I.

Of Juch as bave lefs than ten Filaments in every Flower.

> O F J A M A I C A.
> Periantium Monopbyllum, in quinque lacinias, angufors, declinatas, ad bafing fere divifum.
> Corolla, Pentapetala; petalis oblongis, angufis, fere cequalibus, irregulariter fitis.
> Stamina. Filantenta diadelpbia: inferius fimplex validiffimum of longifimum, fubulatum; anthera oblonga: fuperiora coalita, ad api+ cemvix Jejuncta; anthere minima abortiva.

POLYGALA 1. Herbacea, minor, erecta; foliis linearibus; jpicâ multiplici, terminali, foliofa.

## The fmall erect Polygala.

This beautiful little plant is a native of Famaica, and pretty frequent in the drier hills of St. Faith's and St. Catherine's. It has a great deal of the fmell and tafte of the Seneka Snake-root; but is not foftrong, or difagreeable: is a mild attenuant, and fudorific; and may be adminiftered in infufions, or decoctions, with great propriety, where fuch medicines ate requifite. It grows, generally, to the height of fix or feven inches, and is feldom branched below the middle.

> POLYGALA 2. Fruticofa, foliis ovatis glabris, floribus confertis, pedunculis bafi gibbis.
> The fmaller fhrubby Polygala.
> POLYGALA 3. Fruticofa; foliis glabris, ovatis; capfulis fubrotundis, compre/tis, emarginatis; racemis minoribus, laxis, alaribus. Tab. 5. f. 3.
> Polygala floribus imberbibus, racemofs; caule arboreo, foliis variis. L. Sp. Pl.

## The Baftard Lignum Vitce, of the red hills.

This fhrub grows very plentifully in the red hills; and there, it generally rifes to the height of deven or eight feet, or better. It is called Baftard Lignum Vita, in thofe parts, becaufe it taftes not unlike the gum of that wood; and is fometimes ufed for the fame purpofes.

POLYGALA 4. Arbopea, foliis lanceolato-ovatis; capfulis compreflis, bilobis, ultra medietatem divifis.
The larger Polygala.
I have feen this tree in the woods of St. Elizabetb's: it grows to a more confiderable fize than either of the others, being frequently above twenty feet in height.

SECURIDACA I. Fruticofa, foliis fubrotundis, ramulis tenuifimis, fpicis laxis terminalibus.

## The fmaller fhrubby Securidaca.

Periantium Tripbyilum, foliolis ovatis.
Corolla Papillionacea: vexillum nullum; alx ampliores, ereata, fubrotundes; carina Semilunata, comprefa, genitalia amplectens.
Stamina. Filamenta octo, in tubum arcuatum, fuperne fifum, ad bafin coalita; fuperne libera: antheræ ovata. E bafo vero tubi, utrin-
que, emergit appendix ligulata, majufcula, invicem appropinquate, vexilli minoris vicem fuppeditans.
Piftillum. Germen avatum; ftylus Jibulatus, longitudine Jaminum; figma latiufculum.
Pericarpium. Capjula unilocularis, monopermis, fubrotunda, fcabra, 倮 alam membranaceam oblongam majorem definens.

SECURIDACA 2. Scandens, foliis oblongis, Cpicis ramofis.
Securidaca. L. Sp. Pl.

## The larger climbing Securidaca.

Both thefe plants are natives of Gamaica, but not common. I found the firt fpecies in St. Games's, the other in the red hills. The former grows upright, and divides into a number of very delicate freading branches; the other is a climber, and more fuxuriant in every part.

AMERIMNON 1. Fruticofum; foliis nitidis, fimplicibus, cordato-acuminatis, Tab. 3 I. f. 3.
The flrubby Amerimnon, with fimple alternate leaves.
Periantium Breve cylindraceum, quafa bilabiatum; labium fuperius crenatum; inferius tridentatum:
Corolla Papillicnacea: vexillum erectum, oblongum, obverfè cordatum; ala oblonga, erectie, later ales, longitudine © pohtione vexillu: Carma brevis, ovata, compreffa, ad ungues alarum pofita.
Stamina. Filamenta novem, ad bafini coalita, Juperne libera; antherwo fubrotunda.
Piftillum. Suftentaculum breve; germen oblongum compreflum; fylus brevis recurvus; figma acuitum.
Pericarpium. Siliqua oblonga compreffa, feminibus binis vel ternis referta.
This fhrub is very common in the low lands, and remarkable for the vaft quanfities of white flowers it throws out, after every rain. It grows very buthy, and rifes generally to the height of feven or eight feet, fometimes more.

$$
S \quad E \quad C \quad T . \quad I .
$$

Of Juch as bave ten Filaments in every Flower.

E
RYTHRINA 1. Arborea, jpinofa $\mathcal{E}$ non Spino $\sqrt{a}$; foliis rbombcis, pinnatoternatis.
Erythrina foliis ternatis, caule arborea /pinofo. L. Sp. PI. \& H. C. Coral arbor Clufit. Slo. Cat. 142. \& H. t. $17^{8}$. Corallodendron triphyllum Americanum, \&c. Thez. Zey. Muruca. H.M. p.6. t. 7 .

## The Coral or Red Bean Tree.

This tree grows in many parts of Famaica, and rifes, generally, to the height of fixteen or eighteen feet. There are many reafons that induce me to think it not a native; but to have been introduced to that ifland in the time of the Spaniards, who ufed to plant it among their Cacao trees, where the walks lay mot expoled to the weather; in order to break the force of the wind, in hurricane times; from whence it has acquired the appellation of Mader di Cocro, among them.
The feeds of this tree arre of a beautiful red colour.

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NEANTHE I. Arborefcens, foliis oblongis nitidis pinnatis, racomis terminalibus.
The Neantbe, with pinnated leaves.
Periantium Monopbyillum, tubulatum, quinquedentatum. Corolla. Tripetala; tertium cateris duplo majus, omnia involvens. Stamina. Filamenta decem, diadelphia; anthera fubrotunda. Piftillum. Germen oblongum; Atylus fubulatus fimplex; ftigma acutum. Pericarpium Legumen. Cætera defiderantur.
I found one of thefe trees near Port Antonio; but could never meet with another of the fort, in any part of the illand.

GALEGA? 1. Fruticofa, foliis fubrotundis pinnatis; Jpicis fimplicibus terminalibus. Tab. 3 I. f. I.
Corallodendron folio pfeudoaccacie, Jiubtus tomento/o; fore lutio. Plum. Cat. Arbori Coral affinis non Jpinofa, fraxini folio roturdiore, \&cc. Slo. Cat. $144^{\circ}$
The fhrubby Goat-rue, with round afh-coloured leaves.
Periantium Campanulatum, levifimè dentatum, fere truncatum.
Corolla 2uafileguminofa, pentapetala irregularis; fuperius fubovata; lateralia oblonga aqualia, unguibus tenuibus incidentia; infima ad apices agglutinata.
Stamina. Filamenta decem, bafi levifimè adnata; inde libera: antherx cordata.
Piftillum. Suffentaculum brevè; germen oblongum; ftylus brevis; ftigma obtujuyculum.
Pericarpium; Legumen longum torofum. Semina plurima oblongo-ovata.
This fhrubby plant grows chiefly in the low lands, near the fea; and rifes, generally, to the height of fix or feven feet. It is of a dark afh colour, and bears many long pods of a roundifh cylindric form, but fwelling about the feeds. I doubt whether the leaves of this plant would not make a good Indigo.

GALEGA? 2. Herbacea fubcincrea villufa, foliolis oblonsis pinnatis, Jpicis laxioribus ad alas.

## The fmall herbaceous Goat-rue.

Periantium Parvum, ultra medietatem in quinque lacinias angufas acutas fectum.
Corolla Papillionacea: vexillum amplum ommia tegens; alx angufte oblonge ad latera vexilli pofita: carina bipetala; petalis anguAtis, alis longioribus, ad apices adnatis, ad latera genitalium fitis.
Stamina Decem erecia, bafin in tubum breveḿn coalita; antherx globofa.
Piftillum. Suftentaculum brevifinum: germen oblongum E'deniter compreffum: Atylus longus ad medietatem fexus, recurvus; angulus acutus, flexurâ tunnidâ: Atigma obtufum ciliatum.
Pericarpium. Legumen teres feminibus plurimis, refertum.
This plant is common among the bufhes in all the Savannas about Kingfon; and feldom grows above eleven or twelve inches in length.

ONONIS x. Erecta minor, fliquis monoßermibus confertis.

$$
\begin{aligned}
& \text { The fmaller erect Reft-harrow. } \\
& \qquad 4 \mathrm{~F} \\
& \text { ONONIS }
\end{aligned}
$$

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ONONIS 2. Erecta, major, fubbirfuta; fliliquis majoribus.
The larger erect Reft-harrow.
Both thefe plants are common in $\mathcal{F}$ amaica; the former grows chiefly in the low lands, the other among the hills: but the firft feldom fhoots above one foot in height, while the other is frequently obferved to rife between two and three, with a pretty luxuriant ftalk and foliage.

> TERAMNUS I. Triphyllus fubbirfutus, foliis oblongo-ovatis, flizquis gracilibus comprefts, Jpicis laxioribus alaribus.

> The fubhirfute Teramnus, with afh-coloured leaves.
> Periantium Parvum, in quinque lacinias anguftas acutas cequales profunde Sectum.
> Corolla Leguminofa; vexillum cordatum, reflectum; ałæ erecte, oblongoovata, longitudine fere vexilli; carina minima, lacinia infima calicis tecta, genitalia brevifima amplecters.
> Pericarpium. Legumen longum gracile compreffum, uniloculare, bivalve. Semina Plurima reniformia.

This creeping, or climbing plant is pretty common in the lower hills; and runs generally the length of fix or feven feet from the root. The leaves are oblong, and covered, moderately, with down: the flowers are fmall, and difpofed on flender fpikes, at the alx of the leaves; and the feed-veffels are long, flender, and compreffed.

STIZOLOBIUM s. Spicis multiforis pendulis alaribus, foribus ternatis. Tab. 31. f. 4.
Phafeolus Americanus, foliis molli lanug ine oppofitis, sic. Pk. t. 214. f. I. Phafeolus indicus lobis undiquaque pilofis, \&cc. Bur. Thez. Zey.
Phafeolus utriufque Indice, lobis rillofis pungentibus. Slo. Cat. 69. The Cowhage, or Cow-itch plant.
STIZOLOBIUM 2. Pedunculis bipartitis alaribus.
The fmaller Cowhage, or Cow-itch plant.
Periantium Monopbyllum, tubulato-campanulatum, fubventricofum, ringens; labium Juperius majus, obtufum, emarginatum, reflectens; inferius tridentatum fuberectum.
Corolla Leguminofa; vexillum amplum fubrotundum reflexum, ungue valido munitum. Alæ oblong a patentes, carina breviores, ad bafim quafi adnatre; carina bipetala, petalis oblongis ad apices agglutinatis.
Stamina. Filamenta decem, inferne connata, Juperne libera; antheræ ovata, alternce fubmonftrofa oblonga tumentes.
Piftillum. Germen oblongum; ftylus fubulatus, ftaminibus longior; Rigma fimplex.
Pericarpium. Legumen longum fubcquale, ad utrumque extremum adverfe fubarcuatum, birtis pungentibus ophitum, Seminibus quatwor, quinque- vel jex reniformibus, refertum,
Thefe climbing plants are common in all parts of the Wefo-Indies, and rife generally to the top of the talleft trees about them, wherever they grew; or fpread in proportion, if they chance to thoot among lower bufhes. The ftems of both forts are round and flender, and the leaves oval and villofe; and always three on every foot-ftalk. The flowers, which are of a dark purple colour, are difpofed in fikes at the alr of

# O F J A M A I C A. 

the ribs, and fucceeded by fo many oblong pods, of a moderate length and thicknefs, whofe furface is thickly befet with fhort, rigid, itchy hairs.

A decoction of the roots of thefe plants is reckoned a powerful diuretic, and cleanfer of the kidneys: and a vinous infution of the pods (twelve in a quart) is faid to be a certain remedy for the dropfy: the dofe half a pint, when made in beer.

In the windward iflands, fome of the inhabitants make a fyrup of the pods, which is faid to be very effectual againft worms.

PHASEOLUS 1. Minor, foliis ovatis, floribus ternatis alaribus, calicibus exterioribus tripbyllis.
The fmaller Pbafeolus, with the flowers difpofed in a ternate order at the alæ of the ribs.
PHASEOLUS 2. Suberectus major, fliquis maximis oblongis glabris, fatura altera nervo majori utrinque infignita.
Dolicos leguminibus gladiolatis dorfo fulcatis, Jeminibus arillatis. L. Sp. PI.
Phafeolus maximus filiquis enfformíbus, \&cc. Slo. Cat. \& H. t. 114.
Phafeolus fylveftris maximus, \&c. Bur. Thez. Zey.

## The Horfe-Bean.

This plant grows in many gardens in Yamaica, where it is cultivated chiefly out of curiofity. It feems to keep a main between the upright, and the climbing fpecies of the Pbafoolus; for the ftem feldom tifes above three or four feet, though it emits fome flender delicate hoots, that run much further. The pods are commonly between ten and fourteen inches in length, and generally contain about ten or eleven feeds; but the pulfe is very feldom ufed, being generally thought, more or lefs, of a deleterious nature.

> PHASEOLUS 3. Minor erectus pratenfs, foliis oblongis, vexillo minori, filiquis gracilibus.
> Phafoolus erectus latbyroides, \&c. Slo. Cat. 71. \&H. t. 116.
> The fmall erect Pbafeolus, with red flowers.

This plant is pretty common in the Savannas about Spani/b Town; and rifes generally to the height of twelve or fourteen inches, or better. The bloffoms are of a deep red colour; and the fide-leaves, or ala of the flower, very long, in proportion to the other parts.

> PHASEOLUS 4. Scandens, jpicis laxis terminalibus, filiquis comprefis tetrafpermibus, utrâque futurâ rugofáa.
> Phafeolus maximus perennis, \&c. Slo. Cat. 67 . \& H. t. 113.
> Bonavift.

This plant is cultivated by moft of the inhabitants, in the country parts of $\mathrm{Fa}_{a}$ maica; for it thrives better than any of the other fpecies; and the feeds are genesally reckoned very wholefome and palatable. It grows luxuriantly in the dryeft foils, and fpreads a great way upon the rocks, or neighbouring bumes.

PHASEOLUS 5. Suberechus, fliquis quinquefpermibus oblongis © leniter comprefos, feminibus quandoque mifcellis.
The Kidney-Bean, or Cock-Atone.
This plant is cultivated in moft parts of the world. The pods are generally, while in a tender ftate, boiled whole and ferved up by way of greens: but, when advanced in feed,

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feed, the pulfe is picked to feed the negroes, in thofe colonies. The whole plant feldom rifes above a couple of feet in height.

## PHASEOLUS 6. Perennis, floribus berbaceis minoribus; Jpicis alaribus © terminalibus; fliquis comprefis tetrafpermibus, futura abtera rugofa.

The Lima Bean.
This climbing plant was introduced to Yamaica fome years ago, and is fince much cultivated in all parts of the ifland; for the feeds are very tender and palatable; and far fuperior to any other pulfe, of the fort, now cultivated in that ifland. It requires a rich foil, and continues to bear four or five years fucceifively; but does not produce fo frequent as fome of the other fpecies.

> PHASEOLUS 7. Erectus; fliquis gracilibus, teretibus, tolvecrmibus; Seminibus rufefcentibus, oblongis.
> Phafeolus erectus major, \&cc. Slo. Cat. 71. H. 115.
> Calavances, or Red Peafe.

This fpecies is pretty much cultivated in Famaica: it is a hardy fruifful plant, and thrives almolt in every foil; tho' it feldom rifes above a couple of feet in height. The feeds ferve to feed the negroes; and are frequently ufed by the poorer fort of white people: they are obferved to be a hearty wholefome food.

## PHASEOLUS 8. Erectus; Jiliquis gracilibus, teretibus, polypermibus; feniz nibus Jubrotundis, bilo,nigro notatis.

Phafeolus erectus minor, femine Jpharico, \&c. Slo. Cat. \& H. t. II7.

## The Black-eyed Pea.

This plant is pretty much like the foregoing, both in fize and growth; and cultivated in the fame manner, and for the fame purpofes: but it is more commonly ufed by the better fort of people.

## PHASEOLUS 9. Erectus; filiquis gracilibus, teretibus, polypermibus; Seminibus oblongis, abidis.

## Cuckolds-Increafe.

This plant refembles the feventh fpecies very much, both in fize and the manner of its growth, as well as in the form of the pod and feeds. It is a very profitable pulfe, and now much cultivated throughout the whole ifland.

PHASEOLUS 10. Scandens, foliquis glabris comprefis, tri- vel quadrijpermibus.

The Jamaica Bean, or Sugar-Bean.
This plant is cultivated in all parts of Jamaica; and the pulfe generally made ufe of at every gentleman's table. It is of an eafy growth, and continues to bear a confiderable part of the year.

PHASEOLUS 11. Scandens, fliquis compreffis quinquefpermibus falcatio, Jeminibus lineis fufcis radiatis.
The poifoned or wild Pbafoolus.

This plant refembles the foregoing, pretty much, both in the manner of its growth, and the form of its pods; but the feeds are remarkably ftriated, and generally thought to be of a very deleterious nature. The plant is never cultivated, nor the feeds ufed, but through ignorance or inadvertency.

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PIIASEOLUS 12. Maximus perennis, filiquis majoribus comprefis, tetra-
    vel penta/permibus.
    Phafeolus maximus perennis, \&xc. Slo. Cat. 66.
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The Broad Bean.
This plant is cultivated more for the fake of its Chade, and fpeedy growth in arbours, than fur its feeds; tho' thefe are known to be both wholefome and palatable, and fruquently ufed at the beft t.bles in the illand. It is not cultivated fo much as the other forts.

PIiASEOLUS 13. Minimus repens, foliis linearibus, fliquis oblongis angutis.
The fmalleft creeping Pbajeolus.
This little plant is generally found among the grafs, in the Savannas about Spanifit Town. It is a very delicate plant, and feldom rifes above twelve or fourteen inches in length. It is different from the Cat's-claw, which it refembles very nearly.

DOLICHOS I. Scandens, foliis nitidis; frliquâ mảjori quinquespermi oblongâ, Jillco longitudinale utrinque notata.
The larger fmooth-leafed Dolichos.
I found this plant in the mountains of St. Faitb's; it grows pretty luxuriantly, and fpreads a good way among the bufhes. The pod is generally about five or fix inches in length.

DOLICHOS: 2. Scondens; fliquis geminatis comprefis, feminibus plurimis mifcellis oblongis, refertis.
An, Phafeolus fubbirfutus Americanus, \&c. Pk, t. 214, f. 2.
The fmaller climbing Dolicbos, with narrow pods, difpofed by pairs.
DOLICHOS 3. Scandens, filiquis poly/permibus geminatis, quafi bexagonis.
The larger climbing Dolickos, with angular pods, difpofed by pairs.
Both thefe plants are common about the Angels, and generally found climbing among the neighbouring buhes. The form of the pods is a fufficient diftinction between the two fpecies.

DOLICHOS 4. Maritimus repens, foliis orbiculatis nitidis, filiquis compreffis, fatura alterá trigonâ.
Phafeolus maritimus rotundi folius, flore purpureo, \&c. Slo. Cat. 69.
Phafeolus maritimus Zeylonicus. Burm. \& Pk. t. 112.
The large Sea-fide Dolichos, with round leaves.
DOLICHOS 5. Maritimus, minor, repens; pedunculis longioribus; filiquis polypermibus, gracilibus, teretibus.
The fmaller Sea-fide Dolichos.

Both thefe plants grow pretty common by the fea-fide, in the parih of St. George's; but I could never obferve the laft fort in any other part of the ifland. The root of the other fpecies is a flrong purgative.

DOLICHOS 6. Herbaceus minor, foliis linearibus, fliquat polypermi comprefa.

## Cats-Claws:

This little plant is frequent about Old-barbour: it grows among the bufhes, but feldom ftretches above three or four feet in length. The pods are long, and compreffed; and the figma, or top of the fyle, almoft naked.

This plant is ufed as a purgative-ingredient in diet-drinks, by fome of the inhabitants of Mountferat ; and is faid to anfwer well in hydropic cafes.

> DOLICHOS 7. Minimus fotidus repens, filiculis bifpermibus,
> Dolichos leguminibus racemofis comprefis tetrafpermibus, foliis rbombois,
> L. Sp. Pl.
> Phafeolus minimus fotidus, \&c. Slo. Cat. 7r. \& H. t. 115 .
> The fmall fœetid Dolicbos.

This little weakly plant is frequent in the lower lands of Famaica: it grows chiefly among the buthes, and rifes by a very flender branched ftem, furnihed with a great number of fmall leaves, difpofed, three together, on every foot-ftalk : but it feldom exceeds two or three feet in height.

VICIA I. Minor berbacea; foliolis linearibus fubtus birfutis.
The fmall creeping herbaceous Vetch.
This little plant is frequent about Old-barbour, and feldom runs above a foot, or fixteen inches, in length. The pods are comprefled.

VICIA 2. Subincana minor affurgens, floribus geminatis per Jpicas terminales.
An, Coronilla Zeylonica tota argentia. Bur. Thez. Zey.
The more erect wild Vetch.
This plant grows pretty erect, and is not uncommon on the brow of the hill, juft above Mr. Elletjon's, in Liguanea. The pods are compreffed, and difpofed loofely, by pairs, along the flowery extremities of the branches.

VICIA 3. Caule erecto, petiolis abfaue cirrbis. L. Sp. Plant.
Faba. Bau. © omnium autborum.

## Beans.

This plant is fometimes cultivated in the mountains of Nerv Liguanea; but does not thrive fo well as many of the other European vegetables, that are planted there from time to time.

PISUM 1. Stipulis inferne rotundatis, crenatis; petiolis teretibus, pedunculis multifloris. L. Sp. PI. \& Pifum fipulis crenatis. H. C.

Peafe.

## O F J A M A I C A.

This plant was alfo introduced to Famaica, from Europe; and is now frequently cultivated in Ceveral parts of the inand, but does not thrive well any where; for it feldom rifes above two feet in height, and thoots into bloffoms before the ftem is half grown: it does, however, produce a good many pods, which makes it not uncommon at the gentlemens tables there.

ARACHIS 1. Tetrapbyila, fliquas infra terram recondens; feminibus oblongis: Arachidna. Plum. t. 36.
Arachis. Gen. \& L. Sp. Pl.
Arachidna utriuqque India, \&c. Slo. Cat. 72.
Sena tetrapbylla, feu apfi congener folliculos condens, \&cc. Pk. t. 60. f. 2.

## Pindar's, or Ground-Nuts.

The feeds of this plant are frequently imported to $\mathfrak{y}$ amaica, in the fhips from Africa; and fometimes cultivated there, though it is but very rarely, and in very fmall quantities. It thrives beft in a free foil, and warm fituation; and would grow very well in many parts of that ifland, was it regularly cultivated.

> ESCHINOMENE I. Procumbens, foliolis pinnatis mimulis, ramulis tenuiffimis.
> Æfchinomene caule bipidido, foliolis acuminatis, leguminum articulis fuborbiculatis. L. Sp. Pl.
> Hedyfarum caule birfuto, mimofe foliis, \&cc. Slo. Cat. 74. Hedyfarum annuum, minus Zeylonicum. Bur. Thez. Zey.

## The flender fenfitive $A$ /cbinomene.

This plant is very common in many places, on the fouth-fide of the illand; efpecially about Old-barbour, and near Mr. Elleffon's, in the lower hills of Liguanea. It is a delicate flender plant, and grows rarely above two feet and a half, or three feet, in height ; but it feldom flands upright.

ZOOPHTHALMUM I. Siliquis majoribus birtis tranfverfe fulcatis, pedunculis communibus tenuibus longiffimis fexilibuJque appenfs. Phafeolus Brafilianus frutefcens, \&cc. Pk. t. 213. f. 2.
Phafeolus Indicus lobis villofis pruritutn excitantibus. Muf. \& Thez. Zey. The Ox-eye Bean.
Periantium Monopbyllum, tubulato-campanulatum, bilabiatun: labium furius reỉum, obtufum $\mathcal{O}$ leniter crenatum: inferius majus, tridentatum.
Corolla Leguminofa: vexillum maximum, rectum, cordatum, ad apicem leniter crenatum, cateris fructifcationis partibus incumbens: alæ oblonga, ad ungues aurita, $\mathfrak{E}$ carina adnata: carina oblonga comprefla; petalis rectis, Juperne liberis, ad ungues adnatis.
Stamina. Filamenta decem diadelpbia: fuperius antberâ depreffa donatum; inferiora vero antberis obiongis, predita Junt.
Piftillum. Suffentaculum nullum, germen oblongum; ftylus longus; ftigma obtufum fimplex.
Pericarpium. Siliqua major, fubcomprefa, birta \& tranfverfe fulcata, od utrumque marginem craffa, Seminibus paucis referta.
Semina Orbiculata fubcompreffa, putamine duriflimo tella, $\mathcal{E}$ fafcia tricolori variegatâ, per totam fere marginem duciâ, notata.
This plant is very common in the inland parts of Jamaica, and climbs to the top of the talleft trees in the wood, throwing down its long flender flower-

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ftalks to a moderate diffance from the alx of the upper ribs, from whence they generally rife: thefe are not above the thicknefs of a common packthread, but feldom under four or five feet in length, and bear the flowers in clufters at their extremities. The plant carries three leaves on every common foot-ftalk, like the Pbajeoli; and, like moft of that clafs, raifes itfelf by a flender winding ftem.
I have feen the feeds of another fpecies of this fort, in Mr. Baker's curious collection: he had it from the Eaft-Indies.

CYTISUS 1. Fruticofus, erectus, ramofus, tripliylths; foliis fubcinereis oblongis; vexillo variegato; flitquâ compreffá, ad femina torofá.
Cytifus racemis axillaribus erectis, foliolis Jublanceolatis tomentofis. L. Sp. Pl.
Cytifus folio molli incano fliquis orobi, \&c. Thèz. Zey. t. 37.
Laburnum bumilius, filiqua inter grana, ©e grana juncta. Slo. Cat. 139.

## Pigeon or Angola Peas.

This fhrub is frequently cultivated by the negroes; becaufe it is a perennial, and does not require fo much care. It grows commonly to the height of four or five feet, and bears a great many pods. The feeds are much ufed among the peorer fort of people, and reckoned a hearty wholefome pulfe.

CYTISUS? 2. Fruticofus, erectus © villofus; foliis plurimis pinnatis, Spicis fiorum terminalibus.
Surinam Poifon, or the fmaller fhrubby Cytifus.
Periantium Cyatbiforme quinquedentatum, laciniis Juperioribus minoribus ET minus profunde divi/s.
Corolla Leguminofa; vexillum majus, erecto-patens: alx oblongce, carina longiores: carina Semilunata, elongata © leriter comprefa.
Stamina. Diadelpbia regularia.
Pittillum. Germen oblongum; fyylus fubulatus villofus: Atigma acutum.
Pericarpium. Siliqua longa fubteres cylindracea, feminibus plurimis referta.
This plant has been introduced to famaica from the main, and is now cultivated in many parts of the ifland, on account of its intoxicating qualities. It is a fpreading Chrubby plant, and rifes generally to the height of five or fix feet.

The leaves and branches of this plant, being well pounded, and thrown into any river, pond, or creek, are obferved to infect the waters very foon; by which all the firh are immediately intpxicated, and rife and float upon the furface, as if they were dead; from whence they are eafily taken. But moft of the large ones that are left, recover from this trance, after a chort time; tho' the greateft part of the fimall fry perifh on thofe occafions.

ICHTHYOMETHIA 1. Foliis pinnatis ovatis, racemis terminalibus, foliquis quadrialatis.
Erythrina foliis pinnatis, leguminibus membranaceis tetragonis. L. Sp. PI. Phafeolo affinis arbor Indica Coral dicta polyphyllos. Pk. t. 104. f. 3. \& 263. f. 3.

Coral arbor polyppylla, non Jpinofa. Slo. Cat. 143. \& H. t, 176.

## Dog-wood.

Periantium Monopbyllum, ventricofum, breve, quadricrenatum: laciniâ fuperiori majori, obtufa.
Corolla Leguminofa; vexillam amplum fubrotundum, limbo reflexo.

- Stamina.


# O F J A M A I C A. 

> Stamina. Filamenta decem diadelpbia regularia.
> Pitillum. Suffentaculum breve; germen compreflum oblongum; Aylus brevis; Atigma oblongunn reflexum.
> Pericarpium. Legumen oblongum quadrialatum.
> Semina Pauca oblonga.

This tree is a native of $\mathcal{F}$ amaica, and grows chiefly in the low lands, where it generally rifes to the height of twenty or thirty feet; forntimes more. It Howers about the month of May or Yune, and throws out all its bloffons before the appearance of the foliage; but the leaves fucceed pretty foon, and are regularly difpofed on common ribs upon the fmaller branches. The bark of the root of this tree is ufed for the fame purpofes, and with the fame effects, as the leaves and branches of Surinam poifon, already defcribed: it is pounded, and mixed with the water in fome deep and convenient part of the river, or creek, छ̌c. from whence it may fpred itfelf more diffufively around; and in a few minutes after it is well mingled, you'll fee the firh, that lay hitherto hid under the neighbouring rocks, or banks, rifing to the furface, where they float as if they were dead; in which fituation they continue for a confiderable time: but moft of the large ones that are left, recover after a time; while the fmaller fry are all deftroyed, and float upon the furface, for fome days after. The eel is the only fifh I have obferved, that could not be intoxicated with the common dofes of this bark, tho' it affects it very fenfibly; for the moment the particles fpread where it lies, it moves off, and Iwims with great agility thro' the water: I have fometimes feen them chafed to and fro, in this manner, for fome minutes, without being any ways altered.

The tree is generally confidered as one of the beft timber-trees in the ifland. The wood is very hard, and refinous; and lafts almoft equally in or out of water. It is of a light brown colour, coarfe, crofs-grained, and heavy.

## ICHTHYOMETHIA 2. Foliis oblongo-ovatis, pinnatis; fliquis compre/fis oblongis.

## The Mountain Dog-wood.

This tree is fo like the foregoing, both in appearance and fmell, as well as in the grain and texture of its wood; that a man can hardly diftinguif the one from the other, until he obferves the fruit; which, in this, is quite compreffed and plain. It grows to a very confiderable fize; and the wood (which is rather darker than that of the other fort, and equally as good,) may be had almoft to any dimenfions.

GLYCINE I. Scandens, foliolis pinnatis, fpicis nodofis axillaribus. Glicine foliis pinnatis conjugatis, pinnis ovatis oblongis obtufis. L. Sp. Pl.
Phafeolus arboreus alatus © volubilis major, \&cc. Pk. t. 214. f. 5.
Phafeolus glycyrrbizites folio alato, \&cc. Slo. Cat. $70 . \&$ H. t. 112. f. 4.

## The Wild Liquorice, or Red-Bead Vine.

This weakly climbing plant is very common among the buhes, in all the low lands of Jamaica. The infufion of the leaves, and tops, is much ufed in all our fugar-colonies; and oblerved to open both the body and the 1 kin, very mildly: it helps expectoration; relieves all loads of the breaft, proceeding from temporary colds; and is frequently ufed as a diluent in fevers; and the more generally liked, as the tafte is fomewhat fweetih, but does not leave any clamminefs upon the palate. The feeds are of a very beautiful fcarlet colour, with a black fpot on one fide. They are of a very deleterious nature, and cannot be taken inwardly without great danger; though, if fwallowed whole, they commonly pafs entire, and are feldom attended with many of thofe violent fymptoms that follow when taken in powder; which
always works both upwards and downwards, with the greatef violence; the operation being attended with anxiety and convulive fpafms,

Herman fays, that three or four feeds is a mortal dofe; but that he has made an extract from the roots, no ways inferior to that obtained from the roots of liquorice. See Muf. Zey. pag. 16.

GLYCINE 2. Sylvefte fcandens, foliis pinnato-ternatis, foribus Jpicatis; fliquis bijpermibus medio coarclatis.
The climbing trifoliated Red-Bead Vine.
I have never feen but one plant of this fort; it grows wild, a little below the $D e-$ coy, in St. Mary's; climbs to a confiderable height, and bears a good many flowers towards the top.

GLYCINE 3. Arboreum, foliis oblongis, feminibus majoribus.
The Red-Bead Tree.
I have feen this tree pretty often in Mountferat, where it grows naturally. It rifes by a moderate trunk, and fpreads a good deal towards the top. The feeds are pretty large, and well marked with a proportioned black fpot, like thofe of the two other fpecies.

CLITORIA I. Major fandens, foliis Jubrotundo-cvatis, foribus geminatis. Clitoria foliisternatis; calicibus campanulatis, geminatis. L. Sp. Pl.

## The larger climbing Clitoria.

CLITORIA 2. Minor fondens, folizs fubvillofis oblongo-ovatis, Aloribus geminatis.
Clitoria foliis ternatis. L. H. C.
The fmaller Clitoria, with downy leaves.
Both there fpecies are natives of Jamaica; but the firft fort is very rare: I found it near Mr. Whiteborn's, in St. Ann's, where it grew very luxuriantly. The other fpecies is pretty common in all the hills and lower lands of the illand.

GALACTIA I. Foliis ouatis glabris pimnato-ternatis, Jpicis elongatis terminalibus. 'Tab. 32. f. 2.
Phafeolus minor lockefcens, \&c. Slo. Cat. \& H. t. 114.
The Galactia, with fmooth leaves, and long reddifh flowers.
Periantium Duplex: exterius dipbyllum, minimum, deciduum; interius breve, campanulatum, quadridentatum, lacinia Jupremá B̉ infima majoribus.
Corolla Leguminofa, pentapetala; petalis omnibus longis, anguftis: vexillum rectum, cateris latius, incumbens.
Stamina. Filamenta decem diadelphia regularia: antheræ ovate.
Piftillurn. Germen tenue; ftylus rectus Jubulatus; ftigma acutum.
Pericarpium. Siliqua longa tenuis, Seminibus plurimis Jubrotundis, referta.
This plant grows chiefly in the lower hills; and is eafily diftinguifhed by its long reddifh flowers, milky branches, and fmooth leaves. It is a weakly climber, and raifes itfelf by the help of the neighbouring bufhes, to the height of eight or nine feet, the ufual limits of its growth.

TRIFOLIUM I, Procumbens, foliis ciliatis nervogis; filiculis monofpermilus, acuminatis, quinquefriatis.

# O F J A M A I C A. 

Anonis non fpinofa minor glabra procumbens, \&xc. Slo. Cat, 75. \& H. t. 119 . An, Trifolium procumbens Zey. \&xc. Burm. Thez. Zey. t. 106.

The fmall creeping Trefoil, with ciliated leaves.
This fmall plant is not uncommon in the low lands of Liguanea: it is a creeper, and feldom runs above feven or eight inches in length. The leaves are fmall, beautifully nerved, ciliated, and hining; and the pods, which feldom exceed two lines in length, never contain above one feed.

TRIFOLIUM 2. Suberectum \& fubbirfutum; filiculis minoribus, fingularibus:
Loto pentapbyllo filiquofo © villofo fimilis, Anonis, \&cc. Slo.C..t. 75. \& H. t. 119.

## The fmall downy fub-erect Trefoil.

This plant is rather more common than the foregoing: it grows in the low lands, and rifes generally to the height of twelve or fourteen inches. Both forts are kind pafture herbs.

TRIFOLIUM 3. Repens, foliis maculatis, foribus conglobatis, pedunculis Trifolium Jpicis ovalibus, calicibus inflatis, \&cc. L. Sp. Pl. \& H. C.

## The common field Trefoil, or Clover-grafs.

This plant was inttoduced to Sfamaica fome years ago, and planted at Captain Jones's, in the mountains of Nero Liguanea; where it now grows very luxuriantiy without any fort of care.

ECASTAPHYLLUM I. Frutefons, reclinatum; foliis orato-acuninatis, integris, alternis. Tab.32.年. I.
The flurubby Ecafapboylicm, with fingle leaves.
Periantium Breve campanulatum, quinquedentatuin; laciniis Juperioribus majoribus, obtuforibus, minus profundè divifis.
Corolla Leguminofa: vexillum obcordatum reflectens; alæ oblongee, longitudine fere vexilli, unguibus tenuibus incidentes; carina Jubcomprefla, cocbleata, ad apicem bifida.
Stamina. Filamenta decem, in duos fafciculos comprefos, aquales adnata; fafcicullis ad latera germinis fitis.
Piftillum. Sufentaculum oblongum: germen oblongum compreflum; Aylus brevis fimplex: figma fimplex fubacutum.
Pericarpium. Siliqua lata comprefa, feminibus paucis reniformibus comprefis, referta.
This Arrubby plant is not uncommon in the low lands about Kingfon: it grows chiefly in fwampy places, and runs generally to the length of feven or eight feet, in an oblique direction from the root. When the plant is young, the more tender leaves are befet with down; but this falls off as they grow more hardy, and in time, they appear quite fmooth: they are always fingle in this plant.

BRYA I. Arborefcens, erecta, Jpinofa; foliolis confertis, foribus geminatis. Tab. f. 2.
Afpalathus arborcus, feut peudo-ebenus, \&xc. Slo. Cat. 140. \& H. t. 175. Sideroxylum alterum. L. H. C. © Jpinofum. Sp. Pl。

> Famaica Ebony.

Periantium Monopbyllum, campanulatum, profundè quinquedentatum.
Corolla Leguminofa: vexillum cordatum, reflexum; alæ oblonge, longitudine fere vexilli, unguibus tenuibus parieti calici adnate: carina oblonga; petalis, ad apicem © bafim, Sejunctis.
Stamina. Filamenta novem vel decem, diadelpbia, regularia.
Piftillum. Germen oblongum, compreffum, ad alterum marginenn rectum, ad alterum, in duos lobos profundè crenatum; ftylus fubulatus, faminibus longior; ftigma acutum.
Pericarpium. Siliqua latiufcula compreffa bivalvis, in duos lobos monojpermes fibbrotundos ad alterum marginem profundè crenata.
This fhrubby tree is common in all the lower hills and Savannas of Famaica; and grows generally to the height of fourteen or fifteen feet: but the ftalk feldom exceeds three or four inches in diameter. It is a fine timber-wood, has a fmooth even grain, and takes a fine polihn; but the fmall dimenfions of its trunk render it fit only for few purpofes. The flender branches of this chrub, are very tough and flexile: they are, for this reafon, frequently ufed for riding-fwitches; and genesally kept at all the wharfs about Kingfon, to fcourge the refractory laves.

LOTUS? 1. Erectus; foliis lanceolatis, pinnato-ternatis, ad apices denticula. tis; floribus denfe Jpicatis, terminalibus.

## Surinam Grafs.

This plant was lately introduced to Gamaica, from fome of the Dutch fettlements, and cultivated in the mountains back of Bull-bay, where it thrives well. I have not feen it in feed; but the characters of the flower agree very well with thofe of the Lotus, as they are laid down by Linneus.

HEDYSARUM 1. Triphyllum minus, tenue E' ramofum; foliis ovatis glabris, quandoque maculatis; filiquis compreffis, variè contortis.
The flender reclining French Honey-fuckle.
HEDYSARUM 2. Triphyllum minus, foliolis obtufis, fliquis rectis fubcomprefis articulatis.
The fmalleft herbaceous French Honey-fuckle, with fraight pods.
Both thefe fpecies are very fmall, and frequent among the grafs, in all the $S a$ vannas about Kingfon and Spanifh Town: the latter feldom rifes above eight or nine inches; but the other grows fometimes to the height of two feet, or better; and is generally found ftretching among the lower grafs, unlefs fupported by fome neighbouring plant or hrub.

HEDYSARUM 3. Gracillimum repens, caule birto trigono, foliis pinnato. ternatis fetulâ terminatis.
The weakly French Honey-fuckle, with a triangular ftem.
I found this little plant in one of the Pinguin fences, near Old-barbour; where it generally fhoots to the height of three feet, or better. It is a weakly plant, and requires a fupport. Its rough and flender fem diftinguimes it very fufficiently from all the other fpecies.

HEDYSARUM 4. Minimum tripbyllum, foliolis linearibus.
The fmalleft French Honey-fuckle, with very narrow leaves.

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I found this uncommon little plant on Cofly's hill: it never tifes above feven or eight inches in height.

> HEDYSARUM 5. Trippyllum majus repens, foliis venofis ovatis, fpicis terminalibus \& alaribus.
> Hedy farum trifoliatum Jpicatum, foliis oblongis glabris. Thez. Zey. t. 53 .
> The larger creeping French Honey-fuckle.
> HEDYSARUM 6. Triphyllum majus repens; fcapis axillaribus, affurgentibus, inferne nudis, fuperne Jpicatis.

## The larger creeping French Honey-fuckle, with naked flower-ftems.

Both thefe creeping plants are very like each other, and generally obferved to run many feet from the main roots: but they commonly caft a few radical fibres from all the joints that touch the ground, which greatly forwards their luxuriant growth. The leaves are marked with fome prominent veins on the under-fide, and feldom under an inch and a half in length. Both the fpecies are pretty common in the more thady hills of Jamaica.

## HEDYSARUM 7. Tripbyllum, maximun, fiandens; caule trigono, birtis uncinatis munito; Jpicis amplis terminalibus. <br> The large climbing French Honey-fuckle.

This plant is pretty frequent in Gamaica, and a native of the mountains: it is a climber, and raifes itfelf generally to the top of the talleft trees in the wood. The ftem is triangular, and every where befet with fmall hooked briftles, or rough hairs. The leaves are oval, and much like thofe of the Kidney-bean tribe; and all the branches terminate in fo many large and beautiful flower-fipikes. The plant is moft common about Hope-river.

## HEDYSARUM 8. Caulefiens erectum tripbyllum, foribus minimis, fpicis laxis

 terminalibus.Hedyfarum triphyllum erectum, \&c, Slo. Cat. 73. \& H. t. 116.
The larger erect French Honey-fuckle.
This plant is pretty frequent in the more remote hills, and inland parts of the illand: it grows erect, and rifes generally to the height of two feet and a half, or better. The leaves are moderately large; and the Jtipula, that fhoot about their infertions, roundifh and broad.

## HEDYSARUM 9. Triphyllum, birfutum, minus, repens; racemis friEtis birfutis.

The Hare's-foot French Honey-fuckle。
I found this rare and curious fpecies of the Hedyarum, a little beyond Guy's bill, in the road between Sixteen-mile-welk, and St. Mary's. It grows in tufts, and feldom rifes above fixteen or feventeen inches from the root.

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HEDYSARUM 10. Herbaceum, procumbens; folits geminatis; spicis folio- latis, terminalibus.
Hedyfarum foliis binatis petiolatis, floralibus fefflibus. L. Sp. PI.
Hedyfarum bifolium, foliolis ovatis, faliquis alperis. Thez. Zey. t. \(5^{\circ}\)
Onobrichis maderafpatana dippyllos, \&cc. Pk. Phy. t. 102. f. I.
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## The fmaller French Honey-fuckle, with coupled leaves.

This plant is very common in all the Savannas about Old-barbour, and many other parts of the ifland: it feldom rifes abuve fixteen or feventen inches inlustht;
 numerous yellow flowers, on foliated fpikes, at the extremities of the bratichor.

## HEDYSARUM 1 r . Pentapbylum minus, reclinatum.

## The fmaller pentaphyllous French Honey-fuckle.

I have met with this curions fpecies near the barracks, in the road thro' the mountains of $W_{c} /$ moreland: it is a weakly reclining plant, and feldom grows above fixteen or eighteen inches in length. It is generally found in beds.
 Indigofera leguminibus arcuatis incanis, raconis filio brevioribus. L. Sp. PI. Indigofera L. H. C. © anil Jive Indigo Indica, Morif. ©8 Caachira. Piio 19\%. Colutea Indica bumilis ex qua Indigo, folio viridi". Muf. \& Ther. © z y. Colutex affinis fruticofa foribus Jpicatis, \&c. Slo. Cat. 141. \& H. t. 179. The Indigo Plant,
This plant is not to bardy, nor does it give fo gnod a pulp as thic following fpecies: but it yields a great deal more of the dye than cither of them ; and is, for that reafon, generally preferr'd, though fubject to a great many more mifchances. The plant feldom rifes above tivo feet and a half, in height, the feems to divide, rather than to branch in its growth.


## The Guatimala Indigo Plant.

This plant is much hardier than the foregoing, and affords a finer pulp: but it does not yield fo great a quantity of it; and is only cultivated where the feafons are not fo certain, or in mixt fields. It grows commonly to the height of three or four feet, and throws out a good many fub-erect branches as it rifes.

> INDIGOFERA 3. Afurgens, fubvillofa Eo fubcinerea; ramulis craflioribus; Fliquis arcuatis, brevioribus, reflexo-patentibus.

## The wild Indigo.

This laft fpecies is very common in Famaica, and grows wild in all the Savannas, where, doubtlefs, it had been cultivated in former times: for there, we often meet with fome of thofe Indigo-works, that were then built; which remain very perfect to this day. The plant is harder than any of the other forts, and grows very luxuriantly even in the dryeft Savanna lands; but it does not yield fo much pulp as either of them: the dye, however, that is extracted from it, is generally the beft; of a fine copperih caft, and a clofe grain.

All the fpecies feem to thrive beft in a free rich foil, and a warm fituation; but, to anfwer the labourers toil to his fatisfaction, they fhould be cultivated where they may be pretty frequently refrefhed with moifture. All the different forts are now propagated in every part of America, where Indigo is made; and generally cultivated and manufactured in the following manner, vis.

Having firft chofen a proper piece of ground, and cleared fuch a part of it as you purpofe for the immediate culture of this vegetable; you may begin to plant in any feafon of the year: but the land mult be firft howed into little trenches, not above two inches, or two inches and a half, in depth; nor more
than fourteen or fifteen inches afunder: the feeds are ftrewed pretty thick in the bottom of thefe, and immediately covered from the adjoining banks, where the mould of the trenches was laid. But, as the plants fhout, the field fhould be frequently weeded; and kept conftantly clean, until they rife and fpread fuficiently to cover the ground.

Tho' this be the moft regular method of raifing thefe plants, thofe that cultivate great quantities of them, are feldom fo formal in the difpofition of their felds; and only ftrew the feeds pretty thick, in little fhallow pits, howed up irregularly; but generally difpofed within four, five, or fix inches of one another; covering them again from the banks, as we obferved in the other method. The plants, raifed in this manner, are obferved to anfwer as swell, or rather better than the others; but they require more care and attention in the weeding: the difances mutt be, however, varied, according to the fort you cultivated; thefe being the moft commonly ufed for the firft fpecies. The plants grow to full perfection in two or three months; and are generally obferved to anfwer beft, when cut in full bloffom.

Your feeds being thus fowed, your next care muft te to fee that the works be ready, and in good order; well cemented, terraffed, and feafoned. Thefe confift of three or five fquare cilterns, or vatts, made gradually fmaller: and fo fituated on the fide of fome rifing ground, as to have the plain at the top of the fecond and third upon a line with the bottom of the firft, or a little lower; and the plain at the top of the fourth and fifth, upon a line with, or lower than, the bottom of the fecond and third. The firt, which is the largeft and called the fteeper, is generally made about eight or ten feet fquare, by four deep; and opens into the fecond, or fecond and third, by one or two round holes, made clofe to the bottom; fo as to difcharge all the tincture readily: thefe generally run through a $\log$ of fome hard timber, placed for that purpofe, in the wall; which is fometimes bored with two or three holes, placed one over the other, or triangularly; to difcharge the liquor with the greater speed. The fecond, or fecond and third vatts, called the beaters, are made of different dimenfions; according to the method intended to be ufed in beating or working of the tincture: for if you have but one ciftern, and intend to work up the liquor with hand-buckets; it fhould be eight or ten feet fquare, and fix, or fix and a half deep: but if you have two cifterns, and intend to beat your tincture with an engine; they hould be fo deep as to hold all the liquor a good way below the main, or horizontal axis, into which the buckets are fixed; and the walls, in thofe cifterns, fhould be nearly as high over the rollers, as the ciftern is deep below them ; to keep the tincture from being wafted. After the liquor is well beat in thefe cifterns, it is left to fettle; and when the pulp is depofited, the clear incumbent fluid is drawn off by a convenient vent, placed fome inches above the botfom of each ciftern; and the remaining magma difcharged into the fourth and fifth cifterns, by convenient outlets, placed clofe to the bottom; like thofe in the firft. Thefe laft cifterns are but fmall ; they are, however, generally made fquare, and proportioned to the quantity of pulp fuch works commonly produce at a time.

The beft engine 1 have feen for beating of Indigo, was built in the following form, wiz. In the intermediate fpace between the two beaters or main cifterns, and in the middle of a line drawn through the center of both, you raife a main column; which is fixt fo as to move with a point, or pivot, lodged upon a groundfil, at the bottom; and fecured with a convenient frame at the top; where it alio moves by a pivor, in a beam, or timber that runs from the upper part of the wall of one of the beaters, to the oppofite wall of the other. This column is fupplied, below the center, with a pair of arms, by which it is turned round; and, over this, it is allo furnifhed with a wheel, well fupplied with coggs, fixed to as to rife in a perpendicular direction to the plane of the wheel: thefe, as the main column turns round, work either or both the horizontal rollers, into which the buckets are fixed; and which are fo contrived, at the ends adjoining to the main column, as to be wedged higher or lower, at pleafure; fo that one, or both, may work as need requires. Thefe

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rollers run horizontally thro the middle of the beaters, or main cifterns; and, bé= ing lodged upon pivots in the further walls, pafs thro two holes in the nearer, and move again by pins, in a frame dropped (from the upper beam, or timber, that lies between the walls) parallel to the main column; being each fupplied with a fett of coggs, to work in thofe of the main wheel: and, at proper diftances, within the beaters, they are alfo furnithed with three or four crofs arms, to the ends of which are fixed twice fo many pyramidal and truncated veffels, open at both ends; to run thro' and agitate the liquor the better. Each of thefe is of a moderate fize; and, if bottomed, would hold between two and three quarts.

The whole frame is moved with great ease and celerity, by one horfe; for whofe courfe, fufficient room is always left between the beaters, in the building of the works; which occafions them to project beyond the angles of the fteeper. With this machine you may beat more liquor, in half or three quarters of an hour, than fix negroes can do in fix: fo that it fully anfwers the expence and labour; and frequently brings a weakly and imperfect tincture, to grain, which could be hardly done without infinite labour, otherways. Your works now ready and fit for ufe, you begin to manufacture your Indigo in the following manner, viz.

The plants are cut with rape-hooks, a few inches above the root: they are then tied in loads; carried to the works; and laid by ftrata in the fleeper. When this is pretty full, the weed is overlaid with boards, and thefe fupported by props, from the beams that overlay the ciftern: thefe being well fettled, you put in as much water as will cover the weed, and leave it to digelt, and ferment, until the greateft part of the pulp is extracted; without letting the tender tops of the weed run to putrefaction, which would fpoil the whole. On this critical juncture chiefly depends both the quantity and quality of your Indigo ;and in the management of this point alone, the judgment of the planter chiefly coniaits: he mut be therefore very cautious and watchful to know it perfectly; for if he draws'off the water: but two hours too foon, he lofes the greateft part of the pulp; and if the fermentation runs but two hours too long, the whole is fpoiled. To avoid both inconveniences, you muft, when the fermentation rifes, frequently draw out a hanifful of the weed; and when you find the tops grow very tender, and pale; and obferve the ftronger leaves to change their colour to a lefs lively pale; you may be fure you are then at the proper point, and ought to draw off the liquor without delay. But you foon learn to know this critical juncture, by the height of the fermentation, and grain of the tincture; of which you may frequently beat a little in a filver cup, or a foop-plate, for that purpofe; tho' the other is, by far, the beft and fureft way, until a perfon is well experienced in the courfe of the operation.

The pulp being thus extracted, the vents are opened, and the tincture difcharged by the proper taps, into the beaters; where it is agitated and worked up by two or three negroes, each with a bucket fixed to the end of a pole, (or by a proper engine,) who continue this labour, until the dye begins to granulate, or float in little fioculx in the water; which feparation is greatly forwarded by a gradual addition of fome clear lime water. But a perfon muft cautioully diftinguifh the different ftages of this part of the operation alfo; and carefully examine the appearance and colour of the floculx, as the work advances: for the grain paffes gradually from a greenif to a fine blue, which is the proper colour of the floculx, when the liquor is fufficiently worked; too fmall a degree of agitation leaving the grain green and coarfe, while too vigorous an action brings it to be almoft black. But the different ftages may be eafily diftinguifhed on examining a fmall quantity of the liquor in a filver cup, from time to time, as the procefs advances; and a little experience will foon learn you to know them as well by a fingle drop upon your nail; fo that you may ftop at any degree of height, and have your Indigo of a deep copperith blue, or of a paler colour, as you chufe: and when the liquor, in which the floculx fwim, is quite clear, you may be fatisfied there is lime-water enough; but this muft be very clean, for otherways your Indigo will be very much fpeckled; and not in too great a quantity, which would make it too hard, and of a greyifh caft.
O F J A M A I C A.

The liquor being now well beat, and the pulp granulated; it is left undifturbed until the flocule fettle at the bottom: then the incumbent water is difcharged by a tap, fixed for that purpofe, a few inches above the floar of the ciftern; and the magma, or mud, let out by a lower vent into its proper receptacles. This is again, by fome, put into a cauldron, and heated over a gentle fire, but not fo far as to boil; and then emptied into little ozenbrick bags to drain : by others it is not heated, but immediately put into the like bags to drain; and when fufficiently cured that way, it is, by all, put into little fquare boxes, whofe fides muft not be above four inches deep; that it may dry the fooner, and without crumbling, which it is otherways apt to do.

Good Indigo thould be of a fine copperifh blue colour, deep, and hining, with a fmooth grain; it Thould break eafily, fwim in water, and burn very freely, leaving fome fine white cinders behind.

The faults in Indigo generally arife, I. From too long a putrefaction; and then it is of a dirty caft, and looks like black mould, or mud. 2. From too little beating; and then it is of a coarfe grain and green colour. 3. From too much beating, which always gives it a black colour. 4. From over-heating, which makes the grain very coarfe; but the colour is feldom vitiated by this. 5. From a mixture of fome particles of the lime, or too great a quantity of the water; which renders it grey and hard.

The quantity of the pulp falls fometimes below expectation, 1. For want of proper feafons; whereby the growth of the plants is flunted. 2. For want of a fufficient degree of fermentation; for then the ftronger leaves do ftill retain a confiderable part of the dye. 3. For want of a due granulation; which oftens happens, where lime-water is not ufed: the menftruum, in fuch cafes, never fettles well, and depofites but an inconfiderable part of the fubftance.

This valuable commodity is the only ingredient known to dye a fine blue: but the culture of the plant has been wholly neglected among the Englift, for many years; though no part of the world affords a better foil, or more commodious fituations for that purpofe, than Gamaica. The people, however, now begin to plant it, both there and in South Carolina; and it is not doubted but the fuccefs will anfwer their expectations. It is principally ufed in dyes and paintings.
N. B. Seventeen negroes are fufficient to manage twenty acres of Indigo, throughout the year; and do other work, at times. And one acre of rich land, well planted, will, with good feafons and proper management, yield five hundred pounds of Indigo in twelve months: for the plant ratoons, and gives four or five crops a year; but muft be replanted afterwards. One negroe's load of good plants, will produce one pound of good Indigo.

## C $\quad$ L $\quad$ A $\quad$ S $\quad$ S XVIII.

## Of the Polyadelphia; or Vegetables that have their Filaments joined into three or more bundles at the bafe.

## $\mathrm{S} \quad \mathrm{E} \quad \mathrm{C} \quad$ T. $\quad$ I.

 Of fuch as bave but five Filaments in every Flower.
## T HEOBROMA 1. Foliis oblongo-cordatis, ferratis, ab altero latere majori- <br> bus; fructu minori fcabro.

Theobroma foliis ferratis. L. Sp. Pl. \& H. C.
Guazuma. Plum. t. 18.
Alni fructu mori folia arbor, EBc. Slo. Cat. 135 .

## Baftard Cedar.

This tree is a native of Gamaica; and peculiar to the low lands, where it often forms a very agreeable fhade for the cattle: and frequently fupplies them with food in dry weather, when all the herbage of the fields is burned up, or exhaufted; moft forts being obferved to feed very greedily both upon the fruit and foliage of the tree. The feeds are very mucilaginous, but, otherways, agreeable to the palate. The wood is light, and fo eafily wrought, that it is generally ufed by our coach and chaife makers in all the fide-pieces. The flowers grow in clufters at the alx of the leaves.

> THEOBROMA 2. Fructu ovato-acuminato, fubverrucofo, decem Julcis longitudinalibus fubarato.

Cachaos. Mart. ${ }^{369}$.
The Chocolate Tree, with long pods.
THEOBROMA 3. Frultu fubrotundo, fubverrucofo, decems fulcis fubaraio.
Theobroma foliis integerrimis. L. Sp. Pl. \& H. C.
Cacao. Ger. Ema. E̊c. Slo. Cat. 134. \& H. t. 160.
Cacao. Catefb. App. t. 6. ©̌ Chacolata. Bontii, pag. 198.
The Chocolate Tree, with round pods.
Both fpecies of the Cacao, or Chocolate tree, are pretty frequent in Famaica; and often found wild in the woods, where doubtlefs they had been cultivated in the time of the Spaniards: but they are feldom planted there in regular walks, as they are on the main; where hurricanes are neither fo frequent, nor fo deftructive. The trees are very delicate, and rarely furvive when once they are loofened in the ground (a); which is generally the cafe, when they are not well fhaded, in hurricane times: for the ground is then quite foft and yielding for the fpace of many feet under the furface; and the force of the wind, often fuch, as to break or bend the moft robuft trees. The Spaniards, to prevent fuch inconveniences, ufed to intermix many of the Coral Bean trees (b) (from whence they have been fince, gene-
(a) The root cankers generally on thofe occafions, and decays moft commonly afterwards: but I query, whether many of them would not recover, had they been pulled up, and pruned both at top and botrom, when they begin to weather; and then tranfplanted?
(b) The Erythrina.
rully called Mader di Cacao) in their walks; which helped greatly to break the force of the wind, and thereby generally preferved their Cacao trees. I have, however, feen numbers (c) of them thrive well, without any fhelter of this kind; and bear the force of many ftorms without damage: but, probably, they were protected while young, and yet too tender to bear any extraordinary hocks; for I generally obferved them to be planted in a good deep mould, and a warm, well covered fituation.

Thefe trees grow naturally to a moderate fize ; and feldom exceed fix or feven inches in diameter, or rife above fifteen or fixteen feet in height. They are very beautiful, and, in general, extremely engaging to the fight, when charged with fruit; which grows from all parts of the trunk, and larger branches, indifcriminately. When the feeds are loofe, and rattle in the pods, they are picked off, opened, and the kernels picked out and expofed daily to the fun, until they are thoroughly cured, and fit for the ftore, or market.

Thefe feeds are remarkably nourihing, and agreeable to moft people; which occafions them to be now commonly kept in moft houfes in America, as a neceflary part of the provifions of the family: they are generally ground or pounded very fine, at leifure hours; and made into pafte, to be the more in readinefs upon occafion. It is naturally pretty much charged with oil; but mixes very well with either milk or water, the ufual vehicles with which it is prepared for immediate ufe. It is much efteemed in all the fouthern colonies of America; and well known to make up the principal part of the nourihment of moft of the old people in thofe parts, as well as of a great number of $\mathcal{F}$ erws.

The plant is propagated by the feed; but requires a great deal of care to raife it with fuccefs. It is generally planted and cultivated in the following manner, viz. You take a full grown pod, that has lain by fome days; and cut off the top at the pointed extremity, fo that the feeds may be fully expofed to view: you then bury it two thirds, or deeper, in mould, in fome moift and fhady place. In a few days the feeds begin to germinate; and then they ought to be taken out, one by one, and tranfplanted in proper beds: but the mould, to which they are transferred, fhould be rich, well divided, and free; moilt, properly thaded, and difpofed at proper diftances; fo as to leave convenient room for the roots and branches of the trees to fpread in. In each of thefe beds you plant one or two feeds, with the root part downwards, fcarcely covering them at the top; you then moiften the mould gently about them, and cover the bed with fome large leaves, to protect the young budding plants from the more active rays of the fun; which may be fill guarded by fome little ambient bulwark, to ward off fuch accidents as may happen from heavy rains, or blowing windy weather. They feldom require to be watered after the firft day; but, if this hrould become neceffary, it mult be done with great tendernefs; and is beft managed, by laying a piece of wet cloth, of fome watered weeds, gently round the young plant; which, fhould be left there until the earth foaks a fufficient quantity of the moifture. But great care mult be taken not to break off the feed-leaves of the plant, on thofe occafions; for thefe are only the tender divided lobes of the kernel, and the lofs of them would wholly prevent its further growth.

The plantain-walks afford the moft natural and agreeable fhade for thofe plants, while young; but, as they rife, they thould be fupplied with a more fubftantial guard, to protect them from the inclemencies of the weather; which ought to be continued until they grow to full perfection, and muft be removed with caution even then.
(c) There is a fmall open walk at Dr . Tully's, in Mountferat, which has ftood for many years.

## S E C T. III.

Of Juch as bave from eight to twenty Filaments in every Flower.

C
ITRUS 1. Fructu Jpparicoovato, punctato, levi, minori, acido.
Malus Aurantia fructu limonis pufillo, \&cc. Slo. Cat, 211. \& H.
The Lime Tree.
This bufhy fhrub is very common in Famaica, where it is often raifed for the fake of its fruit; and not unfrequently planted for fences. When it grows luxuriantly, it is feldom under twelve or fourteen feet in height, and fpreads greatly about the top; but it is often ftunted, and of a fmaller ftature. The bark and fibres of the root, are excellent ftrengthening aperitives; and found frequently effectual in obftinate febrile cafes, as well as in weakneffes and obftructions of the vifcera. The leaves are generally ufed in difcutient baths; and the juice of the fruit, as a principal ingredient in punch : the moft appropriated and agreeable liquor that can be ufed in any country, where the juices are overheated and in a ferment; as they generally are in moft people, in thofe colonies.

CITRUS 2. Fructu Jpharico-ovato, punctato, infipido; fuperficie incequali.

## The fweet Lime or Lemon Tree.

This tree grows much like the foregoing; but it rifes generally more upright, and bears a fruit which in fize, as well as form, feems to hold a mean between the Lime and the Lemon. The juice is very infipid; but the bark and fibres of the root have a great deal of that bitter fo peculiar to the Lime tree. I have feen fome of thefe at Dr. Brady's, in St. Ann's.

## CITRUS 3. Fructu ovato acido, fuperficie inaquali.

Citrus petiolis linearibus. L. Sp. Pl.
Limo arbor, ejufque fructus limo, Cord, \&c. Slo. Cat.209.

## The Lemon Tree.

## CITRUS 4. Fructu majori acido ovato, fuperficie incquali.

## The St. Helena Lemon Tree.

This tree was but lately introduced to $\mathcal{F}$ amaica: but it is now cultivated by moft people, on account of its large fruit; one of which frequently yields above half a pint of juice.

CITRUS 5. Fructu jpharico, punctato, croceo, acido; cortice interiori fpongiofo; petiolis alatis.
Malus Aurantia vulgaris major, \&cc. Slo. Cat. 2 10. \& H.

## The four or Seville Orange Tree.

Thefe two laft fpecies grow more bulky and upright than any of the foregoing; and the juice of their fruits, which is far more mild than that of lime, is generally moft efteemed among the natives and old ftandards, whofe juices begin to chill: they are, however, differently received by different people, each praiing moft, what agrees beft with his own palate. The juice of the laft fort is the leaft ufed in ${ }^{\mathrm{f}} \mathrm{a}_{\mathrm{-}}$ maica, tho' more mild than any of the reft; but the rind is much efteemed in bitters, and ftomachic wines.

## O F J A M A I C A.

# CITRUS 6. Fructu oblongo majori, cortice crafo carnofo, Juperficie inaquali veficulato. <br> Citrus arbor \& malus Citrea Cord. \&c. Slo. Cat. 208. \& H. <br> The Citron Tree. 

The rind of the fruit of this tree is very thick and fucculent, and makes a fine fweetmeat. It is fometimes fteeped in fpirits; and to them, when diftilled, it gives both an agreeable flavour, and its name.

CITRUS 7. FruEtu fpbarico, punctato, croceo, dulci; petiolis alatis.
Citrus petiolis alatis. L. Sp. PI.
Malus Aurantia Sinenfis, \&ec. Sloc Cat. 21 I.
Aurantium, qua malus Aurantia regia dulcis, \&c. Thez. Zey.

## The Cbina Orange Tree.

This tree is very common in moft parts of $\mathcal{F}$ amaica; and the fruit much efteemed by all forts of people. It is always in flower, or bearing fruit, in thofe parts of the world.

CITRUS 8. Fructu fpherico-obovato, maximo; cortice equali, veficulato, pallidè luteo.
Malus Aurantia fructu rotundo maximo, \&cc. Slo. Cat. \& H. t. 12.
Aurantium, que malus Aurantia Indica, fructu omnium maximo. T. Zey.
The Shaddock Tree.
CITRUS 9. Fructu ppherico-ovato minori, cortice cquali veficulato pallide luteo, petiolis alatis.
The Forbidden Fruit, or fmaller Shaddock Tree.
Thefe two laft fpecies grow to a more confiderable fize than any of the others, and are now cultivated in moft parts of the country; particularly on the fouth fide, where they are obferved to thrive beft. The fruit of both fpecies is agreeable to moft palates, and of a pleafant grateful flavour; but the laft excels in fweetnefs, while the other partakes a little of the bitter, which recommends it to moft people.

The feeds of all the fpecies have a bitterih, but pleafant tafte; and doubtlefs would make very good emulfions, which may be ufed with great fuccefs, when the ftomach is weak or languid, and cannot bear the ftronger bitters: nor is it improbable but they may prove an excellent mixture with milk, in confumptive cafes. They are very fuccefffully adminiftered in dry belly-aches and convulfive fpafms; and one of the moft effectual medicines that can be ufed to reftore weakly limbs to their former vigour: but it fhould be continued for a confiderable time; aided by regularity, and other affiftants; and ufed before the parts are emaciated.
$O b f$. I do not apprehend that any of thofe, except the fecond, fifth, and ninth, can be confidered as variations; for they generally retain the fame appearances and fpecific characters, even in the wild flate.

## S E C T. III.

Of fucth as bave a great number of Filaments in cuery Flower.

A
SCYRUM 1. Fruticofum minus, fupra-decompofitum; ramulis gracilibus marginatis; foliis linearibus, Jeflibus, bafi biglandulis.

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4 \mathrm{~L} \quad \text { Afcyrum }
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Pericarpium. Capfilla ovato-acuminato unilocularis bivalvis, Seminibus plurimis utrique lateri affixis referta.
This elegant little frrubby plant is common in the cooler mountains of Nero Liguanea. It is very full of leaves and branches, and feldom rifes above three feet in height : but the filaments of the flower do not feem to be joined at the bottom.

## C L A S S XIX.

Of the Syngenefia; or Vegetables that have the anthere, or tops of the filaments connected together, and formed into a cylindric tube round the upper part of the fyll ; the filaments themfelves being feparate.

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Of fuch as bave all the Flowers bermaphrodite and fertile.

## The common Garden Lettice.

This plant was formerly introduced to Jamaica; and is fince cultivated, with good fuccefs, in all the cooler mountains of the ifland; where the air is generally freh and damp, and the foil tich and well thaded.

> CICHORIUM I. Foliis radicalibus, fimbriatis, oblongis; caule affurgenti ramofo, pene nudo; ramulis floriferis.
> Cichorium caule fimplici, foliis integris crenatis. L. Sp. Pl. \& H. C.

## Succory.

This plant is alfo cultivated in Famaica, and thrives very well in all the cooler mountains; but the tafte being fomewhat bitter, it is hardly ever ufed. It is a wholefome fallet, and proves an agreeable green when boiled.
LEONTODON

1. Foliis radicalibus, oblongis, obovatis, fubtus lanugindfis incanis; fcapo Simplici nudo monoforo.

An, Leontodon callce inferne reflexo: L. Sp. Pl?<br>Dens Leonis, folio fubtus incano, fore purpureo, \&cc. Slo. Cat. 123. \& H. t. 1 50. f. 2.

The white-leafed erect Leontodon, with an undivided Italk.
This plant grows in moft of our fugar-colonies, and is generally found in moift mady places; but thrives beft in a cool gravelly foil. It is reckoned an excellent diuretic, and is ufed as fuch by many people, in thofe parts of the world.

SONCHUS I. Foliis ciliatis obtufis, warie $\mathcal{B}$ profunde finuatis. Sunchus pedunculis tomentofis, calycibus glabris. L. Sp. P!.

## Sow-thiftle.

This is a native in moft of the fugar-colonies; and grows wild in every fallow field. It is an excellent ingredient in all cooling, diuretic and aperitive apozems: but it is feldom ufed for that purpofe in America, tho' generally gathered for hogmeat in all the colonies.

> HIERACIUM 1. Erectum birfutum majus, foliis oblong is funuato-laceris, floribus fubtrietè comofis.
> Sonchus afper laciniatus, \&cc. Slo. Cat. 123.

## The large hairy Hawk-weed.

This plant is pretty common in the all lower mountains, and rifes generally to the height of three feet, or better. The leaves are long, and appear as if torn at the margin. The common flower-cups are moderately large, and difpofed pretty thick at the top of the plant, from whence its little branches chiefly rife; for it throws out but very few from the body of the ftem.

> HIERACIUM 2. Erectum minimum fublirylutum, foliis angufits, capitulis paucioribus.
> Hieracium minimum, longis stegris © angufis foliis, \&sc. Slo. Cat. 123 .
> The flender erect Hawk-weed, with narrow leaves.

This little plant is pretty frequent in all parts of Fansaica, but moft common in the road between Spanifh Town and Sixteen-mile-walk. It grows chiefly in cool fhady places, and feldom rifes more than feven or eight inches in height.

## LAPSANA I. Erecta; foliis majoribus, lunatis, dentatis; ramulis tenuioribus, Jubnudis, afurgentibus.

The branchy erect Nipple-wort, with very thin leaves.
This plant grows pretty frequent in the gravelly banks of moft of the rivulets in the mountains, and thoots often to the height of three feet, or better. It rifes generally by a flender ftalk, divided into a great number of delicate, fpreading, fubdivided branches, towards the top. The leaves are nearly of the figure of a beart, with a large open finus at the bafe; the middle of which projects a good way back, to throw out their flender lengthened foot-ftalks.

ELEPHANTOPUS a. Ereçus birfutus; foliis inforioribus avatis, utrinque productis, floralibus oblongis; capitulis alaribus.
Elephantopus foliis oblong is fabris. L. Sp, PI.

The fmaller erect Elephantopus, with the flowers difpofed at the ale of the upper leaves.
This plant is common in moft parts of 'famaica: it grows chiefly in open gravelly lands; and rifes generally to the height of fifteen or twenty inches, fometimes more. The common receptacles of the flowers rife fingly from the ale of the upper leaves, and feem difpofed in the form of a fpike; but we feldom find more than four bloffoms in each of them. The feeds are, each, crowned with four little brifles, or fetz.

## ELEPHANTOPUS. 2. Erectus; foliis oblongo-cvatis rugofis atque ferratis, floralibus cordiformibus ternatis; capitulis remotis terminalibus.

Elephantopus foliis integris ferratis. L. H. C.
Scabiofa Favana. Bontii.
Scabiofx afinis anomala filvatica, \&cc. Slo. Cat. 127. \& H. t. 156.
The upright Elephantopus, with large flower-heads.
This plant is not fo common as the foregoing, tho' frequent enough, in many places, on the north fide of the ifland. It rifes generally from half a foot, to three or four, in height; and is generally adorned with a great number of flowers, gathered into pretty large heads, at the extremities of the branches. The feeds are of an oblong form, and crowned, each, with five little briftles. The common foot-ftalks are very long, and terminate the branches; but, at the feparations of them, you may always obferve a fmaller head growing to the ftem, without any fupporter.

This plant is a good vulnerary; and much ufed in confumptive cafes, among the natives of $\mathcal{F a v a}$, in the Eaft-Indies. The leaves are frequently ufed, inftead of Carduus Benedictus, among the inhabitants of the French illands.

TRIXIS 1. Frutefcens, foliis nitidis ovatis dentatifque, floribus comofis. Tab. 33. fig. 1 .

The fhrubby Trixis.
Periantium Duplex: exterius quadripbyllum erectum majus, calycem communem involvens; interias e Squamis octo circiter, lanceolatis, erectis, fubfinuatis, in cylindrum agglutinatis, conflatum.
Corollulx Uniformes, aquales, bermapbrodita: propria monopetala tubulata, in tres lacinias profunde Jecta; exterior ligulata patens tridentata; interiores agglutinatio, exteriori oppafite, angufiores, revoluta.
Stamina. Filamenta quinque : antheræ in cylindrum adnatce.
Piftillum. Germen oblongum; fylus erectus bifidus; ftigmata tenuia. Semina Oblonga pappo capillari coronata: receptaculum nudum.
This little fhrub is very common in the Savannas about King/ton, and feldom rifes above four or five feet in height. The common receptacles are difpofed at the extremities of the branches; and the outward divifions of the flowers grow gradually fmaller, and curl more downwards as they approach the center; which gives the whole fomething of the appearance of a radiated flower, at the firf appearance.

STRUCHIUM 1. Herbaceum fubafurgens, foliis oblongo-ovatis utrinque productis, capitulis confititatis ad alas. Tab. 34. f.2.
An, Cadelari. H. M. p. 10. 155.
The herbaceous Strucbium, with oblong leaves.

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Periantium Commune campanulatum, imbricatum; Squamis inaqualibus,
angufir, acuminatis, erccto-patentibus; proprium tubulaangufir, acuminatis, ercdro-patentibus; proprium tubula
tum, breve, eredum, quadricrenatum, germini incidens.
Corollulas: Subaquales, monopetale, inf qudibuliformes, bermapbrodita; marginales trifide, centrales quadripartito.
Stamina. Filamenta brevilama e tubo corollo orta; anthere latiufiula, oblonge, adnata.
Pifillum. Germen oblongum, angulatim, calyce proprio coronatum; Aylus bifdus corolla longior; figmata oblonga revoluta.
Receptaculum Tumidum punciatum nudum.
I found this plant at the Ferry: it grows pretty luxuriantly by the river-fide, and rifes, generally, to the height of two feet and a half, or better. The leaves are difpofed in an alternate order, oblong, and entire; and the flower-bunches interfperfed with a few fmaller ones, that rife between the common cups, as they fand compacted together at the alx of the leaves.

> EUPATORIUM I. Erectum birfutum, folizs oblongis rugofis; floribus fpicatis, per ramos terminales declinantes uno verfí difpofitis
> Coniza fruticofa, flore palide purpureo, \&cc. Slo. Cat. 124.

## The erect Eupatorium, or Hemp-Agrimony.

This plant grows chiefly in the low lands, and rifes commonly to the height of three feet and a half, or better. The leaves are, difpofed in an alternate order, rough and oblong. The branches bend generally forwards, and bear their flowers in loofe fpikes, along their extremities; where they are difoofed in a gradual fucceffion on the upper fides only.

> EUPATORIUM 2. Odoratum birfutum; foliis covato-acuminatis, bafim verfus crenatis, oppofitis; floribus comofis.

Eupatoria Conizoides, folio molli, \&ec. Pk. to 177. f. 3. The Archangel.
This weakly fhrubby plant is very frequent in the lower hills of $\mathcal{F}$ amaica; and generally obferved to grow among the other bufhes, where it frequently cafts its long, flender, flexile, and oppofite branches to a moderate diftance. The flowers are fometimes impregnated with a fmell perfectly like that of the European Meadowfweet; but this is not obferved in every plant of the fame fpecies, nor conftant even in the fame bloffoms.

EUPATORIUM 3. Fruticofum, afurgens, incanum; foliis amplioribus, cor-dato-acuminatios, crenatis; floribus comgis.

## The fhrubby afh-coloured Eupatorium, with oppofite leaves and branches.

This fhrubby plant is common in moft of the mountains of Famaica; and rifes generally to the height of feven or eight feet. The leaves and branches are oppofite; and the flowers difpofed pretty thick at the extremities of the branches.

> CNICUS 1. Caule difufo, foliis dentata-finiatis. L. Sp. PI. \& H. C. Carduus Benedictus. Offc.

The Carduus, and Carduus Beneditus of the fhops.

## 314 THENATURAL HISTOR Y

This plant was introduced to Jamarca fome years ago; and has been fince cultivated, with great fuccefs, at Mr. Jones's, in the mountains of New Liguanea; where it feeds as well as in moft parts of Europe. It makes a fine ftomachic infufion; and may be ufed with fuccels, in all weakneffes of the vifcera, and over-abundant difcharges of bile.

## CYNARA I. Incana, foliis Jpino/is omnibus pinnatifdis, calycinis Squamis ovatis. L. Sp. Pl.

## The Cardoon, or Spanibb-Cbardon.

This plant was lately introduced to Jamaica by Mr. Wallen; and is now raifed in many of the gardens, both in the low lands and the mountains.

## CYNARA 2. Foliis fubfpinofis pinnatis indiviffque; calycinis Squamis ovatis. L. Sp. Pl.

## The Artichoke.

This plant, though a native of Europe, grows very luxuriantly in the cooler mountains of Liguanea, where it is now cultivated with fome fuccefs. It is propagated by flips, or fuckers, taken from the old roots; but, to make it bear a luxuriant top, great care fhould be taken to pull off moft of the younger fhoots early in the fpring; leaving only two of the ftraighteft and moft promifing of the under plants, to each, for a crop: thefe; however, thould be well and clofely moulded, and put as far afunder as they will conveniently bear ; obferving to crop off the tops of all the leaves that hang downwards. Mr. Miller (who is the author of this method of preparing them for a crop) fays, that in forming a new plantation of artichokes, the ground thould be well fupplied with decayed dung; and tells us that care fhould be taken to choofe fuch plants as may be found leaft woody, cleareft and foundeft, with fome fibres at their bottoms. He alfo advifes, to cut off the woody part that joins them to the ftalk, as well as the larger outfide leaves. The plants thus prepared, (if the weather be dry) fhould be placed upright in a tub of water, for three or four hours before they are planted; which, he obferves, refrefhes them greatly.

The plant thrives beft in a moift rich foil. The bottom of the leaves, as well as the receptacle of the feeds and flowers, is flefhy, and delicate eating.

> CARTHAMUS I. Foliis Sefitibus, denticulatis, oblongis, obtufis; caule afs furgenti, fummitatem verfus ramofo.
> Carthamus foliis ovatis integris aculeatis. L.H,C.
> Carthamus. Off.

## Baftard Saffron.

This plant was introduced to $\mathcal{F}$ amaica by the Spani/b Jews, who fill call it by the name of Saffron. It is cultivated in moft of the gardens about King/ion; and the florets are frequently ufed in broths and ragoo's by moft people there; efpecially the jewws.

DALEA I. Fruticofa; foliis oppofitis, oblongis, angufis, fubferratis, utrinque productis; racemis terminalibus. Tab.34. fig. I.

## The fhrubby Dalea.

Periantium Commune conicum, imbricatum angufum.
Corollulx, In fingulo periantio, tres vel quatior, tubulofe, bermapbrodite, requales.

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Semina Conico-cordata, pappo ramofo coronata. Receptaculum Minimum nudum.
This Shrub is frequent in the lower hills of Liguanea; and rifes frequently to the height of nine or ten feet, or better: it has a moderate thick lignous ftem; and throws out its branches in a pretty open pofition.

> SANTOLINA? 1. Afurgens major, fere fimplex; foliis amplioribus, varie \&o profunde finuatis; petiolis marginatis © auritis; floribus corymbofis.

The annual Santolina, with large lobed leaves.
Periantium Cyatbiforme; fquamis plurimis aqualibus crecto-patentibus.
Corollulæ Equales: propria monopetala, tubulata, quinquecrenata, folitaria, paleis oblongis membranaceis difincta.
Semina Solitaria, oblongoobcordata, fubcomprefa, binis alis aucta, छ binis denticulis coronata.
Receptaculum Paleaceum.
This luxuriant plant is common in moft parts of the illand, and rifes frequently to the height of feven or eight feet. It is an annual; but frequently throws up new branches from the ftalk of the laft year. The leaves grow very large, and divided into deep roundifh lobes.

SANTOLINA 2. Ereciza fubbirfuta; foliis ferratis, bafatis, vel fimplicitus Ev utrinque porrectis; foribus comolis.
The Halbert-weed.
Periantium Commune campanulatum, imbricatum: fquamæ plurimee, cocblerata, tranfucida, oblonga; interiores longiores.
Corollulæ Uniformes bermapbrodita; propria tubulata profunde quinquepartita, \&c.
Semina Solitaria, obverfè conica, pappo fetaceo coronata.
Receptaculum Paleaceum, paleis fquamis calycinis Similibus, Semina amplexantibus.
This plant rifes generally to the height of four or five feet. It is an excellent bitter, and much ufed in America; where a fpirituous infufion of the tops is generally kept at moft plantations, which is often adminiftered as an active warm ftomachic.

SANTOLINA? 3. Subbirfuta; foliis ovato-acuminatis, oppofitis; capitulis axillaribus, pedunculatis ternatis fingulari feffri affociatis.

## The larger downy Santolina.

This plant is found chiefly in the woods and inland parts of the ifland, and grows generally to the height of fix or feven feet, or better. It is furnifhed with large hairy leaves, of an oval form.

SANTOLINA? 4. Erecta; foliis linearibus oppofitis, quandoque ternatis; floribus remotis terminatricibus.
Coipatlis, Hern. 36.
The fmall erect Santolina, with narrow leaves.
Semina Nuda folitaria, obverfe cuneiformia, paleis, fquamis calycinis fimilibus, teefa.

## 316. THE NATURAL HISTORY

This plant grows in the lower mountains of Liguanea; and rifes generally to the height of two feet and a half, or better. The upper branches are naked and flender, and bear all the flowers at their extremities.

TANACETUM I. Herbaceum, erectum; foliis cordatis, crenatis, oppofitis, capitulis paucioribus, remotis, terminalibus.
Chryfanthemum fylvaticum repens, \&cc. Slo. Cat. 126. \& H. t. 155.
The fmall herbaceous Tanfey, with round crenated leaves.
Periantium Polyphyllum; foliolis oblongis angufis aqualibus.
Corolla Compoîta aquatis; propria tubulata bermapbrodita.
Semina Oblonga \& leniter falcata, ad apices latiora.
Receptaculum Nudum punctatum.
This little plant is found chiefly in the moft cool and fhady woods of the ifland; and generally rifes from feven to nine inches in height.

TANACETUM 2. Foliis pinnatis; pinnis pinnatifidè incijs; laciniisferratis. Tanacetum foliis bipinnatis incifis ferratis. L. H. C.
Tanacetum. Off.
Tanfey.
This plant is cultivated, and thrives well in many parts of afamaica; efpecially in the cooler mountains. It is an excellent bitter, and an active, warm, nervous medicine; which is much ufed to promote the lochia and menfes. The leaves and effential oil are kept in moft apothecary's fhops.

## CHRYSOCOMA 1. Eretla; foliis inferioribus angulis Serratis, Juperioribus lanceolatis. <br> The narrow-leafed Cbryfocoma.

This plant is very common in the low lands, and rifes generally to the height of three feet, or better. The leaves are very numerous on all parts of the plant : they are long and narrow, and of a dirty green colour.

> CHRYSOCOMA? 2. Arborea, ramofifima; ramulis teretibus, quadratofubmarginatis; foliolis paucioribus minimis /inearibus. Tab. 34. f. 4 .

## The Mountain Broom Tree.

This is a native of Gamaica; and there found only in the coldeft parts of the mountains. The flowers are compofite; the florets even, tubular, and hermaphrodite; the cup imbricated; the feeds crowned with a beard; and the receptacle naked. It refembles our European Broom, and is the only tree, of the fame appearance, I have obferved in that country. The leaves are very fmall, and but few on any part of the plant.

KLEINIA? 1. Scandens; foliis triangularibus, angulis acutis. Tab. 34. f. 3*
Clematis novum genus, Cucumerinis foliis, \&c. Pk. t. 162, 3 .
The climbing Kleinia, with triangular leaves.
Periantium Commune cylindraceum; fquamis poucis, quatuor quinque cel fex fcilicet, angultis erectis aqualibus.
Corollulx Hermapbroditre tubulata pauca.

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Semina Oblonga, angulata, friata, fetis tenuibus, © quafi barbatis coronata. Receptaculum Nudum.
This plant is frequent about St. Tbomas's in the Eaf, and Mangenecl: it is a climber, and ftretches a great way among the neighbouring buhhes. The leaves are of a triangular figure, with very harp corners.

KLEINIA? 2. Caule molli fucculento; foliis amplioribus ovatis atque denticulatis, utrinque porrectis; petiolis appendiculatis.
The foft fucculent Kleinia.
Periantium Commune fimplex, cylindraceum, connivens; efquamispaucioribus (fex fcilicet, feptem, vel octo) infernè craflioribus, conflatum.
Corolla Uniformis: propria bermapbrodita tubulata, ftylo longiori bifido inAructa.
Semina Conica, pappo fimplici coronata.
Receptaculum Nudum.
I found this plant in the rocky hills of Portland, near Port Antonio: it grows commonly about three feet in height.

AMELLUS 1. Ramofus, foliis ovatis dentatis, foribus remotis terminalibus, fulcris longis divaricatis.
Eupatoriophalacron, fcropbularice aquatice foliis oppofitis. Thez. Zey. pag. 95. t. 42.
An, Cerato-cephalus ballotes foliis, Achmella dictus, \&cc. Thez. Zey. 53: The long-fhanked Amellus.
Periantium Commune imbricatum, campanulato-patens; Squamis fere aqualibus.
Corolla Fiqualis; propria tubulata, infundibuliformis, ore quinquedentata. Semina Oblonga angulata jolitaria. Receptaculum Paleis numerofis infiructum.
This plant is very common about Bull-bay river, and in all the back hills of the parifh of Port-Royal. It rifes generally to the height of two or three feet; and carries its flowers at the extremities of its lengthened branches.

BIDENS 1. Hirfutus, foliis cordato-dentatis, petiolis brevibus, foribus ad fummitatem confertis.

The hairy Bidens.
This plant grows chiefly in the dryeft and moft open parts of the mountains: it is full of down, and of a dark green colour; but feldom rifes above two feet in height.

BIDENS 2. Suffruticofus, vimineus; foliis oblongo-ovatis, oppofitis; floribus como/is.

## The weakly fhrubby Bidens.

This plant is frequent in the hills above Bull-bay. It is a weakly branched thrub, and rifes generally to the height of five or fix feet, or better; but requires the fupport of the neighbouring bufhes to keep it upright.

## 318 THENATURAL: HISTORY

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Of fuch as bave all the central Flowers bermaphrodite and fruitful; and none but female fruitful flowers in the margin.
GNAPHALIUM 1. Erectum, Jpicatum, fimplex, villofum © incanum; foliis longis, angufis, Seffilibus E Semiamplexantibus. An, Gnaphalium caule fimplicifimo, floribus coloratis. L. Flo. Lap. 302. The narrow-leafed undivided Cud-weed.
This plant is a native of the coldeft mountains of Liguanea; and grows generally in the moft open places, but feldom rifes above fix or nine inches in height. The flowers are yellowifh, and difpofed pretty thick about the top of the flalk, which puts on the appearance of a fhorter fpike.

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\begin{aligned}
& \text { ARTEMISIA i. Foliis compofitis, multifidis; floribus fubglobofis, pendulis; } \\
& \text { receptaculo pappofo. L. H. C. } \\
& \text { Wormwood. } \\
& \text { This plant was firf introduced to Fomaica from Europe, and is fince cultivated in } \\
& \text { moft parts of the ifland; but thrives beft in the mountains, where it is often cbferved to } \\
& \text { grow as luxuriantly as in moft provinces of Europe. It yields an active lixivial falt, } \\
& \text { an oil, and a conferve, which are commonly kept in the hops; and is a principal } \\
& \text { ngredient in a compound water, to which it gives its name. It is a wholefome } \\
& \text { bitter, and much ufed as a ftomachic, in vinous and other infufions. }
\end{aligned}
$$

> CONYZA 1. Odorata minor erefla, purpurafens, corymbofa; foliis ovatis, villofis.
> Conyza major odorata, \&c. - Slo. Cat. 124. \& H. t. 152. f. I. The fweet-fcented Flea-bane.

The fmell of this plant is agreeable to moft people: it is frequent in all low marhy lands, and feldom rifes above fixteen or twenty inches in height. The ftalk is generally pretty fimple below the middle; but, as it rifes, it throws out a good many branches, which reach nearly to an equal height, and carry their flowers in a fhady fpreading form at the top. It is kept by fome people among their cloaths, and is faid to preferve them from moths, and other vermin.

> CONYZA 2. Angufifolia fubincana, caule alato, Spica multiplici; floribus inferioribus ternatis, mediis binatis, Juperioribus fingularibus,

The narrow-leafed Flea-bane, with an edged ftalk.
Obf. Semina Subbirfuta, pappo capillari coronata.
I found this plant on the fouth fide of Mount Diable: it is pretty hairy, and rifes generally to the height of two feet and a half, or better: The flower-branches are very long and flender, and difpofed in the form of fikes at the top.

CONYZA 3. Frutefcens affurgens, foliis ovatis denticulatis oppofitis.
The fhrubby Flea-bane, with denticulated oval leaves.
This plant grows pretty frequent in the woods above St. Ann's bay; and rifes generally to the height of fix or eight feet.

## O F J A M A I C A.

## CONYZA? 4. Foliis lanceolatis, amplexantibus, oppofitis; caule alato; foribus purpurafcentibus comofis.

The purple Flea-bane, with an edged ftalk.
This plant is a native of the low lands, and feldom rifes above two or three feet in height. The leaves are narrow, and without footftalks; the ftem edged in feveral places; and the flowers difpofed in a hady form at the top.

## VERBESINA 1. Foliis oblongo-ovatis, fubdentatis, recurrentibus; floribus remotis terminalibus. <br> Verbefina foliis alternis decurrentibus undulatis obtufis. L. Sp. PI. \& H. C. Chryfanthemum alatum, \&c. Slo. EF Chryfanthemum Americanum. Pk. t. 84. f. 3.

The larger tufted Verbefina, with edged ftalks.
This plant is pretty common on the north fide of the ifland, and remarkable for the edgings of its ftalk. The feeds are of an oval form, compreffed, and terminated, each, with a fingle fubulated tail.

VERBESINA 2. Foliis inferioribus fimplicibus oppofitis, fuperioribus pinnatoternatis.

## The larger upright Verbefina.

This plant is a native of the coldeft mountains of Liguanea, and rifes generally to the height of three or four feet. The leaves are of an oval form, and intire.

VERBESINA 3. Erecta birfuta, foliis fubfeflilibus ovatis oppofitis, floribus, confertis alaribus.
The erect Verbefra, with fimple oppofite leaves.
This plant is common every where in the low lands: it feldom branches, or divides in its growth; and rifes generally from eighteen to twenty-four inches in height.

TAGETES 1. Caule fubdivifo diffufo, foliis Serratis, bipinnatis vel compofitis. Tagites caule fubdivifó diffufo. L. H. C. \& Sp. Pl.

## The French Marygold.

This flowering plant is cultivated in moft gardens in Famaica; and thrives well in all parts of the country.

## TAGETES? 2. Minor, caule fubdivifo diffufo, foliis linearibus integris. <br> Hieracium fruticofum, angufifimis gramineis foliis. Slo. Cat. 123. \& H. <br> t. 149.

## The fmaller diffure French Marygold.

TAGETES? 3. Caule erecto, ad fummitatem ramofo; foliis oblongo-cordatis, leniter crenatis.

## The larger erect French Marygold.

In both thefe laft fpecies, the common cups are made up of five, fix, or feven narrow equal fcales, joined together into a cylindric tube; which contains fo many female ligulated florets, difpofed, very orderly, round the margin; and a few hermaphrodites in the center. The firft is fpreading and flender; it grows much about the Savannas, and feldom rifes above eighteen or twenty inches in height: the other is more
upright, and rifes frequently above three feet in height. Both forts grow inmofs of the fugar-colonies.

> SOLIDAGO? I. Villofo, incana; foliis aratis, oppofitis; caule aflurgenti, fubnudo, tripartito; floribus fubumbellatis. Tab. 33. ..2. $A n$, Scabiofa. Thez. Zey?
> Scabiofx affinis Anomala Jylvatica, \&ec. Slo. Cat. 127. \& H. t. 156.
> The downy Wound-worth, with large oval leaves.
> Involucrum Univerfale quadriphyllum. Calix communis inbricatus; Squanis anguft is lanceolatis, interioribus longioribus.
> Corollulæ Equales: hermaphroditx pauciores, tubulata, in dijco: feminex plures ligulate anguifa bifide, in radio.
> Stamina, Hermapbroditis quinque: anthera in tubum coalitre. "
> Piftillum, Omnibus, germen obverfè conicum; fylus bifilus; figmata gemina, longa, revoluta.
> Semina Omnibus obverje conica, pappo fmplici coronata.
> Receptaculum Setaceum.
> This beautiful and uncommon plant is a native of the cooler woods and mountains of famaica. It fhould be a fine vulnerary; for the tafte is acerb; and leaves a fweetnefs upon the palate, that is not common in the plants of this clafs. The leaves are pretty large, and grow chiefly about the bottom of the ftalk; the upper part being commonly naked, and generally divided into three branches; each of which is again fubdivided into many fmall flower-branches at the top. The whole plant feldom rifes above two feet and a half in height.

SENECIO 1. Tomentofus, foliis oblongoovatis, levifine denticulatis; petiolis brevibus.
The downy Indian Groundfel.
ANTHEMIS I. Minima arvenfis; foliolis fuperioribus tridentatis, inferioxibus laciniatis.
Anthemis foliis triternatis, pedinculis terminalibus ramo longioribus. L. Sp. Pl. \& H. C.
Chryfanthemum paluftre repens, \&c. Slo. Cat. 126. \& H. t. $155^{5}$. 3. The fmall creeping Anthemis.
This little plant is frequent in all the Savannas of famaica, and feldom rifes above three or four inches in height. The flowers are yellow, and fand upon pretty long foot-ftalks, at the extremities of the branches.

BUPHTHALMUM I. Foliis oblongis, levifimè crenatis, oppofitis; floribus geminatis vel ternatis, ad alas, pedunculis tenuioribus \& longioribus incidentibus.

## The tufted Ox-eye, with flender oblong leaves.

BUPHTHALMUM 2. Subfruticofum maritimum inconum, foliis oblongis, foribuis folitariis ad divaricationes ramorum.
Cbryfanthemum fruticafum maritimuim, foliis oblangis glaucis, \&c., Slo.


Samphire, or the fea-fide Ox-eye. Jun an at hastad

## O F J A M A I C A.

The firft of thofe plants is pretty frequent in all the low marfhy lands about Kingfon; and in every ditch where the rain-water fettles for any time. The other grows only near the fea-fide; and is moft common in the parifh of St. Tames: It grows in a buhhy tufted form, and feldom rifes above two or three feet in height.

> BUPHTHALMUM 3. Hirfutum, foliis oblongis fubferratis obtuffs, floribus minoribus, pedunculis geminatis alaribus.

The larger hairy Ox -eye, with oblong leaves.
Periantium Commune fimplex, erecto-patens; fquamis lanceolatis, paucioribus, (Septem inter $\mathcal{E}$ duodecim) aqualibus; aliis interioribus, aliis majus externe fitis. Flos radiatus.
Corollulx Numerofe bermaphrodita in difoo; feminina ligulate non pauce in radio.
Piftillum. Germen compreffum oblongum; fylus fimplex ; Atigmata duo obtufiufoula.
Semina, Et bermaphroditis © femininis, oblonga rugofa leniter comprefa caliculis propriis coronata.
Receptaculum Planum Setis rugofis deciduis infructum.
BUPHTHALMUM 4. Hirfutum; foliis trilobis, ad bafim ansufioribus, oppofitis; floribus folitariis alaribus.
The larger creeping Ox -eye.
Both thefe laft fecies are natives of Famaica, and frequent in all low marfhy lands: they are weakly plants, and creep a good way among the other vegetables; but are, both, more luxuriant and upright towards the top.

$$
\begin{array}{lllll}
\mathrm{S} & \mathrm{E} & \mathrm{C} & \mathrm{~T} . & \text { III. }
\end{array}
$$

Of fuch as bave bermaphrodite and fertile flowers in the center, and ferile or abortive flowers in the circumference.

> C
> IOREOPSIS ı. Virofa, foliis inferioribus bipinnatis, fuperioribus plurifariam divifis.

The virous Coreopfs, with a various foliage.
COREOPSIS 2. Major ramofa; foliis lanceolatis, ferratis, quinato-pinnatis, quandoque fublobatis, inaqualibus.
The larger branched Coreop/sis, with narrow ferrated leaves.
COREOPSIS 3. Scandens; foliis ferratis, ternato-pinnatis; receptaculo nudo. Coreopfis foliis fubternatis cuneatis ferratis. L. Sp. PI.

The climbing Coreop/s.
I found the firft of thefe plants at Mr. Read's, in Mangioneel, where it generally grows to the height of three or four feet. The fecond is more common, and found in moft of the ditches about Kingion, where the waters fettle in the rainy feafons. The third is a native of the hills, and a climber; but the florets of the margin are all neuter, and rife immediately from the bottom of the inward fcales. The feeds are bidented in all the fpecies.

## S E C T. IV.

Of Juch as bave all hermapbrodite, but ferile flowers in the center; and female, but fertile flowers in the circumference.

C
ALENDULA I. Vulgaris, foliis angufits fefilibus, capitulis fingularibus terminalibus.
Calendula feninibus radii cymbijormibus, ecbinatis; difi bicornibus. L. Sp. Pl.

> Marygold.

This plant is cultivated, with great fucceff, in the mountains of Liguanea; and thrives fo well in thofe parts, that it is daily fold with the other pot-herbs, in the markets.

$$
\mathrm{S} \quad \mathrm{E} C \mathrm{~T} . \mathrm{V} .
$$

Of fuch as bave only fingle flowers in all the beds or empaloments; and they generally more various botb in the number and difpofition of their filaments.

LOBELIA 1. Foliis Tanceotatis, dentatis; pedunculis brevifimis, lateralibus; tubo foris tenui, longifimo. L. Sp. Pl.
Rapunculus aquatictis, foliis cichorei, fore albo. Slo. Cat. $58 . \&$ H. t. 10 I . The fmall Lobelia, with four-inch flowers.
This plant is frequent in Famaica, and grows generally in moift, cool, and fhady places: but it feldom rifes above fourteen or fixteen inches in height. It is very remarkable for the length of its fingle white flowers, which have no more than five filaments each, and thefe joined to the tube alimoft to the top. The figma, or extremity of the Ayle, is always obtufe and hollow.
LOBELIA 2. Foliis oblongis, angufis, leniter © acute ferratis; caule fimplici,
inferne foliolato, fuperne in fpicam longam definenti.
Lobelia caule erecto, foliis lanceolatis ferratis, jpica terminali. L. Sp. PI.
Rapunculus folio oblongo Serrato, \&c. Slo. Cat. 58. \& H. t. 95.
The fimple upright Lobelia.
LOBELIA 3. Major bracbiata, afurgens; foliis oblongoovatis, denticulatis,
bafi appendiculatis, utrinque productis; Jpicis termina-
libus.

## The large branched Lobelia.

Both there plants are natives of Gamaica. The former grows generally in the lower Chady hills, and feldom rifes above three feet in height: but the other is found chiefly in the cooler mountains, where it fhoots frequently to the height of five or fix feet.

## IMPATIENS 1. Pedunculis confertis uniforis. L. Sp. Pl. \& H. C. <br> The Gapuchine, or Balfamine.

This plant was introduced to 7 amaica many years ago, and has been fince cultivated in moft of the gardens for the fake of its flowers. It thrives well in all parts of the ifland; and grows fo luxuriantly in mand places, that it becomes a troublefome weed.

## O F J A M A I C A.

BLAKEA I. Fruticofa; foliis elipticis, trinerviis, nitidis; floribus lateralibus. Tab. 35 .

The wild Rofe.
Periantium Duplex. Germinis bexaphyllum; foliis fubrotudis, eoctlatis, femiamplexantibus, per pares gradatas fitis: florig: dificus membranaceus, amplas, patens, bexangularis, integer, marginem germinis cingens.
Corolla Hexapetala; petalis ovatis najoribus rofaceis.
Stamina. Filamenta duodecim, fubulata © Jubarcuata, erecta; anthere maxima, triangulares, quinguelateres, verticaliter jubcompreffa, in orbem coalita; angulis acutis interioribus.
Piftillum. Germen obovatum, apice depreffum, planum, marginatum; margine ampliore bexangulari forem fuftinente: Atylus fimplex, fuberectus, fubulatus, longitudine floris; fligma acutum.
Pericarpium. Capfula obverfê conico-ovata Jexlocularis.
Semina Plurima minora.
This vegetable is certainly one of the moft beautiful productions of America. It is but a weakly plant at firft and fupports itfelf, for a time, by the help of fome neighbouring flub or tree: but it grows gradually more robuft, and at length acquires a pretty moderate ftem, which divides into a thoufand weakly declining branches, well fupplied with beautiful rofy blofforms, on all fides, that give it a moft pleafing appearance in the feafor.

It is chiefly found in cool, moift, and hady places; and grows generally to the height of ten or fourteen feet : but rifes always higher when it remains a climber, in which flate it continues fometimes. It thrives beft on the fides of ponds, or rivulets; and thofe that would chufe to have it flourih in their gardens, where it muft naturally make a very elegant appearance, ought to fupply it with fome fupport while it continues young and weakly.

It is called Blakea, after Mr. Martin Blake, of Antigua, a great promoter of every fort of ufeful knowledge; and a gentleman to whofe friendmip this work chiefly owes its early appearance.

## C $\quad \mathbf{L}$ A $\quad$ S $\quad \mathbf{S}$ XX.

Of the Gynandria; or Vegetables in whofe flowers the filaments are connected with, or fixed to the $\nexists y l e$.

## S E Crrr T.

Of fuch as bave only two filaments, or male parts, in every Flower.
I muft remark, before we proceed further, that under the generic appellation of Satyrium, we fhall comprehend all the plants of this tribe now found in the inland of $\mathfrak{F}$ amaica. For the neEZaria are very various in their figures; and, frequently, not conformable to any of the charactersalready eftablinhed: tho' they all agree in the general formation of the more effential parts, and feed-veffels. But we Chall, however, endeavour to be more particular in the fpecific marks of them, as the productions of the clafs are very numerous.

## SATYRIUM is Erectum fimplex, foliis fefilibus ab altero latere recurrentibus, Jpica terminati, nectariis longi.ifimis.

The Satyrium, with one-eared leaves and long fpurs.
I found this plant near Colonel Williams's, in Liguanea: it is very uncommon, and grows generally to the height of eighteen or twenty-two inches. The leaves are oblong, and the ftalk fimple and upright.

SATYRIUM 2. Erectum, foliis oblongis, petiolis vaginatis amplexantibus, Jpica terminali, nettariis longijimis.
The upright Satyrium, with vaginated foot-ftalks and long fpurs.
SATYRIUM 3. Parafiticun; foliis paucioribus, radicalibus; fcapo fimplici, fabfquamofo, Jpicato; nettariis adnatis.
Vifcum radice bulbofa minus, delpbinii flore, \&c. Slo. Cat. 11g. \& H. t. 12 I.

The parafitical Satyrium, with red flowers and bulbous roots.
This is one of the moft beautiful fpecies of this tribe of plants. It is a parafitic, and grows indifferently on all the trees and rocks in the low lands of famaica: but it feldom rifes above twelve or fifteen inches in height.

> SATYRIUM 4. Erectum minus, afpbodeli radice; foliis oblonno-ovatis, radicalibus; facpo affurrenti fubffuumoofo, Jpicato.
> Cardamomum minus, \&cc. Slo. Cat. 61. \& H. t. 103. f. 3.
> The fmall upright Satyrium, with oval leaves.
> SATYRIUM 5. Erectum minus; foliis tenuifimis, ovatis, venofis, radicalibus; fiapo afurgenti, fubbyuamofo, jpicato.
> The fmaller upright Satyrium, with large leaves.

Both thefe plants are frequent in the woods, and more fhady hills of fomaica; but neither of them rifes above ten or twelve inches in height. Both fpecies are very like each other in form and appearance, and bear all their leaves alike round the bottom of the falk; but the texture of the falk and foliage fhew them to be different.

> SATYRIUM 6. Parafiticum, folio fingulari longo finuato; fpicâ alJurgenti, ab infimo finu ortá.
> Epidendrum foliis radicalibus Jubulatis acutis nodo radicatis. L. Sp. Pl. Vifcum delphinii flore minus, \&c. Slo. H. t. 121. f. 3. E Vifcum arboreum flore Jpatiofo, \&cc. Pk. t. 117.

The lark-fpur parafitical Satyrium.
:This plant grows chiefly upon the trunks of trees, and feldom rifes above feven or nine inches in height. The roots are fibrous and interwoven; and the flowerfpike rifes from the bottom of the hollow, or groove of the leaf.

SATYRIUM 7. Apbyllum, fcapo erecto fimplici Jubfquanofo fpicato.
The naked Satyrium.
I found this plant at the Angels, on one fide of the road that leads to the red hills: it was then in bloffom, and about the height of twelve or fourteen inches, but without any leaves. The flowers are of a flefhy colour, oblong and fucculent.

## SATYRIUM 8. Parafiticum bulbofum, foliis fere gramineis, labio inferiore fimbriato.

## The fmall graffy parafitical Satyrium.

SATYRIUM 9. Erectum fimplex, bulbofum atque fpicatum; fore majori, las bio inferiore tripartito, lacinia media produciori fimbriatá, nectario prominulo.
The upright Satyrium, with large flowers.
The flower of this plant is pretty much like that of the foregoing fpecies; but the falk is furnifhed with oblong leaves about the bottom. It grows in the hills above Mrs. Guy's, in the road to the Decoy and St. Mary's.

## SATYRIUM 10. Foliis liratis longifimis, fcapo forifero partiali, fubfquamofo.

## The Jamaica Salop.

The leaves of this fpecies (which is found only in the cooler parts of the moinntains) perfectly refemble thofe of a young Cocao-nut plant; and generally fun from fifteen inches to two or three feet in length. The flower-ftalk grows clofe to thefe; but feparate, and rifes commonly to the height of two or three feet. The root is flefhy, fomewhat tranfparent, and fixed in the ground by fome fringy fibres: its tafte is bitterifh, and attended with a clamminefs that leaves a light prickly warmth behind it; but this wears off foon, leaving the palate free from every fenfation but that of the bitter. As the root dries, it acquires a great deal both of the colour and tafte of rhubarb; but it fhould be fliced, and kept a long time in the open air, or fun, to be properly cuped. It may be ufed, with great propriety, as a ftomachic; andasigeiererally obferved to thicken the faliva, when chewed.

[^20]The upright Satyrium, with a compreffed foliated falk.
This plant grows indifferently either upon trees, or the ground; and fhoots generally to the height of $t$ wo or three feet. The leaves are oblong, refembling thoie of the lilly kind pretty much; and the ftalks always terminate in fimple flower- fipikes.

> SATYRIUM 12. Erectum majus, caule fubrotundo, foliis majoribus amplexantịus oblongis, fpica terminali ramofa.

## The larger upright Satyrium.

This is very like the foregoing, both in form and difpofition: but it rifes generally to the neight of three feet, or better; and the ftalk terminates in a branched fpike.

> SATYRIUM 13. Parafiticum, foliis majoribus oblongis radicalibus; frapo affirgenti llongiJ/imo farmentofo fimplici nudo, ad fimmitatemp ficato.

The large-leafed Satyrium, with a long farmentous fimple ftalk.

> SATYRIUM 14. Parafticicum, foliis oblongis radicalibus, faapo fubafurgenti longo farmentofo nudo ad apicem ramof, labio inferiori floris cordato.

The large-leafed Satyrium, with a long wcakly branched feem.
SATYRIUM ${ }_{15}$. Parafiticum, foliis oblongis radicalibus maculatis, fcapo of Jurgenti longo farmentofo nudo ad apicem ramofo, floribus mijcellis.
An, Epidendrum foliis radicalibus lancealatis, petalis retufis. L. Sp. Pl.

## The large farmentous Satyrium, with mottled flowers.

This is a very beautiful fpecies of the Satyrium, whofe flowers are like fo many little patches of thofe Dutch calicoes with a dark ground; they open wide, and are pretty much like thofe of the $13^{\text {th }}$ fpecies before defribed; tho' the plants are different. This fort is pretty frequent on the rocks near the Ferry; but I never could obferve it in any other part of the illand.

EPIDENDRUM 1. Scandens; foliis elliptico-ovatis, nitidifamis, margine membranaceo cinctis, fubfeflibus; inferioribus claviculis jugatis, fuperioribus oppofitis.
Epidendrum foliis ovato-oblongis nervafis feflibus caulinis, cirrbis Jpiralibus. L. Sp. Pl.
Angurek. Kæmpferi. H. 868. © Vanilla. Plum. G. 28.
Lobus oblongus aromaticus. Slo. Cat. 70. Epidendron, E.r. Pk. t. 30. f. 4. The V anilla Plant.
This plant is a climber, and rifes, with great eafe, to the tops of the talleft trees in the woods. The ftalk is moderately flender, and throws out a long winding tendrel oppofite to each of the lower leaves, by which it fticks and holds to the branches, or bark of the tree: but after it gains the top, thefe become ufelefs, and the place of each is fupplied by a fellow leaf. It is found wild in all parts of the mountains of Famaica, particularly in the parihes of St. Ann and St. Mary; and grows moft luxuriantly in cool and fhady places.

The plant is cultivated chiefly in low warm lands: it is propagated by the gem, and generally planted along walls, or at the foot of trees, or other props, whereby
it may be fupported. The pods grow in pairs, and are generally of the thicknefs of a child's finger; they are green at firt, grow yellowihh afterwards, and turn of a brownifh caft as they ripen. When they come to a full fate of maturity, they are gathered, and hanged by the ends to dry in the fhade: but, when dry enough to keep, they are rubbed over with oil, to hinder them from growing light or fpungy, and to prevent their breaking; after which, they are put into little bags, from 50 to 150 in each, to keep them ready for ufe, the market, or exportation.
Some people let the pods remain upon the ftalks too long, and then they tranfude a black fragrant balfam, which carries off both the fmell and delicacy of the feeds, for which alone the plant is cultivated; thefe being frequently mixed in chocolate, by the French, Spaniards, and Italians, to which they are thought to give both a delicate fmell and an agreeable flavour. They are generally looked upon as a cooling cordial, a ftomachic, and a good nervous medicine: and are fometimes ufed to perfume fnuffs, and many other fubftances.

## S E C T. II.

Of fuch as bave three, four, or five Filaments in every Flower.

SISYRINCHIUM ı. Foliis angufis, liratis, productis. Sifyrinchium caule foliifque ancipitibus. L.Sp. Pl. \& H.C.
Bermudiana. Tour. \& H R. Parif.

## The Palm-leafed Bermudiana.

This plant was introduced to $\mathcal{F}$ amaica from North America, and is now cultivated there by many of the curious. It thrives very well in moft parts of the illand, and grows generally to the height of twelve or fixteen inches.

PASSIFLORA I, Veficaria; florum involucris trithyllis, multifido-capilla-
ribus. L. HC.
Paffiflora foliis trilobis cordato-pilofis, involucris multifido-capillaribus. L. Sp. Pl.

## Paffiflora veficaria berbacea, \&cc, Pk, t. 104. f. I.

The large creeping Pafion-flower, with diffected cups.
PASSIFLORA 2. Foliis amplioribus cordatis, petiolis glandulis fex notatis, caule quadrigono alato.
An, Paffiflora foliis indivifis ferratis. L. Sp. Pl.

## The Granadilla Vine.

This plant is cultivated in many of the gardens of Jamaica, for the fake both of its hade and berries; for it is frequently made arbours in moft of thofe fultry countries, and produces an agreeable cooling fruit.

## PASSIFLORA 3. Foliis ovatis, petiolis biglandulis, baccâ molli ovatâ. Paffiflora foliis indivifis integerrimis, involucris dentatis. L. Sp. Pl.

 The Honey-fuckle.This plant is cultivated in many parts of America, for the fake of its fruit: it is a climber, and fpreads, like the Granadilla, fo as to be frequently employed in arbours. The fruit is very delicate, and much efteemed by moft palates: it is about the fize of a hen's egg, and full of a very agreeable gelatinous pulp, in which the feeds'are lodged.

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PASSIFLORA 4. Foliis cordatis productis, petiolis biglandulis, fructu Spheerico, pericarpio duro.
Paffiflora foliis indivifis cordato-oblongis, petiolis biglandulis, involucris integerrimis. L.Sp. Pl.

## The Water-Lemon.

I have not known this plant to be yet cultivated in any of the gardens of $\mathfrak{F a}$ maica, tho' a native: it grows frequent in the woods, and fupplies the wild hogs with a great part of their food in the feafon.

PASSIFLORA 5. Foliis nitidis trilobis, medio angufto longiori, lateralibus quandoque auritis, fructu baccato minori nitido. Paffiflora foliis trilobis fubpeltatis, cortice fuberofo. L. Sp. Pl.
The little creeping Paffion-flower, with fmall, fmooth, blue berries.
PASSIFLORA 6. Folio trilobis, medio minori, 'lateralibus ovatis. Paffiflora foliis trilobis, oblongis, fubtus punctatis, medio minori. L.Sp.PI. The large climbing Paffion-flower.
PASSIFLORA 7. Foliis trinerviis nitidis, ad apices latioribus, fubtrilobis; lobis aqualibus.
Pafliflora foliis trilobis cordatis aqualibus obtufis glabris integerrimis. L. Sp. Pl.
The larger climbing Paffion-flower, with fmooth leaves.
PASSIFLORA 8. Foliis quinquelobis profunde divifis, lobis oblongis.
Paffifora foliis palmatis, quinquepartitis, integerrimis. L. Sp. Pl
The climbing Paffion-flower, with digitated leaves.
PASS IFLORA 9. Foliis fubbaftatis, petiolis biglandulis, 今ylo longiori, fructu fubbirfuto rubello.
Paffiflora foiiis trilobis ferratis. L. Sp. Pl.
The Paffion-flower, with oblong crenated leaves.
PASSSIFLORA 10. Foliis trilobis; cruribus oblong is obtufis, intermedio fere obfôleto © Setulâ terminato.
Flos-paffionis perfoliatus, feu periclimeni folio. Slo. Cat. IO4.
The larger Paffion-flower, with two-fhanked leaves.
PASSIFLORA 11. Foliis trilobis; cruribus angufis oblongis, intermedio fere obfoleto.
Coanenepilli, E Contra-Yerva. Hernand. 301.
The fmaller Paffion flower, with two-fhanked leaves.
PASSIFLORA 12. Foliis tenuioribus, trinerviis, bicornibus, lunatis; finu anteriori obtufo.
An, Paffiflora foliis bilobis obtufis bafi indivifis, neefariis monophyllis. L. Sp. Pl.
The Bull-hoof, or Dutchman's Laudanum.
This plant (like moft of the other fpecies) is a climber; whofe fruit is of an oblong oval form, about the fize of a large olive, and of a flefhy colour when ripe. Both

# O F J A M A I C A. 

the fyrup and decoction of the plant is now much ufed in the leeward parts of the ifland, where it is frequent; and is faid to anfwer, effectually, all the purpofes for which the fyrup of poppies and liquid laudanum are generally adminiftered. The flowers have been hitherto the moft in ufe: they are commonly infufed in, or pounded and mixed immediately with, wine or fpirits; and the compofition generally thought a very effectual and eafy narcotic.

All the fpecies mentioned here, grow in the different parts of the ifland; but the firf, fifth, tenth and eleventh, are moft commonly found in the lower lands, or towards the foot of the mountains. The root of the eleventh is much extolled by Hernandes, who fays, That taken, to the quantity of three ounces, it cures the fpleen, eafes pains, creates an appetite, provokes a difcharge by urine, cools the body, and prevents the effect of poifons. The fecond and third are cultivated in the gardens for the fake of their fruit and fhade : and the fixth, feventh, eighth, and ninth, are natives of the cooler woods, as well as the laft; and rife to a greater height than any of the others. But the leaves of the tenth fort are only applied to the ftalk, by the natural bent of the foot-ftalks.

## S E C T. III.

Of fuch as have fix or more Filaments in every Flower.

ARISTOLOCHIA 1. Scandens, foliis cordato-acuminatis, fiorum fabellis amplis purpureis.
Ariftolochia caule volubili, foliis cordato-oblongis planis, fructu pendulo, $\& c$. L. H. C. Ariftolochia feandens odoratifima. Slo. Cat. 60. \& H. t. 104. Phetruome. Hern. 162.

The Contra-Yerva of the fouth fide of Jamaica.
This plant is a climber, and rifes frequently to a confiderable height among the neighbouring trees and bufhes. The root has a ftrong fmell, and is defervedly looked upon as a warm attenuant, and an active diaphoretic and fomachic: it is adminiftered in infufions, and greatly ufed among the flaves in famaica.

## ARISTOLOCHIA 2. Scandens, foliis amplioribus cordatis; florum fabellis maximis variegatis, in appendicem long am tenuemque definentibus.

The large climbing Birth-worth, with variegated flowers; or the poifoned Hog-meat.
This plant is very common in St. Ann's, and bears very large flowers, which are feldom under five or fix inches round the margin; but the rima, or opening of the flower, continues glewed up, longitudinally, for a confiderable time; and terminates in a long flender appendix, at the lower extremity.

## ARISTOLOCHIA 3. Scandens, foliis fublobatis obtufis, fioribus amplifimis. Ariftolochia foliis trilobis. L. Sp. Pl.

The Contra-Yerva of the north fide.
The roots of this plant are ufed on the north fide of the inland, where it is moft common, in the fame manner as thofe of the firft fpecies are on the fouth fide.

PISTIA 1. Aquatica viltofa, foliis obovatis ab imo venofis, floribus fparfis foliis incidentibus.

## THENATURALHISTORY

Piftia. Lin. \& Hill. t. 15. f. 20.
Pittia. Plumeri. Gen. \& Kodda-pail. H. M. P. xi. t. 32.
Stratiotes /Egyptia Dioforidis, Veflengii $\mathcal{E}$ Raii. H.
Lenticula palultris fexta, vel KEgyptia, \&c. Slo. Cat. 11. \& H. t. 2.
The Great Duck-weed, or Pond-weed.
E fuperiori pagina foliorum, verfus bafes, affurgit

## Periantium Nullum.

Corolla Monopetala incquialis, tubulata, oblonga, inferne ventricofa, ad medietatem coarctata, Juperne dilatata. Limbus obliquè ligulatus, erectus, acuminatus, integer; auris equine figurc.
Stamina. E pariete floris, infima rima parti oppofito, furgit fuftentaculum ereetum, verfus bafim difco membr anaceo inde ligulato cinctum, (lisulâ ad apicem germinis porreEta) ad apicem antheris octo, (quandoque paucioribus) Jubrotundis, patentibus, in orbem fitis ornatum.
Piftillum. E fundo foris emergit, germen oblongum, figmate obtufo coronatum.
Pericarpium. Capfula oblongoovata, in fex loculamenta divifa, \& feminibus aliquot oblongo ovatis, referta.
This plant is rare in Yamaica. I have not obferved it above once in that ifland; it was in a pond between Mr. 'Fames's, and Doctor Thene's, in St. Fames's: but it is very common in Antigua, where the greateft part of their waters is collected and preferved in ponds, for the public ufe. It grows and thrives very luxuriantly in thefe refervoirs, and keeps the waters always frefh and cool; which would be greatly fubject to putrefaction, and charged with a multitude of infects, had they continued expofed to the heat of the fun. It has its inconveniences, however, and thofe not very trifling; for the plant is, of its own nature, acrid; and when the droughts fet in, and the waters are reduced very low, (which frequently happens in that ifland) they are over-heated, and fo impregnated with the particles of this vegetable, that they frequently give bloody-fluxes to fuch as are obliged to ufe them at thofe feafons: but this inconvenience may be, in fome meafure, remedied, by mixing flower, or fome other fheathing fubflance with it, if neceffity obliges the ufe of it in fuch a ftate. Its acrimony gives me room to think that it is not the Stratioles of Profp. Alpinus, or Baubin.

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HELICTERES ı. Villofa \& fruticofa; foliis cordato-acuminatis, ferratis,
Helicteres. L. Gen. \& H. C. \& Ifora. Plumeri.
Helicteres arbor Indic orientalis, \&c. Pk. t. 245. f. 2, 3. \& H. Mal. vi. t. 30.
Abutilo affinis arbor altbeca folio, \&c. Slo. Cat. 97.
Ifora Murri. H. M. p. 6. t. 30 .
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## The Screw Tree.

This curious fhrub is very frequent in the low gravelly hills of Jamaica. It rifes generally to the height of nine or ten feet, and has much of the habit of the Mallows tribe; from which it is diftinguifhed by the fpiral form and connection of its capfular feed-veffels, and the peculiarities of the parts of the flower.

> CHAMIEROPS 1. Acaulis, foliis fabelliformibus maximis, petiolis validis rotundis, Jpicis brevioribus partialibus.
> $A n$, Chamærops. L. Gen. \& H.C.
> Palma non Jpinofa bumilior, \&cc. Slo. Cat. 177. \& H.
> The humble Palmeto, with round foot-ftalks.

Spatha

$$
\begin{aligned}
& \begin{array}{llllllllll}
\mathbf{O} & \mathrm{F} & \mathrm{~J} & \mathrm{~A} & \mathrm{M} & \mathrm{~A} & \mathrm{I} & \mathbf{C} & \mathbf{A} .
\end{array} \\
& \text { Spatha Tri- vel quadripbylla, foliis oblongis mollibus amplexantibus. } \\
& \text { Spadix Simplex conico-cylindraceus, capfulis baccatis fefflibus obtufis de- } \\
& \text { preffis } \mathcal{E}^{\text {e }} \text { fere connatis, in fpicam uniformem redactis, omuftus. } \\
& \text { Corolla. Flores alii mares, alii feminæ, alternatim mixti in eodem Jpadice. } \\
& \text { Mas. } \\
& \text { Periantium Quadrigonum, cuneiforme, carnofum, ad apicem lineis variis } \\
& \text { notatum. } \\
& \text { Corolla Nulla. } \\
& \text { Stamina. Rudimenta quatuor craffa brevia, antberis numeroffimis oblon- } \\
& \text { gis infructa. } \\
& \text { Periantium Craffum carnofum quadratum; mafculinis intcrpofitum, foliolis } \\
& \text { quatuor minimis margini incumbentibus ornatum. } \\
& \text { Corolla Nulla. Stamina Nulla. } \\
& \text { Piftillum. Germen craffum, quadratum, coronatum, preynans; ftyli qua- } \\
& \text { tuor vel plures, longifini, incumbentes; Atigmata fimplicia } \\
& \text { acuta. } \\
& \text { Pericarpium. Capfula fucculenta, baccata, angulata, inferne craffior, ad } \\
& \text { apicem angufior, quadrilocularis. } \\
& \text { This plant is very frequent in } \mathcal{F} \text { amaica, particularly about the Crefeence; and is often } \\
& \text { ufed for thatch, tho' not fo good as the other leaves commonly employed for that } \\
& \text { purpofe. The foot-ftalks are exactly like fo many joints of well-grown walking- } \\
& \text { canes, both in fhape and fize; but they foon wither and flrivel up. The berries are } \\
& \text { fweet, and fed upon much by the birds. }
\end{aligned}
$$

ARUM I. Caule erecto, geniculato, inferne nudo; foliis majoribus oblongoovatis.
An, Arum caulefcens foliis fagittatis. L. Sp. Pl?
Arum caule geniculato, canne Indicre foliis, \&c. Slo. Cat. 63.
Aninge 19. Pifil 220.

## The Dumb Cane.

This plant is common in moft parts of America, and grows chiefly in cool and moift places. The ftalk is ufed to bring fugar to a good grain, when the juice is too vifcid, and cannot be brought to granulate rightly with lime alone. T'rapbam recommends a decoction of the plant by way of fomentation in hydropic cafes: and it certainly muft be a ftrong refolutive, which cannot fail to ftrengthen and ftimulate the relaxed fibres, in fuch cafes.

ARUM 2. Scandens triphyllum. foliis exterioribus auritis, petiolis vaginantibus.
Arum maximum foandens, geniculatum of trifoliatum. Slo. Cat. 63.

## The trifoliated Arum, or Wake-Robin.

This plant is pretty frequent in all the hills of famaica, and generally found climbing among the neighbouring trees. It is the only fpecies that is obferved to be furnithed with compound leaves in that ifland.

ARUM 3. Scandens, foliis majoribus crenato-laceris, petiolis fimplicibus.
Arum maximum altifime ja
An, Elitta di Maravara. H. M. p. 12. t. 20?
The large climbing Wake-Robin, with torn leaves.

## 332 <br> THENATURALHISTORY

ARUM 4. Acaule purpureum, foliis amplifimis cordato-fagittatis.
Colocafia quod Arum Indicum, Colocafia dictum, pediculis atris, \&c. Thez. Zey. 68.
The purple Cocco, and Tamier.
The tops of this plant are commonly ufed to feed the hogs; but the root is more valuable, and fupply many of the poorer fort of people with what they call Bread-kind, in thofe parts of the world.

ARUM 5. Acaule maximum, foliis cordato-fagittatis.
Arum acaule, foliis peltatis ovatis repandis, bafi femibifdis. L.Sp. Pl. \& H. C.

Colocafia, Jeu fabo Egyptic veterum fos. C. B. E3c. Thez. Zey. 68.
Arum maximum 压gytiacum, quod vulgo Colocatia. B. Pin. Eic. Slo. Cat. 6 I.

## The white Cocco, and Tyre.

The tops of this plant do fometimes fupply the tables of Yamaica with greens; but they are not reckoned fo good as thofe of the feventh fpecies, which is the moft in ufe. The young roots are very wholefome, dry, and nourifhing; and fometimes ufed in broths, by the poorer fort of people. The old heads are called White Coccos, and the young roots that hoot round the top, Tyres.

ARUM 6. Acaule maximum, foliis cordato-fagittatis, radice leniter mordi-: cante.
Arum acaule, foliis cordatis acutis cum acumine, angulis rotundatis. L. H, C. \& Sp. Plant.

## The Scratch Coceo.

The root of this plant is ufed like thofe of the other forts; but it is not fo frequently cultivated. The old roots are generally called Scratch Coccos, from a little pungency with which they are always impregnated; and the young ones that fhoot round the top, Edyes.

ARUM 7. Acaule medium, foliis cordato-fagittatis quandoque auritis, radice minori carnofa.
Arum acaule, foliis peltatis ovatis integerrimis, bafl femibifidis. L. Sp. P1. \& H. C.
Arum minus nympbere foliis Efculentum, \&c. Slo. Cat. $62 . \&$ H. t. ro6. Colocafia quod Arum Zeylonicum minus, \&cc. Thez. Zey. 68.

## Indian Kale.

The leaves of this plant boiled, make a wholefome agreeable green: it is tender and mucilaginous, and pleafing to moft pabates. The plant is much cultivated by all forts of people; efpecially in the country parts, where cabbage and kidneybeans are not always to be had. A fmall bed of it is fufficient to fupply one or two families with greens throughout the year; for it grows very luxuriant and quick, and the offener it is picked, the better. It grows very fmall if it be not tranfplanted from time to time.

> ARUM 8. Acaule, foliis triangularibus fagittatis, angulis divaricatis acutis. Arum minus efculentum, fagittaria foliis viridi-nigricantibus. Slo. Cat. 63. \& Hift. t. 106. f. 2 .

This plant is cultivated by many people in Jamaica: it is much like the former, and frequently ufed for the fame purpofes.

ARUM 9. Acaule majus fylveftre, radice oblongâ fibratâ, foliis amplioribus cordatis.
Arum acaule, foliis peltato-ovatis bafi bipartitis. L. H. C.
An, Colocafia quod Arum maximum Zeylonicum, radice crafa. Thez. Zey. 68?
The large wild Wake-Robin.
This plant is very common among the rocks, in many parts of the ifland: the leaves are very large, and rife immediately from a thick lengthened root.

ARUM 10. Acaule fubcaruleum maximum, foliis amplifimis cordato-fagittatis.
Colocafia Strongylorrbiza Zeylonica, \&c. Thez. Zey. 68.
The Baboon or Hog Cocco.
The root of this plant grows to a monftrous fize, and is very coarfe: it is of an eafy growth, and planted chiefly for the hogs, which it is faid to fatten very well.

ARUM 11. Scandens, foliis cordatis, petiolis rotundis.
The climbing Wake-Robin, with round foot-ftalks.
ARUM 12. Tenue fcandens, foliis oblongis, petiolis alatis amplexantibus. Phylitidi fcandenti affinis major, \&cc. Slo. Cat. $15 . \&$ H. t. 27.
The climbing Wake-Robin, with oblong leaves and edged foot-ftalks.
This plant is only to be met with in the moft lonely inland woods: it climbs with great eafe, and grows more fucculent and luxuriant towards the top.

ARUM 13. Parafiticum minus, foliis ovatis punctatis glabris, jpica brevi.
The fmall parafitical Wake-Robin.
I found this liftle parafitical plant in the woods above St. Ann's bay. The ftem is flender and fhagged, and adorned with a few oval leaves: it fticks pretty clofe to the trunk of whatever tree it grows upon; but feldom runs above two or three feet in length.

## C L A

Of the Monoecia; or Vegetables that throw out diftinct male and female Flowers, from different parts of the fame Plant.

$$
\text { S E C } \quad \text { T. } \quad \text { I. }
$$

Of fuch as bave one, two, three, four, or five Filaments in every male Flower.

C
YNOMORIUM 1. Erectum, breve, cylindraceum, nudum; prima atate Squamatum.
Cynomorium. Miche. t. 12 .

## The upright Cynamorium.

This little plant is feldom met with but in the moft fhady inland woods: it grows in beds, and rifes generally to the height of three, four, or five inches; but is commonly fmalleft towards the bottom. At firft it is covered pretty thick with fcales of the figure of a heart; which fall off gradually as it rifes, and expofe the body of the plant thickly befet with little tranfparent denticles, intermixed with a few tubular trifid flowers, that jet above the level of the furface. The ftem of the plant is fucculent and flemy, and all the parts aftringent.

LEMNA 1. Minima monorbifos, foliolis orbiculatis.
An, Lemna foliis feffilibus planiufculis, radicibus folitariis? L.Sp. P1. Lens paluftis. Raii H.

Duck-weed.
This little aquatic plant grows in fome of the fmall ponds of Jamaica; but it is not common, nor put to any ufe there.

OMPHALANDRIA 1. Frutefcers diffufa, foliis amplioribus ovatis, petiolis biglandulis, racemis terminalibus.
The large-leafed Omphalandria, with two Antberce or male parts.
Flores alii mares, alii femina in iifdem racemis.
Mas.
Periantium 2uadri- vel quinque-pbyllum, foliolis cocbleatis fubrotundis.
Corolla Nulla.
Stamina Nulla. Nectarium crafum umbonctum fubrotundum, in medio calicis fitum, fuftentaculum prabet antberis geminis, lateribus nectarii oppofitis longitudinaliter immerfis.

## Fæmina.

Periantium Ut in mare. Corolla Nulla. Stamina Nulla.
Piftillum. Germen ovatum; flylus brevis; ftigma fubtrifidum.
Pericarpium. Capfula carnofa, ovata, trilocularis.
Semina Solitaria oblonga.


# OMPHALANDRIA 2. Foliis obovatis glabris, ad bafin biglandulis; floribus triandriis. Tab. 22. f. 4. 

The larger Omphalandria, with three Anthera.
Thefe plants are chiefly found about Port Antonio, and Mangeneel. There are no filaments in the flowers of either of them; but the anthera are lodged in fo many grooves, difpofed longitudinally and at equal diftances from each other, in the fide of a roundif naval fituated in the center of the cup. The firt fort is a weakly fpreading fhrub; the other, a fmall tree.

$$
\begin{aligned}
& \text { ZEA i. Seminibus fubcompref/2s obovatis. } \\
& \text { Zea. L. Gen. Sp. Pl. \&\% H. C, } \\
& \text { Maizium. Mart. 6. \& frumentum Indicum mays dictum, \&cc. Slo. Cat. } 26 . \\
& \qquad \text { Great Corn, or Maize. }
\end{aligned}
$$

This plant is much cultivated in all parts of $\mathcal{F}$ amaica, and thrives very luxuriantly every where. It is generally planted among the young canes, and grows to perfection before thefe fhoot to any confiderable height. The grain is reckoned a wholefome hearty food, and much ufed among the negroes, who make it into various meffes, according to their fancy. It is given to horfes, in thole parts, as we do oats, beans, or peafe, in Europe; and is the principal fupport of their poultry and fmall ftock, of which the people of that inland raife great quantities.

# COIX 1. Arundinacea erecta indivifa, foliis brevioribus latiufculis, fpica racemofa terminali. <br> Gramen paniceum majus, /pica fimplici levi, \&c. Slo. Cat. 30. \& H. t. 64. Lachryma Fobi H. E. Thez. Zey. p. 137, 8. <br> An, Coix Jeminibus ovatis. L. Sp. PI. \& H. C ? 

The Coix, with fimple flender-fhanks.
This plant grows wild every where in the woods, and is excellent fodder for all forts of cattle. It has all the appearance of a reed; and rifes commonly to the height of four feet, or better.

## CAREX I. Tenuior, altifime fcandens.

An, Carex, fpiculis oblongis fefflibus remotis androgynis, capfulis ovatis acutis. L. Sp. PI.

## The climbing Carex.

This plant is frequent in St. Elizabeth's, and grows very luxuriantly in all parts of the parifh. The ftalk is very flender, and rifes to a confiderable height, when fupported by neighbouring bufhes.

CAREX 2. Foliorum vaginis marginatis $\mathcal{E}$ ab altero latere appendiculatis; Jpicis qnandoque mixtis, quandoque majculinis; caule triangulari.

## The common Carex.

This plant is extremely like the common European fort: it grows very plentifully in all the lagoons about the Ferry.

## CAREX 3. Paluftris major, caule arundinaceo.

The upright Carex, with a fmooth hollow falk.

## $33^{6}$ THENATURAL HISTORY

The ftalk of this plant is thick, round, fmooth, and jointed like a reed; but it is not of the fame texture: it's frequent in the Ferry-river, and about the great pond.

> TYPHA .1. Simplex, foliis longis angufis comprefis, Spica duplici terminalio Typha foliis fubenfformibus, Jpicis approximatis. L. Sp. P1.

## The Great Reed-Mace.

This plant is a native of Gamaica, and grows very common in all the lagoons about the ifland. The leaves make good matts; and are fometimes ufed for thatch in the low lands.

$$
\begin{aligned}
& \text { TRAGIA I. Scandens, foliis baftatis ferratis bifidids. } \\
& \text { Tragia foliis cordato-oblongis, caule volubili. E. Sp. Pl. } \\
& \text { Urtica ramofa foandens, \&c. Slo, Cat: } 38 . \text { \& H. .t. } 82 . \\
& \text { The creeping Cowhage. }
\end{aligned}
$$

In this plant, the foot-ftalks of the flowers rife from the ala of the leaves; and divide foon after, into two fimple branches; whereof, the one bears a number of male flowers, difpofed gradually in the form of a fike, towards the top; while the other fuftains only a fingle female bloffom, which is fixed at the extremity of the branch. There is no more than two filaments in each of the male flowers of this plant; and what Linneus calls a cup, or periantium, feems to be rather a real flower. The plant is very common in famaica, and well known on account of its fharp itching hairs. The root is looked upon as a good aperient and diuretic; and both the decoction and juice are frequently ufed among the negroes for thofe purpofes.

> TRAGIA 2. Subfruticofa, foliis oblongis glabris, fruct bi/pido. An, Tragia foliis lanceolatis obtufis integerrimis. L. Sp.Pl? An, Pee-Tsjerou. H. M. p. 5. t. 23 ?

## The fmooth-leafed Cowhage.

I found this plant at the Angels, on the fide of the road that leads to Sixteen-milewalk: it grows commonly to the height of four or five feet.

URTICA 1. Humilior bippida, foliis ovatis crenatis, Jpicis alaribus.
The fmall hairy Nettle.
This plant was introduced to Jamaica by Mr. Wallen; and thrives well at the Ferry, where it was firft planted. It is a native of the ifland of Madera.

## URTICA 2. Erecta, foliis cordatis Jerratis, racemis comprefis terminalibus.

The larger Dead-nettle, with fpreading flower-bunches.
This plant is very common in Famaica, and grows chiefly in cool fhady places. The leaves are pretty large and luxuriant, and the flower-bunches fpreading and compreffed, and difpofed at the extremities of the branches. The plant rifes frequently to the height of three feet, or better.

> URTICA 3. Minor fupina, foliis ovatis Jerratis oppofitis, floribus confertis terminalibus.

> The fmall creeping Nettle.
> URTICA? 4. Humilior, difficha, diffufa, compreffa, obliquè afurgens; foliolis minimis.

$$
\begin{gathered}
\text { O F } \quad \text { J A } \\
\text { Herniaria lucida aquatica, \&cc. Slo. Cat. } 50.8 . \text { H. tab. 93. f. 2. } \\
\text { The little reclining Nettle, with very fmall leaves. } \\
\text { URTICA 5. Humilior, reclinata, fere fimplex; foliolis minimis dificbis. } \\
\text { The fmaller reclining Nettle, with very fmall leaves. }
\end{gathered}
$$337

Both thefe plants are like each other, and feem to be only variations of the fame fecies. They are very different in appearance from all the other forts of nettle; but the parts of the flowers, which are very fmall, feem to place them in the fame clafs. The following is a defcription of the bloffoms, as nearly as I could make it out.

Flores, alii mafculini femininis intermixti.
Mas.
Periantium Nullum.
Corolla, Tetrapetala, petalis cocbleatis oblongis.
Stamina. Filamenta quatuor, petalis fere tectd: antheræ Jubrotunda.
Femina.
Calix Nullus; Corolla Nulla.
Piftillum. Germen oblongum; ftylus brevifimus; ftigma ciliatum.
They grow chiefly in cool gravelly places; but neither of them rifes above twelve or fourteen inches in height. The difpofition of the leaves and branches is nearly the fame in both; tho' one of the fecies feems to divide a good deal in its growth, while the other rifes almoft with a fimple ftem.

URTICA 6. Erectia, foliis ovato-acuminatis trinerviis nitidis, racemis comprefis.
Urtica Iners racemofa, \&cc. Slo. Cat. 3 8. \& H. t. 83 . f. 21
'The larger Dead-Nettle, with fmooth leaves and bunched flowers.
URTICA 7. Fruticulofa, glabra; foliis fubrotundo-ovatis, crenato-ferratis.
The erect Nettle, with fmooth leaves.
Thefe plants grow chiefly in cool and fhady places, and rife generally to the height of two feet and a half, or better. The firft fort has large oval leaves, and wide fpreading bunches of flowers, difpofed at the top of the branches: It is common in all the cooler gravelly banks of the higher hills. The other grows more upright; it is of a more delicate make, firm and lignous; and adorned with fmaller roundifh leaves: I have met with it at Mangeneel.

## URTICA 8. Arborefcens; foliis cevatis, birtis, pruriginofis, oppofitis.

The Netlle Tree, with itching hairy leaves.
This plant grows commonly to the beight of eight or ten feet, and is pretty frequent in the woods about St. Mary's and Portland.

URTICA 9. Frutefcens; faliis amplioribus ovatis, finuato-dentatis; nervis, petiolis $\mathcal{F}^{\circ}$ caulibus aculeatis.
The large prickly Nettle.
I met with this plant in Blue-mountain Valley, but could not obferve it in any other part of the inland: it was not at that time perfect enough to bear either flowers

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feeds; and have placed it here only from the common difpofition and appearance of its leaves and branches. The plant was about the height of five feet, or better; furnifhed with large gloffy leaves, of the figure of a heart; and every where fupplied with tharp prickly thorns, efpecially about the trunk and leaves.

URTICA 10. Frutefcens; foliis rugofis ovatis, in acumen productis; ramulis gracilibus.
The fhrubby Nettle, with flender branches and lengthened oval leaves.

> URTICA 11. Fruticofa; foliis amplifimis, ovatis, ferratis; Jpicis longifimis, tenuibus, ex alis propendentibus.

> The Nettle Tree.

Both thefe plants are natives of the cooler woods of Famaica, and grow commonly to the height of ten or fifteen feet. The laft fort is more frequent in the cooler mountains of Liguanea, and furnifhed with very broad leaves.

SAPIUM 1. Arboreum, foliis ellipticis glabris, petiolis biglandulis, floribus fpicatis.

## The Gum Tree.

Flores alii mafculini, alii feminini, in ijdem fpicis: illi e fuperiore fpica parte, oriuntur; bi vero infra enafeuntur.

Mas.
Periantium Nullum. Corolla Nulla.
Stamina. E fingulâ lacunâ biglandula emergunt flamenta quatuor, quinque, vel fex, brevifima; antheris globofos infiruicia.

## Femina.

Periantium E lacunis paucis biglandulis, circa bafin fpica digefis, emergunt periantia totidem ventricofa, minima quadridentata.
Corolla Nulla. Stamina Nulla.
Piftillum. Germen oblongum, intra calicem fitum; Aylus brevis tripartitus; fligmata fimplicia.
Pericarpium. Capfula fubrotunda, obtufê triloba, trilocularis, Seminibus tribus folitariis referta.
This tree grows to a very confiderable fize, and yields a great quantity of refin, of a thick ficky confiftence, dirty colour; opake, and of little fmell: which generally ferves for the boiling-houfe lamps, in every part of the country where the tree is frequent ; and is much ufed for bird-lime, which purpofe it is obferved to anfwer extremely well. The wood is foft and coarfe, and not much efteemed.

## ARGYTHAMNIA s. Fruticofa, tota albida; foliis oblongis, nervis paucioribus arcuatis.

The fhrubby afh-coloured Argythamnia.
Flores alii mafculini, alii feminini, in eâdem plantâ.
Mas.
Periantium Tetraphyllum; foliolis lañeeolatis, villofs.

# O F J A M A I C A. 

Corolla Tetgapetala; petalis minoribus lanceolatis.
Stamina. Filamenta quatuor, longitudine fere floris; antheræ oblongo-ovata.
Femina.
Periantium, Ut in mare, villofim. Corolla Nulla. Stam. Nulla. Pitillum. Germen Jubglobofum, obtufê trilobum, villofum; ftyli tres, ultra medietatem tripartiti; laciniis fingulis, biffis: ftigmata lacerata.
Pericarpium. Caplula obtufe trigona, trilocularis, trifpermis.
Semina Subrotunda folitaria.
This thrub is pretty frequent in the lower hills, and grows chiefly in a dry gravelly foil: it feldom rifes above five feet in height; and the trunk and branches are covered with a whitih bark.

# MORUS I. Lactefcens; foliis oblongis acutis, paginis exterioribus productioribus, ligno citrino. <br> Morus foliis ovatis birfutis. L. Sp. Pl. <br> Morus fructu viridi, ligno fulphureo tinctorio. Slo. Cat. 128. \& H. t. $15^{8 .}$ Itainfba. Pif, 163. 

## The Fuftic Tree.

This is a fine timber-wood; and a principal ingredient in moft of our yellow dyes, for which it is chiefly imported into Europe. The berries are fweet and wholefome, but not much ufed, except it be by the winged tribe, by whofe care it is chiefly planted. It is a native of Jamaica, and deferves to be propagated with greater care.

## MORUS 2. Foliis obliquè cordatis. L. Sp. Pl.

## The Carolina Mulberry.

This tree is cultivated in many gardens in Jamaica, and thrives very well in the low lands; but it feldoms bears any quantity of fruit. The berries of this fort are longer than thofe of the European mulberry, and generally of a whitih colour.

## MORUS 3. Foliis cordatis, fubtus villefs; amentbis cylindraceis. L. Sp. P1.

## The Virginia Mulberry.

A few of thefe trees, which are natives of Virginia, have been lately raifed in Jamaica by fome curious gentlemen; and are faid to be of that fort on which the filk-worm feeds and thrives beft. It grows in that illand as well as any of the other fpecies, but does not bear any quantity of fruit; and was planted there only to fatisfy the curiofity of the people.

ATERAMNUS I. Foliis oblongis, levifime crenatis, alternis; fpicis fingularibus, ad alas.
The Ateramnus, with oblong crenated leaves.
Flores alii mafculini, alii feminini, in iijdem Jpicis. Mares plurimi, conferti, quadriftaminei: feminæ pauciores, tribus ftylis pradita, © ad bafin Jpica fita. An, ad Sapiam referri debet?

AMBROSIA 1. Erecta ramofa, foliis plurifariam divijs, laciniis crenatoferratis, racemis paniculatis terminalibus. Ambrofia foliis bipinnatis, racemis paniculatis terminalibus. L. Sp. PI. Ambrofia elatior, foliis artemifice atrovirentibus. Slo. Cat. 38.

This plant grows very common and luxuriant in all the dry fandy banks of the larger river-courfes; where the mould is wathed away by the floods, and nothing left but gravel mixed with fliff clay. It is a powerful vulnerary and refolutive; and frequently ufed in warm baths and fomentations of that nature, The juice of the leaves, mixed with honey, is recommended in exulcerations of the lungs.

> PARTHENIUM 1. Subbirfutum ramofum, foliis miltiticliciter incifis, foribus terminalibus.
> Parthenium foliis compofito-multifidis. L. Sp. Pl. \& H. C. Achoavan. Profp. Alp. 56 .

## Wild Wormwood.

This plant grows wild in moft of the open fields round the ifland; and thrives very luxuriantly about all the fettlements in the low lands. It is obferved to have much the fame qualities with the Feverfew; and may be ufed, like that, in refolutive baths, and infufions.

AMARANTHUS 1. Aculeatus rufefcens, foribus confertis Sẹfilibus, capitulis alaribus.
Amaranthus, racemis pentandris cylindricis ereetis, axillis Jpinofis. L, sp. Pl.

The prickly Calaloo.
This plant is frequent in the mountains, as well as the lower hills of famaica; and much ufed as a green, when the more valuable forts are fcarce. It is reckoned both a wholefome and an agreeable vegetable.

AMARANTHUS 2. Coma terminali varia, nonfrofa Ei fimbriata.
The Cock's-comb.
This plant grows now in moft parts of Jamaica; and thrives fo luxuriantly every where, that it may be confidered as native. . It makes a beautiful appearance among the other flowering-plants cultivated in our gardens, and is often raifed for that purpofe in all parts of Anerica.

## $\mathrm{S} \quad \mathbf{E} \quad \mathbf{C} \quad$ T. II.

Of fuch as bave fix, or more, Filaments in every Flower.

$\square$IZANIA .. Panicula effufa. L. Sp. Pl.

The larger Zizania, with a fcattered panicle.
This plant is common in all the lagoons of Jamaica: the joints of the ftalk are fhorter than thofe of the common fort; and fwell a little on one fide at the bafe.

> ZIZANIA? 2. Sylveffis, affurgens, tenuis § ramofa; panicula laxa racemofa. An, Zizania panicula racemofa. L. Sp. Pl.

The branched flender Zizania, with a loofe panicle.

I have claffed this plant, already, among the reeds; but believe it does more properly belong to this genus.

ZEUGITES 1. Arundinaceus, ramofus, minor, rufefcens; panicula fparfa terminali. Tab. 4. f. 3 .

## The Mountain Reed-Grafs.

Periantium Gluma trivalvis trifora; valvulis inferioribus aqualibus, ovato-fubobtu/ss; tertia interior triplo major obtufa, \&o fetulâ terminata: e finu bujus emergit germen oblongum, ftylo fimplici villofo, $\mathcal{F}$ ftigmate obtufiufculo, villofo, infructum. Ex eqdem finu etiam furgit pedunculus tenuis biforus; floribus bivalvibus, calicibus defitutis; fingulis, ftaminibus tribus refertis: antheræ oblonga biloba, utrinque bifurca.
I found this curious little plant at Cold-Spring, in the mountains of Nerv Liguanea: it grows in a rich Chady foil, and feldom rifes above two feet or twenty-fix inches in height.

PALMA 1. Spadicibus alaribus; fructu maximo; caudice fubaquali, cicatriculis circularibus fcabro; foliis enfformibus, replicatis, pinnatis.
Coccos. L. Sp. Pl. \& H. C.
Coccos $\mathcal{E}$ Coccoifera. Mart. 388.
Palma Indica Coccifera angulofa C. B. Thez.Zey.
Palma Indica nucifera Coccos dicta Raii. Slo. Cat. 132.
Tinga varia. H. M. p. 1 \& 3. f. 1, 2, 3, 4.
The Cocco-Nut Tree.
Flores, alii mafculini, alii feminini, in eodem spadice.
Mas.
Periantium Triphyllum breve.
Corolla Tripetala, petalis oblongis, foliolis calicis alternatis.
Stamina. Filamenta fex, brevia, antheris majufulis, fagittatis, infrucia. Pittillum. Germen obfoletum; ftyli tres, fubulati, breves; ftigmata acuta.

## Femina.

Periantium Nullum xif petala exteriora foris pro calice fumas.
Corolla Hexapetala, petalis fubrotundis cocbleatis; quorum tria majora interiora fint.
Stamina Nulla. Germen craffum, fubrotundum; ftylus nullus; ftigma triangulare, obtufè trilobum, excavatum.
Pericarpium, Drupa quandoque ficca, © fibrofa; quandoque baccata, छ pulpofa; nauco offeo magno triloculari tribus foraminulis Jubobjoletis perforato referta. Loculamenta pulte amygdalino vel aqueo Jemper repleta funt; bina tamen quandoque objoleta funt.
Semina. Tot funt germina minora, quot loculamenta perfecta, in faucibus foraminum five lacunarum fita.
This tree is planted in moft parts of America, both for its beauty and productions: it grows generally in the low lands, and rifes frequently to a confiderable height, bearing all its foliage at the top, like the reft of the kind. This confifts of many ftrong ribs, furnifhed with long narrow leaves folded lengthways, which rife in a con-

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 THE NATURALHISTORYtinued feries on both fides, and fpread very evenly both ways. Thefe ribs thoot grädually from the top; and as the younger ones ftretch out fufficiently to raife the fap; the lower ones decline, wither away gradually, and fall off in time. The flowers of this tree rife in fpreading bunches from the alx of the ribs, and are fupported by fo many large branched foot-ftalks: thefe, while young, are very thickly befet with bloffoms, and covered with a fimple, thick, fibrous fpatba or fheath, of an oblong form, pointed at the top, and moderately contracted at the bottom. When all the parts of the flowers have gained a due degree of perfection, the fpatha fplits on the under fide, from the bottom upwards, and expofes the common bunch, with all its flowers, to the open air : moft of thefe are males, and fall off gradually as the fpatba withers, leaving the embryo fruit, which is generally fixed to the lower and ftronger part of the falk, to increafe and ripen gradually. Thefe grow very large in time, and are compofed of thick fibrous hufks, containing fo many large hollow nuts; which, in moft of the tribe, are trilocular: though in this, as well as fome of the other fpecies, two of the cells are obliterated, and the third only comes to perfection. The nut or fhell is formed of a hard compact fubftance, and filled with a fweetifh water, while young; but as the fruit advances in its growth, this depofites a foft gelatinous cruft upon the fides of the thell, which hatdens gradually with age, until at length it acquires a ftrong concreted stex* ture; and then it is not unlike the fubtance of an almond, either in tafte or confiftence. "The water contained in the nuts, is very pleafant while they are young, and generally looked upon as one of the greateft dainties of America; but, as they grow old, the liquor grows more fharp and cooling, and far more agreeable to over-heated habits. The kernel is very nourffing, and may be ufed inftead of almonds, in milks, emulfions, and apozems; and with greater propriety, as it may be always had frefh. The thells ferve for drinking and water cups; and the hufks, which are very fibrous, are made into various forts of cordage, in fome of the eaftern parts of the world; but in Jamaica they are only ufed to fcour the floors. The leaves of this tree are ufed for thatch, upon occafions; and the tender fhoots at the top afford a pleafant green, or cabbage: the outward part of the trunk is made into lattings; and the juice obtained by tapping it about the top, being mixed and fermented with moloffes, affords a very pleafant wholefome firit, which differs but very little from arack. At the bottom of the ribs, we find a coarfe fibrous net-work, that ferves for frainers; and the kernel is frequently rafped, and inade ioto fritters and fmall cakes.

The foots of the tree are very flender, fimple, and flexile; they rife feparately from the bottom of the trunk, and fread from thence in all directions; fome running to a great depth in the ground, while others creep almoft parallel to the furface.

> PALMA 2. Caudice altiffimo ad imulum turgido; pinnis infernè vaginantibus; folits angufis replicatis; fructu minori.
> Caunga, H. M. p.3. t. 5.

## The Barbadoes Cabbage Tree.

This is the moft beautiful tree I have ever feen, and may be very lawfully efteemed the queen of the waods: it grows to a very confiderable fize (a); rifes by a tall ftraight trunk, which bilges moderately at fome diftance above the root; and thoots by a ftraight cylindric tapering body from thence to the top, where it fpreads into large and beantiful foliage, not unlike that of the Cocco-nut tree. The lower part of each rib is pretty broad in this plant, and formed into a fheath, which embraces all thofe that grow between it and the center; fo that they continue the form of the trunk for fome fpace above the real fummit of the ftem, from whence it throws out, on oppofite fides, two large branched bunches, well be-
(a) Ray makes mention of one of thefe tites that was obferved to grow to the height of 270 feet, or thereabouts.
I
fet with mixed flowers: but thefe continue convered by a fimple $\int p a t b a$, until all the parts are ready for the operations of generation. Both the bunch and fheath refemble thefe of the Cocco-nut palm very much; but the Spatka of this is more fuft and delicate, and the bunch more fertile and fpreading; tho' the fruit is very fmall, and feldon exceeds the fize of an Englifb pea.
The feeds of this beautiful plant were firft carried to Famaica by the prefent governor, His Excellency Admiral Knowoles; and it has been fince cultivated there with great care. The lower part of the inward ribs, and the embryo leaves, are very tender; and, when boiled, become a delicate wholefome green, which is generally called cabbage in all the colonies: but this fpecies is chiefly planted for its beauty, and feldom or never cut down for that, or any other ufe.

PALMA 3. Pisnis inferne vaginantibus, caudice eqquali annulato, frutu minori:
 \& H. t. 215 .

## The Jamaica Cabbage Tree.

This plant is frequent in moft of the fugar-inlands, and grows commonly to a moderate fize. The body of the tree is generally pretty tall, upright, and even; and throws out its flowers (like the foregoing) immediately under the column formed by the fheathed bottoms of the tibs: thefe, in the fize and difpofition, as well as in the form of both their bunches and covers, are very like thofe of the Barbadoes Palm; and its foliage (like thofe of that plant) affords a delicate wholefome green, which is commonly called Mountain-Cábbage, in the fugar-iflands; and for which it is generally ent down. The outward part of the tree is ufed for lathing, and boards for out-houfes: the feeds ferve to feed the wild hogs in the feafon; and the Jpathas are frèquently made into matts by the hégroes.

- PALMA 4. Pinnis inferne vaginantibus, caudice tereti aculeàtifino, fruttus

Palma foinofa minor, vaidice gracili. Slo. Cat. 178. \& H. ii. 12 1. The prickly Pole.
This flender tree is very common itt the inland woods of famaica, and fupplies the wild hogs with abundance of food, when its berries are in feafon. It is feldom above four inches and a half in diameter, tho' it generally rifes to the height of twelve or fifteen feet: bat both the leaves and flowers are difpofed like thofe of the cabbage tree. The outward part of the trunk is extremely hard and elaftic, and looks much like whalebone ; it is very fit for bows and rammers.

PALMA 5. Caudice aculeatifimo, pinnis ad margines Jpinofis, fructibus majufcti is.

> Palma Jpinofa minor, fructu pruniformi, \&cc. Slo. Cat. 178. \& H.

The Mackaw Tree.

This tree is very common in moft of the fugar-colonies, and the rind of the fruit which is pretty thick, yields a fattifh fubftance; not unlike, or inferior to, the real palmoil. The trunk is ufed for lathing; and the feeds, which are of a black colour; about the fize of walnuts, and bear a fine polifh, are frequently made into beads by the negroes.

PALMA 6: Inermis, caudice recto, pinnis amplexantibus fabvaginatis, bac-
cis minoribts. Palma non' fpinofa folits minoribus, \&cc. Slo. Cat. 17a. \& H. Hi. I 18.

## The Thatch Tree.

The leaves of this tree are frequently ufed for thatch, and reckoned better than thofe of the other forts, for that purpofe. The outfide of the trunk is ufed, inftead of other boards, for the walls of out-houfes: it is very hard, and bullet-proof.

> PALMA 7. Pinnis \& caudice ubique aculeatiffimis, fruct umajufculo.
> Palma tota Spinofa major, \&c. Slo. Cat. $177 . \&$ H. ii. 119.8 . 1 , tab.
> An, Palma fructu pruniformi luteo aleofo ejufdem. C. $175 . \& \mathrm{H} .13$. 214.

## The Great Mackaw Tree.

The fruit of this kind differs but little from that of the fmall Mackaw tree: the hufks of both are full of oil, and the nut black and Mining. The negroes fay, that this is the tree which yields the true palm-oil : the outfide of the trunk is made into laths, bows, and darts; like thofe of fome of the other fpecies.

PALMA 8. Subcinerea, foliis brevioribus pinnatis quafimodo confertis, infppis breviffimis O in Jpinas quafi redaçis.
Phenix. Lin, G. \& H. C.
Palma dactylifera major vulg. \&ic. Slo. Cat. 174. \& H. 11, 111.

## The Date Tree.

This tree is now cultivated pretty much in famaica: the fruit is very wholefome, and fupplies a principal part of the fuftenance of many people; particularly in the ifland of Socotra, where the berries are frequently ftoned and preferved. The liquor that runs from the over-ripe fruit, ferments and becomes vinous; and if the trunk be tapped near the top, it yields a quantity of juice which ferments very freely, and makes good wine. Slo.

> PHARUS I. Foliis nervofs, oblongis, obtufs; petiolis ita contortis, ut adverfâ paginâd folia fomper Cielum refpiciant. T. 3 . f. 3 .
> Gramen avenaceum flvaticum, foliis latifimis. Slo. Cat.

## Wild Oats.

Flores alii mafculini, alii feminini in eâdem planta.

## Mas.

Periantium. Gluma bivalvis, brevis, fimplex.
Corolla Nulla. Pift. Nullum.
Stam. Filamenta fex brevia: antherx angufta oblonga.

## Femina.

Periantium. Gluma bivalvis fimplex.
Corolla. Gluma univalvis, oblonga, angufa, atate rigida \& a terga, lime inflar exafperata.
Stamina Nulla. Piftillum: Germen parvum, oblongum, intra corollam claufum; ftylus longitudine foris, bifidus, vel trifidus; ftigmata oblonga cirrboja.
This plant is pretty frequent in all the woody hills of $\mathcal{F}$ amaica, and reckoned a hearty wholefome food for all forts of cattle. The male flowers are fmaller than the female ones, and ftands on pretty long foot-italks at the back of the others.
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TEREBINTHUS 1. Foliis cordato-ovatis pinnatis, cortice levi rufefcente.floribus mafculinis fpicatis.
Piftacia foliis pinnatis deciduis, foliolis ovatis. L. Sp. Pl. Terebenthus major Betula cortice, \&c. Slo. Cat. 167. \& H.Sima-ruba. L. M. Med.
The Birch or Turpentine Tree.Flores alii mafculini, alii feminini, in eadem planta.
Mas.
Periantium Minimum quinquedentatum.
Corolla Parva monopetala, ad bafim fere in quinque lacinias oblongo-ovatasfecta.
Stam. Filamenta decem brevia; antheræ globofa.
Piftillum Nullum.
Obf. Aliquando corolla mafculina demittit, quintam generationis partem.
Femina
Periantium -? Corolla - Pit. - ?Pericarpium. Bacca fubtrigono-ovata, tribus lineis longitudinalibus notata,unilocularis, trivalvis; fucco Terebentbenaceo turgida, 尺nucleo unico turbinato, referta.

This tree is very common in all the fugar-iflands. The bark is very thick, and exfudes a clear and tranfparent refin, which hardens foon in the air, and looks much like the maftic of the fhops: but it yields a confiderable quantity of a more fluid fubftance, by incifion; which has much of the fmell and appearance of turpentine, and may be ufed for the fame purpofes with fuccefs.

The bark of the root of this tree is thought to be the Sima-rouba of the fhops, which is the moft effectual remedy we have yet known in bloody-fluxes: it is adminiftered in decoctions; and one or two drachms is fufficient for a quart of water; for if it be ftrong, it purges, or vomits; and does not, in fuch cafes, ftop thofe difcharges with fo much certainty.

## SAGITTARIA i. Foliis maximis, fimplicibus, oblongis, uitrinque produciis; ramulis verticillatis; caule glabro.

## The great American Arrow-head, with large oblong leaves.

This plant is very common about moft of the ftagnating waters in Famaica, particularly thofe near the Ferry. The ftem grows very luxuriant, in general, and rifes frequently to the height of two or three feet above the foliage. The branches of the lower verticilla feldom exceed three in namber, and are generally fubdivided in the fame manner themfelves; but thofe of the higher orders confift chiefly of five long fimple flower-ftalks, and thofe about the top of three only. The flowers that grow about the extremities of the ftem and branches, are generally male, and adorned with a great number of filaments, which are always obferved to ftand on longer foot-ftalks than the female flowers, which commonly occupy the lower part of the main, as well as of the lateral flower-fpikes. Both the ftalk and branches are fmooth and roundifh.

CERATOPHYLLUM 1. Foliis verticillatis $\mathcal{O}^{2}$ tuberculatis, maltifariam inci/ts; laciniss conicis acutis.
Ceratophyllum. L. Sp. PI. \& H. C.
The Morafs, or Morafs-weed.

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This plant is very common in all the brackifh waters in $\mathcal{F}$ apaica; and generally ufed to cover whatever filh or water-plants they carry a long way to market; for it retains a deal of moifture, which keeps them frefh and cool for a confiderable time. It may be alfo uled, with great fuccefs, to cover the tender feeds of the Cacao, for a few days after they are planted.

## CORYLUS 1. Stipulis coatis obtufis. L. Sp. Pl. <br> The Hafel-Tree.

This fhrub, like the following, was introduced to Famaica from Europe: but it does not thrive in any part of the ifland; and feldom rifes above a foot and a half, or two feet in height, even in the mountains.

## JUGLANS ı. Foliis ovalibus glabris, fubferratis © fubequalibus. L, Sp. P1. \& H. C.

The Walnut-Tree.
This plant was firf introduced to Jamaica by Mr. Fones, and planted in the mountains of New Liguanea : but it does not thrive as well as many of the other European yegetable that are cultivated there.

JUGLANS 2. Foliis oblongis obtufis pinnato-ternatis, fructibus fingularibus baccatis ad alas.
Nux Juglans trifoliata, \&ec. Slo. Cat. 123. \& H.
The Jamaica Walnut.
This Ghrubby tree is frequent about the Ferry, and often rifes to a confiderable height. The outward part of the fruit is foft and pulpy, when ripe; but the hard lignous fhell, and the partitions and lobes of the feeds, as well as the parts of the flower, agree perfectly with the general characters of the genus.

## S E C T. III.

Of fuch as bave the Filaments of the Male Flowers jained together at the bafe.

A
CALYPHA 1. Humilior, foliis cordato-crenatis, fpicis mixtis; alaribus Et terminalibus, Tab. 36. f. I.
Acalypha, involucris femineis cordatis incifis, foliis petiolo longioribus. L. $\mathrm{Sp} . \mathrm{Pl}$.
The Acalypha, with mixed flower-fpikes.
ACALYPHA 2. Erecta virgultofa, foliis ovato-acuminatis atque crenatis, Jpicis uniformibus alaribus. Tab. 36. f. 2.
Ricinokarpos, \&cc. Thez. Zey. p. 203.
The Acalypba, with diftinct flower-fpikes.
I have met with this plant at Mr. Fones's, in New Liguanea, where it grows to be a fmall twiggy fhrub; but feldom exceeds four feet and a half in height.

CROTON 1. Minus tricbotomum fubbirfutum, foliis oblong is dentatis, fpicis ad divaricationes ramorum fitis.
The fmall trichotomous Croton.

## $\begin{array}{lllllllll}O & F & J & A & A & I & A\end{array}$

This plant grows in many parts of the Savannabs of Ligzanea, but feldom rifes above lixteen or feventeen inches in height. The feeds are fmall, and much ufed both by the wild and tame fowls, who pick it up every where in the fields.

> CROTON 2. Fruticulofum minus, foliis villofos cordato-acuminatis, ramulis gracilibus glabris. An, Croton foliis ovatis tomentofis integris ferratis? L. Sp. Pl. \& H.C. The fmall Sea-fide Ballam.

This plant is common in the Savannabs about Kingfon: it is very hot and pungent upon the palate; and frequently ufed in baths and fomentations for nervous weakneffes.

> CROTON 3. Fruticulofum $\mathcal{E}$ villofum, foliis cordato-acuminatis, ramulis crafioribus tomentofis.

## The yellow Balfam.

This plant is common in the Savannas about King/ton, and rifes frequently to the height of two or three feet: it is pretty much like the foregoing, both in fize and the general form ; but is eafily diftinguifhed by the thicknefs of its extreme branches, which, in this fpecies, are pretty foft and luxuriant. All the parts of the plant are equally fharp; and, like that, fometimes ufed in refolutive baths.

## CROTON 4. Fruticulofun erectum \& fubvillofum, foliis cordato-acuminatis, fpicis terminalibus.

## The Sea-fide Balfam.

On breaking the more tender branches of any of thefe fpecies, a large drop of a thick balfamic liquor ouzes from the wound ; from whence they have obtained this appellation. This fort is larger than either of the others, and grows frequently to the height of four or five feet; but is moft commonly found in low moift bottoms. The leaves and tender tops are faid to heal fores of all forts very well; and frequently ufed in baths and fomentations, like the other fpecies.

> CROTON 5. Fruticulofum; foliis longis, angufis, fubtus incanis, margine reflexis.
> Ricino affinis odorifera fruticofa, \&c. Slo. Cat. 44. \& H. t. 86. Wild Rofemary.

This fhrubby plant refembles the European Rofemary pretty much, both in the manner of its growth, and the form and colour of its leaves; from whence it has acquired its common appellation. It is frequent on the fouth fide of the ifland, and the moft generally ufed in warm refolutive baths and fomentations.

> CROTON 6. Erectum glabrum, foliis ovatis oppofitis vel ternatis, spicis terminalibus.
> An, Ricinoides Indica folio lucido, \&c. Thez. Zey, t. go?
> An, Tilix affinis laurifolia abulili foribus albis, \&tc. Slo. Cat. \& H.

## The fmooth erect Croton.

This plant is frequent abaut Mr. Boyd's, in St. Elizabetb's, but it feldom rifes above three feet in height: it is pretty fimple towards the root, and-divides into three or four fimple branches towards the top. The leaves are oval, and pointed both ways.

# $34^{8}$ THE NATURAL HISTORY <br> CROTON 7. Fruticofun; foliis fubrotundoovatis, Jubtus Jubincanis, altornis; Jpicillis alaribus. <br> An, Croton foliis ovatis glabris, caule arboreo, \&c. L. Sp. Pl. <br> An, Malifolio arbor artemifice odore, \&c. Slo. Cat. 139. \& H. <br> An, Ricinoides aromatica arborea. Thez. Zey. t. 91. 

The larger Croton, with roundifh leaves.
This plant is pretty common in all the low lands about Spanifs Town and Kingfon: it grows in a flrubby form, and is feldom under feven or eight feet in height. All the parts of the plant are of an active warm nature, and have a pretty agreeable fmell. It is a Chrub, like this, and of the fame genus, that yields the gum lac of the fhops.

> JATROPHA I. Afurgens, ficus folio, flore berbaceo.
> Jatropha foliis cordatis, angulatis. L. Sp. Pl. \& H. C.
> Ricinus ficus folio, flore pentapetalo, \&cc. Slo. Cat. 40 .
> Munduy-Guaç. Pif. 179.

## The Phyfic-Nut Tree.

This plant is very common in all the fugar-colonies, and cultivated frequently in inclofures: it grows fometimes to the height of feven or eight feet, or better; but dies after a few years. The leaves are much ufed in refolutive baths and fomentations, and the feeds fometimes as a purgative; but they operate very violently, and therefore, now, but little ufed.

> JATROPHA 2. Humilior fetis ramofis ornata; foliis trilobis vel quinquelobis, levifime denticulatis.
> Jatropha foliis quinquepartitis, lobis ovatis integris, fetis ramofis glandulofis. L. Sp. Pl.
> Ricinus minor flapbifagrie folio, fore purpureo. Slo. Cat. \&t H. t. 84. Wild Cafava, or Cafadar.

This plant is very common about Kingfon; and in moft other parts of the inand, where the foil is dry and gravelly, and the fituation warm. It grows moft luxuriantly about houfes, where the ground is warmed with dung; and rifes, in fuch places, to the height of three feet and a half, or better. It is a very beneficial plant in every plantation where they raife any quantity of poultry; for moft forts of birds, efpecially thofe of the craw'd kind, feed much on its feeds. Mr. Hughes, of Barbadoes, affures us, that an excrefence is generally found in the body of the ftalk of this plant, which, he fays, is a powerful purgative and fternutatory: but the fwellings, in which it is generally found there, is feldom obferved in any of thofe plants in Famaica; and probably may be the effect of fome infects peculiar to that inland. A decoction of the leaves is fometimes ufed as a purgative in the dry belly-ach.

> IATROPHA 3. Afurgens, foliis digitatis, laciniis angufis pinnatifitis.
> Iatropha foliis multipartitis levibus, Atipulis fetaceis multifidis. L. Sp. PI. $\& \mathrm{H} . \mathrm{C}$.
> Ricinus Americanus leniter divifo folio. Slo. Cat. 40.
> French Phyfic Nut.

This plant is pretty much raifed in Jamaica, and forms no fmall ornament in many of their flower-gardens. It grows generally to the height of five, fix, or feven feet, and throws out pretty large bunches of beautiful reddifh flowers, that

## O F J A M A I C A. 349

ftand on long foot-ftalks at the extremities of the branches. The leaves are divided into many narrow lobes; and each of thefe is again varioufly cut into fmaller fegments at the edges. "The capfulæ are moderately large, and grow yellow as they ripen. The feeds are purgative, but fo very violent in their operations that they are now but rarely adminiftered; tho formerly, they were almoft the only medicines of the purgative kind ufed among the Spaniards.

> IATROPHA 4. Foliis palmatis pentadactylibus, radice conico-oblonga, carne fublacteâ.
> Iatropha foliis palmatis, lobis lanceolatis levibus integerrimis. L. Sp. Pl. Ricinus minor viticis obtufo folio, \&c. Slo. Cat. 4 r. \& H. t. 85. Mandihoca. Pif. 114. \& Yucca \& Cazzavi. Martiris, pag. 6. 228. \& 544.

The Caffava, Caffada, or Caffadar.
This plant, which formerly fupplied the greateft part of the fuftenance of the native Indians, is now raifed in mont parts of America; and generally confidered as a very beneficial vegetable, which yields an agreeable wholefome food; and this, with its eafy growth and hardy nature, recommends it every where. It fhoots from a tough branched lignous root, whofe flender collateral fibres fwell into thofe flefhy conic maffes for which the plant is cultivated; and rifes by a flender woody knotted ftalk, to the height of four, five, or fix feet, fometimes more. It thrives beft in a free mixt foil, is propagated by the bud or gem, and generally cultivated in the following manner:

The ground laid out for the culture of this plant is firft cleared, and howed up into thallow holes, of about ten or twelve inches fquare, and feldom above three or four inches in depth; but without order or regularity. When they intend to plant, they provide a fufficient number of full-grown ftems, and cut them into junks, of about fix or feven inches length, as far as they find them tough and lignous, and well furnifhed with prominent, well-grown, hardy buds: of thefe they lay one or two in every hole, and cover them over with mould, from the adjoining bank; but care muft be taken to keep the ground clean, until the plants rife to a fufficient height to cover the mould and to prevent the growth of all weaker weeds. The plant grows to perfection in about eight months; but the roots will remain for a confiderable time, uninjured, in the ground, tho' the want of plants, or ftormy weather, fould oblige the cutting of the ftalks. The bulbs are commonly dug up as occafion requires, and prepared for ufe in the following manner, viz. Being firf well wafhed and fcraped, then rubbed to a pulpy farine on iron graters, they are put into ftrong limen, or palmata bags, and placed in convenient preffes (a), until the juice is entirely expreffed: the farine is then taken out and fpread in the fun for fome time, pounded in large wooden mortars, run thro' coarfe fieves, and afterwards baked on convenient irons. Thefe are placed over proper fires, and, when liot, befrewed with the fifted meal to whatever fize or thicknefs people pleafe to have the cakes made: this agglutinates as it heats, grows gradually harder, and when thoroughly baked, is a wholefome well-tafted bread.

The juice of the root is fweetifh, but more or lefs of a deleterious nature both frefh and in the putrid ftate; though it hardly retains any thing of this quality whike it ferments. What is expreffed from the farine is frequently preferved by fome people, and prepared for many œeconomic ufes: in the boiling it throws up a thick vifcid fcum, which is always thrown away; and the remaining
(a) The preffes generally ufed on this occafion, are both cheap and effectual; they are contrived by placing one or more large flat ftones near the root of fome convenient tree, in the fide of which they cut a hole or notch about the height of the ftones: and into this they fix the end of a flrong plank, which is fretched over the flat fones on which the Caffava bags are fet; placing as many weights as the flereigth of the board will bear, or may be requifite to exprefs the juice, on the other end.

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 THENATURALHISTORYfluid (being found by long experience to be both wholefome and agreeable) is fometimes diluted and kept for common drink; and is thought to rimble whey very much in that ftate. Some ufe it in fauces for all forts of filh as well as many other kinds of foods; purpofes for which it was known to be employed among the native Indians, long before any European had landed in thofe parts of the world. See Peter Martyr's Decades, pig. 4.20. Dut however mobhckome or violent the rough juice may be found immediately after it is expreffed, it is certain that the roots are daily thrown and eat by the hogs without prejudice: and it has been lately difoovered by an ingenious gentleman, who has practifed many years in the warm parts of America, that a little mint-water and falt of wormwood will calm the molt violent fymptoms that arife on taking it; and prevent all bad confequences, even in the human fpecies, if it be but timely adminitered.

The farine, as yet, impregriated with the juice, makes an excellent falve, which feldom fails to clean and heal the moft defperate fores: but where thefe are very foul, or the parts too much relaxed, it is fometimes mixed with a few pounded tobacco-leaves; and has been often found effectual where common ointments have not had the leaft force : it is alfo ufed by way of poultice, and is an excellent refolative.

IATROPHA 5. Foliis palmatis, lobis incertis, radice oblong $\hat{a}$ funiculo valido per centrum ducto, carne nivea.

## The Sweet Caffada.

This plant is very like the foregoing both in habit and appearance, and raifed and cultivated in the fame manner; but the root is free from any of that deleterious quality that is generally obferved in the juices of the other fort. It is always planted in feparate pieces for fear of a miftake, , and roafted or boiled for ufe; but the latter feems to be the beft method of drefing it; for in this ftate, the outward part is commonly brought almoft to a jelly, and is extremely delicate and agreeable.

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RICINUS 1. Fruticofus afturgens, foliis majoribus peltato-lobatis, lobis Serratis
    acutis.
    Ricinus foliis pellatis palmatis ferratis, petiolis glanduliferis. L. Sp. PI. \&
    H. C.
    Ricinus Americanus fructu racennofó bipido, \&cc. Slo. Cat. 38.
    Ricinus foliis maximis, \& ce. Clayt. Flo. Virg. 119.
    The Oil-Nut Tree.
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This luxuriant plant is frequent in all the fugar-colonies, and cultivated by many people for the fake of its oil; which is commonly obtained by pounding the feeds or kernels freed from the hufks, and boiling them in water until all the oily particles rife to the top; which they carefully fkim off, ftrain, and preferve for ufe. This is burned in the boiling-houfe lamps, by many of the planters; and is fometimes ufed by way of phyfic. I have often ordered it made into an oily mixture, in the dry belly-ach, to two, three, or four ounces; and do not know any thing that procures a paffige fo certainly, or with fo much eafe. It is quite free from acrimony in this ftate, and flays freely upon the flomach, even when it loaths moft other medicines: but its mildnefs feems to be chiefly owing to the action of the fire; for the expreffed oil, as well as the mixt juices of the feeds, are far more active and violent in their operations. The roots of the plant are looked upon as ftrong diuretics; and the leaves are generally ufed to drefs blifters, of which they make too frequent ufe in thofe parts of the world.

HIPPOMANE I. Arboreum lactefcens, ramulis ternatis, petiolis glandula notatis; floribus fpicatis, mixtis.
Hippomane folizs ovatis ferratis. L. Sp. PI. \& H. C.
Juglandis affinis arbor Fulifera laitefcens venenata, \&sc. Slo. Cat. 129. \&
H. ii. P. 3. tab. 159. and the Mangeneel of Cat. ii. t. 95.

Mançanilla. Plum. t. 30.
Arbor mire moxia. Mart. 105.
The Mangeneel Tree.
Flores alii mafculini, alii feminini, in iafdem Jpicis.
Mas.
Per fpicam, e finu fingula fquame deciduce binifque glandulis infructe, confertim emergunt caliculi feu capfula membranacea, cyatbyformes, felfiles, fere integra.
Cosolla Nulla.
Stamina. E centro finguli caliculi, furgit Atamen unicum, erectum, calice duplo longius; antheris quatuor jubrotundis in orbem pofitis, influcluth.

## Femina.

Fructificatio tantum unica vel altera, ad bafim fingula spica pofita eft, 8 fic Se babet.
Periantium; Inter glandulas binas erigitur calix tripbyllus parvus, germen involvens, tandem deciduus.
Corolla Nulla. Stam. Nulla.
Piftillum. Germen ovatum, calice fere tectum; Alylus brevis; Atigma con-cavo-campanulatum, limbo in Sex vel plures lacinias anguJtas, pof glandularum delapfum refectentes, divisum.
Pericarpium. Drupa atate baccata, fpharica; nauco ligneo, rugofo, inaquali, fex inter $\mathcal{E}^{2}$ duodecim loculamentis varie difpofitis referto, donata.
Semina. Nuclei folitarii tot quot funt loculamenta; fed ut plurimum abortiunt nonnulli, numero incerti; © objolejcunt loculamenta.
This tree is very common in moft parts of America. It grows generally by the fea-fide, at fome friall diftance from the furf; and is full of an acrid milly juice, which is apt to blifter and inflame the fkin: nay, the dew or rain-drops that fall from the leaves, is faid to do the fame. The wood is ofien of a fine grain, and very beautifully clouded; but, to guard againft its corrolive juices, the wood-cutters are obliged to make a fire round the body of every tree, fome time before they can venture to fell them. I bave known many people who have ignorantly eat of the fruit of this tree, which they had taken for crab-apples: they generally vomited in a fhort time, and continued to complain of a burning heat in the mouth, throat, and ftomach, for many hours after. The juice of the buds of the white cedar is efteemed an antidote to this poifon, and is generally ufed with fome fuccefs on thefe occafions; but oily mixtures and emulfions, are the moft effectual affittants, and feldom fail giving relief foon. I have not known any to die by this 'poifon, tho' I have feen fome who have eat nine or ten of the apples at a time. It is with the juice of this tree the Indions ufed to poifon their arrows.

HIPPOMANE 2. Arboreum, ramulis irregulariter ternatis, folis cordatocrenatis reflexis, petiolis biglandulis.
Hura. L. Sp. Pl. \& H. C.
Baruce fruqus e plurimis nucibus arboris burce J. B. Slo. Cat. 214.
Et Hift. ii. 186. \& Ehret. t. xif.

The Sand-Box Tree.
Flores alii mafculini, alii feminini, in eâdem plantâ.
Mas.
Ex eadem arboris parte cui infidit fos femineus, furgit fpica fimplex, fatis valida, tuberculata: ex tuberculis vero, atate prorumpunt totidem Stamina Singularia, valida, rubra, duplici, triplici, vel quadruplici ferie antherarum verfus fummitatem, in orbem pofitarum, referta, $\mathcal{E}$ apicibus nudis decemcrenatis terminata.

Femina.
Ad divaricationes ramorum fuperiorum, pedunculis validis folitariis incumbunt totidem
Periantia Parva, fubrotunda, truncata, integerrima.
Corolla Nulla. Stam. Nulla.
Piftillum. Germen conicum canaliculatum calice fere tectum; fylús longus crafus, fuperne ampliatus concavus, infundibuliformis. Stigma. Limbus tubi incraffatus amplus reflexus terdecimdentatus, figmatis vicem fupplet.
Pericarpium. Drupa orbiculata depreffa, utrinque umbilicata, fulcis terdecim longitudinalibus notata: naucus ligneus terdecimlocularis, fulcatus; loculamentis in orbem fitis, oblongocomprefis femilunatis bivalvibus; valvis adnatis, vi elaficica decedentibus.

## Semina. Nuclei folitarii orbiculati compreff.

The formation and parts of this tree agree fo well, in general, with thofe of the Mangeneel, that I was induced to look upon them as two diftinct fpecies of the fame genus. The branches are divided alike in both; and the leaves which fland in the fame manner, reflecting a little backwards from the direction of the foot-ftalks, are difpofed pretty thick at the extremities of the branches, and fuftained by foot-ftalks, that have, in this, one gland each; in that, two. This is full of a thick tranfparent juice; that of milk; both acrid: and the fluwers, notwithftanding they differ in fome degree; agree in the formation of the Ayle and Aigma, as well as in the difpofition of the anthera, tho' the number of thefe be not the fame in both. In this, the fruit is regularly divided into cells; in that, whofe nut or fhell is harder, thefe are not fo regular; yet they are longitudinal, adjoining, in a number proportioned to the divifions of the fivgma, and generally both regular and many in the younger germens; but fome of them abort, as the fruit increafes.

The feeds of the Sand-box tree, roafted, purge both upwards and downwards. Herr. 1 have tafted one of them, and it appeared, at firft, to be both mild and pleafant; but it foon began to warm and fcald both my palate and throat, which induces me to look upon it as an improper purgative; unlefs it be given to raife a warmth in the bowels, where they have loft moft of their vigour by a continued flux, or diarrhæa; and, even then, I think the feeds of the argemone a much more eligible medicine. The fruit is very curious, as well as the parts of generation: and the tree, when it grows well, is very fpreading and fhady; which induces many people to raife it in their gardens.

## S E C T. IV.

Of fuch as bave the antherx, and fometimes the filaments themflves, irregularly connected together in all the male flowers.

M
OMORDICA 1. Glabra, foliis profunde lobatis, fructu rotundo friis verucofis notato.
Momordica Zeylonica pampinea, fructu breviori minori Int. Thez. Zey.

## The fmooth-leafed Cerafee.

MOMORDICA 2. Subbirfuta; fructu oblongo, tuberculis conico-comprefis inaqualibus obfito.
Momordica pomis angulatis tuberculatis, foliis villofs longitudinaliter palmatis. L.H.C.
Momordica Zeylonica pampinea fronde, \&cc. Thez. Zey.
The hairy Cerafee.
Both thefe plants are frequently cultivated in Famaica, and thrive very luxuriantly in moft of the gardens about Kingfon. The leaves boiled, and the decoction of the plant, are equally ufed to promote the locbice; the former by way of green, the other as an apozem; and are both reckoned very ferviceable on thofe occafions.

MELO I. Fructu oblongo fulcato odoratifimo.

## The Mufk-Melon.

This plant is much cultivated on account of its fruit, which is generally efteemed in thofe warm climates, and looked upon as one of the greateft delicacies among their vegetable productions. It is very agreeable and refrefhing to moft palates, and much in ufe among the better fort of people. The feeds are commonly ufed in cooling and nutritive emulfions.

CUCUMIS I. Subbirfutus minor, foliis profunde finuatis, fructibus muricatis.
Cucumis foliis palmato-finuatis, pomis fubovatis ecbinatis, anguria diefus.
L. Sp. Pl. \& H. Upf. \& Guaperva Aba. Pif. 264.

## The fmall wild Cucumber.

This plant grows wild in moft of the fugar-iflands, where the fruit is frequently ufed, with other herbs, in different foups; in which it proves both an agreeable and a wholefome ingredient. If this be the true anguria of Europe and of the Chops, (and it hath all the appearance of fuch) it throws off both its bitter and purgative qualities in thofe warm climates.

CUCUMIS 2. Sativus, foliis crenatis atque lobatis, fructu oblongo majori.
Cucumis foliorum angulis rectis, pomis oblongis fiabris. L. Sp. PI.

## The Cucumber.

This plant is much cultivated in Famaica, where its cooling fruit is frequent in ufe and generally efteemed. It is commonly ferved up by way of fallet; and obferved to agree very well with all over-heated habits in thofe warm climates.

CUCUMIS 3. Foliis multipartitis. L.Sp. PI. \& H. Upf.
The Water-Melon.

This plant is frequently cultivated in the gardens of Famaica, on account of is cooling pulpy fruit, which is greatly efteemed by moft people in thofe warm climates. The feeds, like thofe of the mulk-melon, are much ufed in cooling and nutritive emulfions.

CUCURBITA I. Foliis quinquelobis, lobis Jubangafis denticulatis, fruenu nitido ovato cequali.
An, Paffiflora foliis palmatis ferratios. L. Sp. P1.
The fmall Gourd, with divided leaves.
This plant grows wild in the moft lofty mountains of Nerw Liguanea. The pulp of the fruit is quite infipid, and divided into three diftinct mafles, as in the reft of this tribe; which, with the form of the feeds, hath induced me to range it in the fame clafs, tho' I have not feen any of the flowers.

> CUCURBITA 2. Villofa, fructu pyriformi minori, foliis fubangulatis bafo biglandulis.

Cucurbita foliis fubangulatis tomentofis, bajo fubtus biglandulofis pomis lignofis. L. Sp. PI.

## The fmall Gourd.

This plant is found, either cultivated or wild, in moft parts of $\mathcal{F}$ amaica, where the Chells of the fruit are generally ufed for water-cups; and frequently ferve for bottles among the negroes and poorer fort of white people, in the country parts of the illand. The decoction of the leaves is recommended much in purging clyfters; and the pulp of the fruit often employed in refolutive poultices: it is bitter and purgative; and may be ufed, inftead of the common coloquintida, upon occafions.

CUCURBITA 3. Fructu maximo fubrotundo. Cucurbita foliis Jubangulatis tomentofos, \&c. L. Sp. P1.

The large Gourd.
This plant is cultivated in many patts of Jamaica on account of the lignous fhell of its fruit, which grows frequently large enough to contain between twenty and thirty quarts. Where aloes is manufactured in any quantity, it is commonly preferved in there fhells; but, in 'famaica, they are hitherto ufed only to hold wates and fmall grain.

CUCURBITA 4. Fructu longiffimo, bipedali, incurvo, obtufa.
An, Trichofanthes pomis teretibus oblongis incurvis. L. Sp. P..
Curuba. Pif. 262.

## The flender winding Gourd.

This plant is, like the reft of the kind, fometimes planted in Jamaica, on account of its fruit; but it is not fo common, nor the fhell fo much efteemed.

> TRICHOSANTHES 1. Foliis denticulatis, quandoque tribbis, quandoque cordatis; fructu fubrotundo minori.
> An, Trichofanthes pomis turbinato-ovatis. L. Sp. Pl.

The wild Trichofanthes, with denticulated leaves.
This plant is a native of Jamaica, and grows wild in the cooleft parts of Neic Liguanca: the pulp of the fruit is very bitter, and the feeds black. I have not feen any of the flowers; nor ever met with the plant in any other part of the ifland.

SECHIUM I. Foliis cordata-angrlatis, racemis minoribus ad alas. The Cbocho Vine.
Flores alii mafculini, alii feminini, in eádem plantâ.
Mas.
Periantium Nullum, nif denticulos minores ad incijuras foris pofiros, calicem effe velis.
Corolla Monopetala campanulata, ad medietatem in quinque partes cequales Jecta.
Pift. Nullum. Stam. Filamentum unicum, craffrufculum, fubquadrifidum, antheris quatuor cordatis ornatum, centrum foriss occupat.

## Femina.

Periantium, Ut in mare.
Corolla, Ut in mare, ftylo valido infidens.
Stamina Nulla. Pift. Germen obverjè-ovatum: fylus validus, incrafSatus fimplex foren fulinet atque perfodit © centrum occupat: Atigma capitatum.
Pericarpium. Pomum magnum, carnofum, obverfe cordatum, Jubcomprefum, femine unico minori refertum.
This plant is now cultivated in many places in famaica, and grows very luxuriantly in all parts of the ifland, efpecially in the cooler mountains, where the vines are always obferved to run and fpread very much. The fruit is fometimes boiled, and ferved up at table by way of green, in which ftate it is generally looked upon as wholefome and refrefhing; but it is too infipid to be much liked. The apples ferve to fatten the hogs in the mountains and infand parts, where the plant is moftly cultivated.

## BRYONIA. 1. Foliis birtis, trilobis vel quinquelobis, denticulatis; racemis minoribus alaribus. <br> The Mountain Bryony.

I found this plant growing wild in the mountains of New Liguanea, juft below Mr. Jones's: it runs a great way, and bears fmall roundifh berries, which contain, each, three, four, or fix feeds. The figma, or top of the fyle, is, in each female flower, divided into three thin reflected lobes; and the fruit feldom exceeds three quarters of an inch in diameter.

## C L A S S XXII.

Of the Dioecia, or Vegetables that have both male and female Flowers, but difpofed on different ftems.

$$
S \quad E \quad C \quad I
$$

Of fuch as bave from one to ten Filaments in every Male Flower.

A
CIDOTON I. Fruitefcens aculeatum $\mathcal{O}$ difufim, ramulis gracilibus terctibus, foliolis confertis flore unico vel altero alociatis.

## THENATURALHISTORY

The fmall fhrubby Acidoton.
Flores, in aliis mafculini, in aliis feminini.
Mas_?
Femina.
Periantium Nullum.
Corolla Pentapetala, vel monopetala in quinque lacinias ovatas ad bafim Jecta; laciniis binis majoribus. Stamina Nulla.
Pintillum. Germen ovatum; ftyli tres, refexi, bifurcati; fligmata oblonga. Pericarpium $\qquad$ ?
This little fhrub is pretty common in the Savannas about New Greenwich, where it feldom rifes above four feet in height. The branches are very flender and flexile, and the leaves fmall and delicate ; and fhoot, with the flowers, early in April or May. The whole plant has a good deal of the appearance of a young Ebony.

BATIS I. Maritima erecta, ramofa; foliolis fucculentis, fubcylindricis.
Kali fruticofum coniferum, flore albo. Slo. Cat, 50.
The Samphire of Jamaica.
Flores, in aliis mafculini, in aliis feminini.
Mas.
Flores mafculini per Jpicas pyramidatas Squamis quadruplici ordine imbricatas, difpofiti funt.
Periantium Proprium nullum.
Corolla Nulla, nifi vaginulas membranaceas irregulares Squamis interpofitas, pro floribus babere vis.
Stamina. E fingulis fquamarum interfititis, furgunt filamina quatuor erecta, fquamis longiora, antheris triangularibus fubfogittatis, infructa.

## Fæmina.

Periantium Commune diphyllum, in caput collegit embryones plures (fex inter © duodecim) fucculentos, © invicem agglutinos; qui, tandem, in unum corpus fubequale, oblongo-ovatum redacti funt. Proprium nullum.
Corolla Nulla. Stamina Nulla.
Pifillum. Germen fucculentum, minimum, proximis fubadnatum, quadrangulare; ftylus nullus; ftigma obtufum, fub-bilobum, villofium.
Pericarpium. Acince totidem fucculenta, adnata, feminibus binis comprefis referta.
Receptaculum Commune oblongum, acinas omnes in unum colligit.
This plant is common in all the Salinas on the fouth fide of Famaica: it abounds with alkalious falts, but the manufacture of this commodity has not been yet attempted in that ifland; where no endeavours have been hitherto ufed to make either foap or glafs.

[^21]
## O F J A M A I C A.

VISCUM 2. Parafiticum geniculatum appyllum, ramulis comprefis oppofitio. Vifcum caule prolifero, ramofifimo, aphyllo, compreflo. L. Sp. PI. Vifcum opuntioides ramulis comprefis, \&ec. Slo. Cat. 168. \& H.

The aphyllous Mifletoe, with verticillated branches.
VISCUM 3. Parafiticum, berbaceum; foliolis concavis fubcylindricis, ad $\begin{gathered}\text { apices tridentatis. }\end{gathered}$
The fmall parafitical Minetoe, with tubular leaves.
Thefe plants are pretty frequent in Gamaica, and commonly found growing on all the larger trees in every Savannab. The firft fort is employed by the inhabitants of that inland, for the fame purpofes, for which the mifletoe of the oak is in England; but I have never known it to have any remarkable effect. The laftspecies is very rare, and feldom thoots above five or feven inches in length; it grows upon the fmaller plants, is very fucculent, and feldom bears either fruit or flower.

CISSAMPELOS 1. Scandens, foliis peltatis orbiculato-cordatis villofis; foribus majculinis racemofis, femininis Jpicatis, fpicis foliolatis.
Clematis baccifera glabra © villofa, \&c. Slo. Cat. 85 .
Iztac-coanene-pilli. Hern. 1 Ig. © Botbuas alba \& Pareira-brava. Off. Ciffampelos foliis peltatis cordatis emarginatis. L. Sp. PI. \& M. Med.

The Velvet-Leaf.
Flores, in aliis mafculini, in aliis feminini.
Mas.
Periantium Tetrapbyllum, foliolis lanceolatis comniventibus.
Corolla Difous membranaceus rotatus in fundo calicis fitus. An, neCtarium?
Stamina. E centro difci furgit flamentum unicumbrevifinum; antherâ am-
pliatâ, concavâ, quadrilobâ, obtufè quadrigonâ, ornatum.

## Femina.

Periantium. Periantii vicem fupplet foliolum unum vel alterum, ad latera germinis pofitum.
Corolla Nulla. Netarium. Margo membranaceus e latere germinis afJurgens.
Piftillum. Germen ovatum, minimum, birfutum; ftylus nullus: Atigmata tria, minima, acuta.
Pericarpium. Bacca fubrotunda fucculenta, nucleo unico, nauco fubcompreffo ad latera glabro, margine rugofo, tecto, referta Obf. Omnes fructificationes partes minime funt.
This plant is looked upon as an excellent diuretic, and in frequent afe among the negroes in all obftructions of the urinary paffages; but it has not been yet much known among the whites. It thrives beft in a rich chady foil, grows well both in the high and low lands, and may be very eafily propagated. The root, which is the part chiefly ufed, has a pleafant bitterifh tafte, and anfwers well in decoctions.

TROPHIS I. Foliis oblongo-ovatis glabris alternis, foribus mafculinis fpicatis ad alas. Tab. 37. f. i.

The Ramoon Tree.
Flores, in aliis mafculini, in aliis feminini.

## THENATURALHISTORY

Mas.
Periantium Nullum. Corolla Tetrapetala.
Stamina. Filamenta quatuor. Pift. Nullum.
Femina.
Periantium Nullum: Corolla Nulla. Stamina Nulla.
Pift. Germen ovatum. Stylus tenuis, ad bafin fere divifus in duas partes fubulatas; antheræ adnate.
Pericarp. Bacca fubfriata rugofa, unilocularis; nucleus bilobus, nauco tenui fragili, tectus.
The leaves and tops of this tree make an agreeable wholefome fodder for all forts of cattle; and are often ufed as fuch, in dry feafons, in the inland woody parts of Famaica, where grafs is frequently very fcarce. The berries are generally about the fize of large grapes, and of an agreeable pleafant flavour.

PISONIA I. Afurgens, farmento valido, foliis ovatis utrinque productis, spinis validis recurvis, racemis lateralibus.
Pifonia. Plum. Lin. Gen. \& H. C.
Rhamnus an potius Lycium, \&cc. Pk. Phy. t. 108. f. 2.
Paliuro afinis arbor Jpinofa, \&cc. Slo. Cat. \& H.

## The Cock's-fpur, or Fingrigo.

## Periantium Dipbyllum minimum.

Corolla Monopetala conico-campanulata: limbus quinquecrenatus; laciniis brevibus, reflexis.
Stamina. Filamenta fex, quandoque feptem, vix áqualia, corollả duplo longiora: anthere fubrotunde.
Piftilum. Germen oblongum, parvum; ftylas fimplex, longitudine tubi corolla; ftigma ampliatum, lacerum, penicilliforme.
Pericarpium. Capfula oblonga, obtufa \& obtufe peritagona; angulis denticulis uncinatis munitis.
Semen Unicum oblongum.
This plant is frequent in all the fugar-iflands; it is a ftrong withey climber, whofe main trunk is fometimes no lefs than five or fix inches in diameter, but this is generally in the woods, where it thrives beft, and is commonly fupported by the help of fome of the neighbouring trees. The flowers of this plant are very various, they are fometimes hermaphrodite on every branch, fometimes male in one branch and female in another, and fometimes male, female, and hermaphrodite, on the different parts of the fame plant; but moft commonly they are all of one kind. The plant is frequently cut for hoops, when there is a fcarcity of the other forts.

> IRESINE 1. Erecta berbacea, caule nodofo, panicula longà afurgenti.
> Celofia foliis lanceolato-ovatis, panicula diffufa filiformi. L. Sp. Pl.
> Amaranthoides, $\mathcal{F} c$. Pk. t. 26 I. f. I.
> Amaranthus panicula-bolofericea, \&cc. Slo. Cat. 49. \& Hilt. tab. 90. 2.
> The herbaceous Irefine, with oval leaves.
> Flores, in aliis mafculini, in aliis feminini.
> Mas.
> Periantium Diphyllum, minimum; foliolis nitidis, acutis, oppofitis.
> Corolla Pentapetala; petalis erectis, lanceolatis, lucidis: vel monopetala,

## O F J A M A I C A.

Stamina. Filamenta quinque erecto-patentia, corolla breviora; antherx oblonge. Nectaria totidem minima interpofita.
Pift. Minimum abortiens.

## Femina.

Periantium, Ut in mare. Corolla, Ut in mare. Stamina Nulla. Pift. Germen ovatum; flylus nullus; ftigmata bina fubrotunda. Pericarp. Capfula oblongo-0vata, Jeminibus aliquot tomento obfitis, referta.
This plant is frequent about Kinglon; and rifes, commonly, to the height of two or three feet. The leaves are of an oval form and intire.

> SMILAX 1. Sarmento tereti, inferne aculeato; foliis fubrotundoncordatis, trinerviis; petiolis clavicula unâ vel alterâ refertis.
> Smilax caule aculeato teretinficulo, foliis inermibus ovato-cordatis. L.Sp. PI. Smilax Indica fpinofa, folio Cinnamomi, \&cc. Mul. \& Thez. Zey. p. 214. An, Smilax afpera Bermudienfis, \&cc. Pk. t. 110 . f. 6.

## The Cbina-root Plant.

This plant is frequent in the more cool inland parts of famaica. It grows wild, rifes from a thick porous root, and climbs by a pretty flender rigid item, to the top of the talleft trees in the woods; this is adorned with a few prickles towards the bottom, divides into many branches at the top, and throws out its winding tendrels from the foot-ftalks of the leaves. The root is commonly ufed in Famaica, and obferved to anfwer as well as that from the Eafl-Indies: it is of a theathing nature, and a very fit ingredient in all diluting apozems.

The plant may be eafily propagated, fo as to fupply the European markets, if the medicine was in any general repute: but, at prefent, what grows wild, is more than fufficient to fupply the inhabitants; and ferves frequently to feed the hogs, which are faid to live chiefly upon it, when there is a fearcity of wild fruit.

## SMILAX 2. A/pera, foliis trinerviis oblongis, petiolis biclaviculatis. Smilax Virginiana, Jpinis innocuis armata. Pk. Phy. t. IIo. f. 5. The prickly Smilax, with flender roots.

This plant is pretty like the foregoing; but the roots are fmall, and divided into a number of flender branches. It is very like the Sarça-parilla of Pifo. pag. 258.

DIOSCOREA 1. Foliis cordatis, caule tereti aculento bulbifcro. L. Sp. Pl. \& H. C.
Volubilis nigra radice tuberofa compreffa, \&cc. Slo. Cat. 46.

## The Negro Yam.

DIOSCOREA 2. Foliis cardatis, caule alatobulbifero. L.Sp. PI. Volubilis nigra radice alba aut purpurea, \&ic. Slo. Cat. 46.

## The Yam.

Both thefe plants are cultivated for food, the roots, which grow very large, being mealy and ealy of digeftion: they are generally both dry and palatabie, and not inferior to any of thofe now in ufe, either in delicacy, flavour, or matter of nourihh ment. Both plants are propagated by the piece; but thefe muft be cut fo as to have a little of the fkin upon them, by which alone they germinate; for the roots have no apparent gems, but caft out their weakly ftems from every part of the furface alike. They are put into convenient holes (two or three in each) which are generally dug pretty regular, and about a foot and a half or two feet fquare: thefe are afterwards

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filled from the adjoining banks, and the whole piece covered with canetrafh; which ferves to keep the ground cool and frefh, and to prevent the growth of weeds, from which there plants mult be carefully preferved, until they grow fufficiently to cover the mould themfelves. They are planted commonly in Auguft, and are generally ripe about November or December following.

When the roots are dug up, the people fhould be careful not to wound them, or but as little as pofible; for fuch assare cut throw out their fprouts very early, and are feldom fit for any thing but planting, if they hold out even till that feafon comes on. After they are dug up, they are rubbed over with athes, from the copper-holes, or other fires, and piled regularly on convenient beds, or hurdles, raifed above the floor, fo that the air may come eafily between them: but, where they are heaped in great quantities, care hould be taken to ftrew fome ahmes between the layers.

> DIOSCOREA 3. Foliis cordatis, camle levi rotunda,
> Diofcorea folits cordatis, caule levi. I.H.C. \& Sp. Pl.
> Fagopirum fiandens feu volubilis nigra major, \&xc. Slo. Cat. 46.

## The wild Yam.

This plant grows wild in the inland woods of $\mathcal{F}$ amaica, and bears very large capfules. It is not put to any ure in that inland.

CARICA 1. Fronde comofa, foliis peltato-lobatis, lobis varie finuatis. Carica foliorum lobis finuatis. L. Sp. PI \& H. C. Papaia major flore © fructu majoribus, \&cc. Slo. Cat. 202. Papaia mas © fernina, \&c. Thez. Zey. \& H. M. iii. t. 15. Arbor Melonifera. Bontii 96. \& Pino-guaçu. Pif. 159.

## The Papaze Tree.

This tree grows wild in many parts of 'famaica, and is eafly propagated both by the feeds and layers. It admits of many changes both in the fize and figure of its fruit; but I take the different appearances to be only varieties of the fame ipecies. The trees are, fome male, others female: in this, the flowers are pretty large, and grow in clufters among the leaves, on the upper part of the trunk: in that, they are fmaller, and grow on long branched fupporters that ftretch a good way out, between the foot-falks of the leaves, which are feldom under one or two feet in length, hollow, and of a proportioned thicknefs. The tree is full of an acrid milky juice, which is commonly faid to cure the ring-worms; but how true this affertion may be, I am not able to determine. The feeds are round and rugged, pretty much of the fize and make of black pepper, and always inveloped in a foft gelatinous fubftance within the fruit: they have a fharp biting t.ffe, much like that of muftard, and are faid to bring away worms from children. The fruit, when ripe, has a pleafant fweetifh tafte, and is much liked by many people; but, while young, it is commonly ufed for fauce, and when boiled and mixed with lime-juice and fugar, is not unlike, or much inferior to that made of real apples, for which it is commonly fubftituted. The tree is very foft and fucculent, and lives but a few years; but never fhoots into branches unlefs it be broke while young. Water impregnated with the milky juice of this tree, is thought to make all forts of meat wafhed in it very tender; but eight or ten minutes fteeping, it is faid, will make it fo foft, that it will drop in pieces from the fpit before it is well roafted; or turn foon to rags in the boiling.

CARICA 2. Sylvefris minor, lobis minus divifis, caule Jpinis inermibus oppofito.


# O F J A M A I C A. 

This plant is pretty frequent in the road thro' May-day hills; but it feldom rifes above four or five feet in height.

BERNARDIA I. Fruticofa, foliis tomentofis avatis ferratis alternis.
Bernardia Carpini folio erecta. Houft.
The Ahrubby Bernardia, with villous leaves.
Flores, aliis mafculini, aliis feminini.
Mas.
E finu fingula fquama amenti five fpica, emergit corolla monopetala, in tres lacinias oblongas revolutas, ad bafim fere fecta: alia nulla.
Stamina. Filamenta plura, viginti circiter, ad bafin in unum corpus cylindraceum breve adnata; antheræ fubrotunda.

Femina.
Periantium Campanulatum, germini fuppofitum, quinquedentatum; laciniis tribus majoribus.
Corolla Nulla. Stamina Nulla.
Piftillum. Germen fubrotundum, trilobum, villofum; ftylus vix ullus; ftigmata tria, compreffa, lacera.
Pericarpium. Capfula Jubrotunda, obtusè triloba, trilocularis, trifpermis.
BERNARDIA 2. Fruticofa, foliis fubrotundis nitidis confertis floribus affociatis.
The fhrubby Bernardia, with fmooth leaves and flender flower-ftalks. Mas.
Periantium Monopbyllum villofum, in quinque lacinias lancoolatas reflexas ad bafin jéctum.
Corolla, Nulla.
Stamina. Filamenta plura brevia: anthere ovata.

## Femina.

Periantium, Ut in mare. Corolla Nulla. Stam. Nulla.
Pift. Germen fubrotundum; ftyli nulli; ftigmata triloba lacera.
Pericarpium. Capjula fubrotunda, obtufe triloba, trilocularis, trijpermis.
This little hrub is common in all the low lands about Kingfon, and rifes generally to the height of eight or ten feet.

ADELIA 1. Foliis obovatis, oppofitis; Jpicillis alaribus; cortice cinereo. Tab. 36. f. 3.

The fhrubby Adelia, with fmooth leaves.
Flores, in aliis mafculini, in aliis feminini.

## Mas.

Periantium Bipbyllum minimum. Corolla Monopetala quadripartita patens.
Stamina. Filamenta e pelvi foris, plura.
Femina. Qur?

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This fhrub is common in the low gravelly hills eaftward of Kinglon: it rifes fometimes to the height of eight or ten feet, and throws out a number of flender branches, adorned with many leaves, difpofed in an oppofite order; from whofe alx thoot fo many fmall flower-fpikes. All parts of the plant are of a whitifh colour.

GIGALOBIUM I. Scandens, clavicthom; foliis bipinnatis ovatis; filiqua maxima.
Phafeolus maximus perennis, \&c. Slo. Cat. 68. Lens Pbajeoloides, foliis fubrotundis oppofitis, \&cc. Thez. Zey. 139. Perein-kaku-valli. H. M. viii. t. 32, 3, 4 .

## The Cacoon.

Flores, in aliis mafculini, in aliis feminini.
Flores mafculinin Jpicati funt, Jpicis axillaribus vel fparfs.
Periantium Minimum cyatbiforme quinquedentatum. Corolla Pentapetala; petalis parvis, erectis, oblongis. Stamina. Filamenta plurima corolla longiora; antheræ globofa.

Femina,
Pericarpium. Corolla, ftamina, \& piftillum defderantur.
Pericarpium, Legumen maximum, longifimum, compre (um, varie contortum, uniloculare, bivalve.
Semina Plura, orbiculata, fubcompreffa, cortice ligneo, duro, fufco, nitido-
que tecta. que tectá.
This plant is frequent in moft of the woods on the north fide of Jamaica, and climbs with great eafe to the top of the talleft trees; where it frequently fpreads over many of the neighbouring branches, and forms itfelf into large fhady arbours. The withes are flender, but tough and flexile, and fuftain themfelves by a number of tendrels: they are very fpreading in their growth, and adorned with fmall pinnated leaves. The fhe-plants throw out their flowers feparate, and are fucceeded by fo many pods; the largeft of the kind known: they grow commonly from four to fix or feyen feet in length, and about four inches in breadth; always flat, and feldom feraight; but twift and writhe varioufly as they grow in length. The feeds are round, compreffed, and covered with a hard, fmooth, lignous brown thell.

$$
\begin{aligned}
& \text { JUNIPERUS I. Foliolis inferioribus ternis, juperioribus binis, decurrentibus, } \\
& \text { patulis. L. Sp. Pl. an potius, } \\
& \text { Juniperus foliolis omnibus; quadrifaram imbricatis; junioribus ovatis, fenio- } \\
& \text { ribus acutis. Roy. \& L، Sp. Pl. } \\
& \text { The Bermudas Cedar. }
\end{aligned}
$$

This is a native of Gamaica, and grows very plentifully in mof of the Blue Mountains, where it is frequently cut down for planks, and other conveniencies. It is a good timber-wood, and admired for its fmeil, lightnefs, and clofe even grain. It is very fit for wainfcoting, and all the inward parts of cabinet-work,

# O F J A M A I C A. $3^{6} 3$ <br> C L A $\mathrm{S} \quad \mathrm{S}$ XXIII. <br> Of the Polygamia, or Vegetables that have both hermaphrodite and male or female Flowers on the fame ftems. 

S E C T. I.<br>Of fuch as bave both male and female, with fome weflefs parts of either fex, in cocry cup.

MUSA 1. Spadice nutanti, fructu triquetro oblongo majori.

Mufa spadice nutanti. L. Sp. Pl. EJ Mula racemo fimplicilimo. H.C. Mufa caudice viridi, fructu longiori falcato, \& \&c. Slo. Cat. 189. Mufa Serapi. Ef ficus Indica. Muf, \& Thez. Zey. Yagua. Mart. 417.
Bala. H. M. iii. t. 12, 13 , 14 .

## The Plantane Tree.

This plant is cultivated with great care in all our fugar-colonies, where the fruit fupplies the principal part of the fuftinence both by the negroes and poorer fort of white people. It thrives beft in a cool, rich and moift foil; and is commonly planted in regular walks or fields: it is propagated by the fhoots, and planted at convenient diffances from each other ; but, as the root throws up a number of young layers every year, the fpaces between the firft plants are left pretty confiderable. The trunk or ftem of this tree is made up of a fmall fpungy heart, covered with the thick fibrous vagine formed by the foot-ftalks of the leaves, infolding each other as they recede from the centre. But the heart, at length, fhoots above the foliage, and throws out a large flower-fpike adorned with a great number of bloffoms joined in clufters, and inclofed in their feveral fpatha, which are afterwards fucceeded by fo many diftinct oblong berries. When thefe are ripe and fall, or are taken off, the flem decays gradually, and the root begins to throw up young fhoots, by which the kind is again renewed: but left the growth of thefe fhould be retarded by the exhalations of the old ftalk, it is ufually cut down near the root, when the fruit is taken off, which gives a fronger and quicker growth to the new plants.

The fruit is generally ufed, when full grown, but before it ripens: it is commonly peeled and roafted, and thus ferved at table, or diftributed among the negroes, by whom it is moftly ufed; tho' many of the whites do really prefer them to any other bread-kind, efpecially while young and tender. The negroes generally boil them with other meffes; as falt-fifh, beef, pork, pickle, or crabs, Ecc. and find them a hearty wholefome food. As the fruit ripens, it becomes foft and fweetioh, and is then generally made into tarts; or fliced and fryed with butter, and thus ferved up in plates.

The juice of the tree is a very rough aftringent; but its cooling leaves are generally ufed to drefs blifters, in thofe parts of the world: and, when dried, are made into matts of different forts; or frequently employed to ftuff matreffes.

MUSA 2. Spadice nutanti, fructu breviori oblongo.
Mufa caudice maculata, fructu reeto, \&cc. Slo. Cat. 192. \& H.

> The Banana Tree.

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## $3^{64}$ THENATURALHISTORY

This plant is allo propagated in all our fugar-colonies, tho' feldom cultivated by any but thofe that have a particular fancy for the fruit of it, which, when ripe, is fweet, clammy, and foft; but it lies heavy upon the ftomach. It is faid to kill the worms in children.

> MUSA 3. Spadice erecto, jpathis rigidis amplexantibus diftichò Eolternatins fitis.
> Mufa Spadice erecto. L. Sp. Pl. Ơ Bibai. Plum. Gen. t. 3 .
> Mufa bumilior foliis minoribus nigricantibus, \&cc. Slo. Cat. 193.

## The wild Plantane Tree.

This beautiful plant grows wild in moft of the cooler mountains of Famaica; and thrives very luxuriantly in every rich and well-(haded gully among the woods. In its growth and leaves it perfectly refembles the other fpecies; but it differs very widely from them in the form and ftructure of the more effential parts; for which reafon I have been induced to give the characters of it here at large.

Spadix fimplex, erectus; floribus fafciculatis.
Spathe, fingulis fafciculis fingula, communes, alterna, rigida, acuminata, erecto-patentes, ad latera compreffe, amplexantes, difticbè fita.
Flores fafciculati, aquales 8 confimiles, jpatbis propriis membranaceis minoribus difineti, intra fpathas communes reconditi.
Periantium Proprium nullum. Corolla, Ut in vulgari.
Stamina. Filamenta quinque, (cum rudimento fexti nectario adnato) longitudine fere floris, ab infima parte petali orta, \& antheris oblongis angufis donata: anthera rudimenti vero imperfecta eft.
Piftillum. Germen oblongum, obtufè trigonum, florem Jufinens; flylus fimplex, longitudine foris; ftigma acutum.
Pericarp. Bacca fucculenta, carulea, jubrotunda, obtufa \& obtujè-triloba, trilocularis.
Semina Solitaria oblonga, naucis ligneisrugofis teeta.
In the bloffoms of this plant we find five perfect filaments fhooting from the bottom of the real flower-leaf, and one imperfect filament from the nectarium. But, in the others, it is quite the contrary, for five of the filaments are imperfect; and the only one that is otherwife rifes from the nectarium. In this fpecies the berries are fmall and fucculent, and contain three hard rugged feeds each; but, in the others, the fruit is covered with a thick fkin , which contains a foft pulpy fubflance.

> ANDROPOGON I. Polydaclyion affurgens fpicis tenuioribus birfutis.
> Gramen Dactylon elalius, \&cc. Sl. H. t. 65. f. $2^{2} \& 8$ Pluck. t. 245. f. I.
> Gramen dactyloides deorfum arifatis. Thez. Zey. t. 47.
> The erect Andropogeon with many flender fpikes.

In this fpecies the fikes are generally from feven to eleven, and rife immediately from the top of the ftalk: they are all flender and flowered underneath, the parts of which are as follow, viz.

Periantium Duplex. Exterius. Gluma unifora bivalvis, valvis oblongis. Interius. Gluma bivalvis: valvula altera major carinata, fetá terminata; altera minor inferne contraila, rotundata, circulo pilofo notata, fuperne ampliata excavata $\mathfrak{F}$ arifa terminata.
Corolla Gluma bivalvis; valvulis oblongis fimplicibus, valvulâ majori calicis proprii obvolutis.

## $O$ F J A M A I C A.

ANDROPOGON 2. Avenaceum afurgens, panicula laxa lanuginofa.
Andropogon panicula nutante, arijtis tortuobs lecious, calicinis birfutis. L. Sp. Pl. E Gramen avenacerm, \&cc. Slo. Cat. $35.8 \% \mathrm{H} . \mathrm{t} .14$. Sour-Grafs.

Obr. In bac Jpecie, Periant. Gluma ef bivalvis, valvulis oblongis tomentofis. Corolla Etiam bivalvis eft, valvulis oblongis levibus (altera alteram amplexante) Semenque involventibus.
The roots and leaves of this plant, pounded and applied externally, are obferved to cure tores and ulcers of all forts with more certainty than moft other things uted for that purpofe. It is a ftrong deterfive and agglutinant; and, doubtlefs, woult make an excellent ingredient in vulnerary apozems and infufions. Simples of this kind, and all thofe in general that are of a fimulating nature, have been always oble ved to anfwer much better in thofe parts, than ointments and regular dreflings; nor is it unnatural, where the fate of the habit is fo much relaxed.

> ANDROPOGON 3. Altifimum gracile; panicula tenui plorimis gradation najcentibus, foribus confertis.

> The flender Andropogon, with long fpikes.

This plant is frequent in St. Elizabetb's: it has but a flender ftem, and rifes generally to a moderate height. The flowers are placed in diftant tufts on long hairy foot-ftalks; and the calycine glumes which are alfo hairy, terminate in long briftes.

> ANDROPOGON? 4. EreEtium, montanum; Jpicáa multitilici comofa $\mathfrak{B}$ lanuginofá.
> Andropogon panicula Spicis conjuratis ovatis. L. Sp. Pl?
> Gramen dactylon bicorne tomentofum maximum. Slo. Cat. 33 . \& H. t. 15. Andropogon panicule Jficis conjugatis; fogculis bafilanatis, folio Jpathaceo obvolutis. L.Sp.Pl.

## Mountain-Grafs.

In this plant the foot-ftalks of the flowers are covered with a long white down; and the Jpicilli, which rife by pairs on long erect fupporters, feem to meet in a kind of an umbrella, at the top.

| ANDROPOGON | Minimum, Jpicillis ternis vel quaternis, patentibus, fummo caule dijpofitis; valvula majori in ariftam barbatam definente. |
| :---: | :---: |
| Gramen dactylon | corne minimum. Slo. Cat. 34. \& H. |
|  | fmall upright Andropogon. |
| Obf. G | no altera floralis etiam arizata efo. |

ANDROPOGON 6. Majus, paniculâ §parfa, ficicis fimplicibus utrinque ariflatis.
Andropogon Jpicis digitatis plurimis erectiufculis articulatis levibus utrinque arifatis. L. Sp. Pl.
Gramen dactylon majus paniculá longâ, \&cc. Slo. Cat. 34. \&t. H. t. 69.
The larger Andropogon, with a loole panicle.
Obf. Valvula corolla altera in arifam tenuemb barbatam defnit.

ANDROPOGON 7. Minus, panicula fparfâ, fpicillis fimplicibus alternatis bexacetis.
The fmaller Andropogon, with fix briftles to every flower.
Obf. Gluma exterior, E calycis © corolle, in tres fetas definit.
ANDROPOGON 8. Polydactylon, fpicis paucioribus birfutis, medio pedunculato.
The larger polydactylous Andropogon.
The flower-fpikes of this plant are generally from four to feven, fituated at the extremity of the ftalk; and each of the calycine glumes terminates in a flender beard.

## ANDROPOGON 9. Minus panicula Jparfa, Jpicillis paucioribus fimplicibus alternatis.

The fmaller Andropogon, with a loofe fpreading panicle.
This little graffy plant is frequent about Old-barbour. The outward glume of the flower is tripartite at the top, and ends in three rugged briftles.

HOLCUS I. Sylvaticus minor, paniculâ Jparfa, foliis brevioribus lanceolatoovatis.
Panicum miliaceum viride, foliis latis brevibus, \&cc. Slo. t. 72. f. 3.
The fmaller Wood-Grafs.
This little plant is very common in the woods of $\mathcal{F}$ amaica, and agrees, for the moft part, with the Guinea grafs, both in the arrangement and formation of its flowers. The ftalk and leaves are excellent fodder for all forts of cattle, and the feeds ferve to feed the fmaller forts of birds.

> HOLCUS 2. Major afurgens, culmo comprefo, Jpicâ laxâ Spatiofa.
> Guinea Grafs.

This plant, like the Scotch grafs, is frequently cultivated in Famaica, to fupply their ftabled and working cattle with food. It is planted, like the other, by the joint or gem, and alfo by the root; but does not require near fo much moifture, and is reckoned a more hearty fodder. It is not fo much cultivated in the illand as a plant of this nature ought to be; for the lands about the towns are too fubject to droughts to produce it in any perfection; and the people in the other parts of the country, who have not the fame profpect of gain, are too indolent not to make any fhift, rather than be at the trouble of planting it; never confidering how much time and labour is loft annually in feeking for other fodder, which is neither fo good, nor can be fo eafily obtained; nor do they ever confider the loffes they fuftain in flock, for the want of abundance of good wholefome food.

The characters of this plant agree pretty well with thofe of the Panicum, in general: but the flowers commonly grow very luxuriant, and, though often hermaphrodite, are generally obferved to be diftinct males and females, furrounded by feparate involucra, and ftanding on diftinct footfalks within the fame cups. They are as follow :

> Periantium. Gluma quadrivalvis: extima minima, ad tergum proxima pofita; intermedice oppofita, oblonga, cocblearis infar excavate; quarta interior, membranacea, oblonga.
> Corolla. Gluma bivalvis, florem bermapbroditum vel femineum amplectens.
$\begin{array}{llllllllll}\text { O } & \mathrm{F} & \mathrm{J} & \text { A } & \text { M } & \text { A } & \text { I } & \text { C } & \text { A. } & 67\end{array}$
Stamina. Intra florem, quandoque tria, quandoque nulla: ut plurimum tamen reperitur ftamen unum vel alterum extra forem, inter valvulam interiorem \& proximam exteriorem calycis. Anthera oblonga compreffa.
Pift. Germen oblongum: ftylus quandoque unicus, quandoque biduus. Stigmata purpurea cirrofa. Semen Oblongum.

CENCHRUS 1. Spica oblonga fimplici ecbinata.
Cenchrus Jpica oblonga conglomerata Roy. L.Sp. Pl.
Gramen ecbinatum maximum ppica rubra vel alba. Slo. Cat. 30. \& H. pag. 108.
The Cencbrus, with a fimple oblong panicle, and multipartite cups.
This is one of the moft common forts of grafs in the open paftures of Jamaica, and is looked upon both as a wholefome and pleafant food for all forts of cattle.

CENCHRUS 2. Spica oblonga grabra, calycibus rigidis quadripartitis, inciJuris apertis, laciniis acuminatis.
The Cencbrus, with a fimple fpike and quadripartite cups.
This grows with the former, and, like that, is fed upon by all forts of cattle.
ATRIPLEX 1. Inermis rubens, foliis cordato-ovatis venofis, petiolis longis, spicâ terminali verticillatâ.
The fmooth red Calaloo.
This is a pleafant wholefome green, and frequently ufed as fuch in every part of Jamaica. It grows in all the gardens and rich open fpots round the ifland.

ATRIPLEX 2. Erecta minima, ad alas forida.

## The fmall erect Atriplex.

This little plant is very common in the gardens about Kingfon, and feldom rifes above one or two inches in height. It thoots into bloffom after every rain, and always bears a great number of flowers at the alx of the leaves.

## $\begin{array}{llllllll}\text { A } & \mathrm{P} & \mathrm{P} & \mathrm{E} & \mathrm{N} & \mathrm{D} & \mathrm{I} & \mathrm{X} .\end{array}$

HA VING now claffed and difpofed thofe Vegetables, whofe flowers we have feen and examined; I thall endeavour to give fome account of thofe few, whofe characters I have not been hitherto able to obtain, and are yet too confiderable to be wholly omitted.

SPIGELIA 1. Foliis oblongis obovatis nitidis pinnatis, cortice glabro cinereo.

## The Baftard Cabbage-Tree.

Flores, in aliis mafculini, in aliis feminini dicuntur.
Mas. Defideratur.
Femina.

Periantium? Corolla? Stamina?
Piftillum. Germen ovatum; fylus brevis, attenuatus; fligma acuium.
Pericarpium. Drupa carnofa, firma, ovata, lineâ longitudinalí lateraliter notata, unilocularis, monopermis.
Semen. Nucleus bilobus ovatus, membrana tenui abvolutus, ©o nauco ligneo glabro, lineá longitudinali lateraliter notato, tectus.
This tree grows to a very confiderable fize, and is reckoned among the beft tim-ber-trees of the ifland; for which parpofes it is frequently cut down in all parts of the country. The bark is faid to be a very powerful anthelmintic, and is frequently given for that purpofe in powders and decoctions both to men and beafts; but it operates very violently, and, for that reafon, is not much ufed among the whites.

## ARBOR 2. Foliis obovato-oblongis, fpicillis alaribus; ligno durifinno, ex Jubtuteo © fufco variegato.

## Pigeon-Wood.

This fhrubby tree is greatly efteemed on account of its wood: it feldom exceeds four inches in the diameter of its trunk, though it rifes frequently to the height of fixteen or eighteen feet. The wood is very hard, of a clofe even grain, and very beautifully clouded.

ARBOR 3. Minor diffufa, obfcurè virens; foliis obovatis; fronde comosa, fruEtibus jingularibus ad alas. Tab. 20. f. 3.

The Scarlet-Seed.
Periantium Duplex; exterius biphyllum minimum; interias pentapbyllum, foliis crafficfoulis fubrotundis.
Corolla? Stam? Pit. Germen ovatum. Stylus fubulatus: ftigma acutum.
Pericarp. Capfula nitida, carnofo-fungofa, bilocularis.
Semina. Nucleoli plures, maximâ parte abortientes, oblongi, quas bilobi, naucis propriis fragilibus unilocularibus recurvis of apprefis, quaf bilocularibus, tecti; naucis cerá tenui coccineâ obductis: Receptaculum columnare per centrum fepti medii ductum, ad apicem multipartitum; lacinulis teretious intra loculamenta utrinque reflexis, femina ferentibus.
This Chrubby tree is frequent in the red hills, where it grows pretty luxuriantly; but it feldom rifes above twelve or fixteen feet in height, or exceeds fix or feven inches in diameter. When the fruit is ripe, it burfts upon the tree, and fheds its feeds, of which the fmaller birds feem very fond: they are always inveloped in a greafy waxen fubitance of a fcarlet colour, which may probably ferve both for the dyer's and painter's ufe, when better known.

I believe this may be a fecies of the Sloanea: the wax and formation of the feeds, which is nearly the fame in both, induce me to think fo, tho' the capfule is fmooth in this.

ARBOR 4. Foliss ovatis, petiolis brevibus, floribus fafciculatis.
Pif. Germen fubrotundum: Ayli duo, breves, interne conalyculati: Atigmata ampliata compreffa excavata.
Pericarpium. Capfula videtur bilocularis bipermis.

FRUTEX 5. Foliis oblongis, glabris, acuminatis, alternis, leviter $\mathfrak{E}$ acute crenatis.
Pift. Germen trilobum, obtufe angulatum, fubrotundum; ftylus brevis, fimplex; ftigmata tria, oblonga, tenuia, reflectentia.
Pericarp. Capfula fubrotunda, obtufè tribba, trilocularis, trivalvis.
Semina Solitaria naucis propriis tecia.
VIMEN 6. Scandens; foliis alternis, ovatis, leniter undulatis; venis obli-
An_ quis. Tab. 22. f. 5. ${ }^{\text {H. M. Vol. II. t. 20? }}$
Fructificatio admodum fingularis: Sic mibi videbatur.
Periantium Monopbyllum in duas partes bemijpbericas excavatas ad unguem ufque Jectum.
Corolla Bipetala; petalis compreflis, छ' fafciâ validâ per mediam longitudinem ornatis; alterum unguibus geminis Juftentatum; alterum fylo refertum, © adnatum.
Stamina? Stylus? An in aliis mares, in aliis feminæ?
Pericarp. Quod periantium fuit, vertitur in capfulam fub-fucculentam fulcatam, luteam, fubrotundam, bivalvem, unilocularem, perpendiculariter debifcentem.
Semen Unicum, pulpâ niveâ fubdiapbanâ, wa corollam fuife videtur, vefitum $\mathcal{O}$ alteri valvulce funiculo proprio ligatum; atate liberum, nigro Jplendens.
I have met with this plant near Mrs. Guy's, in Sixteen-mile-walk: it is a climber, and rifes to the top of the talleft trees in the woods.

> ELUTHERIA 7. Arborea; foliis majoribus, ovatis, oppoitis; petiolis brevibus, fubtumidis, ganglionofis.
> Lauro afinis arbor foliis latioribus, \&c. Slo. Cat. 137. \& H. t. 170.
> Mufk-Wood, or Alligator-Wood.
> Pericarpium. Capfula craffa, fubrotunda, corticofa, dura, quadrilocularis, quadrifariam ab apice debifcens.
> Semina. Nuclei folitarii oblongo-ovati.

This tree is frequent in inland woods, and grows to a confiderable fize. All parts of the plant, efpecially the bark, fmell ftrong of mufk, and may be ufed, inftead of that perfume, for many purpofes. The wood is full of a bitter refinous fubflance, which renders it unfit for rum-hogheads; being obferved to communicate both its fmell and tafte to all fpirituous liquors: but it is often cut for flaves and heading, when there is a fcarcity of other lumber. The powder of the bark is faid to be a good emetic; and is, I am informed, fometimes ufed among the negroes for that purpofe.

## ARBOR 8. Foliis oblongis glabris alternis.

Milk-Wood.
Flores, in aliis mafculini, in aliis feminini.


Femina.
Periantium Parvum, imbricatum; Squamis ficcis, cordiformibus, cocbleatis, perfifentibus.

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Corolla - ? Stamina - ?
Piftillum. Germen ovatum; fylus ultra medietatem bipartitus; lacinais attenuatis: ftigmata acuta.
Pericarpium. Bacca mollis ovata unilocularis monofpernis. An, bilocularis in germine?
Semen. Nucleus bilobus, nauco tenui fragili tectus.
This tree is pretty frequent in St. Mary's, and rifes to a confiderable height in the woods. It is reckoned among the timber-trees of the illand, and is fometimes ufed as fuch, tho' not generally valued.

## VIMEN 9. Scandens; farmento valido; foliis amplioribus, craffiufculis, nitidis, ovatis, oppofitis; capfulis geminatis vel ternatis. <br> Pericarpium. Capfula major, orbiculata, compreffa, unilocularis, femen unum vel alterum amplectens. <br> Semen. Nuclei bilobi, fubrotundi, compreff, fundo capfula affixi.

Ifound this weakly fpreading plant in the parim of St. George's, on the left hand fide of the road that leads to the eaftward. The leaves are large and fhining, and the ftem and branches pretty thick, tho' weakly. The capfulæ are moderately large, and thin; and feem to fhew the plant to be fomewhat allied to the Tricbogamila. It is a native of Brafl, as well as of Famaica: I have feen fome of the feed-veffels in Mr. Baker's collection, which he received from that part of the world, by the way of Portugal.

BRABILA 10. Fruticofa \& jpinofa, foliis ovatis nitidis confertis, floribus folitariis.
The prickly Brabila, with fmooth oval leaves.
Pericarpium. Bacca fubrotunda, fucculenta, unilocularis, nucis juglandis
magnitudinis, nucleo majori, nauco ligneo glabro tecto, referta.
I found this fhrub near the beech at Port Antonio, where it grows to the height of eight or nine feet, or better. The fruit has all the flavour, and much of the appearance, of the European plumb; but the fhell of the feed is fmooth, and the pulp and fkin of the fruit of a pale red colour. The leaves and foot-ftalks are all of a pale green.

ARBOR 11 . Foliis ovatis glabris utrinque acuminatis, foribus umbellulatis, umbellulis jpar/s.

## Lance-Wood.

Pericarpium. Bacca parva mollis unilocularis, Jemen unicum nauco proprio tectum, amplectens.
This tree is pretty common in the woods of Portland, and generally reckoned one of the beft timber-trees in the ifland, efpecially where ftrength or elafticity is required; but it feldom grows to any very confiderable fize. Quere if it be not a fpecies of the Erytbroxylum.

> ARBOR 12. Foliis cordatis myrtineis oppojitis, baccis bippermibus.
> Myrtifolia arbor cortice argenteo, Silver-wood dicta. Slo. Cat. 162.
> An, Eugenia autborum?

## Rod-wood.

FRUTEX 13. Minor, foliolis cordatis confertis, flore uno vel altero aflociatis. Tab. 27. f. 4.

Flores, in aliis mafculini, in aliis feminini.
$\qquad$
Femina.
Periantium Minimum quadripartitum.
Corolla Tetrapetala, petalis oblongis erecto-patentibus.
Stamina Nulla.
Pift. Germen oblongum; Atylus brevis; ftigma bilobum, ampliatum, quandoque fimbriatum.
Pericarpium. Bacca oblongo-ovata, bilocularis, binis nucleis naucis propriis tedis, referta.

FRUTEX? 13. Foliis myrtineis, nitidis, ovatis, alternis; ramulis gracilibus.
FRUTEX 14. Foliis fubrotundo-ovatis, alternis, quandoque confertis; floribus alaribus.
Flores, in aliis mafculini, in aliis feminini.
$\qquad$
Femina.
Periantium Hexaphyllum, foliolis ovatis perffentibus.
Corolla Nulldo Stamina Nulla.
Pift. Germen fubrotundum; ftyli tres, breves, bifidi; ftigmata acuta, reflexa.
Pericarp. Capfula fubrotunda, trilocularis, trivalvis.
Semina In jingulo loculamento fena.
GREWIA? 15. Arborefcens, oluteo virens; foliis ovatis, utrinque acuminatis, nitidis, alternis; floribus quaf umbellatis.
Flores, in aliis mafculini, in aliis feminini.
Mas _ ?
Femina.
Periantium Minimum, monophyllum, tubulatum, fubventricofum, pragnans, ore quadripartitum.
Pericarpium. Bacca fubrotunda, nucleo unico nauco proprio tecto, referta.
I have met with this plant at Mr. Hall's, in Liguanea: it has fomething of the appearance of myrtle.

FRUTEX 16. Foliis majoribus, cordatis, nitidis, petiolis femipollicaribus incidentibus. Tab. 3I. f. 5 .
Laurifolio arbor folio latiore mucronato, \&cc. Slo. Cat. \& H. t. 168.
The Lagetto, or Lace-Bark Tree.
This tree is pretty common in the woods of Vere and St. Elizabetb's. The bark is of a fine texture, very tough, and divides into a number of lamince, which fpread into thin webs not unlike lace. It is only ufed for ropes in $\mathcal{F}$ amaica, but would, undoubtedly, make fine paper, had it been properly prepared for that purpofe. It has been, upon occafions, made into different forms of apparel, by the wild and runaway negroes.

## 372 THE NATURAL HISTORY <br> ALICASTRUM 17. Arboreum, foliis ovatis alternis, frustibus folitariis. Bread-Nuts.

Pericarpium. Drupa, feu potius capfula corticofa, fpherica, unilocularis. Semen Nucleus bilobus, carnofus, fubrotundus, edulis.
This tree is very frequent in St. Elizabetb's and St. Fames's; and in both parifhes is computed to make up about a third part of the woods. The timber is not defpicable; but the leaves and younger branches are more ufeful, and a hearty fattening fodder for all forts of cattle. The fruit, boiled with falt-fifh, pork, beef, or pickle, has been frequently the fupport of the negroes and poorer fort of white people, in times of fcarcity; and proved a wholefome and no unpleafant food: when roafted, they eat fomething like our European chefnuts, of which they may probably be a feccies. The leaves and younger fhoots are full of gum, which renders them difagreeable to moft cattle at fifft, but they foon grow very fond of 'em.

## ARBOR 18. Foliis oblongo-ovatis, pinnatis, punctatis; petiolis brevifimis refectentibus.

## Yellow Sanders.

The wood of this tree is faid to make good infide timbers: it is of a yellow colour, and a clofe fmooth grain. It is very common in St. James's and St. Mary's, and grows to a confiderable fize.

ARBOR 19. Cortice fifo, foliis oblongis, racemis umbellulatis terminalibus.
The Bonace Bark Tree.
Pericarpium. Drupa ficca, ovata, oliva magnitudinis \&f figura, nucleo unico bilobo, membrana propria obvoluto, referta.
This tree is common near Monteca bay, where it grows to a moderate fize. The bark makes very good ropes; it is fine, and fpreads, in fome fhape, like that of the Lagetto bark, though not quite fo free or regular. The feeds have a fharp biting tafte.

ARBOR 20. Altifima, foliis oblongis, nitidifimis, nervofs.
Mali-perficæ Mammece dicta folio arbor, \&xc. Slo. Cat. 180.
An, Inneophyllum. Thez. Zey. pag. 130. \& tab. 60.

## The Santa Maria.

Pift. Germen fubrotundum; ftylus fimplex ; ftigma?
Pericarp. Drupa carnofa rotundata, unilocularis.
Semen. Nucleus unicus bilobus, nauco proprio ligneo fubtenui tectus.
This is reckoned pretty good timber-wood; but it mult be kept under cover, for it does not bear the weather well: it is frequently ufed for ftaves and heading.

XYLOCYSTE? 21. Fruticofum; foliis eliptico-ovatis, Jubtus cinereis; pen dunculis ramofis, alaribus.
Pericarpium. Capfula fubrotunda, obtufè triloba, trilocularis. Semina Subrotunda, folitaria.
I have found this fhrub near the eaftern more of Monteca bay.

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FRUTEX? 22. Ilicis aculeate foliis.
    An ——Pk. t. 1 52. f. 4. tab. 54. f. 5?
    An, Agrifolium folio tenuiore majus acuminato © majus corrugato, \&c.
                            Slo. Cat. 173.
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$$
\mathrm{O} \text { F J A M A I C A: }
$$

I have met with a young plant of this form, in the parifh of St. Yames's; but of what peculiar clafs or growth it may be, I could not difcover. The figure of the leaves is pretty well reprefented in Plucknet.

## PLANTA 23. Erecta indivifa; foliis comofis, oblongis birtis, finuatis; petio. lis marginatis.

I found this young plant near the Waterfall, in Mamee-river: it is very like that reprefented in $P k$. tab. $424 . \mathrm{f}_{0} 4$.

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HERNANDIA 24. Arborea, foliis cordato-peltatis, capfflâ tenui apertâ.
Hernandia. Plum. \& L. Sp. Pl. \&t Flo. Zey.
Balantine. Pet. Gazo. 43 . f. I.
Nux veficaria oleofa, folis umbilicatis. Pk. t. 208. 1.
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Fack-in-a-Box.
Flores, in aliis mafculini, in aliis feminini
Mas. Vid. L. Gen. 93 I.
Femina,
Pericarpium Capfula? maxima aperta inflata, fubrotunda, tenuis, fubpellucida, ventricofa, unilocularis; ore leniter contracto, truncato, integro.
An calix pro capfula jumitur?
Semen. Nux oblongoovata, fulcata, erecta, rugofa, in centro capfula pofita unilocularis. Nucleus globofus.
This tree is pretty common in Barbadoes and Mounterat, and grows to a confiderable fize in thofe iflands; but I have not feen any in Famaica, though I have been credibly informed that it was frequent in the parifh of Portland. The cups that fuftain and partly invelop the nuts are very large, and, as they move in the wind, keep a whiftling noife, which is often frightful to unwary travellers. The feeds are very oily.

## HERNANDIA 24. $2^{\text {d. }}$. Arborea; capfulâ crafâ, ligneâ, ovat da, integrâ. <br> The Hernandia, with oval capfules.

I do not know whether this tree be a native of the Eaft or $W_{e f f}$-Indies; but I have feen a fruit of this form in Mr. Ebret's collection of feeds, which I mention here, only, to fhew that there is a fecond fpecies of the genus.

There are two other plants in thofe colonies, that have almoft wholly efcaped my notice; the one is the green withe, which I take to be a fpecies of the Arum, or Epidendrum: the other feems to be a kind of the Nux vomica. The firft of thefe plants is not uncommon in the woods of Jamaica; the other grows in the windward part of Mountferat, in the fide of the great gully, called Kaby's Gully. It is a fmall fhrub, and bears white bloffoms, which are afterwards fucceeded by fo many large apples, containing a number of large compreffed feeds difperied in the pulp of the fruit: (if I remember) the plant is milky when young.

## $\begin{array}{lllllll}\mathrm{A} & \mathrm{D} & \mathrm{D} & \mathrm{E} & \mathrm{N} & \mathrm{D} & \mathrm{A} .\end{array}$ <br> D I O E C I A.

T-VILLEA I. Foliis crafforibus glabris, quandoque cordatis, quandoque trilobis.
Fevillea. Plum.
Fevillea foliis cordatis angulatis; छ' foliis trilobis. L. Sp. Pl.
The Antidote Cocoon.
Flores, in aliis mafculini, in aliis feminini.
Mas.
Pedunculo tenui incidit Periantium monophyllum ultra medietatens quinquepartitum, laciniis lanceolatis patentibus.
Corolla Monopetala, patens, ad marginem leniter quinquecrenata: Limbus reffexus.
Stamina. Filamenta quinque e centro corolla orta, erecto-patentia, Jupernè ampliora; antheræ ovata.
Nectarium. Filamenta quinque comprefa, infernè latiufcula, attenuata, arcuata, conniventia, ftaminibus interpofita.

Femina.
Periantium Cyatbiforme quinquecrenatum, germine pragnans, pedunculo valido incidens. Corolla ?
Stamina Nulla. Pift. Germen calyce inclavatum Jubrotundum. Styli tres. Stigmata fubrotunda.
Pericarpium. Drupa maxima dura, fubrotunda, calyce aucro femitecta, trilocularis.
Semina Orbiculata compreffa magna, cortice fungofo tecta, in fingulo loculamento, duo, tria, vel quatuor.
This plant is frequent in the inland parts of $\mathcal{F}$ amaica, and generally found climbing among the talleft trees in the woods. The feeds are very oily, and frequently burnt by the negroes inftead of candles: they put them upon fkewers, and fet fire to the uppermon, from whence they burn gradually to the bottom. The kernels are extremely bitter, and frequently infufed in fpirits for the ufe of the negroes: a fmall quantity of this liquor opens the body and provokes an appetite, but a larger dofe works both by ftool and vomit, It is frequently taken to clear the tube, when there is any fufpicion of poifon, and, often, on other occafions.

## EXPLICATIONS.

In all the foregoing figures, the letter (a) points out the empalement or cup; (b) the flower; (c) the filaments with their antberce; (d) the ftyle and figma; and (e) (f) (g) the germen, fruit and feeds.

## NATURAL HISTORY

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\mathcal{F} A M \stackrel{I}{\circ} A
$$

## P A R T II.

BOOK III.

Of ANIMALS

CONTAINING,
An Account of the feveral Sorts of Quadrupedes, Birds, Fifhes, Reptiles, and Infects, commonly obferved in and about the Ifland; their Properties, Mechanifm, and Ufes.

Si motum, vel mechanifmum, vel fenfus externos internofque, vel denique figuram, refpiciamus; omnibus in aprico erit, animalia effe fumma ©o perfectifima Creatoris opera.

Lin. Obf.


## P R E F A C E.

WHETHER we confider this part of the creation with regare to the variety or peculiar forms of the individuals, to the momber of conveniencies with which it fupplies mankind, or with refpeEt to the real ules of its different productions in the course of life, we Joall certainly find it Juperior to either of the others. But wober we obferve thofe delicate organs with which moft beings of this clafs are furnibed; confider the formations, difpofitions, ives, and various mechanical powers of their feveral parts; and reflect on the different fenfes, infincts, difpofitions and modes of attion, peculiar to eacts; we mutt allow it to be, by far, the moft perfect as well as the moft engaging part of the creation.

Is it not then natural, that bodies endowed with affections and qualities So particularly adapted to the form and fation of coery individual, with fuch peculiar babits and dipofitions, with thole fingular faculties which fome enjoy in a more perfeet degree than the reft ; and which, befides thefe, and many other flattering inducements, are known to fupply us daily with the moft agreeable and nouribing part of our food, to furnifb many conveniencies that tend to the eafe and fatisfaction of life, anal to yield the mof neceffary as well as the moft agreeable part of our cloaths and coverings; fbould engage fome part of the thoughts and fudies of mankind? Or fould we not ratber conclude, that beings endowed with fuch extraordinary qualities, fo ufeful, and yet frequently more engaging by their babits and attachments, ought to emplay a more conjuderable part of the thoughts and contemplations of every reafonable creature?

The nature of the different forts of food obtained from this clafs, as well as the different calamities arijing from the poijonous bites, fings, \&uc. of many of the individuals, and a thoufand other particulars, muf naturally engage the attention of the Pbyfician. Here the Pbilofopher may fee a numberlefs variety of actions, powers, mechanifms, and other curious phe-

## ccclxxvii $\quad$ P $\quad$ R $\quad$ E $\quad$ F A C

nomena, the proper objects of bis enquiry; while the Naturalif endecurours to obferve the peculiar forms, differences, claffes, and general properties of all. The nature of fociety we may learn from the Caflor, and the rules of government, induftry and friendlbip, from the Ant and the Bee. The little Nautilus bas firgt taugbt us to Sail; and the ufes of the Paddle, the Lever, the Forceps, and the Saw, with a thoufand otber mechanical powers are daily fisewn us by numbers of the Infect Tribe.

Thefe, indeed, were for a long time confidered as the mere productions of filth and putrilage, about wbich they are frequently found; and bave been but little noticed among the Writers of Natural Hifories, until the oblervations of later ages, the labours of the accurate Redi, Swamerdam, Wormius, Reaumure, Baker, De Juffieu, and Linneus, bave made us better acquainted with their mechanifns, actions, and genius; and fatisfied every perfon, that they are perfect and difinct beings; and as regular and uniform in propagating tbeir Jpecies, as any otber clafs of. individuals can po $\sqrt{16}$ ly be.

Their organs, it is true, are fo fmall and delicate, and their motions and operations fo very quick, that it was almof impolible to know any thing of their formation, parts, or mechanifm, before we were acquainted with the powers and ufe of microfoopes, by which we are now enabled to form difinet ideas of many objects, that bave been wholly unnoticed before; and to obferve the form, parts, and fructure of many that are bardly perceptible to the naked eye: by their affjance we become daily acquainted with the manner and causes of the mof furprizing movements and mechanical powers; and by the belp of them alone we are at length enabled to range the e mimute objects in a regular order, and to divide them into convenient claffes and genera, according to the more and lefs general uniformity that is obferved to fubfit in their genius, forms, parts, and funtions. Nor is there any clafs of the animal creation that deferves our attention, or can move our admiration more; for, whether we confider the minuteness of many of the individuals, fome fcarcely larger than a globule of buman blood, and yet furnibed with proportioned veffels and adequate juices; with perfeet organs to fee, to feel, and to propagate their kind; with convenient limbs to walk, to fly, or to fwim; and frequently with weapons to defend their young, and to guard their labours and themfelves; or obferve the diverfity of their forms, babits, and difpofitions, or more various mechanical operations; we Sall bardly find any other class of beings that will afford Jo great a variety of engaging fcenes; and none that can fo effectually raife our thoughts to the contemplation of that infinite prwev. and wifdom by whom all things were ordained.

Thefe, with a thouifand otber curious or ueful particulars, have, fince the invention of microfcopes, engaged a good deal of the attention of the learned; many of whon bave Jpent a confiderable part of life in the fu-

## P R E F A C E.

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dy of this branch of Natural Hifory; and I think it the duty of avery man to affel in fo laudable a defgn: for the moft defpicable infeet we now know, may, bereafter, be difcovered to bave the noft Jurprifing qualities, or found of the greateft ufe to mankind; and the knowledge of the individuals, is the firf flep towards a difcovery of their properties, which can be bardly obtained witbout the afffance of many, and a circumfantial account of the Species commonly found in every country, their properties and mechanifins; with the obfervations of the vulgar, who by a long experience frequently learn both their genius and qualities.

The confideration of the ufe of fuch an infitution, was, I muft acknowledge, the only motive that engaged me to engage in this part of the work; for the fudy of Vegetables was always the moft agreeable to me, and the Ifland, whole Natural Hiflory I now write, furnifbed a great variety of them, tho there was but a ferw $\int$ pecies of the animal tribe peculiar to it; moft of thofe now obferved there, being introduced from foreign parts, and the fibes, birds, and many of the infects, fuch as are frequently obferved in other feas and countries. But as I bad fometimes met with bodies of this kind that were not defcribed before, and frequently obferved others that were but imperfectly reprefented, $I$ was induced to digeft the whole; and to difpofe what I bad obferved on the occafion, in the form in which it now appears.

I bave endeavoured to follow the difribution of Linneus, as much as polfble, in the arrangement of this tribe as well as of the foregoing; but as I proceed from the mineral to the vegetable, and thence to the animal reign, I was obliged to invert the order in which be difpofed them, and to begin with thole that phew leaft of animality. Nor is this the only circumftance in which I differ from bim; for, wherever I thought bis difpofition eitber forced or irregular, I bave fludied to follow that which feemed the moft conformable to nature, whether adopted by another, or the produce of my own imagination.

## THE

## NATURAL HISTORY

## OF

## Of $A \quad M \quad A \quad I \quad C \quad A$.

## P A R T II.

B O O K III.

## C H A P. I. <br> Of I N S E C T S. <br> C L A S S I.

Of Worms, or Infects that have no folid Props within themfelves, but perform all their weakly motions by a mere tonic or mufcular power.

$$
\begin{array}{lllll}
\mathrm{S} & \mathrm{E} & \mathrm{C} & \mathrm{~T} . & \mathrm{I} .
\end{array}
$$

Of reptile Infects, or fuch as have no limbs, but perform all their actions by the flexions and contractions of their long and jlender bodies.

G
ORDIUS 1. Gracilis छ longifinus, fub cutem reptans.
Seta aquatica quibufdam.
Vena Medinenfis Cbirurgorum.

## The Guinea Worm.

This infect is often found among the negroes imported directly from the coafts of Africa; and is, generally, both troublefome and dangerous to all whom it infefts. It lies commonly under the fkin, or in the interftices of the mufcles; and muft be very cautioufly and artfully managed, to be difengaged with fuccefs. When the creature grows to a certain ftate, it begins to pufh its way through the fkin , and then the artift lays hold of the firft part that appears, pulls it very gently and gradually, and fecures all that lies without the furface, that he may have a better

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opportunity of repeating the fame operation the next, and every other fucceeding day, until the whole is extracted: but he muf be always earefut to fecure the whole of what appears, for it can't be extracted with too much caution; and, if it fhould chance to break, it is apt to raife great inflammations in the parts about it, which is frequently the occafion of very difmal confequences.

This infect is not peculiar to the coafts of Guinea alone, but may be frequently feen in different parts of Europe: It is commonly found in flill waters, in which is fwims with great eafe, appearing generally of the fize and form of a horfe-hairs flender, and about twelve or fifteen inches in length. It is moft common in fhallow pools where rocks and weeds moft abound.

ASCARIS r. Cylindracea, utrinque attenuata, albida. Afcaris Couleti © omnium authorum.

## The round Worm.

This fpecies infefts the human body more frequently than any of the other forts, and, without exaggeration, may be deemed the moft fertile fource of difeafes among the negroes and poorer fort of white people, in all the fugar colonies; nay, is often the caufe of more than three-fourths of all their complaints: nor are the ladies, who generally live very temperate in thofe warm climates, and often indulge themfelves in the ufe of the richefl fruits, always free from their attacks. They are frequently the occafion of general complaints in clofe moilt feafons, which are commonly attended with anomalous fevers, or other irregular complaints accompanied with fpafms and convulfions: but thefe I hope I may be able to give a more fatisfactory account of hereafter, which, if leifure permiss, I purpofe to publifh in a particular differtation at the end of the work.

## LUMBRICUS 1, Terreftis minor vulgaris, <br> The Earth-Worm.

Though moft forts of infects feem to profper in warm climates, the EarthWorm grows but rarely to any confiderable fize in thofe parts of the world. I have obferved a few of this fort in Famaica, where they continue the fame habit and appearance with which they commonly thew themfelves, in Europe,

## TÆNIA 1. Comprefa oblonga.

Tænia. L. S. N. 8 Tænia paludofa. Fn.
Lumbricus latus Tulp. \& Coul.

## The Tape-Worm.

This, like moft other infects that infeft the human body, is no where more common than in Gamaica; where it is frequently obferved to grow to a monftrous length. The appellation proceeds from its flat narrow form, for they generally come away in continued heaps, many of them being commonly linked together into one body of a narrow, flat, and lengthened fhape.

FASCIOLA I. Minor, capite fufco, ore fubbirfuto.

## The Gourd-Worm with a dark-brown head.

This fort is not common in America: I have feen it but once in thofe colonies, and then it was found flicking to the uvula of a young boy. It feldom exceeds an inch in length.

## O F J A M A I C A.

FASCIOLA 2. Oblonga alba.

> The Maw-worm, Bott, or Grub.

This infect is found fometimes in the human body; but is more common among cattle, to which it is frequently deftructive.

FASCIOLA 3. Turpida marina.

## The Sea-Bott.

This infect is very frequent in the harbour of King/ton, and generally found fticking to moft fhells and ftones that fettle near the fhore. It gives but fmall figns of life, though it be vifibly of the clafs; and is generally found in little groups, from three to ten, flicking to each other. They are generally about half an inch in length, and pretty thick in proportion.

FASCIOLA 4. Marina major verucofa.

## The warted Marrow-Pudding.

FASCIOLA 5. Marina maxima glabra.

## The large fmooth Marrow-Pudding.

Both thefe fpecies are frequent in the harbour of Kingfon, and generally found buried in the mud, in the lefs agitated parts; they are both of an oblong cylindric form, tapering, and rounded at the ends. The mouth, as well as the anus, is fomewhat flefhy and mufcular, and the body furnifhed with five longitudinal mufcular fafcia on the infide, which run the whole length of the cavity from the anterior to the oppofite extremity, difpofed at equal diftances from one another; but the anus is fmaller than the other aperture, and appears always in the form of a ftar. Each of thefe creatures is furnifhed with convenient entrails which run, with a few windings, from the one opening to the other; but there is no diftinction of back or belly in them. The whole body is foft and yielding, and when expofed to the heat of the fun, on a dry board, it flattens, fpreads, and gradually (after a few minutes) melts into a gelatinous flime, tho' neither of them is tranfparent in the perfect ftate. The negroes bave given thefe infects this Englifi appellation, from the common figure and confiftence of them.

## HIRUDO I. Sanguijuga vulgaris.

The Leech.
I have never feen above three or four of thefe infects in America, and thefe were carried there from Europe.

## S E C T. II.

Of the Zoophyta, or Infeets that are furnifled with convenient limbs, tho' defitute of folid props.

## O R D E R I.

Of fucb as are furniphed roith pliable limbs, but bave neitiver coats nor rcceptacles.

THE productions of this kind are commonly tranfparent, and of a firm gelatinous confiftence and appearance. Their miotions, in general, are merely tonic; but, in fome individuals, the vibrations of particular parts are extremely fwift and regular, and feem to be the effects of the moft perfect organs: and yet, moft bodies

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of the kind retain fo much of the vegetable nature, that, being cut in pieces, each part grows again into a perfect being of the fame form and like patts with thofe of the parent fock.

THALIA I. Oblonga, crifà perpendiculari comprefíquadratû, lineis laterdlibus integris. Tab.43. f. 3.
The Thalia, with a fquare erect creft.

> THALIA 2. Oblonga caudata, crifâ deprefla rotundâ, lineis lateralibus interruptis. Tab. 43, 4.

The Thalia, with a round depreffed creft.

## THALIA 3. Oblonga, lineis interruptis, cauda © crifa defituta.

## The fimple Thalia.

Thefe bodies are of an oblong rounded form, tapering flowly towards both ends; they are generally between three and four inches in length and better than one in diameter, tranfparent, of a firm gelatinous confiftence and hollow, each opening by a fmall triangular aperture at the end next the creft, and by a narrow round one at the oppofite extremity. They have each a firal line, of a milky colour, which runs the whole length of the back, in the fubftance of the infect; under this appears another, larger, opake, ftraight, and fimple; which feems to be the gut or common refervoir of whatever ferves to nourifh it. And, on each fide, but lower than either of thefe, appears another, fmaller than either of thofe already mentioned, and of a beautiful purple colour.

They are natives of the ocean, and frequent about the weftern iflands, where I have obferved them in my voyage from famaica. They are generally found fingle, and appear each with a fingle longitudinal white line in the water ; but, at times, you may obferve them in heaps, four, five, fix, or eight fticking lengthways together ; and then the mafs appears large, and furnimed with many white lines. Whenever I met with thefe infects linked together in this manner, I obferved them to be all of the fame form, which made me divide them into fo many different fecies.

## BEROE I. Radiis octo longitudinalibus ciliatis. Tab.43. f. 2.

## The Beroe, with eight ciliated longitudinal lines.

This beautiful creature is of an oval form, obtufely octangular, hollow, open at the larger extremity, tranfparent, and of a firm gelatinous confiftence; it contracts and widens with great facility, but is always open and expanded when it fwims or moves. The longitudinal radii are ftrongeft at the crown or fmaller extremity, where they rife from a very beautiful oblong ftar, and diminifh gradually from thence to the margin: but each of them is furnihhed with a fingle feries of fhort, delicate, flender appendixes or limbs, that move with great celerity either the one way or the other, as the creature pleafes to direct its flexions, and in a regular accelerated fucceffion from the top to the margin. It is impoffible to exprefs the livelinefs of the motions of thofe delicate organs, or the beautiful variety of colours that wife from them while they play to and fro in the rays of the fun; nor is it more eafy to exprefs the fpeed and regularity with which the motions fucceed each other from the one end of the rays to the other. I have frequently met with thefe infects to the north of the weftern illands; they feldom exceed three inches and a half in length, or two and a half, in the largeft tranfverfe diameter.

$$
O \text { F J A M A I C A. }
$$

MEDUSA I. Major fimbriata, tentaculis quatuor longifimis. Urtica marina quibusdam.

## The Sea-Nettle.

This creature grows to a confiderable fize, being feldom under feven or eight pounds in weight. It is of a firm gelatinous confiftence and appearance, and adorned with a regular ftar upon the back; but the border, by whofe tonic contractions and expanfions it moves in the water, is large and fimbriated. The limbs or tentaculce are long and flender, and defcend from the center of the mole that lies within the border.

MEDUSA 2. Major fubrotunda, tentaculis brevioribus.
The roundifh Sea-Nettle or Blubber.
Both thefe fpecies are frequent in the harbours of Kingfon and Port-Royal, and may be feen playing in the waters every calm funhine day. The fecond fort is fmaller than the other, and its tentaculde are very foft.

MEDUSA 3. Major fubcroceo.
The Orange-coloured Blubber.
I obferved this fpecies about two hundred leagues to the north of Bermudas; it was nearly as large as either of the foregoing.

MEDUSA 4. Minor, anulis quatuor fubroitundis, opacis © fere integris; tentaculis brevilimis.
The fmall fmooth Blubber with an opake far.
This Blubber is adorned with four opake but imperfect anula, which refemble fo many horfe-fhoes, their openings being almoft contiguous near the center of the bafe.

MEDU̇SA 5. Minor glabra, non fellata, maculis fubfufcis oblongis undigue afperfa.

The mottled Blubber.
MEDUSA 6. Mïnor verucofa non fellata, tentaculis maculis rufefcentibus afperfis.
The fmall warted and fpotted Blubber.
MEDUSA 7. Minima jubfufca verrucofa.
The little warted Blubber.
I met with thefe four laft fpecies off the weftern iflands. They are feldom obferved in any other latitude, though very frequent in thofe parts, where they conftitute the principal part of the food of the loggerhead turtles when out at fea.

LIGEA 1. Oblongo-ovata, variabilis, ab alterâ parte truncatâ.

## The floating brown Ligea.

This is a thin gelatinous body furnifhed with a little opake head of an irregular form and brown colour. The gelatinous part feems to float like a membrane
from the reft, and expands to the breadth of three or four inches; but the head is no larger than the top of a man's finger. I have oblerved two or three of thefe infects in the feas about the weftern iflands.

> CLIO I. Vaginâ triquetrá pyramidatá, ore obliquè truncato. Tab. 43. f. I. The fmaller Clio, with a trilateral fheath.

This beautiful little creature, together with its vagina, feldom exceeds half an inch in length. The body, which is opake, flender, and pointed at the bottom, fupports a fmall round head adorned with a little fharp bill, and a pair of beautiful green eyes; the fhoulders are furnihed with two tranfparent membranous expanfions, by which it moves itfelf with great celerity on or under the furface of the water ; but the lower part of the infect is faftened to the bottom of the fleath into which it Chrin'ss, and from thence extrudes itfelf as occafion requires. The vagina is of a firm confiftence, tranfparent, and made large enough to contain the whole body of the creature, together with its membranous expanfions, upon occafion: it is of a regular figure, fharp underneath, pointed at the extremity, and commonly about $\frac{4 t^{4}+{ }^{\circ}{ }^{\circ} \text { of an inch in length. }}{}$ I have found two other empty fheaths, of different forms and fizes, much in the fame latitude; which feemed to agree fo well with this, in the general habit, confiftence, and appearance, that I was induced to look upon them as the cafes of different fpecies of the fame kind; for which reafon I have ranged them here as fuch.

## CLIO 2. Vaginâ compreffâ caudatâ.

## The Clio, with a large compreffed fheath.

## CLIO 3. Vaginâ triquetrâ, ore borizontali, The Clio, with a large triangular fheath.

The fheaths or vagine of thefe two fpecies are pretty large, being feldom under an inch, or better, in length : they are tranfparent like that of the other, and of a firm confiftence.

## SEPIA 1. Vaginâ fubovato-truncatả.

## The Ink or Scuttle-Fifh.

This infect is frequent enough about Famaica, but moft common on the north fide of the ifland. It is compofed of a firm tranfparent fheath which includes the greateft part of an adherent but fofter gelatinous mafs, furnifhed with a great number of tentacula of different fizes and forms. It is curious to fee how readily this creature difcharges its ink on the approach of danger, to hide itfelf in the coloured fluid: but the juices difcharged on fuch occafions, are not only black and thereby fufficient to protect the creature by giving a tincture to and thickening the water about it; they are alfo bitter and clammy which muft probably render them either pernicious to the gills, or hurtful to the eyes of all other fifhes.

## ARETUSA 1. Crifat fubrubellá venofa.

> The Portuguefe Man of War.

This is no more than a fimple tranfparent bladder, furnified with a great number of tentacula, or ftringy appendixes. The former is very like the human ftomach in fhape, and adorned with a cellular creft on the upper fide; but from the oppofite part, towards the larger extremity, it emits its long and numerous tentaculc: thefe take their rife by fourteen or fifteen tendinous roots, and divide after-

\section*{| $\mathbf{O}$ | F | J | A | M | A | I | C | A. |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |}

wards into an infinite number of flender branches of various forms, lengths, and fizes, which defcend commonly about three or four feet in the water. All the juices of this creature abound with acrid particles.

## PHYLLIDOCE 1. Labris caruleis. Tab. 46. f. I:

> The Sally-Man.

This infect, though evidently of this clafs, is more firm and opake than either of the foregoing; and confifts of an oblong cartilaginous flat body flightly radiated from the center, and interfected with imall concentric lines: bui this is furnifhed with two thin, flefhy or femigelatinous lips, $6 b$, that extend themfelves by fhort vermiform appendixes over the under furface of the cartilaginous part. It is alfo fupplied with a femi-elliptical, dry, tranfparent membrane $E$, which ftands perpendicularly on the furface of the more firm part $\Lambda$, in the direction of the line $D D$, furnihing it with a pair of conftant ftanding fails which anfwer upon all occafions; for when this body is to move in any particular direction, frippofe towards $X$, the part $A, D D-1$, of the perpendicular membanc, wish arches in the direction of the line $A D-1$, fills and puthes the baty iorwat?, while the other part floats in the wind. But when the wisd changes, and the body is to move towards $Z$, the other part anfwers in the frme manner, and all the motions are performed by the fame mechanifm. It is furnition with arot number of llender tentacula, each about half an inch in length, which rife very thick from the margin of the cartilage underneath; and it feems to have an opening or mouth in the center of the bafe.

LERNEA 1. Subfufca major, valvis binis majoribus per longitudinem dar $\sqrt{\beta}$ producitis.

## The larger dark Lernea or Sea-Snail.

This infect is pretty frequent in the American feas, but lives generally near the fhore where it feeds very ravenoully on all the fmalier weeds. Un toucini:g this creature, it emits a confiderable quantity of a vifcid purple liquor, which theckens and colours the water about it fo much that it can fcarcely be feen for fome time after, by which means it is generally enabled to make its efcape in times of danger. This liquor is difcharged from a large gland fituated deep between the valves of the back, by the means of which it performs all its floating motions; but, while it feeds, it creeps like a fnail upon its belly.

I have gathered a fmall quantity of the difcharges of this creature, and Rained a linen handkerchief with it: it gives a very beautiful dark purple colour, which is not apt to change either with acrids or alkalies; but it is eafly wafhed out.

It is remarkable that the water grows always clear in a few minutes after each difcharge, though confined in a fmall veffel; and yet the flained bandkerchief retained the colour until wafhed, which was not done for many weeks after. When the creature is put into frefh water, it contracts, and dies foon after.

ACTINIA I. Subfufca mollis, fundo mufculofo.

## The Sea-Pudding.

This.infect is of the fame confiftence with the fnail, and of a dark dirty colour: it is foft and glutinous, of a cylindric form, Chort, and furnithed with a great number of fmall flabby tentacula difpofed in a double row round the margin, at one end; but the oppofite extremity is rugged, mufcular and yielding, like the belly of the fea-fnail or Lernea. I have feen only one of this fort; it was about an inch and a haif each way, but I am informed they grow very large fometimes.

LIMAX I. Subfufca media.

## The Imall Snail.

Though famaica abounds with many forts of the teftaceous fnails, I could not obferve above one or two forts that go without coverings; and thefe are chiefly found in the woods, where they may be frequently feen, either mornings or evenings when the grafs is frefh and moift.

## O R D E R II.

Of fucb as are furnijsed with convenient but pliable limbs, and form and dwell confantly in fix'd receptacles of various figures and great bardnefs.

AS I have adopted the late opinion in the difpofition of there infects, and confidered moft of thofe hard cavernous ftructures in which we generally find them, as the produce of mere animal labours; it may be expected I fhould give fome account of the nature and mechanifm of the inhabitants. But as this can be hardly undertaken by any, befides thofe that have made this part of natural Hiftory particularly their ftudy, and ftrictly obferved the motions and configurations of the individuals, while their little limbs were frefh and pliable and their motions perfect; I fhall content myfelf with referring to thofe authors, on whofe obfervations the opinion was firft founded, and by which, I muft acknowledge, I was chiefly induced to difpofe many of them in this order and clafs. Nor will the hypothefis appear unnatural, though we fhould ever remain flrangers to their particular modes of action, when we confider the general properties of the various receptacles in which they are commonly found; receptacles formed of a fubftance of the fame nature and difpofition with that of which other cells and coverings, the acknowledged work of other fubmarine infects, are made; and every where divided into convenient and fimilar lodges.

When indeed we confider the diminutive fize and languid motions of thofe creatures, it feems amazing that they fhould be the fabricators of fuch confiderable maffes; but as we are wholly unacquainted with their peculiar mechanifms, we can argue only from other confiderations.
It is however allowed, that thefe little infects are always found in the pores and cells of thefe maffes; and it has been obferved that their lodges are conftantly fimilar and diftributed very regularly throughout the whole fubftance. The maffes themfelves we find of a nature and texture inconfiftent with the growth or circulation of vegetables, and not wholly conformable to the accretion or condenfation of foffils, to which however they feem to approach the neareft; but we always find them to anfwer the laws of appofition, and to be, both in nature and difpofition, like other bodies which all acknowledge to be the work of the like infects: why may we not then be allowed to confider them as productions of the fame fort? Many, I do believe, will be ready enough to allow that they may be fuch, but can't conceive how fuch confiderable maffes can be put together by thofe languid infirm inhabitants; the mufcle, the oyfter, and the congue, they obferve, with reafon, do bear a certain proportion to their coverings, as well as moft of the other clammy marine infects; and this, I muft acknowledge, is the ftrongeft argument I hear againft the fuppofition of thofe other maffes being alfo formed by the very inhabitants that are found in them. But we ought to confider that thefe little infects are endowed with organs and mechanifms with which we are yet unacquainted; nor fhall we, perhaps, think thofe fabricks fo difproportionate as fome im trine, when we confider that the fluid in which they live abounds'with matter of the fame nature, which always fupplics a fufficient quantity of proper particles fur tuch purpofes; particles

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that require no more than a certain tho' fmall power to lay, a peculiar mechanifm to difpofe, and a proper flime or gluten (with which we know all marine infects to abound) to fix and bind them.

> D I

Of Zoophytes that live in bard or elafic tubular receptacles of various forms.

## A R T I C L E I.

Of fuch as live in Mender, flexile, articulated, and, for the moft part, brancbed tubes; baving all the appearance of fincller plants, whofe flowers and foliage are reprefented by the expanded limbs of the inhabitants, which generally appear at the end of every compartment of the common fabrick.

## S <br> ERTULARIA I. Major ramofa.

## The larger branched Sertularia.

This tubular ftructure has all the appearance of a fubmarine plant, and is found in great abundance in the fea about five-iflands, weftward of Antigua. It grows in beds, and rifes frequently to the height of eight or nine inches. All the branches are moderately thick, and continue nearly of the fame diameter to the top. The whole fubftance is flexile and yielding while freth, and has a tharp biting tafte.

SERTULARIA 2. Minor ramofa, ramulis gradatim minoribus, ultimis fere capillaceis.

## The fmall fhrubby branched Sertularia.

Great quantities of thefe branched fubftances are thrown upon the fhores of Fa amaica after every ftorm and ftrong fea-breeze; but they do not feem to differ much from that commonly found on the fhell of the European oyfter, and feldom rife above two or three inches in height (a).

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\begin{gathered}
\text { D I V I S I O N...I. } \\
\text { Of Zoophytes that live in fiff foney receptacles, of a porous or cavernous } \\
\text { texture and fructure. }
\end{gathered}
$$

## A R T I C L E I.

Of fuch as form their receptacles in fmall thin flakes, compofed of an infinite number of very fmall cells, placed contiguous to each other in the form of a boney-comb.

$\mathrm{M}^{1}$ILLEPORA 1. Cellulis obliquis, valvulis minoribus femiclaufis.

The fmall comprefled Millepore with oblique cells.
I found this cellular fubftance on the furface of a large decayed brain-ftone. It grew in fmall fpots, and formed a very beautiful net-work upon the rugged furface of the fabric.
(a) I have never found a fpecies of the Tubipora in thofe parts of the world.

## A R T I C L E II.

Of fuch as are found in branched malfes of a fony bardnefs, and of an uniform porous texture, without any remarkable cavities or perforations.
$N . B$. The following fubftances are known to be of this clafs by their texture, forms, and general properties.

CYORALLIUM 1. Brachiatum maximum, ramis Jubcomprefis equalibus. An, Corallium a/perum candicens adulterinum J. B. § Slo. Cat. I.

The large branched white Coral.
This coralline fubftance is very frequent about Antigua; it grows in beds, fhoots in a branched Chrubby form, and rifes frequently to the height of two feet, or better; but the limbs feem to be of the fame thicknefs from the bottom to the top, and are formed into a thoufand beautiful figures by the various difpofitions, connections and reflexions of the upper branches.

## CORALLIUM 2. Minimum fubramofum glabrum. <br> An, Corallium album pumilum noftras Rai. \& Slo. Cat. I. <br> The fmall tooth-like Coral.

This little coralline fubftance is frequent on all the common pebbles in the harbour of King/ton, but is feldom obferved to rife more than an eighth or a quarter of an inch above its inlarged bafe. It feems to be of a clofer grain and more even texture than any of the reft.

CORALLIUM 3. Bracbiatum $\mathcal{F}$ articulatum, articulis cylindraceis nervo tenuiori connexis.
Corallina nervo tenuiori fragiliorique internodia longiora nectente Slo. Cat. \& Pk. t. 26. f. 2 .
The fmaller divided and articulated Coral.
CORALLIUM 4. Bracbiatum © articulatum, articulis majoribus angulatis nervo majori connexis.
Corallina opuntioides \&c. Slo. Cat. \& Pk. t. 26. f. i. The opuntioid Coral.
CORALLIUM 5. Minimum capillaceum, ramulis fubarticulatis aqualibus. Corallina minima capillacea Slo. Cat.

The fmall divided Coral with equal branches.
CORALLIUM 6. Equale lamellatum Keratophytis reticulatis EO aferiis inductum.
The fmooth thin incruftating Coral.
This fubitance is very frequent in all the American feas, and commonly found, in thin flrata, on the reticulated Keratophyta, and other fubmarine fubftances.

## $\begin{array}{llllllll}\mathrm{O} & \mathrm{F} & \mathrm{J} & \mathrm{A} & \mathrm{M} & \mathrm{A} & \mathrm{I} & \mathrm{C}\end{array} \mathrm{A}$.

A R T I C L E III.
Of fuch as live in brancbed ftony receptacles of a regular porous texture; compofed of a great number of radiated cylindric caverns of moderate diameters, runing obliquely, in an erecto-patent direction, from the center to the furface, where their openings appear regular and uniform.

## M

 ADREPORA I. Minima fubverrucofa rubra.The fmall red Madrepore.
This little coralline fubftance is frequent on all the larger decaying maffes of this clafs, and feldom or never obferved to rife above a tenth or an eighth of an inch in height: it is of a beautiful red colour and an uneven form; but adorned with a few regular ftars on the furface.

## MADREPORA 2. Lamellata \& muricata Keratopbytis inducta.

The thin rugged Madrepore.
This little fubftance is commonly found on all the fea-fans, and moft other fubmarine plants of America. The protuberances on the furface appear like fo many rugged warts; and when thefe fmall tops fall off, the whole mafs appears with a multitude of fmall cavities.

MADREPORA 3. Minor, aperturis cavernarum concavo-radiatis, rarioribus. The fmaller branched Madrepore with few ftars.
This branched fabric is frequent in all the harbours of Jamaica: it is generally found in groups, but feldom grows to any confiderable height, or exceeds the thicknefs of a fwan's quill in any part.

## MADREPORA 4. Minor, fellis creberrimis.

The fmaller branched Madrepore with many ftars.
This is very like the foregoing both in fize and form, but may be eafily known by the multiplicity of its ftar-like apertures.

MADREPORA 5. Ramofa major, muricata \&o fellata, aperturis cavernarum minoribus depreffis.
Corallium album porofum maximum muricatum Slo. Cat. p. I.
The larger branched prickly Madrepore.
This fpecies is frequent about the Keys near Port-Royal, and grows frequently to the height of two or three feet above the bafe: its branches are all round and tapering.

MADREPORA 6. Maxima compreffa, palmata \& muricata.
Corallium porofum album latifimum muricatum, \&cc. Slo. Cat. \& H. t. 18.
The large compreffed prickiy Madrepore, or white Coral.
This grows the largeft of all the coralline fubftances found about famaica; it is met with in large fingle maffes of an irregular compreffed form, which fpread into broad flat lobes towards the top.

All the productions of this clafs are of a free porous texture, and regular ffructure; they ferment readily with acids, like all the other fubftances formed by marine infects, and make a good lime when well burned.

AR-

A R T I C L'E IV.
Of fuch as live in fimple, roundith, fony maffes of a porous texture, comppofed cbiefly of a great number of flender cylindric and radiated cavities, ranged clofe to each otber, and running obliquely from the furface to the center or baje of the ftructure.

STREA I. Aperturis cavernarum minimis, mafa inaquali.
The Star-ftone with fmall cells.
ASTREA 2. Aperturis cavernarum radiatis, centro Jpongiofo.
The Star-ftone with a loofe fpongy center to the cells.
ASTREA 3. Aperturis cavernarum radiatis, centro folido.
The Star-ftone with a folid center to the cells.
ASTREA 4. Depreffa inaqualis, aperturis cavernarum concavo-radiatis.
The Star-ftone, with a hollow center to the cells.
ASTREA 5. Rugofa, areolis majoribus fubrotundis laxì © irregulariter radiatis.
All thefe fpecies of the Star-ftone are frequently caft up on the fhores of $\mathcal{F} a$ maica, and may be eafily diftinguifhed by the difpofition and forin of the nucleus, or center of the apertures of the cells; but the laft fort feems to hold a main between this and the next genus, for it is of a more loofe open texture, and not fo regular in the difpofition of the radiating lamina of its cells.

## AR TI CLEV.

Of fuch as live in fimple, roundib, fony mafles of a loofe porous texture, connpofed of a feries of lamellated irregular caverns wobole openings appear in angular or oblong winding fpaces in the furface, and whofe cavities arch obliquely towards the center or baje.

The larger depreffed brain-ftone with long winding caverns.
MYCEDIUM 2. Subrotundum, areolis oblongis radiatis irregularibus.
The fmaller roundifh Brain-ftone with irregular oblong caverns.
MYCEDIUM 3. Compreffum affurgens undulatum, areolis irregularibus radiatis.
The compreffed Brain-ftone with irregular oblong caverns.
All thefe productions are natives of the feas about 'Jamaica, and frequently found upon the beech at Bull-bay and the Palijadoes. The three foregoing fpecies are very diftinct from each other, for the firt is commonly found in large fpreading toundifh maffes, with long winding radiated areas; the fecond is feldom io large, and generally appears in a fpherical form with roundifh radiated areas; and the laft is commonly more lax and porous than either, and generally found in compreffed flakes, with the areas at the margin. There are many other diftinct appearances of this kind obferved about Jamaica; as the Mycedium depreflum tenuius \& elegantius, areolis longis undulatis: Mycedium, areolisundulato-ftlllatis: Mycedium areolis fubquadratis;

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\&c. But thefe are always found in flat fpreading maffes, and feem to be of a peculiar nature.

> ORDER III.

Offuch as are furnifsed with convenient but pliable limbs, and covered woith bard cruftaceous coats.
N. B. The individuals of this, as well as of the following clafs, are always found fingle; and never form themfelves into focieties like thofe of the foregoing order.

## COREPHIUM 1. Ellipticum, fcutá elafticâ, fegmentis fubcequalibus. <br> , An, Afcellus marinus. Pet. Gaz. t. I.

## The Sea-Loufe.

This creature, which is different from the firh-loufe, is often found fticking, like the Limpite, to the rocks, in many parts of the northern coaft of Jamaica. The fhell or cover is of an oval form and hollow, but flat and open underneath; and compofed of fome tranfverfe fegments that move, more or lefs, over one another, being connected by ftrong ligaments and proper joints at the extremities, on both fides of the common fabrick. The infect itfelf is ftrong and mufcular, and fticks very firmly to the rocks at times; but, like moft other infects of the clafs, detaches itfelf, and removes from one place to another, at pleafure. The fhell is generally about an inch and a quarter in length, and about $\frac{s}{I}$ ths or better, in breadth, tak ing both the diameters of the bafe.

## ASTERIAS 1. Minima pentadactyla fetacea, bracbiis tenuiffmis fexuofis.

The fmall fcolopendra-Star-fifh.
This delicate little infect is adorned with long weakly briftles on all fides. The arms are flender, and generally bent in various directions according to the place or fituation of the filh; but they feldom exceed half or three quarters of an inch in length.

ASTERIAS 2. Major pentadaciyla craffa \& tuberculata.
The large warted Star-fifh.
ASTERIAS 3. Minor pentadacityla, bracbiis teretibus pectinatis.
The fmaller rugged Star-fifh with flender arms.
ASTERIAS 4. Major bracbiis novem longis comprefis \& pecinatis.
The larger Star-fifh with eight or more flender arms.
Thefe are the only feecies of the Afterias I could find about Famaica; they are very curious, and frequent enough in all the harbours of that illand, efpecially thofe of Port-Royal and King/ton.

ECHINUS I. Major rotundus, teflà elegantifimè radiata, aculeis brevifimis. The larger round Sea-Egg with fhort prickles.
ECHINUS 2. Major fubrotundus vel obfcurè angulatus, aculeis brevifimis. The larger roundifh Sea-Egg with five blunt angles.

ECHI-

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ECHINUS 3. Minor rotundus, aculeis longifimis variegatis.
The fmall round Sea-Egg with long variegated prickles.
ECHINUS 4. Minor oblongus tuberculatus \& fellatus, radiis fellie incequalibus.
The fmall oblong Sea-Egg,
ECHINUS 5. Major fubrotundus, fronte depreffa fulcatá.
The larger roundifh Sea-Egg with a furrow in the fore-part.
ECHINUS 6. Major fubcompreflus, tefia ar colata de fellata.
The larger moderately compreffed Sea-Egg.
ECHINUS 7. Maximus fubrotundus comprefus, tefia fellatâ ©̂ areolata, aculeis minimis.
The Sea-Plate, or flat Sea-Egg.
All thefe fpecies of the Ecbinus are frequent about Famaica, and all well known, except the two laft which are more rare than the reft, being feldom thrown up by the fea. The fhells or crufts of thefe two are furnifhed with a vaft number of fmall flender prickles, and marked into oblong angular areas; but the laft is very large and flat, and its cavity divided into many lodges, by a number of irregular cavernous partitions; and, like the fixth, fifth, and fourth, has both the mouth and the anus on the under fide. It is alfo perforated, like the reft of the clafs, with a numberlefs feries of little holes, through which it emits fo many mufcular ligaments; thefe embrace the necks of the aculei or prickles, and move them very regularly on the correfpondent protuberances, to which they are adapted by the fhallow fockets at their bafes, and held by other convenient faftenings. The ftar of the fhell is a little prominent, and the whole mafs covered over with very fmall prickles or denticles on both fides.

## O R D E R IV.

Of fuch as are furnibsed with convenient pliable limbs, and form and live confantly in Separate fingle cells of a foney texture and conffence.

THE productions of this clafs are commonly known by the name of thell-fin; and the waters, in which moft of the forts are found, cover fo great a part of the earth, and extend to fo many regions without interruption, that we need only to confider the compafs of them, to form a juit idea both of the number and variety of the inhabitants. They are indeed numerous beyond conception, and many of them fo curious, that few can obferve them without admiration; yet.we are fo little acquainted with the crcatures themfelves, that we Chould probably have never known there had been more than a few fecies in being, had not thair more lafting receptacles furnifhed us with an idea of the inhabitants; and hence it is that we are neceflitated to clafs the infects themfelves by the appearance and fimilitude of their manfions, which however muft probably bear fome refemblance to the inhabitants by whom they are moulded.

Thefe receptacles, as to their ufes to us in life, are indeed a very infignificant part of the creation; but if we confider the number of them, and that each ferves to preferve an animated being; if we confider the variety of their forms and configurations, or the luftres and more various colours with which they are adorned,
adorned, they certainly cannot fail to command attention from a mind capable of contemplation. They are things of their own nature engaging; they are things, without which fo many fpecies of living creatures mult become a prey to the next voracious hunters of the main; they are things whofe peculiar difpofitions, forms, luftres, and colours immediately engage our attention; and, befides, they are now found to engage the thoughts, and employ the leifure hours of many of my fair country-women, fo much, that I thought it particularly my duty to give a circumftantial account of fuch as I have met with in thofe parts; as it may contribute fomething towards the innocent amufement of perfons in whom, I may fay, it is a natural call: for what can be more engaging to a mind as yet unburthened with care, unmolefted with anxious thoughts and unaltered with toil, than the contemplation of things fo full of natural fymmetry, variety, and glowing luftres? And may we not conclude that a beautiful combination of colours may be, often, as agreeable to the eye, as a regular fucceffion of founds can be to the ear?

To make the following part more clear, and the difpofition more eafy and natural, it is divided into three claffes: the firft of thefe comprehends the feveral forts of Univolves; in the fecond is a catalogue of all the Bivolves; and the third, of the Plurivolves; but each is again divided into articles, and thefe into genera and fpecies.

But before I give any account of the receptacles themfelves I muft beg leave to fay fomething of the Nereis; a genus of infects, whofe fpecies feem to be the $f_{d}-$ bricators and inhabitants of all the different forts of tubuli, which we have placed in the beginning of the firt order.

NEREIS I. Tentaculis capitis binis, tripartitis; corporis, plurimis penicilliformibus, duplicijerie ad latera poficis. Tab. 39. f. I. (c) Scolopendra marina autborum. Pet. Gaz.
The Ship-Worm of Jamaica.

This infect is extremely deftructive to all the fhips that auchor for any time in the harbours of Famaica, or in any other part within the tropics: They cut with great facility through the planks, and burrow a confiderable way in the fubitance of them, incruftating the fides of all their holes with a fmoath teftaceous fubftance (b). They cut with equal eafe thro' moft forts of timber, nor do we yet know any, except fome of the palm-tribe, that is free from their attacks; but, from late experiments, we have fome reafon to hope that aloes and Irdzan pepper mixed up with the other ingredients with which the bottoms of thips are commonly daubed, may retard their attacks, if not wholly prevent them.

It is amazing with what eafe thefe infects run thro' all forts of timber; but it is remarkable that they burrow moft in the parts that are chiefly expoted to a viciffitude of elements. In the harbour of King/ton, where all the wharfs are made of wood, and fuftained by large piles of the flrongeft timbers, there are frequent occafions to obferve the operations of this infect, which generally deftroys the largelt pieces of the hardelt and moft refinous wood, in the fpace of a few years.

There is a great variety of thefe infects (c), and many of the other fipecies are equally deftructive.
(a) This infect was fo long in fpirits that the tentacule of the hedd were almoft wholly decayed, and thofe of the fides much injured. I had it from my curious friend Mr. Peter Collinfon, F. R. S.
(b) It is very probable that all the tubuli we know of are formed by infecks of the fame clafa.
(c) Mr. Ellis gives a figure of a very large and curious $N_{\text {Tritis and its fiphon. }}$
D I V I S I O
of UNIVALVES.

## ARTICLE I.

Of fimple Univalves, or Univalvés whofe cavities are formed into no regular pires, but gener ally remain open to the immediate view.

SIPHONIUM 1. Subaquale angulatum © flexuofum.

The angular and varioufly writhed Worm-tube.
This is very frequent on the furface of moft ftones and other hard bodies taken out of the feas about Gamaica.

## SIPHONIUM 2. Conicum nitidum midulans.

The fmooth, ftraight; fhining Worm-tube.
This is the ikill of the teredo navalis or fhip-worm, and is common in moft pieces of wood that lie for any time in the fea, in thofe warm climates; it is generally from one eighth to a quarter of an inch, or better, in diameter.

## SIPHONIUM 3. Conicum in Spiram tortum, Jpirâ liberâ. <br> The conic fpiral Worm-tube.

## SIPHONIUM 4. Rugofum varic contortum.

The rugged and varioufly writhed Worm-tube.
This is frequent on all the rocks about Famaica, and generally met with of all fhapes and fizes; but is moft commonly flatted a little on the fide by which it is fixed.

## SIPHONIUM 5. Minus longitudinaliter firiatum ชृ varie contortum.

The ftriated and varioufly writhed Worm-tube.
This tubular fabrick is frequent on moft of the oyfter-fhells and fmall pebbles in the Weft-India feas.

DENTALIUM 1. Minus conicum album, tubo leniter arcuato.
The fmall, white, and flightly arched Tooth-fhell.
This is the only one of this tribe I have obferved in thofe parts of the $W_{e f t}$ Indies.

Before I proceed to an enumeration of the fpecies of the following genus, I thall divide them into, I . Thofe that are quite plain, and without any aperture at the apex. 2. Such as are alfo plain, but have an aperture at the apex. 3. Such as have the apex arching a little backwards from the main perpendicular, commonly called caplimpets. 4. Such as are furnihhed with a valve that covers fome part of the cavity, generally called decked limpets. 5. Such as have fomething of an irregular, tooth-like, hollow and obverfely femiconical fpur rifing from the apex on the infide, called chamber limpets. And, 6thly, fuch as have a very fmall degree of winding in the apex.

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1. Of Limpets that have no aperture at the top.

PATELLA 1. Oblonga © minus profunda, radiatim variegata.
The fmall mottled brown Limpet with radiated colours.
PATELLA 2. Oblonga, limbo angulato, fundo nitido.
The fmaller oblong Limpet with an angular margin.
II. Of Limpets that have an aperture at the top.

PATELLA 3. Rugofa © radiata interne nitida, limbo crenato, apice aperto. Patella. Pet. Gaz. t. 3. f. 12.
The rough radiated Limpet with a crenated margin and open top.
PATELLA 4. Rugofa © radiata interne nitida; limbo integro, apice aperto.
The rugged radiated Limpet with a fmooth margin.
III. Of pointed arching Limpets commonly called Pbrygian-Caps.

PATELLA 5. Subconica obliqua, circulis prominulis acutis circumducta.
The rugged Pbrygian-Cap Limpet.
IV. Of decked Limpets.

PATELLA 6. Minor contignata glabra, limbo binc leniter emarginato, inde appendiculate.
The fmaller fmooth decked Limpet.
PATELLA 7. Rugofa contignata, apice leniter Jpirato. Vid. Lyf. L. iv. S. 8. 2.

The rugged decked Limpet with a deprefled fpiral apex.

> V. Of chambered Limpets.

PATELLA 8. Alba radiata, conclavata \& fubcontignata.
The decked, chambered, and radiated white Limpet.
PATELLA 9. Alba radiata \& conclavata, limbo inaquali.
The white chambered Limpet with an uneven margin.
$N$. B. We find none of the fixth clafs among the fhells of Famaica, unlefs you would reckon the feventh fpecies of that rank.
ARTICLE II.

Of Univalves rwbofe cavities are difpofed in a fpiral form nearly witbin the fame plane, the greatef: part of the finaller windings being frequently covered by the outward larger windings of the Sell. Note, The cavity or bollow of thefe Sells are often fimple; but fometimes we find them divided into difinct compartments by tranfuerje partitions.

AMMONIA 1. Minor fubtumida albidas, ore obtufe anyulato.
The roundifh white Cormu-Ammonis. See Lyff. II. 47.

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In this genus of fhells the hollow is quite entire, and continues uninterrupted from the apex to the mouth; but we have no more than one fpecies of the fort in Gamaica, which is found in the lagoons above the Ferry.

LITUUS I. Minor niveus internè nitidus.
Cornu Ammonis Legitimum Klen. tab. i. f. 6. Lyft. L. Iv. S. Iv. \& Gualt. t. 19. E.

The flender white Lituus or Cormu-Ammonis of America.
The hollow is frequently interrupted in this fort, and generally divided into diftinet lodges by flender tranfverfe partitions, as in the Nautilus; but I could never fee any of that fort in America. The tube of the Lituus is flender, and formed into a free fire, whore windings are all in the fame plane.

## A R T I C L E III.

Of fimple Univalves wobofe cavities are difpofed in fitres of a more or lefs eccentric or rijng form, with an open and pretty even aperture at the bafe.

In the difpofition of the genera and fpecies of this kind, we begin with thofe that rife leaft above the plane of the bafe, and proceed gradually to the moft pointed and eccentric of the kind.

CTOMATIA 1. Minor glabra.
Catina Lactis Klen. t. 7. 114. D'argen. t. 7. C. Pet. Gaz. t. 12. f. 4. \& Gualt. t. 67 . T.

## The fmaller fmooth brown Ear-fhell.

We feparate this genus, in which the margin is entire, from the baliotes, in which it is always perforated; but we have none of the laft kind in America.

The fhells of the following genus are diftinguifhed by their obtufe and moderately rifing apex's, few circumvolutions, and half rounded mouth. The aperture of the cavity is generally pretty wide in all the fpecies, and fituated obliquely at the bafe.

Thefe fhells may be very reafonably divided into fuch as have a perforated umbibicus or navel, and fuch as have no apparent aperture in that part.

## I. Of fuch as have a perforated umbilicus.

## NERITA I. Alba major nitida.

The larger white Nerite. See Lyf. Liv. S. 5. 14.
NERITA 2. Subfufca undulation per fafcias longitudinales variegata.
The brown variegated Nerite. See Lif. iv. S. 5. 3, 4. \& D'argen.
t. 20. A. C.

NERITA 3. Sublutea.
The yellowifh Nerite. $^{\text {. }}$
NERITA 4. Subfufca aqualis.
The light brown Nerite,
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NERITA 5. Subcarnea cqualis.
The flefh-coloured Nerite.
NERITA 6. Subcarnea undulatim per fafcias longitudinales varieg ata:
The afh-coloured Nerite with variegated ftripes.
II. Of fuch as thew not an open umbilicus.

NERITA 7. Sublutea undulation variegata; labiis utrinque dentatis, altero croceo.
The Bloody-Gum. See d'Argen. t. 10. 40.
NERITA 8. Subnigra friata, ore dentato albido.
The coarfer black Nerite commonly called the White Gum.
NERITA 9. Alba, lineis nigris variegata.
The white Nerite with fimple black lines. See Lif. L. iv. S. 6. 3 r.
NERITA 10. Albida, lineis nigris aqualiter interfectis variegata.
The black and white Nerite.
NERITA 1I. Nigra, maculis majoribus © lineis tenuifimis albidis variegata. The larger fmooth black and white Nerite.
NERITA 12. Nigra, maculis minimizs, \& fafcià longitudinalia albidâ varicgata.
The belted black and white Nerite.
NERITA I3. Nigricans, maculis minoribus \& lineeis minutifimis albidis variegata.
The dark fmooth $N_{\text {erite }}$ with very fmall fpots.
NERITA 14. Minor nigricans, maculis dentiformibus variegata.
The dark Nerite with large tooth-like white fpots.
NERITA ${ }^{15}$. Rubella variegata.
The reddifh variegated Nerite.
NERITA 16. Longitudinaliter fafciata \& rubello variegata, albida.
The variegated and belted Nerite with a reddifh mixture.
NERITA 17. Minima viridis, quandoque variegata.
The fmall green Nerite, commonly called the green Pea-hell.
The frail- fhells refemble the Nerites pretty much, both in the general form, and the rifing of the apex; but the fpecies are compofed of a greater number of circumvolutions, and the mouth is generally more open and irregular.

COCHLEA 1. Purpurea tenuis, ore ampliore. Tab. 39. f. 2.
The purple Ocean-fhell. See Lyf. L. iv. S. 5. 23.

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The creature that forms and inhabits this fhell, is a native of the ocean, and lives frequently many hundred leagues from any land; but having met with many of the kind between Bermudas and the weftern iflands, in my voyage from famaica, it enables me to communicate the following account of them. The creature probably paffes the greatelt part of life at the bottom of the fea, but rifes fometimes to the furface; and, to do fo, it is obliged, pifcium more, to diftend an air-bladder; which however is formed only for the prefent occafion, and made of a tough vifcid flime fwelled into a veficular tranfparent mafs, that flicks to the head of the animal at the opening of the fhell. This raifes and fuftains it while it pleafes to continue on the furface; but, when it wants to return, it throws off its bladder and finks. I have taken up many of thefe infects alive, with the bladder yet affixed to the aperture of the fhell; and ftill preferve fome with it on, in fpirits. I have alfo obferved many of the veficulæ themfelves fwimming upon the furface of the water about that place, which induced me to think they were thrown off as the creatures retired. It is obfervable that, upon touching the body of this infect, it diffufes a beautiful purple liquor, of which colour the thell generally appears while it is frefh.

Tab. 39. fig. 2. reprefents the chell of this creature in two attitudes, with its bladder, $a, b$, as it appears both in the natural and preferved ftate.

> COCHLEA 2. Subfufca \& fubrotunda major, fafcia longitudinali albidâ, ore ampliori libero, umbilico claufo.

The larger brown Snail with a white longitudinal ftripe. This is reprefented in Lyfter, L I. N. 49.

COCHLEA 3. Comprefa, ore integro, umbilico claufo.
The middle-fized Antique Lamp.
COCHLEA 4. Subcomprefa, ore unidentato, umbilico Jubperforato. Cochlea. Lyft. 95. \& D'arg. t. 1 I. D.

The Antique Lamp with one tooth.
COCHLEA 5. Subcomprefa ad marginem rotundior, umbilico claufo, ore bidentato.
The Antique with two teeth.
COCHLEA 6. Subcompreffa, margine acuto, umbilico perforato, ore bidentato.
The thin-edged Antique with an open navel. See Lyf. 85.
COCHLEA \%. Subcomprefa tenuior, margine acuto, umbilico perforato. T. 40 . f. A. \& Cochlea Lyft. 80, 8 I

The thin Antique with a very fharp margin and an open navel. I have not yet feen any of thefe with a lip.

COCHLEA 8. Subtumida collo coarctata, fauce quadridentata, umbilico claujo.
The middle-fized Antique with four teeth.
COCHLEA 9. Subtumida collo coarchata, fauce quadridentata, ambitu linecit acutâ cincta.
The middle-fized Antique with a line round the middle.

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COCHLEA 10. Parva fubtumida, ore compreffooblongo, fauce coarclatâ tridentatá.
Cochlea. Lifteri 98.
The fmall Antique with three teeth.
COCHLEA 11. Subtumida minor fufca, ore crenato. Tab. 40. f. 1.
The fmall Antique with a narrow nick in the under lip.
COCHLEA 12. Subtumida turbinata minor, ore utringue unidentato. Tab. 40. f. 2.

The little Antique with one tooth or prominence in each lip.
COCHLEA 13. Oblonga minima Jubdiapbana, ore in extremo crenato. Tab. 40. f. 3.
The fmalleft oblong and flatted Snail-fhell, with an open nick in the outward part of the lip.
COCHLEA 14. Subcompreffa minima tenuis, fauce utrinque lirâ longitudinali notata. Tab. 40. f. 4 .
The fmall green Cocblea, with a thin longitudinal ridge on each fide of the aperture.
COCHLEA 15. Subrotunda tenuior, ore membranaceo ampliore.
The fmaller Snail-fhell, with a thin lip and a wide roundifh aperture. COCHLEA 16. Subrotunda tenuior, volutibus plurimis, ore minori'. Cochlea. Lyft. 60.

The thin Button-fhell with many windings.
Thefe, except the firft, are all land fhells, and frequent in the woody inland parts of Jamaica; and all, except the firft, feventh, and laft, form regular lips at a certain period of life. The genus is diftinguifhed, 1. By the central column which ftretches from the apex to the middle of the bafe, and in which one fide of the lip is conftantly fixed, while the other terminates about the middle of the foregoing winding. 2. By their flatted roundifh form, the apex being but moderately raifed above the plane of the fabrick. 3. By their having a pretty open and roundifh aperture. Note, The mean column is fometimes whole, fometimes perforated.

LICINA 1. Alba major, lineis tenuifmimis notata; ore interne fubangulato. Cochlei \&cc. Lyft. 5 I.

The large white Licina.
LICINA 2. Cralfa fubfufca variegata.
The brown Flea-bitten Licina.
LICINA 3. Fufa tenuis deprefla, ore funplici.
The thin flat brown Licina.
LICINA 4. Rugofa utrinque friata, ore marginato, margine borizontali crenato. Tab. 40.f.5. Buccinum. Lifteri 24.
The white rugged Licina, with a fpreading rim to the aperture. LICINA 5. Utrinque friata, margine minori integro. Tab. 40. f. 7. The fmooth Atriated Licina.

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LICINA 6. Albida glabra, margine minori. Tab. 40. f. 7.
The fmooth white Licina. See $K l$. t. 3. 71.
LICINA 7. Variegata glabra, margine lineari.
The variegated Licina.
LICINA 8. Fufca, major, tubo angufto fubequali in fpiram oblongam fubaquatem voluta, ore fubmarginato. Tab. 40. f. 8.

The long brown Licina.
Tho' thefe fhells are generally ranged with thofe of the frails, I thought it more natural to difpofe them in a feparate article; for the rifing of the apex is a little more confiderable than it commonly is in the others, the mouth is always round, the navel generally hollow, and the whole fabric formed by the windings of a perfect tube.

TROCUS I. Major turbinatus, longitudinaliter liratus atque fulcatus.
The brown Balcony Snail-fhell furrowed along the tube.
TROCUS 2. Minor longitudinaliter Ariatus atque fulcatus, umbilico fubapertb.
The fmaller ftriated Balcony Snail-fhell.
TROCUS 3. Major cinereus nigro maculatus, internè argenteus.
The Magpye Trocus. See D'argen. t. xi. \& Gualt. t. 59. C.
TROCUS 4. Cinereus medius, viridi \&f rubello maculatus, internè argenteus. The fmaller Magpye Trocus. See L. tab. 644.
TROCUS 5. Minor friatus, margine acutiori prominulo, umbilico fubaperto.
The fmall rough Trocus with a fpreading margin.
TROCUS 6. Subfufcus mifcellus minor glaber.
The fmooth dark Trocus.
TROCUS 7. Subcinereus maculatus, appendiculis per marginem acutis, umbilico claufo.

## The falfe Spur.

All the fpecies of the Trocus are diftinguifhed by their fpreading conic form, and roundifh oblique apertures. The navel is frequently open; but in a few, it thews itfelf in a columnar form, as in many of the fnail tribe. The hollow is feldom complete in thefe fhells; for as they grow, both fides of the lip faften to the foregoing winding, one limb being fixed in the center while the other terminates towards the periphery of the preceding revolution.

The difpofition both of the tube and aperture of the Terebellum is almoft exactly like that of the Trocus; but the body of the fhell is raifed into a narrow fharppointed cone. The navel, however, is never perforated in them, though the hollow is formed in the fame manner as that of the Trocus.

TEREBELLUM I. Subcinereum mijcellum \& minute friatum, friis longitudinalibus.
The mottled Screw. See Gualt. t. 58. f. E.
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A R T I C L E IV.
Of fhells that bave their apertures difpofed nearly in the fame direction with the axis of the jpire.

IN ranging the productions of this clafs we fhall begin with fuch as have the moft fimple and fhorteft apertures, and proceed gradually to thofe, whofe openings are longeft and wideft, in proportion to the body of the fhell, without being expanded into a wing of any kind.

In the Turbina, which is the firft genus of this clafs, the form is not quite fo tapering, nor the body fo ftraight and narrow in proportion to the length, as in mott of the others; but the aperture is more oblique, tho' it approaches nearly to the direction of the axis; that part of the orifice that is furtheft from the apex being always pretty near the center of the fipire. The hollow is nearly the fame in thefe as in the foregoing genus; but the columnar axis, and the form and direction of the orifice or mouth, diftinguifh it both from that and the following clafs.

The productions of this kind have been hitherto ranged among the Buccini, from which I chufe to feparate 'em, on account of the form of the aperture, which in that is always furnihhed with fome fort of a lip.

TURBINA i. Albida fufco tranfuerfè mifcella.
The Soldier Snail-Shell, or variegated Turbina.
TURBINA 2. Lactea nitida.
The fmooth white Turbina.
TURBINA 3. Subfufca minutè Ariata \&o obliquè undulata. The fmall dark variegated Turbina.
TURBINA 4. Subcraffa minor albida glabra.
The fmooth, whitifh and flightly ftriated Turbina.
TURBINA 5. Tranfverfè fafciata, fafciis ad interflitias volutuum contiguiso
The falfe Ventletrap. See Pett. Gaz. t. 5. f. 5. Gualt. t. 58, \&cc. \& Kl. t. 3. 66.
TURBINA 6. Minima diapbana nitida.
The fmall, fhining and tranfparent Turbina.
TURBINA 7. Tranfverfè friata fafciisque paucioribus donata.
The fmall lipt Turbina, with few belts.
TURBINA 8. Minima nitida lineis nigris longitudinalibus integris notata.

## The Seed-fhell Bucinum.

The Strumbus comes next in order, and refembles the Terebellum and Turbina very much, as well in the outward form and general make of the fhell as in the difpofition of the orfifice; but it is diftinguilhed from both by the open notch or depreffion at the extremity of the aperture, which in this genus, feldom exceeds a third or fourth part of the length of the whole fhell.

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STRUMBUS I. Subcinereus nitidus tranfoerfe Jemi-fubfriatus.
The fhining fmooth Strumbus.
STRUMBUS 2. Striatus © $0^{\circ}$ tuberculatus, ex albo variegatus.
The rugged warty Strumbus.
STRUMBUS 3. Minimes nitidus variegatus.
The fmall, fhining, variegated Strumbus.
The Buccinum is the next genus; in which the fhells are producted to a fharp point at both ends; and the aperture or mouth, which is naturally pretty wide and open, and extends about one half or two thirds of the whole length, lays very nearly in the direction of the axis of the fabrick. All the fpecies are liped a little, and the aperture, which is generally toothed or rugged below, and more or lefs contratted towards the extremity, ends in an open groove. But the length of the orifice is fometimes, though feldom, a little under the one half of the whoie length of the fhell, tho' this is the general proportion.

BUCCINUM I. Maximum undulatim variegatum, fulcatum 8 fafciatum, ore dentato.
The Sea-Trumpet. See Lif.t. 959. Rump.t.28. I3. \&u Guala. 48.t.
BUCCINUM 2. Fufcum fafciatum छi angulatum; labio exteriori infersè angulato, deflexo.
Buccinum triangulare vulgaris.
The brown Buccinum, with a triangular labiated aperture. See Lif. t. 94 I. 3.8 Gualt. t. $53 . \mathrm{C}$.

BUCCINUM 3. Nebulatum glabrum, lineis nigris longitudinalibus notatum.
The fmooth Buccinum with black longitudinal lines. Lif. t. 910 .
BUCCINUM 4. Subfufcum glabrum.
The fmooth brown Buccinum.
BUCCINUM 5. Fafciatum atque rugofum apice obtufo, dentibus labii exterioris Jeptem.
The rugged Buccinum with a round apex.
BUCCINUM 6. Minus friatum © variegatum, ore angufo uiringue pluridentato, mucrone brevijfano.
The fmall ftriated and variegated Buccinum, with a narrow indented aperture.
BUCCINUM 7. Subventricofiom tuberculatum © rugofur, faucrone leniter retrofiexo.
The rugged, warty, grey Buccinum.
BUCCINUM 8. Tuberculatum © rugofum, labio covteriore feptendentato.
The oblong rugged Buccinum.
BUCCINUM 9. Oblongum, fafciis crebris tranfuerfis \& friis longitudinalibus notatum, ore anguftiore levifimè dertato.

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The Shuttle Buccinum. See Lif.t. 927.27. \& Kl. t. 4. 78.
BUCCINUM 10. Rugofum birfutum, mucrone breviori.
The rugged hairy Buccinum.
BUCCINUM II. Rugofum, gibbum E nodofum, birfutum.
The knotty, rugged, hairy Buccinum.
BUCCINUM I2. Rugolum © faciatum, denticulis labii exterioris feptem geo minatis.
The brown belted Buccinum, with a fingle ridge on the infide of the aperture.
BUCCINUM 13. Albidum, rugofum \& ventricofum, labio exteriori angulato, prominulo.
The rugged Buccinum, with a rifing lip.
BUCCINUM 14. Subcompreflum tuberculatum \& Ariatum, fafoijfque difichis oppofitis refertum.
The flatted Buccinum, with large belts at each margin.
BUCCINUM I 5. Subfufcum rugofum, fafciatum atque friatum, mucrone breviori, ore dentato, virgis mifcellis \&o lineis binis albis notatum.
The white-liped brown Buccinum.
BUCCINUM 16. Minus fufcum nitidum tranfverfè fubfriatum, ore angufin ori internè friato, mucrone veluti abfcifo.
The fmall, fmooth, brown Buccinum.
BUCCINUM 17. Striatum © tuberculatum, ore rotundiori infernè unidentato, tabio exteriori prominulo, mucrone brevi.
The rugged warted grey Buccinum.
BUCCINUM 18. Ventricofum © obtufê tuberculatum, nigrum.
The black warted Buccimum.
BUCCINUM 19. Striatum ventricofum nigrum, ore fupernè © infernè crenato.
The black friated Buccinum, with a fingle nick in each fide of the lip.
BUCCINUM 20. Minus albidum virgâ maculatâ fimplici longitudinaliter notatum.
The whitifh Buccimum with a fingle mottled Atreak.
BUCCINUM 21. Minus nitidum glabrum pulcbrè variegatum. The Wheat-fhell.
BUCCINUM 22. Minimum nitidum, lineis nigris longitudinalibus integris notatum.
The fmall Seed-fhell Buccinum with black lines.
BUCCINUM 23. Minimum rubello variegatum, ore fubovato, mucrone breviffimo.
The reddifh variegated Seed-Ihell Buccimum.

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The Purpura comes next in order, and difers but little from the Buccinum; but the fpecies are generally more ventricofe and fwelling, and furnifhed with a number of prongs at each belt or lip. The aperture in thefe fhells is difpofed in the fame manner as in the Buccinum tribe, and the channel or groove is generally arched a little backwards; but the prongs feem to make the moft effential difference between the two genera.

PURPURA I, Submuricata rugofa alba.
The white Purpura with fhort fimple denticles. See Bon. Cl.3.273.
PURPURA 2. Submuricata major, ore maculato.
The rugged Purpura with fpotted lips.
PURPURA 3. Muricata major, mucronibus acutè dentatis.
The large white Purpura with toothed prongs. See Bon. Cl. 3. $275^{\circ}$
PURPURA 4. Muricata major, mucronibus fimplicibus.
The larger Purpura with fimple prongs.
PURPURA 5. Nitida nebulata nervofa \& fafciata, mucrone recta invariabile.
The fmoother fhining Purpura with a ftraight bill.
PURPURA 6. Rugofa \& fafciata, mucrone recio, collo inde dentato.
The Sycotypus or Fig-fhell comes next in order, having its aperture in a line with the axis, and terminated in a narrow producted bill, like the foregoing; but it is neither liped nor toothed, and ftretches commonly from a large fipiral main. The opening of thefe fhells runs generally about two thirds of the whole length, and the body, which is roundifh and fwelling, terminates in a moderately prominent apex.

SYCOTYPUS 1. Tenuis fubfriatus © leniter tuberculatus.
The fmaller hairy Fig-fhell.
Next to this comes the Dolium; or Tun, whofe fpecies are foon diftinguifhed by the opennefs and length of their apertures; the extremities of which are neither contracted or producted, but generally terminated in a wide truncated groove or nich, as if the top of the aperture had been broke off.

DOLIUM I. Tenue, pulcbrì variegatum ©o longitudinaliter fubfulcatum.
The Patridge-fhell. See D'arg. t. 20. 4. Liff. 98 r. Gualt. t. 51. 3. \& Bon. Cl. 3. 191.
DOLIUM 2. Majus albidum carruleo fafciatum, mucronibus paucioribus conicis muricatum.
The larger Famaica-Wilk. See D'arg. t. x8. Lif. t. 908. \& Gualt. t. 26 .

DOLIUM 3. Subcceruleum minus, mucronibus conicis muricatum. The fmaller Famaica-Wilk. See Lif. t. 904.
DOLIUM 4. Verrucofum nigro variegatum, labio interiori fupernè fuberecto, inferne compreffo.
The Mulberry-Thell. See Liff.t. 989. Gualt. t. 5 I. E.

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DOLIUM 5. Subfufcum © fubmuricatum, mucrone anguftiori, lineâ longitudinali albá.
The dark-pointed Tun with a white line.
This thell refembles the Buccinum very much in its younger ftates, but widens as it rifes.

DOLIUM 6. Tuberculato-dentatum nigrovariegatum, ore fubmucronato.
The nippled Mulberry-fhell. See Lif. t. 956, 7.
DOLIUM 7. Variegatum nitidum, fauce axe longiore.
The larger mottled Dolium or Egg-fhell. See D'arg. t. 20. G. \& Lif. t. 714.72 .

DOLIUM 8. Variegatum nitidum minus fauce axe longiore.
The fmaller mottled Dolium or Egg-fhell.
A R T I C L E V.
Of liped and winged Shells.

THE apertures of thefe fhells, which are generally pretty obtufe at the apex, extends above two-thirds of their length, and terminates always in a hort reflected channel; and the outward cheek fpreads commonly into a ftrong extended lip. The general form of all feems to range them very naturally between the cylinders and the Tuns.

CASSIS 1. Maximus, vultu ovato, ore nigricante.
The Queen-Conque, and Conque of Davies; and the Cak or Helmet of Lif. t. 1008.
CASSIS 2. Major vultu triangrulari, labio exteriore Septem maculis notato. The King-Conque, or Helmet; and the Lambis of Davies. See Lift. t. 1004. \& Gualt. t. 41.

## CASSIS 3. Nitidus mifcellus tranfverfè fubfriatus.

The fmooth mottled Helmet. See Gualt. 40. C.
CASSIS 4. Nitidus fubcinereus mifcellus tranfverfè friatus, labio exteriori undecim dentibus armato.
The mottled Helmet with eleven teeth, and many fmall tranfverfe furrows.
CASSIS 5. Variegatus E̛ tranfverfê friatus, labio exteriori pluridentato. The variegated Helmet with fixteen or feventeen teeth and many tranfverfe furrows.
CASSIS 6. Fufcus utrinque friatus \& fubfulcatus, lawo exteriori dentato, © maculis plurimis notato.
The rugged oval Helmet. See Gualt. t. 39. C.
CASSIS 7. Longitudinaliter fubfriatus, labio exticriori oftodecim liris nafato, oppafito fuperné lima inflar exafperato.

The rugged-faced Helmet.

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CASSIS 8. Glaber albidus, maculis fubluteis majoribus fafoiatim © longitudinaliter dijpofitis notata, labio exteriori pluridentato.
The yellow fpotted Cafk or Helmet. See Gualt. t. 39. K.
I doubt whether this be a Wef-India fhell, though I find it among thore I brought from Yamaica.

CASSIS g. Subfufcus minor tranfverfè Jubfriatus, labio tenuifimo maculato.
The fmall thin-liped Helmet.
The Concbilia or real Conques come next after the Helmets, from which they are eafily diftinguifhed by the extention of the lip. In all the fpecies of this kind the aperture is wider, and the wing more extended and open than in the others; but they never form more than one lip, and that is thrown out only when they are full grown: this, however, thickens gradually afterwards, and, at length, grows fo near the oppofite fide of the fhell, that the paffage feems half clofed up, which perfectly thews the progrefion of life in the animal, from the embrio to the full grown itate, and thence to the laft old age.

CONCHILIUM 1. Maximum melinum, fauce rubello.
The Conque, or Conque of Thetis.
CONCHILIUM 2. Albo \& nigro variegatum.
The fmall marbled Conque. See Lif. t. 871. 25 .
CONCHILIUM 3. Croceum labris nitentibus.
The fmall yellow Conque. See Lift. t. 906. 26. \& Bon. Cl. 3. 299 .

> A R T I C L E VI.
> Of the Rimatæ or clinked Sbells.

$T$HE fhells of this clafs generally have a fmooth gloffy furface, and a long narrow aperture, which ftretches almoft from the one end of the fabric to the other.
The Cylinder feems to claim the firft place in this order, and is diftinguifhed from the reft of the tribe by its prominent apex, moderately fwelling body, and narrow aperture which ends in an open finking nich at the top, as in the Dolium.

> STREPHONA I. Subcinerea, lineis plurimis fufcis varie angulatis © intertextis variegata.

> The Panama.

STREPHONA 2. Fufca variegata, fafciâ obfcuriori ad bafins volutuum.
The dark Olive.
STREPHONA 3. Olivacea mijcella.
The dark mottled Olive.
STREPHONA 4. Subcinerea variegata.
The grey Olive.
STREPHONA 5. Subcinerea minima variegata fubrotunda.
The fmall gloffy Olive.

O F J A M A I C A.
STREPHONA 6. Latiea fubvariegata.
The white Olive.
STREPHONA 7. Alba minor, apice projectiori.
The fmall white Olive.
STREPHONA 8. Albida Jubvariegata. The Agate.
STREPHONA 9. Sublutea.
The yellow Olive.
The Volutes come next to the Cylinders, from which they are diftinguinied by their enlarged bafes, ffraight fides, and conic form.

VOLUTA I. Fufca maculis paucioribus varitgata.
The brown Volute with a few white fpots.
VOLUTA 2. Fufca maculis paucioribus \&o virgâ medià maculatâ variegata.
The dark Volute with fmall white fpots.
VOLUTA 3. Fufca fubfriata fafiation © maculation variegata. The dark Flea-bitten Volute.
$\left.\underset{\text { VOLUTA 4. }}{\substack{\text { VOLUTA } \\ \text {. }}}\} \begin{array}{l}\text { Fulva. nebulata. } \\ \text { Fulva variegata. }\end{array}\right\} \quad$ The yellowin variegated Volutes.
vOLUTA 6. Subolivacea Ariis albis fafciäque longitudinali alba, notata. The ftriated Volute.
VOLUTA 7. Subccerulefcens maculata.
The blueifh clouded $V$ olute.
VOLUTA 8. Variè variegata \& fubmaculata, acumine firiato:
The Pye-bald Volute.
vOLUTA g. Lutea qqualis.
The yellow Volute.
VOLUTA 1o. Crocea, maculis oblong is per median long itudinem obducta.
The yellow fpotted Volute.
VOLUTA ir. Subnebulata minor friata albida.
The whitifh ftriated $V$ olute.
VOLUTA 12. Sublriata glabra alba.
The fmall white Volute.
The Couries comes next to thefe, and are eafily known by their oblong gibbous form and natrow longitudinal apertures. In all the thells of this kind the inner windings of the fire are covered, or almoft covered, by the laft circumvolution; and the length of the fhell is the breadth of the bafe of the firal llip that forms the whole fabric.

All the fpecies have a natural luftre when frefb.
CYPREA 1. Major lactea.
The white Coury.

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CYPREA 2. Subfucica atro longyitudinaliter fafciata.
The dark belted Coury, or Male Coury. See Bon. Cl. 3.266.
CYPREA 3. Subfufcol lateribus maculatis, dorfo nebullato.
The large dark Coury with round white fpots on the fides. Sce Lif. t. 699.
CYPREA 4. Fufca maculis rotundis albis wariegata, inferioribus nebulatis.
The falle or baftard Argus.
CYPREA 5. Cinerea maculis minoribus nigricantibus variegata.
The flea-bitten Coury.
CYPREA 6. Fufca maculis binis nigris ad utrumque extremum.
The Moufe Coury. See D'arg. t. 31. C. \& Bon. Cl. 3. 25 I.
CYPREA 7. Fufca minor inferne albida.
The white-bellied brown Coury.
CYPREA 8. Subfiufa mijcella, infernè maculis minoribus difinctis variegata.
The light brown flea-bitten Coury.
CYPREA 9. Alba minor, labiis externè puncratis.
The fmall white Coury with minutely fpotted lips.
CYPREA 10. Subluteficens fafcià unicâ tranfuerfali fuperduçã.
The hump-back'd Coury. See Lill. t. 711. D'arg. t. 21. L. \& Bon. Cl. 3. 259.
CYPREA 11. Tranfverfe Ariata, quandoque maculata, Satura verticali notatâa.
The flea-bitten Coury. See Lif. t. 706. D'arg. 21. L.

$$
\begin{array}{cccccccc}
\text { D I I } & \mathrm{V} & \mathrm{I} & \mathrm{~S} & \mathrm{I} & \mathrm{O} & \mathrm{~N} & \mathrm{II} . \\
\text { Of } & \mathrm{B} & \mathrm{I} & \mathrm{~V} & \mathrm{~A} & \mathrm{~L} & \mathrm{~V} & \mathrm{E} \\
\hline
\end{array}
$$

IN the diftribution of the fhells of this clafs I have followed a method entirely new, and ranged them according to the form and difpofition of the joints, in which I find the moft conflant uniformity; having, on examination, obferved them to be always the fame, or very nearly $f 0$, in all the fpecies that are truly of a kind. I thall divide the fhells of this clafs, I. Into fuch as are joined together by ligaments. 2. Thofe that are connected by ligaments and teeth: And, 3. Such as are joined by long denticulated edges, ftrengthened with lefs confiderable ligaments.

> A R T I C L E I.
> Of fuch as are connected by fimple ligaments.

The Oyfters claim the firft place in this tribe; they are a very numerous family, generally of an oblong uneven form, and joined by a ftrong roundih tendon at the apex or narrow end. STREA 1. Oblonga glabra adnafcens.

The larger Mangrove Oyfter.

OSTREA 2. Undulata © muricata, adnafcens.
The fmaller pronged and undulated Mangrove Oyfer.
Thefe forts are frequent in moft parts of America, and very little inferior to the European oyfters, either in flavour or delicacy; but they are feldom fo large as the fmalleft of thofe that are fold in the markets of London.

GLYCYMERIS I. Subrotunda, teffâ tenuifina fubcitrinâ.
The yellow Onion-peel Oyfter. See D'arg. t. 22. Lif. 4.7. \& Bon. Cl. 2. 56.
This genus is diftinguifhed by the hole in the centre of the under value: the fhells of all the fpecies are very thin and delicate.

The Mufcle comes next in rank; it is of an oblong form, like the oyfter, but deeper on both fides, and not fo fpreading at the wider end. The fhells of this genus are generally frooth, and comeated by a ligameat that runs obliquely from the point towards one of the fides.

MITULUS i. Mucronatus major carulefcens.
The larger blue Mufcle. Sce D'arg. t. 25. C. Lif. 198.
MITULUS 2. Subrbombeus variegatus, limbo ultra apicem porrecto.
The Tulip Mufcle. See Lif. 199.
The Pectens come next to thefe, and are eafily diftinguifted, I. by the furrows running directly from the point or apex to every part of the circumerence; 2. by their cavities, which are generally formed by the hollow of one of the chells, the other being quite flat; and 3 . by the ears, with which they are always adorned on one or both fides of the point.

PECTEN 1. Major fubcinereus, valvulâ alterâ planâ ©̉ tranfuerfe fublriatả. The large brown PeEten.
PECTEN 2. Nebulatus minor, valvulâ alterâ planâ.
The clouded PeEZen.
PECTEN 3. Subfufcus maculatus, voluta alterá planâ.
The fpotted light-brown Pecten.
PECTEN 4. Subcroceus oblongus uniauritus minor.
The fmall one-eared Pecten.
PECTEN 5. Albus minor, uniauritus.
The fmall white one-eared Peiten.
PECTEN 6. Albidus aut fubvariegatus utrinque turgidus. Tab. 40. f. 10.'.1 The white PeEzen with both valves hollow.
PECTEN 7. Ruber, alâ alterâ longiori.
The red Pecten.
PECTEN 8. Rubellus variegatus utrinque turgidus, alis minoribus.
The fmall oblong Pecten with red ftreaks.

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The Margaritiferce, or Pearl-fhells, claim the next place in order, being generally flat, and roundifh in the margin; but one fide is quite flraight, where the two valves are connected by a flender ligament. One of the valves of thefe fhells is always furnihed with an open nitch or groove a little below the point, which yields a paffage to a ftrong ligament thrown out from the body of the filh, by which it fticks to the rocks or banks, where they are generally found.

## MARGARITIFERA I. Subquadrata, futura longiore \& temuiore, teftif fubmuricata.

The thin Mother of Pearl-fhell. See Liy. 57, 8. \& Bon. Cl. 2. t. I. A, B.

## MARGARITIFERA 2. Subrotunda, faturâ crafiore ©̧ breviore.

The Bank Oyfter. See Lifl. C. 2. \& Kl. t. 8. I8.
Tho' this genus has been generally claffed with the oyfters, its joint and tendinous beard obliged me to feparate it from that tribe; for the fifh always throws out a flrong fibrous ligament by which it faftens itfelf very firmly to the neighbouring bank or rock. They are very frequent in America; but a flrong rancid tafte prevents the ufe of them among the better fort of people.

The Pennaria come next in order: they are generally of an oblong, comprefied, and pointed form with two ftraight fides; and joined by a flender ligament that runs the whole length of the longeft margin of the fhell.

$$
\left.\left.\begin{array}{l}
\text { PENNARTA I. } \\
\text { Pennaria }
\end{array}\right\} \begin{array}{c}
\text { Submuricata undulata. } \\
\text { fubmurica. Lift. }
\end{array}\right\} \begin{gathered}
\text { The American Feather-fhell. } \\
\text { See } D^{\prime} \text { arg. } 5.25 . \mathrm{T} .
\end{gathered}
$$

The fpecies of this kind found in the Mediterranean are very large, and throw out their ligaments like the American bank-oyfters; but thefe are compofed of flender pliable fibres that fin very readily, and are often made into ftockings, gloves, cane-Atrings, and handkerchiefs, in all the adjacent countries.

The Solena comes laft in this clafs, but is joined, like the foregoing, by a longitudinal margin. It is naturally of an oblong form, and almoft of the fame breadth the whole length.

SOLENA I. Subaqualis glabra. Solenus autborum.
The Knife-handle fhell.

## ARTICLE II.

Of fuch as are connected by ligaments, and a ferw prominent teet'r or knobs nutualig received into regular grooves or fockets on the oppofite fides.

$T$HE fhells of the following genus have been always claffed with the oyfters, to which they feem to bear a great refemblance by their flattin form and rugged fides; they are, however, diftinguifhed from them by the rugged oblong prominences, or teeth, with which the ligament at the top is always accompanied.

It is remarkable, that the apex of each of the valves of thefe inells rifes fomewhat above the level or plane of the aperture, like that of the beliotis, and Pbry-gian-cap Patella.

6TOLA I. Loricata lutea, apice fpirato depreffo. Tab. 40. f. g.
The American Orange Oyfter.

- STOLA

O F J. A M A I C A.
STOLA 2. Loricata rubella, apice firato depreffo.
The American reddifh Oyfter.
STOLA 3. Rugofa fubcrocea, profundior.
The mixed orange Oyfter.
STOLA 4. Submuricata, valvulâ inferiore compreffâ adnafcente.
STOLA 5. Subloricata patelliformis albida, fauce planâ ovatâ.
The fmall white cap-Oyfter.
STOLA 6. Subloricata lutea angufior, fauce obliquä.'
The fmall yellow cap-Oyfter.
STOLA \% Sulcata © muricata fubrotunda, apice ori appropinquato vixque spiratâ.
The echinated Cockle-Oyfter. See Lift. $\mathbf{N}^{\circ}$. 159 .
This thell refembles a cockle pretty much, by its roundnefs, depth, and furrows; but the joint feems to difpofe it more properly among the other productions of this genus. It is remarkable for its lip or fhort lateral fpur.

The Spondyli come next in order, and are readily diftinguihed from the reft of the bivalves by their free dove-tail joint, and the fmall fmooth plain marked under the apex of the largeft valve, which reaches generally from the joint to the tip; appearing as if a piece had been cut off there with fome tharp tool. In all the fhells of this tribe the joint is formed by two obtufe prominences, received mutually in fo many fockets in the oppofite valves, and a pretty ftrong ligament fixt in the middle between them.

SPONDYLUS 1. Croceus major loricatus.

## The Orange Spondylus.

SPONDYLUS 2. Croceus ab apice friatus $\mathcal{E}^{2}$ fubmuricatus.
The flat Orange Spondylus.
SPONDYLUS? 3. Minor variegatus © ab apice fulcato-undulatus, limbo fimbriato.

## The Pink-leaf fhell.

The lip of the under valve of this Ghell projects a little obliquely from the apex of the fuperior; but it is not fmooth or level as in the reft. The other parts of the hinge agree pretty well, though the protuberances are not fo round, nor formed to hold fo well.

The Cbama is next in order, being generally pretty flat, with a fmooth even margin; and connected by a few teeth about the apex, and a ligament that runs all of one fide.

CHAMA =1. Major rotunda alba, lineis circularibus notata.
The larger, thick white Chama. See Lifl. 9. 19.
CHAMA 2. Major rotunda alba, circulariter \& radiatim friata.
The large white friated Cbama. See Lif. 102. Gualt. t. 76, 7 .
114. THE NATURAL HISTORY

Chama 3. Rotunda glabra alba, fub tendine dentata.
The thick, fmooth, white Cbama.
ChamA 4. Subovata tenuior alba glabra.
The thin white Cbama. D'arg. t. 24. L. \& Lif: 96.
CHAMA ${ }_{5}$. Subovata nitida glabra miJcella.
The fmooth mottled Cbama.
CHAMA 6. Subcordata, circulariter lamellata © ad alterum latus aculiata.
The Virgin Cyprea, or fhell of Venus. D'arg. 24. F. Lit. t. 140. $\therefore$ \& Gualt. t. 70. D.
CHAMA 7. Subcordata, circulariter lamellata \& ad alterum latus fubaculeata.
The Cyprea. See Lif. No. 130.
CHANA 8. Subcordata, circulariter fafiata.
The Old Woman, or wrinkled Cyprea. D'arg. t. 24. B. Lit. 116.
ChAMA 9. Subcordata radiata \& circulariter Jubfafciata.
The rugged wringled Cyprea. See Lijt. 50.
CHAMA 10. Subcordata, rugofa, utenque friata, interne purpurea, The rugged purple Cyprea.
CHAMA in. Subrotunda afpera mifcella.
The mottled Cbama.
CHAMA 12. Subrotunda albida, radizs paucioribus Jubcroceis.
The white Cbama, with a few faint orange-coloured ftreaks.
CHAMA 13. Subrotunda minor alba, fubnervofa glabra.
The white Rofe-leaf Cbama.
CHAMA 14. Subrotunda minor \& tenuior rubella nervofa. The red Rofe-leaf Cbama.
CHAMA 15. Subrotunda minor alba, friis tenuioribus angulatis notate. The fmall deep ftriated white Cbama, with angled lines. See Lif. 179.
CHAMA 16. Subrotunda minima profundior alba.
The very fmall deep white Cbama.
CHAMA 17. Subrotunda minima glabra, tenuis \& aurita.
The fmall one-eared Cbama.
CHAMA 18. Subrotunda minima rubella.
The fmall, flat, red Cbama.

# O F J A M A I C A. <br> 4.15 

CHAMA 18. Oblonga major nitidifima rubello radiata.
The Barbuda Shell. See D'arg. t. 25. $4^{\text { }}$
CHAMA 19. Subradiata major oblonga, Jubpurpurea.
The purple liped Cbama.
CHAMA 20. Oblonga radiata purpurea.
The purple Cbama.
CHAMA 2 1 . Oblonga glabra alba.
The white, fmooth, oblong Cbama.
CHAMA 22. Oblonga obliquè acuminata, variegata friifque ellipticis infynita.
The pointed variegated Cbama.
CHAMA 23. Ovata obliquè acuminata fubfufca ftriata. The brown oval Chama. See Lift. 179.
CHAMA 24. Ovata obliquè acuminata glabra alba. The white oval Cbama.
CHAMA 25. Cuneiformis fubradiata nitida, purpurea vel purpureo radiata.
The Wedge. See Pet. t. 18. f. 4. Lift. 219. 24.
CHAMA 26. Cuneiformis minima fubpurpureo radiata.
The fmall blue and white Wedge.
CHAMA 27. Subcitrina minima purpureo radiata.
The fmall Orange Wedge.
The Cockle is pretty much like the foregoing; but it is generally furrowed from the apex to the margin, fomewhat like the Pealen, deeper in the cavity, toothed sound the edge; and connected by teeth and a tendon at the apex, and a fingle tooth and cavity on each fide.

BUCARDIUM I. Radiatum © fulcatum, verfus marginem fubmuricatum.
The rough-rimed Cockle. See Lif. N. 199.
BUCARDIUM 2. Radiatum © fulcatum albidum, fundo rufeffente.
The furrowed white Cockle.
BUCARDIUM 3. Nitidum glabrum.
The fmooth Cockle.
BUCARDIUM 4. Obliquè oblongum minus, fubraditum © lateraliter ferratum.
The fmall, oblong, white Cockle.
BUCARDIUM 5. Radiatum \& lateraliter compreffum, gibbum.
The hump-backed Cockle.

$$
\mathrm{A} R \mathrm{R} \text { T I C L E III. }
$$

Of the denticulated Bivalves, or fuch as are connected by long denticulated joints.
I thall give the Cibota the firft place in this rank. It is eafily known by its frraight denticulated joint, radiated furface, and lateral growth.

IBOTA I. Obliquè oblonga, variegata \& radiata, futurâ longiori rectâ.
Noab's Ark. See D'arg. t. 26. G. \& Liff. 208. Gualt. t. 87. H. CIBOTA 2. Obliquè oblonga radiata alba, futurâ fubcrenatá breviori.

The oblong white Ark. See Lif. 207. Kl. xi. 69.
The Mactra comes next to the Cibota in rank; and is diftinguifhed by the roundnefs of the hinge, furrowed furface, and indented margin.

MACTRA I. Subrotunda radiata, futurâ fubcrenatâ © ad apicem ampliatâ。
The larger, round, white MaEtra. See Lif. $6_{4}$.
MACTRA 2. Subrotunda glabra, futurâ arcuatâ aquali.
The fmooth white Mactra with equal teeth on both fides of the apex.
MACTRA 3. Subrotunda radiata \& fubulcata alba.
The round-winged Mactra. See Kl. t. x. 43.
MACTRA 4. Subrotunda alba radiata, ©̧ lateraliter compreffa, futurâ arcuatâ, apice aproximato.
The white roundifh Mactra, flatted on one fide.
MACTRA 5. Subovata $\mathcal{E}^{2}$ fubltriata, lateraliter compreffa, futurâ rectâ, apice remoto.
The fmooth Mactra, flatted on one fide.

> D I V I S I O N III. Of PLURIVALVES.

$$
A R T I C L E I \text {. }
$$

Of fuch as bave all the pieces firmly concreted togetber.

BALANUS 1. Minor verrucaformis.

The fmall brown Balanus.
BALANUS 2. Minor et erectior albus.
The white Balanus.
A R T I C L E II.
Of fuch as have their fbells joined together by ligaments.

P
ENTILASMUS 1. Major, collo craffiori mufculofo quandoque ramofo; ramis bafinacretis.
The Barnacle Shell-fifh. See Lift. 28.

$$
\begin{array}{llllllllll}
\mathrm{O} & \mathrm{~F} & \mathrm{~J} & \mathrm{~A} & \mathrm{M} & \mathrm{~A} & \mathrm{I} & \mathrm{C} & \mathrm{~A} . & 4 \mathrm{I} 7
\end{array}
$$

The great refemblance between thefe and Barnacles and the unfettled nature and fifhey tafte of thefe birds, have, for a long time, given rife to the cpinion of their being transformed from thofe fhell-filhes. I found this fort growing in clufters, on the back of a large Hawks-bill Turtle, in my paffage from famaica. It is diftinguifhed by its long, membranous and mufcular, branched, neck, compreffed body, bivalved fides, and feathered tail.

$$
\text { A } \mathrm{R} \quad \mathrm{~T} \text { I C } \mathrm{C} \text { L } \mathrm{E} \text { III. }
$$

## Of Juch as bave their Valves comected both by kinges and ligaments.

PHOLAS 1. Oblongo-ovatus, friatus, friis arcuatis. Tab. 40. f. II. The fmall rugged Pbolas with arched lines.
This muft not be confounded with the American file-fhell, a bivalve, whofe body refembles it both in form and the difpofition of its lines, which is frequently met with in the cabinets of the curious. This is a multivalve, made un of, 1 . two large oblong fide-pieces, pretty well rounded at one end; 2 . two fmall hends il ps laid over the back and fore joints of thofe; and, 3. a rounded hollow piece, placed obliquely on one fide of the obtufe end, and fiightly connected at the top to both the fide-pieces.

Every man, who has an opportunity of feeing large collections of fhells, will eafily obferve many genus's, and an infinite number of feccies, that are not found in Famaica, to whofe productions alone we are confined here: but, it is loped, Mr. Pond, in Great 2ueen-freet, F. R.S. who has the moft complete collection of this kind I have yet feen, will foon oblige the world with a catalogue of his mells ranged in a proper order.

## C $\quad \mathbf{L} \quad \mathrm{A} \quad \mathrm{S} \quad \mathrm{S} \quad \mathrm{II}$.

## Of Infects that are compofed of folid as well as mufcular parts; and furnifhed with ftiff articulated limbs, as well as proper organs of vifion.

## S E C T. I.

Of the Apteræ, or fucb as bave no wings.

PEDICULUS ı. Humanus. The Loufe. PEDICULUS 2. Inguinalis. The Crab-Loufe,
Thefe infects are very rare in thofe warm climates, for the cleanlinefs of the people, and an abundant aqueous perfiration, contribute alike to prevent the increare of them; they generally living upon the thicker juices of the febaceous glands, which are too much diluted, and too frequently wiped off in thofe countries, to fupply a fufficient quantity of proper nourifhment.

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PEDICULUS 3. Maximus ellipticus ) $\left.\begin{array}{c}\text { marinus. } \\ \text { An, Afcellus marinus. Pet. Gaz. } \\ \text { t. I. }\end{array}\right\}$

The Fin-Loufe, or Sea Cock- Roach.

This creature is very large, being feldom under three quarters of an inch in length, or lefs than $4_{5} \frac{4}{8}$ ths in breadth; and often found fficking to the palates of fifhes, which it commonly kills or emaciates. It is furnifhed with regular limbs, like the reft of the fpecies.

## PULEX I. Saltatrix vulgaris. The Flea.

This, like the loufe, is very rare either in $\mathcal{F}$ amaica; or in any of thofe other colonies fituated within the torrid zone.
$\left.\begin{array}{c}\text { ACARUS I. Minimus nidulans, probofide acutiori } \\ \text { birfuto. }\end{array}\right\}$ The Cheefe-mite.

ACARUS 2. Fufcus, fub cutem nidulans, probofcide $\left.\begin{array}{l}\text { acutiori. }\end{array}\right\}$ The Cbigoe, or Cbiger.
This infect is very frequent and troublefome in all our fugar-colonies, but breeds chiefly in open fields, efpecially in ginger and potatoe-pieces. They often infeft the human fecies, and lodge their eggs in great numbers in membranous bags, under the fkin, where they are moft likely to receive nourihmment from the adjoining veffels. When thefe grow to a certain flate, they eat through, and crawl about the furface until they meet with convenient lodges, in which they multiply again; whereby all the adjoining parts are brought to a common fore, unlefs they be carefully picked, or deftroyed by proper applications; and the only one of this kind, that I have known ufed with any fuccefs was made of foap, aloes, and train-oil boiled and digefted together into a plaifter.

## ACARUS 3. Maximus fubrotundus. The Tick.

This infect is very troublefome to all the labouring cattle in Famaica, and would be ftill more fo, had it not been for the common and Barbadoes Blackbirds, who chiefly feed upon them, and pick'em off with great art and dexterity.

ACARUS 4. Scabiei. The Itch-Loufe.
This infect ingenders but flowly in thofe warm climates, where the pores of the fkin are fo open; and is feldom obferved in Jamaica, unlefs when imported frefl from Europe.


The fmall Houfe-fpider with long flender Manks.

ARANEA 2. Minima nigra Saltatrix, pectore am- $\}$ pliori, pedibus brevibus.

The black Jumper.
This fpider is frequent in the country parts of Famaica, efpecially in the parifh of St. Mary's. It is a very remarkable jumper.

ARANEA 3. Cinered minor faltatrix, pedibus bre- $\left.\begin{array}{c}\text { vioribus. }\end{array}\right\}$ The grey Jumper.
This is an elegant, active, little fider; but feldom finins a web, depending chiefly on its agility in catching its prey. It is very frequent about the houfes in King fon.

$$
\left.\begin{array}{l}
\text { ARANEA 4. Domofica minor, ventre tu- } \\
\text { mido fubrotundo majori, pe- } \\
\text { dibus teretibus longifimis. }
\end{array}\right\} \text { The long-legged Houfc-fpider. }
$$

This fpider is frequent about all the houfes in Kingfon, and fpins fo great a number of extenfive webs, that it is often troublefome. By the form of the body and length of the fhanks it refembles the firft fort; but it weaves its web of a very different form, which induced me to conlider it as a different species.

ARANEA 5. Minor nigra concriformis, fcuta?
dorf 1 majore ambitus aculenta.
Tab. 44.5.
This fpecies is very like a crab in the general form of the trunk, but the head and breaft aie fmall and diftinct. It is very common in St. Mary's.

ARANEA 6. Fufca oblongo-quadrata, caudâ ru- $\left.\begin{array}{c}\text { brâa. }\end{array}\right\}$ The red-arfed Spider.
This infect is frequent in the woods, and its nip or bite faid to be very venomous. The body is about an inch in length, and of an oblong form.

```
ARANEA 7. Oblonga luteo variegata, pedi-)
    buslongifmim, articulis infer-} The large fpotted Spider
    ioribus tumidis birfutis. Tab.} with long thanks.
    44. f. 4.
```

This is a very beautiful fpecies, and fpins a ftrong fpreading web. It lives in trees and out-houfes, and is frequent in St. Mary's and Portland.

## ARANEA 8. Domefica major faccifera, fub- $\left.\begin{array}{c}\text { cinerea ©f fubbirfuita. }\end{array}\right\}$ The large grey Houfe-Spider.

This, tho' a large fort, is a very innocent, and always obferved to carry its eggs in a round bag, clofe to its belly, between the legs. It throws off its fkin once a year, and to go through the operation more eafily, hangs itfelf by a few threads in fome lonely quiet place, where, after a few minutes, you may obferve the belly part of the old coat burft, and the creature draw out all its limbs very gradually from the other parts of its former cover, which he leaves hanging to the cord that fuftained him during the operation; after which he betakes himielf to the occupations of the new year in the ufual manner. It is remarkable that, in this operation, the old nails, as well the outward cover of the eyes, are left fticking to the old k in.

## TARANTULA 1. Fufca major, pedibus anteriori-) bus crafforibus aculeatis \&f unguiculatis, fere cbiliformi- (The Scorpion-fpider. bus, proximis longiffimis tenuifzimis. Tab. 41. f. I.

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This is a very curious fpecies of the fpider-kind, and a native of fome of our fugarcolonies, which induced me to give it a place here, tho' I have never feen it in 'fo $a$ maica. Mr. Baker, in whofe curious collection I have feen it, had it from Antigua, and was fo obliging to let me have a drawing made from it.

I have feparated thefe infects from the Aranea, on account of their feet and forceps; the former being always divided into feven or eight joints, and the prongs of the latter perforated on the outfide. See tab. 45. (2a). probably to yield a paffage to fome poifonous juice, which likely they difcharge when they nip.

TARANTULA 2. Fufca major fubbirfuta, fub ter-? ram nidulans. Tab. 44. f. 3.$\}$ The black Tarantula.
This fort is reprefented of the natural fize, as well as its neft ( 3 a), and both its valves; which are fo well contrived, and foftrongly connected, that whenever they are forced open, the native elafticity of the ligaments that fix them, refore 'em immediately to their ufual pofition.

It is moft frequent in the loofe rocky foils, and nefles under ground. Its nip is very painful for many hours, and fomerimes raifes a fever and deliriums; but ticfe. are commonly eafed by throwing the patient into a moderate fweat, which is commonly done with a little warm rum-punch among the negroes, who are moft fubject to thefe accidents: this puts them foon afleep, and in a few hours they are quite recovered.

TARANTULA 3. Rufefcens major ventre mi-? nori, articulis penultimis $\}$ The large brown Tarantula. ungulatis. Tab. 44. f. 2.
This infect feems to hold a mean proportion between the third and fourth fpecies, and is eafily diftinguifhed by its light brown colour, and middling fize. In this and the following feecies, fome of the intermediate joints of the foremoft feet are furnifhed with nails, and the nippers are very long: See $a-2$. Tab. 44. It is a native of Antigua, and may be feen in Mr. Baker's Muferm, as well as the following fpecies.

TARANTULA 4. $\left.\begin{array}{c}\text { Maxima fubcinerea birfuta. } \\ \text { Tab. 49. f. 2 }\end{array}\right\}$ The large hairy Tarantula.
This infect, which is reprefented of the natural fize, Tab. 49. f. I. is fometimes found among the rocks in the inland parts of famaica. It is furnifhed with large crooked nails on fome of the intermediate joints, as well as the foregoing; and its nip is generally thought to be very dangerous.

## SCORPIO I. Pectinum denticulis tredecim. L. Syf. N. The Scorpion.

This creature is very common in all the fugar-colonies, and of a dareing watchful nature. If any thing be put in its way, it feldom thews the leaft figns of fear, but erects its tail and points its fting forward, ready for wounding, as if confcious of the natural force of its poifon. The wounds inflicted by thie fting of this infect are extremely painful, and the parts about them turn frequently livid, and muft be carefully dreffed to prevent a mortification. They are moft common about old houfes, and dry or decayed walls.

$$
\left.\begin{array}{l}
\text { CANCER I. Minimus glaber, fcutá fubquadratâ, ventrale } \\
\text { latifimo. }
\end{array}\right\} \text { The OyRer-Crab. }
$$

This little fpecies is generally found with the Mangrove oyfters, in their fhells, where they always live in plenty, and fpawn at the regular feafons; and fuch as eat the oyfters, do not think them a bit the worfe for being accompanied with fome of thefe crabs, which they fwallow with the fifh. They are very fmall and tender, and nearly of the fame length and breadth, feldom exceeding a quarter of an inch cither way.

$$
\left.\begin{array}{c}
\text { CANCER 2. Minor fouta fubquadratâ nitidá variegatâ, } \\
\text { margine ad angulos anteriores denticuloge-- The Turte-Crab. } \\
\text { mino utrinque armatâ. Tab. 42. f. 1. }
\end{array}\right\} \text {. }
$$

I found this infect on the back of a turtle, near the weftern iflands. The whole length of the trunk is not much above an inch, and the breadth of the body is nearly as much.

CANCER 3. Maximus cbelis vaginatis. The comb-clatved Crab.
This fpecies is both rare and curious; it is very large, and the claws are grooved on one fide and indented on the other, fo as to refemble a comb and comb-cafe in fome meafure.

CANCER 4. Minor pedibus $\mathcal{E}$ chelis longifimis te-) The larger long-Thanknuifrimifue, fouta antice ferrato- $\langle$ ed Crab with delicate dentatá, in aculeum maximum u-\} prickly arms, and flentrinque definens. Tab. 47. f. r. $\int$ der toothed claws.
This rare and beautiful fpecies was taken up at St. Mary's; the thell is not above an inch and a quarter in length, tho' the extremities of the large lateral thorns be near two inches afunder.

## CANCER 5. Minimus corpore fubrotunda, cruribus om- $\left.\begin{array}{c}\text { nibus longifimis © tenuifimis. }\end{array}\right\}$ The Spider-Crab.

I have feen this beautiful little fpecies in Dr. Fothergel's Mufeum. The body is fmall and roundith, and feldom above half an inch either way. All the limbs are flender and delicate, in proportion to the fize of the body, and commonly between two and three inches in length.

CANCER 6. Scutâ antice ferratâ, aculeo majori\} The common Sea-Crab, utrinque injoruata.
or Sberigo.
This fpecies is very common in all the ha:bours of Jamaica, and furnihheth a good part of the food of the negro fifhermen.

## CANCER 7. Scutâ tenui Jubrotundâ lineis rubris va- 2 The large long-fhankgata denticulo uno vel altero pof ocu- $\}$ ed Crab with a valos utrinque armatâ. $\quad S_{\text {riegated } \text { hell. }}$

This fort is not frequent in any of the harbours of Jamaica, but the fhell is often found on the outward fandy beeches, at the Palijadoes. It is of a moderate fize, and the fhell moft beautifully variegated.

## 

The body of this curious fhell-fin is large and roundifh; and when it contracts its flatted claws, which lie clofe under the fore and lateral parts of the fouta, it feems but one continued fhell, and has a very different appearance from any other forts of the clafs.

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CANCER 9. Minor gibbus birfutus, fouta in lacinias
quatuor teretes acutas producta. Tab.
$46 . \mathrm{f} 2.$.
This curious little fhell-firh is but rarely met with in Jamaica, though a native of that ifland. The fhell is raifed pretty much on the back, and projects a good deal forwards, where it is divided into four or more ftraight flender prongs, whereof thofe in the middle are longeft. The thell is furnifted with a deep groove in the fore-part, between the eyes, where the infect lodges its foft feelers upon occafions.

$$
\left.\begin{array}{l}
\text { CANCER 10. Minor, foutâ utrinque ferratâ, cruribus } \\
\text { aculeatis, plano exteriori utriufque } \\
\text { cbela cequali nitido-Splendente. }
\end{array}\right\} \text { The Creole-Crab. }
$$

This crab is very like the Sberigo, from which it is diftinguifhed only by the peculiar marks of the fhell, and the fharpnefs of its marginal teeth; efpecially thofe between the eyes. The claws are angular, roundifh, and indented, in both; but the outward plane of the laft joint is of a fine pearly colour in this fpecies.

CANCER 11. Minor, fcutâoblongâ variegatánitidả,
$\left.\begin{array}{l}\text { margine anteriori aculeato, arti- } \\ \text { culis ultimis fagittatis. Ventrale }\end{array}\right\}$ The Mamma-Shrimp. longiori $\mathrm{E}_{\text {ang uftiori. Tab. 42.f.2.) }}$
This is a very beaatiful fhell-fifh, and not much known even in famaica, where it is a native. It was found by fome of the fifhermen in the harbour of Kinglon; and is reprefented here of the natural fize.
$\left.\begin{array}{c}\text { CANCER 12. Medius, foutâ fubrotundâ varie- }- \text { The larger Sea- Crab with } \\ \text { gatâ, aculeo unico uitrinque ar } \\ \text { matâ. }\end{array}\right\} \begin{gathered}\text { a roundim variegated fhell. }\end{gathered}$
I have never feen any of this fort alive, but have frequently found the thell on the fea-fhore. The form of the trunk diftinguifhes it fufficiently from all the other fpecies.

CANCER 13. Villofus, foutâ ferrato-dentatå゚ \} The larger bairy Creolc-Crab varie areolatâ, chelis Jpinofis. with prickly claws.
CANCER 14. Minor macricrurus punctatus, fcutâ)
$\left.\begin{array}{l}\text { fubrotundâa pinis tribus majoribus } \\ \text { terminatâ. Tab. 42. f. 3. }\end{array}\right\}$ The three-thorned Crab.
Cancer. Rumph. t.x. f.c.
This is a native of both the Eaft and Wefl-Indies, but not common in the harbours of famaica. I have feen only one of the fort, which is reprelented here of the natural fize.
$\left.\begin{array}{l}\text { CANCER 15. Major albidus, foutâ fubrotunda, arti- } \\ \text { ticulis pedum ultimis aculeatis, penul- } \\ \text { timis birfutis, pilis fafciculatis peni- } \\ \text { cilliformibus. }\end{array}\right\}$ The Mangrove Crab.
This fpecies is very common in all the low and marthy lands bordering upon the fea. It is often ufed by the negroes, but faid to be fometimes poifonous; which is attributed to their feeding upon the bark of the Mangeneel tree, growing chichy in fuch places.

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## CANCER 16. Ruricolus, fcutâ fubrotundá violaceâ? The Black or Mounvel finva, articulis ultimis atque\} the tain-Crab. penultimis aculeatis.

Thefe creatures are very numerous in fome parts of Famaica, as well as in the neighbouring iflands, and on the coaft of the main continent; they are generally of a dark purple colour ; but this often varies, and you frequently find them fpotted, or entirely of another hue. They live chiefly on dry land, and at a confiderable diftance from the fea; which, however, they vifit once a year, to wafh off their fpawn, and afterwards return to the woods and higher lands, where they continue for the remaining part of the feafon; nor do the young ones ever fail to follow them, as foon as they are able to crawl. The old crabs generally regain their habitations in the mountains, which are feldom within leis than a mile, and not often above three from the fhore, by the latter end of Fune, and then provide themfelves with convenient burrows, in which they pafs the greateft part of the day, going out only at night to feed. In December and Fonuary they begin to be in fpawn, and are then very fat and delicate, but continue to grow icher until the month of May, which is the feafon for them to wafh off their eggs. They begin to move down in February, and are very much abroad in March and April, which feems to be the time for the impregnation of their eggs, being then frequently found fixed together; but the males about this time begin to lofe both the flavour and richnefs of their juices. The eggs are difcharged from the body through two fmall round holes fituated at the fides, and about the middle of the under thell; thefe are only large enough to admit one at a time, and, as they pafs, they are entangled in the branched capillaments, with which the under fide of the apron is copioufly fupplied, to which they ftick by the means of their proper gluten, until the creatures reach the furf, where they wafh 'em all off; and then they begin to return back again to the mountains. It is remarkable, that the bag or ftomach of this creature changes its juices with the ftate of the body; and, while poor, is full of a black, bitter, difagreeable fluid, which diminilhes as it fattens, and, at length, acquires a delicate rich flavour. About the month of $\mathcal{F u l y}$ or $A u g u / t$ the crabs fatten again, and prepare for mouldering, filling up their burrows with dry grafs, leaves, and abundance of other materials: when the proper period comes, each retires to his hole, fhuts up the paffage, and remains quite unactive, until he gets rid of his old fhell, and is fully provided with a new one. How long they continue in this ftate is uncertain, but the thell is firft obferved to burft both at the back and fides, to give a paffage to the body, and it extracts its limbs from all the other parts gradually afterward. At this time the fifh is in the richeft ftate, and covered only by a tender membranous fkin variegated with multitude of reddifh veins; but this hardens gradually after, and becomes foon a perfect thell like the former: it is, however, remarkable, that during this change there are fome flony (a) concretions always formed in the bag, which wafte and diffolve gradually as the creature forms and perfects its new cruit. A wonderful mechanifm!

This crab runs very faft, and always endeavours to get into fome hole or crevife on the approach of danger; nor does it wholly depend on its art and fwiftnefs, for while it retreats it keeps both its claws expanded, ready to catch the offender, if he fhould come within its reach; and, if it fucceeds on thefe occafions, it commonly throws off the claw, which continues to fqueeze with incredible force for near a minute after; while he, regardlefs of the lofs, endeavours to make his efcape, and to gain a more fecure or a more lonely covert; contented to renew his limb with his coat at the enfuing change; nor would it grudge to lofe many of the others to preferve the trunk entire, tho' each comes off with more labour and reluctance, as their numbers leffen.

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When the black crab is fat and in a perfect ftate, it furpaffes every thing of the fort, in flavour and delicacy; and frequently joins a little of the bitter with its native richnefs, which renders it not only the more agreeable in general, but makes it fit extremely eafy upon the ftomach. They are frequently boiled and ferved up whole ; but are commonly ftewed when ferved up at the more fumptuous tables.

## ASTACUS 1. Cornutus major, fcutâ undique $\begin{gathered}\text { aculeatâ. }\end{gathered} \begin{gathered}\text { The Horned Lobfter, or Great } \\ \text { Cray-fibh. }\end{gathered}$

This fpecies is very frequent in the harbours of Famaica, and grows fometimes to a very confiderable fize. It has no claws, but in the room of thefe is fupplied with a pair of large aculeated tapering horns, or defenders, which rife from under the fore-part of the jcuta; they have each two or three joints at the bafe, and are furnifhed with a great number of delicate little prickles, difpofed in a verticillated order from the top to the bottom. It eats like the other forts of cray-fifh, and is much ufed by all forts of people.

## ASTACUS 2. Minor, chelis denticulatis, fcuta in la-? mellam tenuem ferratam produ- $\}$ The River Cray-finh. Efa.

This ipecies grows fometimes to a pretty confiderable fize, and is greatly efteemed in all our fugar-colonies, where it is much ufed in foops and ftews. The claws of this fort grow very large, and are thickly befet with fhort pointed prickles; but the other parts of the fhell are pretty fmooth.

## ASTACUS 3. Minimus glaber foutâ in lamellam tenuem fer- $\}$ The Shrimp.

This feecies is very common every where about 'famaica, and grows generally very large, being feldom under three or four inches in length, and of a proportionate thicknefs. They are chiefly ufed in fauces, though many of the people eat them alone, efpecially when boiled with falt.

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ASTACUS 4. Maximus, caudâ fubnudâ molli, chelis fubver-
    rucofis tuberculatis, dextrâ majori.
    The Hermit of Catefb. ii. t. 34.
The Soldier.
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This fhell-filh grows to be one of the largeft of the tribe in America; but at firft it is extremely tender, and creeps into the firft empty fhell it meets, to guard its naked tail from the impreffions of any rugged bodies, or the attacks of its enemies; and fhifts and changes to the next more convenient fhell, as it increafes in bulk.

## ASTACUS 5. Minor glaber, caudâ fubnudâ molli, $\} \begin{gathered}\text { chelâd dextrâ majori. }\end{gathered}$ The common Soldier.

This is very like the foregoing in thape and appearance, and lives and chifts its abode in the fame manner; but its claws are fmooth. It is very common in all the harbours of famaica, and never grows to any confiderable fize.

## ASTACUS 6. Depreffics major, tuberculatus \&o varie-) <br> $\left.\begin{array}{l}\text { gatus, defenforibus compreffis arti- } \\ \text { culatis fubrotundis. Tab. 44. f. z. }\end{array}\right\}$ The Mother Lobfler. Aftacus. Rump. t. 2. f.c.

This fpecies is very rare, and feldom feen in Famaica, though a native of thofe feas. It has no claws; but, inftead of thefe, it is fupplied with two broad, articulated and compreffed defenders, that ftretch forward from the fore-part of the head,

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one under each eye; the feelers are fmall, and of a fine blue colour; the eyes fmall, ftriped and variegated; the body broad and flatted; the fhell finely tuberculated, and of a brown colour, intermixed with fmall yellow fpots; and the leaves of the tail broad, villous, and roundifh.

## ASTACUS 7. Minimus, oculis viridibus, anten- $\left.\begin{array}{c}\text { nis brevifimis. }\end{array}\right\}$ The fmall Ocean Aftacus.

This fpecies is very fmall, feldom exceeding half an inch in length: I found one fticking in the prongs of a blubber taken up a few leagues to the north of the Wefern Ifands.

## $\left.\begin{array}{c}\text { ASTACUS 8. Minimus cornuitus, fcutâ indùratầ } \\ \text { rugofá. }\end{array}\right\}$ <br> The fmall Horned Afacus.

This little infect is about the fize of the common wood-loufe, and generally found, with the timber-worm, in moft pieces of timber that lye for any time in the fea. It is a borer as well as the other, but not fo deftructive.
$O b \int$. The infects defcribed here under the denomination of Aftacus, may be very naturally divided into two diftinct genufes; the one to contain thofe that have claws and feet like the crabs; the other, fuch as have no claws, but are furnifhed with defenders of different forms.

## EMERITA 1. Parva agilis, e nigro plumbea. The dark Emerita.

This genus is eafily diftinguifhed from the Aftacus, which it very nearly refembles in every other refpect, by the fouta of the back, which, in thefe, is made up of feveral pieces, as well as the cover of the tail patt. The body is made, much like that of the Onifous, tapering both ways; and the fcales are pretty even every where: the antennee are fimple, and the legs and tail much the fame as in the lobfter kind. This fpecies is not above five-eighths of an inch in length.

## EMERITA 2. Major viridis. The large green Emerita.

This infect is about an inch and half quarter in length, and proportionately thick.

## EMERITA 3. Minima fubfufca, maculis albis $\left.\begin{array}{c}\text { rotundis variegata. }\end{array}\right\}$ The fmall fpotted Emerita.

This little infect feldom exceeds four-tenths of an inch in length. All the fpecies are found in the ocean, and pretty frequent about the Weftern Iflands.

> SETOURA I. Subargentea cauda Jetofa, fetis bir-\} The Moth, or Bookfutis. worm.

Corpus oblongum, verticaliter fubcompreffum, caudam verfus attenuatum. Oculi minimi. Antennce articulate, ultra pectus difenfiles. Caput oblongum. Pectus ampliatum comprefum, annslis tribus rigidis tectum. $P_{\ell-}$ des jex cequales. Abdomen productum, cylindraceum attenuatum, tribus fetis corpore longioribus, birfutis, varie moventibus terminatum; media longiori: lateralibus vero accedunt dua minores terram refpicientes, vix perjpicua.
This infect is very common in Famaica, and extremely deftructive to books and all manner of woollen cloaths. It grows generally from four to feven lines in length, and is not much above one in breadth: the head is pretty round, and the lips large and flefhy. The antennce are flender and fimple, and generally about half the length of the body. The cover of the brealt feems to be made up of two or

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three annular fegments, which are pretty broad; but the body grows gradually narrower beyond that part. It has fix legs, and is furnithed with five hairy inert briftles at the tail, which it moves at pleafure: two of thefe are fmaller than the reft and hang downwards; but the other three ftand directly back, and fpread and clofe as the creatures pleafe to direct their motions.

ONISCUS 1. Ellipticus vulg. © off. The Wood-loufe of the fhops.
This infect is frequent enough in Jamaica, efpecially in the inland woody parts.

ONISCUS 2. Oblongus tortilis, fafciis pluri-\} The filver Wood-loufe with mis induratio. $\}$ many hard fegments.
ONISCUS 3. Oblongus tortilis, fafciis pauci- $\left.\begin{array}{c}\text { oribus induratis. }\end{array}\right\} \begin{gathered}\text { The filver Wood-loufe with a } \\ \text { few hard fegments. }\end{gathered}$
Both thefe fpecies are frequent in the inland parts of Famaica; and on the leaft difturbance roll themfelves up into perfect fpheres, in the center of which they bide both their legs and head, relying upon the hardnefs of their fcales for their defence. They are very curious; I found fome of them under the ftones in the mountains of St. Ann.

JULUS r. Caudâ rotundatâ glabrá, pedibus plurimis. The Gally-worm.
This infect is generally about three inches and a half, or better, in length, and furnifhed with a great number of fmall flender feet. It is frequent in the woods of Famaica, and lives chiefly in decayed timbers; but is commonly looked upon as a fpecies of the Centapic in thofe parts of the world.

## SCOLOPENDRA 1. Pedibus quadraginta. The Centapie.

This infect is reckoned very venumous: the prongs of the forceps are very ftrong, bending, and pointed, which enables them to bite very hard; and they probably emit fome venomous juice alfo. Some who have been bit by them, informed me that the parts are very painful for the fpace of two or three hours, and turn frequently of a livid colour. I have feen them often kill a cock-roach with a fingle nip.

## SCOLOPENDRA 2. Maxima, pedibus trigintafex. \} The large Centapie.

This infect is fometimes found on the wharfs of Kingfon, and commonly thought to be brought there among the timbers and dye-woods imported from the main: it is generally very large, and fometimes runs above ten inches in length.

## S E C T. II.

Of the Diptera, or fuch as bave two wings.

MUSCA 1. Minima fufca, ad fcapulas appendiculata.
This infect is not half fo large as the houfe-fly, but keeps very bufy about all manner of fores, either in men or cattle; and is thought to compunicate the yarws frequently, by running from one perfon to another.

## MUSCA 2. Oblonga minoo, caruleo nitidè virens, ven- $\left.\begin{array}{c}\text { tre albido maculis virgatis notato. }\end{array}\right\}$ The green Wood-Fly.

This is a very beautiful infect; but it is very rare, and only met with in the moft lonely woods. I have feen it once or twice in St. Mary's.

## MUSCA 3. Minor domeftica. The Houfe Fly.

This infect is no where more common or troublefome than in Jamaica; but it feldom ftirs at night, though they fwarm about a candle by day, and frequently burn themfelves in the flames.

MUSCA 4. Major nigra bumbilans, oculis © ano ru- $\begin{gathered}\text { fefcentibus. }\end{gathered} \begin{gathered}\text { The large black } \\ \text { buzzing Fly. }\end{gathered}$
MUSCA 5. Major fubvariegata oculis \& ano rufefcen- $\}$ The large ftriped tibus, virgis binis aureis in fronte. $\}$

The large ftripe buzzing Fly.

Both thefe fecies are very frequent in Famaica, and generally very bufy about all forts of meat, which they frequently infect. They are both Vivipares, and difcharge a great number of maggots at a time; but thefe are always fmooth and Akinny, which fhews them to be different from the large buzzing flies of Europe, whofe maggots are generally hairy.

CULEX I. Minima variegata, cruribus fere cqualibus. The Sand-Fly.
Thefe little infects are very common in Famaica. They bite very fharp, and are cxceeding troublefome when the feafons are clofe; but they feldom go into the houfes, keeping generally about the fhores and open fandy bays, where they are very bufy every calm evening.

## CULEX 2. Gracilis aureo variegata. The golden Gnat.

This beautiful fpecies is very rare in Famaica: it is about the fize with the common fort, and ftriped in the fame manner, but the ftreaks are all yellow. I have never obferved above three or four of them during my refidence in that ifland.

## CULEX 3. Gracilis albo variegata, antennis pinnatis. The Mufketo.

Thefe infects are very common in all parts of the We/t-Indies, within the tropics: they bite very fharp, and are the more troublefome as they generally feek for food by night, and frequently difturb people's reft as much by their buzzing noife as they do by their bites; which obliges the inhabitants of our colonies, in thofe parts, to hang nets over all their beds. The fkin commonly fwells or blifters wherever thefe creatures bite; efpecially in new comers, to whom they are moft troublefome, and in whom the bites frequently occafion very obftinate fores: but, in fuch habits, we generally obferve a natural eruption mixed with the real bites, which is commonly, tho' erroneoufly, taken for them, and the principal fource of thofe ulcers. The inhabitants of the low and woody parts of Yamaica are often obliged to raife a fmoke about their doors in the evening, to quiet thefe troublefome infects, which, it feems, it does very effectually: in this they follow the example of the Laplanders. See Lin. Flo. Lap. p. 368.

## CULEX 4. Major torpida fufca. The Loggerhead Mufkeeto.

This infect is much larger than either of the others, and very common among the Mangroves, in moft marfhy places by the fex-fide. They bite very tharp, but are fo unactive that they are generally taken or killed before they quit. All thefe fpecies of the Gnat lay their their eggs in water, in which the young ones are ob-

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ferved to live while they continue in the vermicular ftate: then they are of an oblong form, pretty thick about the head, and tapering gradually backwards. They fwim and move with great facility, and may be feen in every pool and reeeptacle in the $W$ efl-Indies.

## S E C T. III.

## Of the Tetraptera, or fuch as bave four wings.

## A R T I C L E I.

Of the Coleoptera, or fuch as have two Elytrx, or frong, opake, bollow, outward mobile cafes, to cover fo many membranous wings.

SCARABEUS 1. Minor fufcus glaber. The little brown Sawyer.

This is the leaft of the Beetle tribe I have met with in America: it is naturally fmooth, adorned with a few hairs about the body, of a dark brown colour, and feldom exceeds a quarter of an inch in length. The different fpecies of this kind agree not only in the make of their antenna, but in the general frame and difpofition of the whole body; particularly in the fhape and figure of the lower joints of their anterior limbs, which are broad, compreffed, and ferrated in all. The elitrce, or outward wings, cover near two-thirds of the body, in all the fpecies of this fort.

## SCARABEUS 2. Major niger naficornis, cormu retro-? flexo. Tab. 43. f. 5. <br> Monoceros, E̛c. Pet. Gaz. t. 8. f. 7.

This infect is of a thick round make, and furnifhed with ftrong fhort limbs, as if nature had intended to fit all its parts for labour. The fouta, or cover of the head, is pretty large, even, round and margined before; but unequal and rugged behind. Out of the middle and hinder part of this rifes the horn, which is flender, firm, moderately arched, and bends backwards over the joint of the neck, and fore-part of the fouta of the back. The fhoulders are rugged and uneven, and, with the head, make up about one half of the whole body. The elitra are very ftrong, Atriated, and cover all the hinder part of the body as well as the wings.

The creature is a very expert mechanic, and daily fhews us the ufe of the prop, the lever, and the rafp or faw; for, with its rifing horn, it is obferved to turn and roll over ftones and lumps of dirt four or five times its own fize. To perform this piece of mechanifm, it leans the horn back, and infinuates the head under the load, until this comes againft the fhoulders; then it begins to move the lever forwards, and when the moving mufcles are fully contracted, and the lever carried as much forward as it will bear, it advances the body gradually towards it, until it brings its ftrong, rugged, and prominent thoulders againit the bulk; and then it proceeds to work in the fame manner again. Its ftrong fliated limbs ferve both to dig and clear its habitation.

$$
\left.\begin{array}{c}
\text { SCARABEUS 3. Major fubcinereus naficornis, cornu. } \\
\text { retroffexo. Naficornis thauroceros } \\
\text { marianus. Pet. Gaz. t. 24. f. 10. }
\end{array}\right\} \begin{aligned}
& \text { (he Newfmonger. }
\end{aligned} \text { The }
$$

This infect is very like the foregoing both in fize and appearance; but it is more rare, and feldom feen except it be in the inland parts of the illand. It is of a light brown colour.

SCARABEUS 4. Maximus pullus nitens, cornu triplici, $\}$ The great brown anteriori bifurcato. Tab, 43.f.6. S Sawyer.

This fpecies is larger than any of the others, being commonly about an inch and half quarter in length, and three quarters over.: It has three horns, all rifing from the cover of the back: the two uppermoft of thefe ftretch ftraight forward, but the lower, which is the ftrongeft, is arched a little upwards, and flightly di-, vided at the top.

$$
\left.\begin{array}{c}
\text { SCARABEUS 5. Minor glaber, fubcinereus, mif-\} } \\
\text { cellus. }
\end{array}\right\} \text { The fmall mottled Sawyer. }
$$

This curious infect is about one inch and half quarter in length, of an oblong form, and flatted. The forceps is broad, ferrated and ftrong; the head rugged; the eyes pretty large, and the antenne fhort. The fcuta of the thorax is fquare and fmooth; but the body is very fmall between that and the fore part of the belly, which lies about the region of the fecond and third pair of legs, and is very gloffy and fmooth. This infect cuts its way with great eafe into any tree or timber; but its hole runs always upwards in the beginning, and then turns off horizontally, by which difpofition, it always fecures its refidence from the approach of moifture.

## LUCANUS 1. Fufcus maximus, forcipibus femiuncia-) <br> libus bifurcatis atque Jerratis. Tab. The Macacca Beetle. 44. fig. 8 . Buceros luzan naficorni accedens. Pet.Gaz.t. 29. f. 2.)

This is the largeft infect of the fly kind I have obferved in Famaica; it is about two inches and a half in length, from the tip of the forceps to the end of the elitre, and about one inch over. The prongs of the forceps rife from the fore-part of the head; they are arched a little inwards, and divided flightly towards the top, to hold the prey the fafter; but in the females, they are fawed below the divifion, tho' generally fhorter than thofe of the males: See fig. 8-a. The eyes are large; the fcuta of the thorax oblong, but moflly extended crofs-ways, margined and toothed at the fides. The antenne are long, flender, and jointed; and the feet proportioned to the body.

This infect breeds in the decayed trunks of trees, particularly thofe of the plumb and filk cotton trees; where their large caterpillars, commonly called Macaccas, fee fig. $8-b$. are ftudioufly fought for by fome people, who think them a very great delicacy. They are near three inches and a half in length, and about the thickneis of a man's little finger. The body is of a white colour, and fuitains a fmall brown head, which is generally cut off when they are ufed. They are always gutted, opened, and wafhed before they are dreffed; and when well fried, are thought, by many people, to be one of the greateft delicacies in America.

This beautiful infect is generally about an inch in length. The fnout and fore-part of the body is narrow; but the reft is thick and oblong, and covered with ftrong, and beautifully fhaded elitra, which defcend very low upon the fides of the belly.

$$
\begin{aligned}
& \text { CURCULIO 2. Medius, elitris nigro viridibus aureo fri- } \\
& \text { atim varie jplendentibus, foutâ thoracicâ } \\
& \text { fubnigrâ. The green Fly. } \\
& \qquad \begin{array}{l}
\text { Tab. } 43 . \mathrm{S} .10 .
\end{array} \\
& \text { This }
\end{aligned}
$$

This creature is extremely beautiful in its colours, and very common among the canes in the months of May and $\not \subset u n e$. It was generally looked upon as a fpecies of the bliftering fly for a long time.

## CURCULIO? 3. Fufca minor, roftro longiori. The Wevil.

This infect is very deftructive to flour, as well as to moft forts of grain, and no where more pernicious than in famaica: but there are two or three other forts, of different kinds, that breed alfo among the corn in America, which are equally deftructive.
$\left.\begin{array}{c}\text { CURCULIO 4. Ater oblongus, capite craf- } \\ \text { fiori. }\end{array}\right\} \begin{gathered}\text { The Famaica Clock or } \\ \text { Black Dor. }\end{gathered}$
This fpecies is very common about the houfes in Famaica, and keeps generally in ground-rooms and pantry's.

CERAMBEX 1. Minimus, fubfufcus © fubbir- $\left.\begin{array}{c}\text { futus. }\end{array}\right\}$ The fmall brown Capricorn.
CERAMBEX 2. Subcinereus, maculis fufcis niten-? tibus variegatus, utrâque eli-
trâ in aculeum definente.

## CERAMBEX 3. Mifcellus brevior, fcutâ toracicâ $\left.\begin{array}{c}\text { utrinque mucronatâ. }\end{array}\right\}$ The mottled Capricorn.

CERAMBEX 4. $\left.\begin{array}{c}\text { Major oblongus, viridi-aureo } \\ \left.\begin{array}{c}\text { Jplendens, joutâ toracicâ aculeo } \\ \text { utrinque armatâ, antennis lon- }\end{array}\right\} \text { The Lady Capricorn. } \\ \text { giflimis. Tab. 43. f. } 8 .\end{array}\right\} \begin{aligned} & \text {. }\end{aligned}$
This infect is extremely beautiful; it is of a dark fhining green colour, with a mixture of gold, and generally about an inch and a half in length; but the body is moderately flender in proportion. The antennea are feldom under three inches in Jength, and arch back a good way beyond the wings as it flies. Every part of the infect abounds with vifcid clammy particles, of a ftrong difagreeable fmell, with which the firits wherein they are preferved are readily impregnated. The fmell holds for a confiderable time, even upon the fingers.

> CERAMBEX 5. Major niger, albo virgatus, antennis brevioribus compreffis. Tab. 43.f.7. $\}$ The large ftriped Capricorn.

This is the largeft of the Capricorn kind I have ever feen in Famaica, being generally about an inch and a half in length, and near half an inch in breadth, about the infertion of the elitra. Thefe are very ftiff, and marked each with a broad longitudinal ftreak in the middle, and a narrower one at each margin; and terminate in a few fmall prickly points at the extremities. The fcuta of the thorax is pretty broad, ftriped like the wings, margined, and ferrated at both fides; but the antennce are not above one inch in length.

$$
\left.\begin{array}{c}
\text { CERAMBEX 6. Rufefcens, maculis paucioribus an- } \\
\text { gulatis albidis variegatus. }
\end{array}\right\} \begin{gathered}
\text { The brown Capricorn } \\
\text { with white fpots. }
\end{gathered}
$$

## CERAMBEX 7. Minor rufefcens, fafciis tri-7 bus tranfverfalibus virga- The fmall ftriped Capricorn tus, antennis fubaculeatis. $\}$ wih prickly feelers.

BUPESTRIS 1. Fufca minima rugofa, The Monk.

This infect is fmaller than the Wevil; but the fcuta, or cover of the thorax, is very large in proportion to the reft of the body, and ferves as a cover for the head of the infect, which is lodged in the fore-part thereof, and protruded or retracted at pleafure. The body is fixed to the other end of this, and covered by its ftrong hollow elitra. The antenna, or feelers, are pretty fhort, and divided into three equal fegments towards the top. It has three pair of legs, and a ftrong pair of nippers. The elitree are rough and warted; and, with the cover of the thorax, feem to compofe the whole body of the infect.


The feelers of this curious infect are fhort, and divided into few joints or fegments, whereof the laft is largeft and moft diftinct. The head is of an oblong form, and furnifhed with a pair of ftrong fimple nippers; but is, like that of the foregoing, half buried in the fcuta of the thorax, where it moves with great facility. The cheft or thorax is covered with a ftrong rugged fouta, which, like that of the other, is roundifh and hollow, truncated at both ends, and furnifhed with a fingle row of fhort recurved prickles at each fide. The elitree are ftrong and rugged, and alfo furnihed with fhort prickles at the fides. The infect is of an oblong form, and burrows always in trees; it bores with great eafe, and makes the fides of its hole very fmooth; but this opens commonly in the under part of fome limb or branch, and runs generally upwards, fo as to prevent any inconvenience from either rains or damps. They are very deftructive to the Spanijb plumb and pomegranate-trees.

## CASSIDA? 2. Albida, elitris membranaceis, corpore $\left.\begin{array}{c}\text { angufiori comprefo. }\end{array}\right\}$ The fmaller Caffida.

CASSIDA? 2. Albida, corpore compreffo fubrotundo, eli- $\left.\begin{array}{c}\text { tris membranaceis. Tab. 43. f. 13. }\end{array}\right\}$ The larger Cafida:
Thefe two infects are extremely like each other, and probably the male and female of the fame fort. The head is very fmall, and, with the breaft, lies covered under the fmall fcuta of the thorax. The elitra are flat and tranfparent, pretty broad, and much longer than the body of the infect. The feelers are very flender, and made up of a feries of fimall joints.

## PYRALIS 1. Minor fubcinerea oblonga, alis ©oculis nigricantibus. Tab. 44. f. $9-a \& b$. $\}$

This curious infect is frequent enough in Oamaica, as well as the larger Fire-fly. The antennce are pretty flender, and compofed of many fhort joints: they rife immediately from between the eyes, juft above the fnout. The head is fmall, and fixed in the under fide of the fouta of the thorax, which is but of a moderate fize, rounded, convex on the back, of a femi-oval or femi-elliptic form, with the bafe placed towards the elitre ; and receives the bead in a peculiar lodge placed beyond the center of the fouta, where it is joined to the trunk, having a free margin almoft round it. The body of this infect is of an oblong form, and of a dirty white colour, as well as the elitrce; but the eyes and wings are blackifh.

This creature, as well as phofphorical Elater, is luminous at night; but the light is more ftrong and conftant in the other; for, in this, the luminous rays proceed entirely from the abdomen, where every part feems to lline with equal force; and the light is commonly vacillating, fhewing itfelf fometimes weaker, fometimes ftronger, and, at times, dying wholly away; but is conftantly renewed again after a few feconds of time. It is however oblerved, that the obfcure inter-
intervals are not of folong a duration as the luminous moments, which the creature feems always to command at pleafure.

DYTISCUS 1. Minimus nigro-plendens. The black Water Beetle:
This infect is frequent in moft of the low-land ponds of Jamaica, and moves with great dexterity on the furface of the water.

ELATER I. Major fufcus, pbofphoricus. Tab. 44.\} The larger Fire-Fly.
This infect is of an oblong form, about an inch or better in length, and moderately broad in proportion. It is very ftrong and elaftic; and being put on its back, will fometimes fpring to the height of four or five inches above the level on which it is placed, the only means whereby it is enabled to recover its natural pofition when thus fituated. But nature, to enable it to go through this piece of mechanifm, has fupplied it with peculiar organs; for that part of the fouta of the thorax, which may be properly called the fernum, is producted a good way below the main body of the fhell, and received in a groove placed in the fore-part of the Jcuta that covers the belly. When the infect contracts the mufcles of thofe parts, the back part of the ficuta of the thorax is brought clofe to the elitre of the back, and leans againft the fhoulders, into which they are inferted. By thefe means the head and tail, the infect being placed on its back, are the only parts that are contiguous to the plane; the prominent part of the fernum is forced a good way out, and proffed againit the verge of the groove, and a large interval is left behind between the middle part of the body of the infect and the plane: the body being put into this attitude, the mufcles of the belly begin to act in their turn; and the fternum being forced over the verge of its groove, flips very fuddenly into its common lodge, which brings the middle part of the body, with fo great a force, and fo fudden a jerk, againft the plane, that it naturally rebounds, and that in a degree proportioned to the firmnefs of the plane on which is the infect is placed.

This infect, befides the particularity of its fpring, is one of the greateft curiofities the ifland affords; for it really is a perfect ploophorus for a confiderable part of life; moft of its internal parts being at times luminous, and the head furnifhed with two glandular fpots - $a$, placed juft behind the eyes in the common fcuta of the head and fhoulders, from whence it emits ftreams of light for a confiderable part of the night. But tho' the luminous rays flow naturally from the infect while awake, it feems to have the power of interrupting them at pleafure, and then thefe fpots are quite opake. I have already mentioned that moft of the internal parts of this infect emit a light, but the thicknefs of the cover prevents it from appearing thro' any other place but thofe conftituted for that purpofe: yet on forcing the rings, that cover the different parts of the body, a little afunder, you may obferve the fame light to iffue from all the entrails indifcriminately.

A perfon may, with great eafe, read the fmalleft print by the light of one of thefe infects, if held between the fingers and moved gradually along the lines, with the luminous fpots immediately over the letters; but eight or ten of them being put into a clear vial, will give light enough to read or write very clearly by.

They are feldom feen in the day time, but wake with the evening, and continue both to move and glow for a confiderable part of the night. They fly very diforderly in general, and their frequent obfcure intervals renders their flight fill more confufed; but they move naturally towards each other, for nature feems to have given them thefe marks, to diftinguifh one another, as the only means whereby they are enabled to propagate their kind; and from hence the negroes have learnt the art

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holding one (a) between their fingers, and waving it up and down, fo that it may be feen by others, who, taking it for forme of their own kind, fly directly towards it, and pitch upon the hand, if they do not difcover the deceit before they come too near. There infects are very common in Jamaica, but they keep monty in the mountains and inland parts: they are fo drowly and torpid by day, that it is a difficult matter to make them thew any figns of life; and, if they do, it is only to fall into the fame fate immediately after; yet, while they hold awake, they are lunituous, tho' they recover the usual vigour only with the night.

TORFICULA 1. Minor fufca capite de- $\left.\begin{array}{c}\text { preflo. }\end{array}\right\}$ The faller brown Ear-wick.
This infect is not uncommon in pantries and ground-cellers in Jamaica: it feeldom exceeds feven-tenths of an inch in length.
$\left.\begin{array}{c}\text { BLATTA I. Minor fetida, appendicibus cauda lon- } \\ \text { gioribus erection arcuatis. }\end{array}\right\} \begin{gathered}\text { The long-tailcd Cock- } \\ \text { roach. }\end{gathered}$
'Tho' this infect be pretty common on board mot of the flips that trade to $\mathrm{F}_{\mathrm{a}}$ maica, I have not observed many of them afore: they are rather more difagreeable and loathsome than the larger forts.

## BLATTA 2. Rufefcens major, elitris fubmembrana-? $\left.\begin{array}{l}\text { leis nitentibus, cruribus birfutis. } \\ \text { at. App. t. 10. }\end{array}\right\}$ The Cock-Roach: Blatta. Cat. App. t. 10.

There are the mont loathfome infects in America: they are very flat, and creep into every chert and drawer, where they find the leaf crevice; but it is remarked they do not touch fills of any kind, though they gnaw all manner of woollen cloath8, efpecially thole that have been dufted with powder. This creature throws off its outward coat very frequently, and appears quite frelh and young after every change. It lays its eggs Separately; they are of an oblong form, rounded, and moderately edged on one file : they are very large in proportion to the infect, and commonly found flicking to cloaths, timbers, $\mathcal{E}_{\mathrm{c}}$.

BLATTA 3. Minor fufca tranfuerfè riata, ais Blatta. Cat. App. $\mathrm{t}_{0} 10$.
This infect is neither fo troublefome nor fo difagreeable as the foregoing: it digs frequently into fort pieces of timber, where it keeps a throbbing noife, not unlike our death-watches in Europe.

$$
\left.\begin{array}{c}
\text { MANTIS 1. Corpore antennis \& pedibus longifi-1 } \\
\text { mist tenuifimijque. Tab. 42. f. 5. }
\end{array}\right\} \text { The Spanij)-Horfe. }
$$

This creature is eafily diftinguihed from all other infects by its flender make, and the length of all its limbs. The body is feldom lefs than fix inches long, pretty even, and not above one-eighth of an inch in diameter. The feelers and legs are very lender, and feldom left than four inches in length.
$\left.\begin{array}{c}\text { MANTIS 2. Alata viridis, corpore be- } \\ \text { viori. }\end{array}\right\} \begin{gathered}\text { The Leaf-Fly of Edwards. } \\ \text { t. Io g. }\end{gathered}$
This is much carter than the foregoing, and winged; but it is much of the fame make otherways.

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GRILLUS i. Maximus viridis, aculeo latiori fal- $\left.\begin{array}{c}\text { cato. }\end{array}\right\}$ The large green Locuft.
This is the largeft of all the winged infects of $\mathcal{F}$ amaica: it is of a beautiful green colour, and fupported by long thorny legs, adorned with Marp griping nails.

GRILLUS 2. Medius fufcus, capite crafiori. The Cricket.
GRILLUS 3. Minor aculeo recto, capite tenuiori, an- $\begin{gathered}\text { tennis longifimis. }\end{gathered}$
All thefe fpecies are frequent in the woods and inland parts of Jamaica, where they keep a loud difagreeable noife for the greateft part of the night; but they hide themfelves by day, and pafs the hours of light in perfect tranquillity.

## A R T I C L E II.

Of the Hemipteræ, or fuch as bave their elitræ or outward wings, partly thin and membranous and partly fiff and opake.
Tho' this clafs takes its denomination from the form of the wings, which is peculiar to many of them, they are chiefly diftinguifhed by the make and difpofition of the probofis or oral duct, which is long, flender, and ftraight, in moft of the fpecies, and generally bent back under the breaft.

CICADA 1. Major nigra, cruribus birfutis, elitris $\left.\begin{array}{l}\text { membranaceis nervofis. }\end{array}\right\}$ The large Black Cicada.
This infect is as large as any of our wild bees in Europe, but of a longer make. The head is very large in proportion to the body, and the wings nervous and tranfparent.

## CIMEX I. Fatidus lectuarius, alis defitutus. The Chink or Bug.

Thefe infects are very common in Gamaica; and the people to avoid them, as much as poffible, are not only obliged to make ufe of the hardeft and fmootheft timbers in their bedfteads, as the leaft capable of harbouring them; but wafh them frequently with boiling water, to deftroy fuch as may chance to fculk in any of the fmaller crevices of the frame.

CIMEX 2. Silvefris alata, ex albo viridis, fout dorf $\}$ The fmall green utrinque mucronata. Tab. 43. f. 14, $\}$ Wood-Chink:
This little infect is frequent in the woods of famaica; it is pretty broad in proportion to its length, efpecially about the fhoulders; but of a thin compreffed make. It is of a pale green colour mixed with very minute black fpecks in every part, and feldom exceeds three-eighths of an inch in length.

ACANTHARIS I. Fufcus, ventre obovato fupernè? $\left.\begin{array}{l}\text { cocbleato, inferne carinato } \\ \text { acuto. Tab. 44. f. II. }\end{array}\right\}$ The brown Acantbaris.
Antenna tenues articulate, longitudine pedum. Caput oblongum tenue, probofcide tereti infructum. Pectus ansufum oblongum, Jupernè binis denticulis infructum. Corpus majusculum, obovato-oblongum, Jupernè depreffur leniterque cocbleatum, margine denticulis aliquot acutis infructum; infervè tumidum carinatum. Rofirum tenue fubulatum refexum. Ala menbranacea deciduc.

## O F J A M A I C A.

I have met with this litetle infect pretty often in Gamaica, but do not know any thing like it ytt defribed. It is obferved to throw off its wings at fome faifun of the year.

NOTONECTA I. Fufcatenuis, cruribus, longifimis ventre $\left.\begin{array}{c}\text { aibido. }\end{array}\right\}$ The Boat-Fly.
This infect is very common about all the ftagnating waters in Gamaica, and walks with the greateft eafe and fpeed upon the furface of them. All the parts of the infect are extremely flender and delicate.

\author{
BRUCHUS I. Kermefinus maculis nigris notatus, elitra- $\left.\begin{array}{c}\text { rum extremis fu/cis. Tab, } 43 . \text { f. 16. }\end{array}\right\}$ The Cotton-Fly.

}

This little infect is chielly of a fcarlet colour, and has but a fmall head in proportion to its body. The feelers are flort and delicate, the probofcis long and flender, the body oblong and comprefled, and the elitre natrow and oblong, thick and opake near the body, but more membranous and tranfparent at the extremity. The caterpillars of thefe flies are frequently pernicious to the cotton-buthes, and often deftroy whole fields of the moft promifing plants, in a very fhort time.

## $\left.\begin{array}{c}\text { ELLIPTA 1. Minima fubfufca mifcella. } \\ \text { Tab. 43. f. } 11 \text {. }\end{array}\right\}$ The fmall brown Ellipta.

This little infect is extremely curious; but I do not recollect where, or by what chance I have met with is. The body of an oval form, and very thin; the antenna fimall and delicate; the eyes monderately large, but compreffed, and form a fegment of the orb or circumference of the conmon mafs, on each fide of the fnout; which renders them coufpicuous both under and over the body: nor does the head, from which the proboficis ftretches perpendiculariy downwards, feem to project from the orb, but forms a part of an uniform eliptic, with the reft of the body. The feet are fix in number, whereof the two foremoft are large and robult, and furnifhed with fo many arching fubulated nails; but the others are made and placed for walking. The wings are farcely difcernible.

## APHIS 1. Compreffa oblonga, alis nigro undulatis. The Blaft.

This infect is very common in America, and generally pernicious to all the plants on which it breeds: it has been fome years known to deftroy whole fields, nay, whole crops of canes; nor do the very trees on which they breed, ever flourifh. When they are very numerous, people are obliged to burn every thing about them, even the moft promifing plants; nor are we foon likely to difcover a better method, unlefs the acid iteam of burning fulphur can prove of any fervice. Thefe infects are of that tribe, whofe individuals grow quite unactive after they grow to a perfect Itate: they always raife the bark of the plants on which they breed, and lay their eggs under it.

COCCINELLA I. Alis defituta, corpore rugefo.
Scarabeus bemijpbericus cocbinilifer. Pet. Gaz. t. I. SThe Cocheneal Fly。 Nochernopalli. Hern. 78.
Caput parvum, a corpore vix difinctum, probofcide attenuato brevi infructum.
Antennce brevifima dorfum verfus fita. Oculi? (nullos obfervare licuit.)
Corpus ellipticum fucculentum, infernè Jubcompreflum, Jupernè convexuns E tran/verfe friatum.
Pedes utrinque tres, brevifimi, flexiles attenuati.

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This infect is of the torpid fort, and performs all the neceflary offices of life while it is fmall; but it foon grows large, and then lives almoft motionlef for the remaining part of life. It is now pretty common in Famaica, where it is faid to have been introduced from the main continent, not many years ago: it breeds chiefly upon the prickly-pear in that illand, that particular fpecies called the Tuna, on which they commonly breed, being very rare there. They are commonly found wrapt up in fmall tufts of delicate white down, which yields like a cobweb; and ficks pretty clofe to the fides of the infect, immediately above the legs, as if it had grown out of that part of the body. They live chiefly upon fucculent plants, but are moft commonly found upon thofe of the Cactus tribe, which generally fupply them both with faftenings and a defence: for which reafon, the Indians, who are the only people that raife them, propagate large quantities of the moft harmlefs fpecies of that clafs, to breed them upon; as it afforls a better opportunity both for managing and collecting them. But their frequent harvefts, and the heavy rains that fall in thofe countries, would render all their induftry, in this refpect, ufelefs; did they not always take care to preferve and protect a fufficient ftock of breeders; which is generally done in the following manner, viz.

Every Indian who manufactures Cocheneal, is fupplied with regular walks or plots of Tuna (a), to feed his infects; and when he apprehends the feafons are fetting in, he cuts off fome of the beft furnihed branches, and plants them in his nurfery-houfe (b), leaving the infects on the remaining part of the tree to be collected by the proper workmen, who brufh 'em off very carefully; and gather them in fmall bafkete, or cloaths, to be dried and prepared for the market; while the others fwell and breed very copioufly on the protected plants. But when the feafons are quite over, and the weather again fettled, thefe are alfo brufhed off and fixed a-new on the plants in the walks, where they fpread and increafe until the following crop: for in thofe countries the rains fall chiefly at two ftated feafons, and would wafh away the infects if they had not been gathered or protected.

The dye obtained from thefe infects formerly ufed to be prepared, by pounding them, and fleeping the pulp in the decoction of the Texuatla (c), or that of fome other plants, which they obferved to heighten the colour: this was left to fettle at leifure, and afterwards made into cakes and dried for the market. But of late they have found both a better and a more expediticus method of preferving the dye, which is by drying the infects whole, either in an oven, or upon the baking-ftones.

> A R T I C L E III.
> Of the Neuropterx, or fuch as bave all their wings thin and membranous, and cuarioufly intervoven with frong tendinouss ribs.

DANORPA 1. Major fouta pectorale utrinque alatâ, a-\} The larger Panorpa,
This infect is generally about three quarters of an inch, or better, in length, and above a quarter in breadth. The head is nearly as wide as the body of the tly, and adorned with a pair of large round eyes, fituated laterally; leaving a large intermediate fpace which is marked with three prominent glands. The feelers are fmall, and the proboficis long, flender, and delicate. The fouta of the thorax is pretiy large, and throws out a ftrong margin on both fides; but joins to a more contracted orie behind, which covers the fore-part of the belly, from whence it emits its large membranous wings. The body from this part back, contracts gradually, and, at length, terminates

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in a pointed fheath or vagina, that covers a fingle, channeled and dightly bearded weapon; but it is open underneath from the top to the bottom.

The lowert of the two figures marked $15 . \operatorname{tab} .43$, is a reprefentation of the exurvice of this infect in another liate; for after the creature has lived fome time under ground, it works its way up, and appears in this form; in which fate it continues for fome time, though very flothful and unactive: but at length it climbs into fome neighbouring buh, thicks its hooked claws in the batk of fome tender branch, and throws off its coat, to make its appearance in the winged ftate.

Note, The mark in the back fhews where the infect burfts its old coat to come out.
RAPHIDIA I. Minor, alis denffime reticulatis, cor- $\}$ pore Jubrotundo. $\}$ The.fmaller Rapbidia.
This infect is very like the foregoing in the general form and difpofition of its parts; but the weapon feems to be quite inert, and divided into three parts. The wings are very clofely ribbed.

LIBELLULA 1. Tota viridis. The green Lady-Fly.
LIBELLULA 2. Fufca tenuis, ad oculos © anum $\left.\begin{array}{c}\text { caruleo nitens. }\end{array}\right\}$ The brown Lady-Fly.
LIBELLULA 3. Maxima rufula, pectore craf- $\}$ The claret-coloured Sori. $\}$ Lady-Fly.

LIBELLULA 4. Tenuior tota ccerulea. The fmall blue Lady-Fly.
Thefe infects are very common in Yamaica; they are very active, and mort frequently obferved in low fwampy places.

## A R T I C L E IV.

Of the Lepidopterx, or fuch as bave thin membranous wings variouly interwoven with flrong tendinous ribs, and covered with finall opake fales or feathers.

Note, The individuals of this clafs are generally very beautiful, and frequently appear with a moft amazing variety of colours.

P
APILIO 1. Major crocea, maculis pau-? The large orange-coloured Butterfly cis © nervis nigris varia. $\}$ with black fpots and ribs.
This is a very bandfome fly, and frequently met with in the cabinets of the curious. The caterpillar is very large, and of different colours; but the aurelia is of a beantiful green with golden fpots. It feeds and hangs its aurelia on the wild Ipecacuanba.

PAPILIO 2. Major tota lutea. The large yellow Butterfly.
PAPILIO 3. Major nigra luteo virga- \}The large black and yellow ta. $\}$ Butterfly.

PAPILIO 4. Minor rubella, maculis ni-\} The fmall flefh-coloured Butterfly gris © albis varia. \} with black and white fpots.

PAPILIO 5. Media rufula, limbis a-? larum maculis nigris\} The middling brown Butterfly with black and white.fpots in the margin of the wings.

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PAPILIO 6. Minor tota argentea. The fmall filver-white Butterfly.
PAPILIO 7. Nigra, limbis alarum al- $\}$ The black Butterfly with white fpots bidis, variegatis. $\}$ in the margin of the wings.

PAPILIO 8. Major nigra, centro $\}$ The larger black Butterfly with orange alarum croceo. $\int$ fpots in the middle of the wings.

PAPILIO 9. Minor rufula. The fmall brown Butterfly.
PAPILIO 10. Minor, ventre ruffecenti, alis ? The fmall pink and blue caruleis. $\}$ Butterfly.

PAPILIO 11. Minor e cinereo'rufefcens, $\}$ The fmall fen coloured Butterfly albo maculata. $\}$ with white fpots.

PHAL ANA i. $\left.\begin{array}{c}\text { Maxima cinereo-mifcella, oculis majo- } \\ \text { ribus. Tab. } 43 \text {. f. 17. }\end{array}\right\}$ The Mufkeeto Hawk.
This is the largeft infect of the tribe I have ever feen in Famaica: it is never abroad but in the earlier hours of night, when the Muykeeto's are moft troublefone, which gave rife to its common appellation; moft people imagining that it feeds on thefe infects. It is reprefented of the natural fize.

PHALÆNA 2. Albo-rubella, mifcella \&o tranf- $\left.\begin{array}{c}\text { verfè virgata. }\end{array}\right\} \begin{gathered}\text { The fmall flefh-coloured } \\ \text { Butterfly. }\end{gathered}$
There is a great variety as well of this as of the foregoing trihe, in $\mathrm{Fa}_{a}$ maica, which I have taken no pains to collect: but as the two genus's are very diftinct, I have inferted a few of the moft remarkable of each fort, for the fatisfaction of the curious.

$$
A R T I C L E V \text {. }
$$

Of the Hymenopterx, or fuch as bave four thin membranous wings.
Note, The infects of this clafs appear commonly as if their bodies had been made up of two diftinct parts: they are generally of an oblong form very active, and always furnifhed with weapons.

$\mathrm{A}^{\mathrm{p}}$$\left.\begin{array}{c}\text { PIS 1. Major oblonga nigra \& fubbirfuta. }\} \text { Tab. 43. f. 18. }\end{array}\right\}$ The large black hairy Bee. This fpecies is not common in Gamaica; I have never obferved more than two or three of the kind, which I found in the woods of Portland. The fecond joints of the hind legs are always armed each with a ftrong feta or biifle, piobably to ferve as a faftening for its load. It is reprefented of the natural fize.

## APIS 2. Rufefcens innocua, fub terram nidulans. The Grave-Digger.

I have never known any of this fpecies to fting, tho' no infect is more common about all the houfes in the ifland. They burrow moftly in the piazzas and other covered places.

## $\begin{array}{llllll}O & F & J & \text { A I C A. }\end{array}$

This infect is pretty common beth in St. Elizabeth's and Weflmoreland; but I have never obferved it in any other part of the illand. It has very large eyes, and is not eafily provoked to fting.

## APIS 4. Major, fufco छ aurantiaco virgata. The Wafp.

Thefe infects are very violent, and, upon the leaft provocation, fly at thofe who difturb them. Their nefts are formed in compreffed cakes of a triangular form, and ftick by fo many fimple narrow ligaments, which rife out of the upper angles, to the limbs of trees or corners of rocks. The cells are all membranous, and open on the under fide of the cakes; but the upper fuperficies and ligaments are always wathed over with a fort of varnifh, which prevents any damage from the rains. The holes are hexangular or round.

## APIS 5. Subfufca innocua alveariis luto/s. The Free-Mafon.

Thefe infects live in fmall focieties, and make their cells of mud. They build generally under cover, to protect their nefts from the weather.

APIS 6. Mellifera oblonga vulgaris. The common Bee.
Thefe ufful infects have been frequently introduced to Famaica; but they do not often thrive there, and the want of fuccefs is gencrally attributed to the pernicious ants. I have feen them, however, raifed extremely well at Mr. Ripley's, in Liguaneo; and do not know of any method, befides common care, that was taken to preferve them. He had above fixty hives under the eves of one thatched houfe, when I was there.

## APENDIGASTER 1. Cruribus polterioribus longibi- $\left.\begin{array}{l}\text { mis. Tab. 44. f. 6. }\end{array}\right\}$ The purfe-belliedFly:

This curious little infect is about the fize of an ordinary fly, and much of the fame appearance at a diftance. The head is of an oval form, furnithed with a pair of fmall nippers, and adorned with a pair of moderate fimple feelers, fixed between the eyes. A fmall nick joins this to the thorax, out of which the wings rife, two on each fide, refembling thofe of the common fly very much: but from the bottom of the breaft it throws out two pair of fmall legs; and the remaining hinder part divides inmediately into two lobes, out of which the hinder legs, which are vaftly longer and larger than the others, rife. From the middle of the back, between the wings, and from the part oppofite to the fpace that lies between the fecond and third pair of legs, it throws out a flender round tube, which runs into a triangular and flightly compreffed bag behind the lobes formed by the hinder part of the main body, and terminates in a fmall vagina, out of which the point of a fimple aculeum appears.

FORMICA 1. Maxima rufefcens, roftro cuneiformi. Tab. $\left.\begin{array}{c}\text { 43. f. 12. }\end{array}\right\}$ The Lion-Ant.
Thefe infects are frequent in Famaica, but not very troublefome, as they keep chiefly in the fields. The male is of a beauiful greenilh blue about the head and breaft, but of a brown colour, like the others, behind. There are three remarkable little glands placed irregularly between the eyes of them.

## FORMICA 2. Major, fupra terram nidulans. The Wood-Loufe.

Thefe infects, on the appearance of tain, quit the ground, and climb into the branches of trees, or along the wails of houfes, to build their neffs in the branches

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of the former, or among the timbers of the other; making regular vaulted channels along the roads, to protect them from the weather in their marches; which, as well as the nefts, are built of particles eroded from different timbers; mixed up with mud, and fome other ingredient that prevents their being diffolved by the rains. The nefts are very large, and under an even furface, are divided into a thoufand fmall regular cells, with convenient intercourfes through the whole. Thefe infects are very troublefome in the rainy feafons, and frequently deftroy moft of the timbers among which they build, as well as books, trunks, papers, $\mathcal{E} c$. that come then in their way. They flew us a mof beautiful example of a commonwealth, where all work and feed alike, each affilting cheerfully in the common caufe.

## FORMICA 3. Domefica omnivora. The Ant.

Thefe infects are very common in Famaica, and frequent about moft of the houfes: they are very voracious, and endeavour to have a part of every thing that is firring.

## FORMICA 4. Minima faccarivora. The Sugar-Ant.

Thefe infects are extremely fmall, and will creep thro any crevice to get at fugar ; of which they are great lovers, as well the foregoing. The only effectual way of keeping them off, is to put whatever you intend to preferve on a fland placed in a bafon of water; and even here, you may fometimes obferve thofe that are drowned in the attempt, made ufe of as a float for the others to get over. If you hang a fugar-box out of the way, you may for a time preferve it from thefe infects; but when one gets to it, either by chance or otherways, you may be fure to fee all the ants in the neighbourhood there foon after; fo that they feem to hold it as a maxim not to mifs the prefent opportunity, but to make it general, by giving immediate notice to the whole community.

## C H A P. II. Of $\quad F \quad I \quad S \quad H \quad E \quad S$.

THE productions of this tribe were always found not only ufeful to mankind in general; but fo very curious in their forms, parts, and mechanifms, that they have, at all times, engaged the attention of the writers of Natural Hiftory: and yet the difficulty that attends the bringing of them under a juft examination; and the impoffibility of knowing their ordinary actions, or examining many of their mechanical powers, have rendered this part of the fience extremely imperfect, until that happy genius, the accurate Artedius, had applied himfelf to the ftudy of it; and with inconceivable pains and difficulties brought it to a ftate of perfection, equal, if not fuperior, to that of moft other parts of natural knowledge. And if we find him to have fome errors or inaccuracies, they are fure to depend on the credit he was fometimes obliged to give to the writings of others, where it was impoffible for him to be an eye-witnefs himfelf.

The beautiful order in which that ingenious author has ranged the productions of this clafs in general, engaged me to difpofe the fithes of famaica in the fame manner, which I Thall, with him, divide into the five following clafics, viz.
I. Such as have open gills, and the radii of their fins of a boney texture, but not pungent.
II. Such as have open gills, and fome of the radii of their fins fliff and pungent.
III. Such as have the radiz of their fins boney, but have not open gills.
N. B. Thefe have a narrow aperture on both fides of the head, thro' which they receive and difcharge the water occafionally; and are commonly furnihhed with a pair of thin membranous lungs, as well as with branchioftegeous membranes.
IV. Thofe that have the radii of their fins, and moft of the fmaller bones, of a cartilaginous nature, and hardly dittinguifhable from their coverings.
V. Such as have their tails difpofed in an horizontal pofition.

Note, All the fpecies of this tribe are viviparous, and furnihhed with lungs, and regular parts both for procreation and the nutrition of their young.
The two firft of thofe being very numerous, we fhall range them in the following fucceffion, as our author has done, viz.

## I.

I. Thofe that have only one fin in the back, and that about the middle.
2. Such as have only one fin in the back, with a little flefly protuberance near the tail.
3. Such as have only one fin in the back, and that fituated neareft to the tail.
4. Such as have one or more fins extended the whole length of the back.
5. Such as have only one fin in the back, and that running fo far back as not to be diftinguifhed from the tail.
6. Such as have no fins, or but a very fmall one in the back.

## II.

1. Such as have fmooth heads.
2. Such as have prickly heads.

## S E C T. I.

CYNGNATHUS 1. Parte anteriori bexagona, poferiori quadrangula, coudâ impinnâ. Hippocam- The Sea-Horfe. pus ñon aculeatus. Will. t. 25.f.5.
This little filh is very frequent in all the harbours both of $\mathcal{F}$ amaica and the other fucar-colonies; but it feldom exceeds four inches in length, and is remarkable only in its uncommon form.

> SOLENOSTOMUS 1. Corpore tereti fubrotundo, caudâ $\}$ The Trumpeter, or bifurcâ. An, Solenoftomus caudấbifurcâ, \&cc. Gron. Muf. Ich.S Trumpet-Fih.

This filh is frequent in the harbours of $\mathcal{F}$ amaica about the months of $\mathcal{F}$ une and $7 u l y$, and is generally about eighteen inches, or better in length. The head is long and narrow; the jaws clofed up at the fides; the mouth very fmall; and the body long and flender.

RIENIDIA I. Corpore fubpellucido, lineâ laterali The Anchovie, or fmall latiori argentea. Tab.45. f. 3.5 Silver Fifh.
This little fiff feldom exceeds three inches in length, and is fometimes very common in the harbours of ofanaica. The head is pretty large in proportion to the body;

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but the mandibles are of a moderate fize, and minutely indented at the margin; and the brangioflegeous membranes, which hang pretty loofely from both fides of the lower jaw, are fuftained each by about twelve flender officles nearly of a fize. The fins are, 1 . One in the back, fituated about the middle of the body, and fuftained by about fifteen radii. 2. Three in the body, whereof two fland very near the gills ( $d$ ), and are accompanied each with a pointed fcaley appendix: but the third is nearer the anus, and fituated about the middle of the body; it is like the back fin, but longer, and placed fomewhat nearer the 4. Tail, which is bifurcated. The lateral line is very broad in proportion to the fize of the fifh, and of a glofly filver white; but the reft of the body is more obfcure, and moderately trantparent.

This little fifh is extremely delicate, and in great efteem with moft lovers of firh. They are generally ferved up fried; and when well pickled are no ways inferion to thofe of the name in Europe: however, they have not hitherto fucceeded in the colour, nor can it be expected in any fifh that is tranfparent.

## CYPRINUS 1. Craffufculus fubargenteus, radio priori\} The fmalleft grey pennce analis longiori. <br> Cyprinus.

This little fifh feldom exceeds two inches and a half in length, but it is pretty thick in proportion. The head is flatted, and tapering towards the mouth; the jaws fomewhat ductile; the eyes near and black; and the brancbiofeeyeous membrane fuftained by five delicate arched ofiicles. The body is of an oblong make, thickith, covered with pretty large fcales, and furnifhed with 1 . One fin in the back, of about eight radii; 2. Two oblong pectorals; 3. Two fmall ventrals, placed towards the anus; 4. One fmall anal fin; and, 5. A fquare tail.

I found this little fifh in a frefh water fpring near the fea, to the eaftward of Kingfon. It is pretty ftraight in the back, but fomewhat arched below: its eggs are large in proportion to the fize of the body.

> AMIA I. Subargentea, labris aqualibus, offculis branchiofegis? The Tropon. vigintiduobus.

## $\left.\begin{array}{c}\text { AMIA 2. Labio fuperiori longiori, officulis brancbioffe- } \\ \text { gis quatuordecim. }\end{array}\right\}$ The Ten-Pounder.

Thefe fifhes differ but very little in appearance, being both nearly of a fize, oblong, roundih, and covered with very large fcales. They have but one fin in the back, which is placed rather beyond the middle, and throws out its laft radii furthoft: the pectoral fins are placed near the head, and fituated pretty low: the ventrals are fmaller than thefe, but like them, and placed near the center of the body: bat the anal fin is uneven and fituated near the tail, which is forked. The lateral fin is ftraight and even. They grow frequently to the length of two feet, or two feet and a half; but are fo full of bones that they are feldom ufed but in broths.

## EXOCETUS 1. Pernis petioralibus longifimis acuminatis.) <br> Hirundo falivani. Will. t. p. 4 <br> Parabili jecunda. Pif. 61. Exocetus. Art. Syn. Pif. 18. The Flying-Fith. <br> The Flying-Filh of Edwards. p. 4. t. 210.

Thefe firhes are very frequent in all the American feas, and generally obferved to keep in fhoals. They are fo common about Barbadoes in fome feafons of the year, that many people buy them for their negrocs: they eat very delicate and tender, and feem to be much hunted for by the dolphin and other voracious fifhes.
(a) Thefe may be called pectoral fins, but they are fituated very low.

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CLUPEA I. Minor, radio ultimo penna dorfalis longifimo. The Sprat.
Thefe are the mof common fifhes in 'famaica, but not regarded there, tho' much efteemed in the Windward IJlands, where they are often poifonous.

CLUPEA 2. Major argentea, dorfo carulefenti. The Herring.
This filh is much larger than the foregoing, and no ways inferior to the European either in fize or delicacy. They are comunon about Famaica in the months of March, April, and May; but feldom ufed by the better fort of people, who are always fupplied with a great variety of the larger and richer kinds.

## ESOX r. Maxilla inferiore produrta. Tab. 45. fig. 2. The Piper.

This fifh feldom exceeds twelve or fifteen inches in length. The body is of an oblong form, and obtufely quadrangular; the mouth fimill; the bill thin and comprefed; and the branchagereonis membrane fift ined ty ahout fourteen flender ofilcles. The breaft fins are fmall and narrow; the ventrals fhort, and fituated beyond the ccister of thu body; the anal fmall and triangular ; the dorfal much like the anal, and oppofite; the tail forked; and the lateral line near and parallel to the beily.

ESOX 2. Utrâue maxillâ producta tereti dentata. Efox maxilla fuperiore longiore, cauda quadrata. Ich. Art. \& Gron. Muf.
Acus Opiani. Will, t. p. 8. f. 2.
The Gar-Fifh.


Both the jaws of this fifh are long and flender, and furnifhed with tharp conic teeth. The fins of the back and anus are pretty long, and extend towatds the tail; but the firft radii of each ftretch out further than the reft, which are but of a moderate length. The tail in both fpecies is forked, but the upper prong is always thorter than the other, and the lateral line is near and almoft parallel to the belly. The body is long, roundifh, and flender in proportion; and generaliy about three feet, or better, in length; but never above two inches in diàmeter. It is a finh of prey, and runs with great agility on the furface of the water, leaping frequently from place to place, for many yards together. It is a firm, dry, wholefome filh; but the bones are always green, which prejudices many people againft it. The eggs are very large.

## ECHENEIS I. Fufcus, pinnis pofterioribus albo marginatis.? <br> Remora, Cat. ii. t. 26. <br> The Sucking-Finh. <br> Iperu-guiba Brafilienfis. Will. $t$, G. 8.

This firh is remarkable on account of its fouta, which is placed on the back and upper fart of the head, by whofe fetule or fhort briftes it faftens itfelf to the fides of thips, planks, finhes, or other bodies, at pleafure; for they are difpofed in ridges, which generally run, from twenty one to twenty three, acrofs the fouta. The eyes are placed rather on the under fide of the head, by which means it is the better enabled to obferve every thing that paffes, while it continues fixed by the back of the bead. The filh is of an oblong rounded form, tapering towards the tail; with the belly-fins joined together by a membrane.

CORYPHeNA I. Coruleo varie Splendens, cauda bifurca.
Coryphena cauda bifurca. Art. Syn. 2 1. \& Guarapema.
Pif. 48 . The Dolphin.
This is one of the mof beautiful fihes of thofe feas, for it always appears whith a variety of very hining colours while it continues in the water. It is a fifh

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of prey, and commonly met with in the ocean, where it is often obferved to fwim with great fwiftnefs after both the flying and other fmall finhes. The head is pretty large, but fomewhat flatted on the fides, and rounded before. The body is of the fame fize and make about the breaft; but it tapers gradually from thence to the tail. It is too dry a fifls to be efteemed; and is feldom uled unlefs when young and tender.

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GYMNOGASTER 1. Argenteus comprefus, caudâ atte-
    nuatâ impinnâ. Tab.45. f. 4.
    Gymnogafter Gron.Muf. Ich. An Stromateus L. S. N.?
    Serpens marinus comprefus, &cc. Barr. &The Sword-Fim.
    Mucu Fonf. 37. 1. Sed male ad caudam depiEta ef.
    Mucu Brafilienfis Will. t. 97. E Angulla Indica. App.
        t.3.
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This is one of the mof common fifhes in the harbour of Kingfon: It is generally about three feet in length, very flat, and not above two or three inches broad. The body is fmooth, being covered only with a thin membranous fkin: the head is pretty long: the mouth wide: the jaws furnifhed with long pointed teeth ; but the foremoft have each a fingle barb on the infide, and thofe that lay farther back are flatted and of a lanceolated form. The lower jaw is fomewhat longer than the other, and the palate is furnithed with a thin membranous expanfion on both fides. The tongue is fmooth; the pharynx denticulated; the iris of filver-white; and the nafal apertures large, and placed near the eyes. The branchioftegous membrane is furnifhed with feven arched officles; and the operculum extended backward, with a fmall membranous expanfion. The pectoral fins are of a trapezoidal form, and fuftained by eleven radii each. The dorfal is pretty low, and continued from the head to the tail. The fifh has neither ventral nor anal fins, except a few very fhort, fharp, prickles that rife at ftated diftances between the anus and the tail, which is alfo naked, but of a lengthened flender form. The body is flat, and bends eafily to either fide, but not up and down, as is commonly reprefented. They are very fwift in their motions, and feem to be fifhes of prey; for they are frequently found marked with fcars, which is a fure demonftration of their pugnatious nature. The lateral line Atretches almolt in an uninterrupted direction from the upper part of the bronchial apertures to the very extremity of the tail.

In deference to my learned friend, I have continued the appellation by which he was pleafed to defcribe this filh; though I mult acknowledge I am apt to think it a fpecies of the Anarcbicas.

## MUReNA I. Unicolor maxilla inferiore longiore. Art. Syn. 39. $\}$ The Eel. Anguilla Saliv. Will. t. G. 5.

This fih is frequent in all the lagoons and rivers of $\mathcal{F}$ amaica, and not at all different from that of Europe.

> MURÆNA 2. Subfuyca, lituris allidis varia, rofro angufliori, $\}$ iride oureà. Tab. 45. f. I.
> Murena Saliv. Will. t. g. f. I.

## MURENA 3. Major fubolivacea, gula \& iride argenteis, ro-? Aro angufiori. <br> The Congre. Murana viridis. Catefb, ii, t. 20.

Thefe two laff feciiss are extremely like each other. The fnout is of a moderate length, and rounded in both; and the jaws befet with long, flender, upright teeth: but, befides thefe, they are alfo furnifhed with three or four fangs, fet one behind

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in tra middle of the pulate. Thefe are of the fame form with the teala, but layser and mobile; yielding backwards with the leaft preffure, and rifing upright again when that is over: but the joints, whereby they are fixed, will not allow them to incline forwards, nor to move in any other direction.

Buth thefe fpecies want the breaft-fins; and the fkin about the upper part of the belly, where the ftomach is fituated, is baggy, lax, and yielding; but the reft of the body is like the common eel. They are put to no ufe in Gamaica, where they commonly go under the denomination of water-fnakes, to which their fangs feem to give them a fair title.

## PLAGUSIA I. Subcinerea, coudâ attenuatá impinnâ, \} The-little b:own sole

 oculis a finjliro. . $\int$ with a pointed tail.This little filh is very different from the ref of the flat tribe: the cover of the gills is lefs ductile; the brancbioftegeous membrane fuftained by feven delicate officles; and the body, which is flat and tapering, is deftitute both of pectoral and tail-fins, and ends in a fharp point behind, where both margins are lightly covered by a continuation of the back and anal fins. The fides have no remarkable lateral lines, but the fk in is every where covered with minute fcales.

## PLEURONECTES 1. Fufcus fubrotundus glaber, oculis a? dextro, lineis feptem nigris tranfverfalibus inter pen- S The Flounder. nam pectoralem © caudam. nam pectoralem $\mathcal{E}$ caudam.

The lateral line is very fmall and ftraight in this fifh, and croffed by feveral tranfverfe black lines, formed by fome of thofe fmall fcales that cover the furface of the fkin. It is a very delicate fifh.

## PLEURONECTES 2. Subcinereus oblongus glaber, oculis a $\}$ The Sole:

Though this fpecies be much fmaller than the foregoing, it is held in equal efteem, and generally thought to be rather more delicate and agreeable.

## PLEURONECTES 3. Subfufcus mi/cellus, glaber, <br> Ejubrotundus, oculis a dextro, capitis margine $\}$ The Bracket Flounder. ciliato.

This finh is not fo common as either of the other forts, tho' it is fometimes met with in the markets of Jamaica. It is rather fmaller than the foregoing, and eats like the reft of the tribe.

## S E C T. II.

XIPHIAS 1. Roftrolongiori attenuato offeo. Xiphias. Art. Syn. 47. \& Will. t. I. $2 \%$
\} The Ocean King-Finh.
This fifh is feldom feen near the fhore; but is fometimes, though rarely, taken in thofe feas, and much efteemed both for its flavour and delicacy.

## HELOPS I. Rufefcens, iride partim rubra, partim albida, $\left.\begin{array}{c}\text { macula nigra pof pinnam dorfalem. }\end{array}\right\}$ The Hog-Fih.

HELOPS 2. Fufco-rufefcens, varie nebulatus. The Hog-Fih of Cat. ii. to 15.
Thefe two fpecies are generally confounded under the fame appellation in the markets of Gamaica, though both the colour and fize feem to fhew an effential difference between them.

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They are both of an oblong form; broad beyond the common proportion; flate $\hat{i}$ on the fides, and fcaled. The mouth is pretty fmall ; the lips ductile; the jaws befet, each, with', a fingle range of flender conic teeth, of which the foremoft is longett ; and the iris of a reddifh colour. The pectoral fins are of a trapezoidal form; and the ventrals are like them, but fmaller, and fuftained by fix radii each. There is only one fin on the back, whereof the three foremoft radii are weakly and hardly connected together; they are very long, compreficd, tapering, and arch backwards over the reft of the fin, whereof the middle radii are fhorteft, but aculeate, and furnifhed with fo many fmall membranous appendages: but the hindermoft part is compofed of flexile branched radii of a moderate length, and refembles the oppofite anal fin, whereof the three foremoft radii are aculeate. The tail is fquare, and the brancbiofergeous membrane futained by fix flender arched officles.

This fifh grows to a moderate fize, and is efteemed one of the beft that fwim in thofe feas: it is both rich and delicate.

## SPARUS 1. Striis longitudinalibusvarius, dentibus anteriori-7 <br> bus latioribus comprefis aqualibus acutis. $\}$ The Bream. Perca rbomboides. Cat. ii. t. 4.

The body of this fimh is nearly of an oval form, being pretty broad, and arched both at the back and belly. The mouth is fmall ; the back part of the jaws befet with two or three ranges of depreffed, obtufe, and rounded teeth; and the broncbiofegeous membrane fuftained by fix officles. The pectoral fins are flender and very long; and the ventrals trapezoidal; but thefe are fuftained below by two tharp fcaley appendicles, and have the firft radii ftiff and pointed. The anal fin is of an oblong form; but the three firit radii of this are alfo ftiff and pointed, whereof the third is very large. There is only one dorfal or back fin, which is almoft even; but the firft thirteen rays are ftiff and pungent; and the lateral line is parallel to the back. It is efteemed a good filh.

## SPARUS 2. Iride argenteâ, dentibus anterioribus conicis. <br> Zanthurus Indicus. Will. ap. t. 3 . <br> \} The Porgee.

This filh is very like the Bream both in form and appearance; but, in this, the teeth are of a conic form, and the pectoral fins much thorter. It is of an even grey colour, and the pointed radii of the dorfal fin are feldom more than eleven in number. The ventral fins are larger than thofe of the Bream, and the appendages fituated more externally. It is efteemed a good wholefome firh.

## MORMYRA I. Major caruleo $\left.\begin{array}{c}\text { varia. aurco }\end{array}\right\}$ The larger painted Parrot-fifh.

This firh has the moft beautiful luftres of any I have ever yet feen, and furpaffes the Dolphin both in variety of thades, and the brightnefs of its native colours, which hold for a confiderable time after it is taken out of the water. It is of an oblong form, pretty tumid, and covered over with very large fcales. The month is but fmall; the lips free and ductile; and the jaws thick and frong, icfembling the beak of a parrot in fome meafure, for they rife into a thatp edge around, which abundantly fupplies its want of teeth. The puctoral fins are of an oblong form, and the ventrals of a trapezoid. There is only one fin in the back, which is nearly of the fame height every where, and continued almoft from the neck to the tail; but the fore part thereof is futtained by nine fliff and pointed radii. The tail is fquare ; but the anal fin is like the pofterior part of the derfal, and oppofite to it. The lateral line is parallel to the back, and remarkable for the number of little branches it throws out in every fcale thro' which it paffes: it is entirely interrupted about the region of the extremity of the back fin, but is rifes lower

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or nearer to the belly, and continues in the fame direation from thence to the tail. The branchiofegeous membrane is furtained by four arched officles.

> MORMYRA 2. Minor rufulo-mifcella, pennâ dorfa cequale. $\begin{gathered}\text { The little brown } \\ \text { Parrot-fin. }\end{gathered}$

MORMYRA 3. Media caruleo nitens. The blue Parrot-fin of Cat. t. 18.
$\left.\begin{array}{c}\text { MORMYRA 4. Media, virefente ni- } \\ \text { tens. }\end{array}\right\} \begin{gathered}\text { The green Parrot- fifh of Catefo. ii. } \\ \text { t. } 29 \text {. }\end{gathered}$
All thefe fimes are frequent in the feas about Famaica, and pretty conftant in their colours, which induced me to look upon them as different fipecies, though they refemble one another much both in form and habit. The fecond fort is feldom ufed, being generally thought to be fomewhat poifonous; but the others are frequently ferved up at table in many parts of America, tho' not fo much efteemed in 'Jamaica.

HOLOCENTRUS I. Rubellus, laminis brancbigfegeis) ferratis, angulis alternis in acu-( leos abeuntibus, pinna ani radi-> The Welfaman. orum tredecim.
Perca rubra. Catefb. ii. t. 29 .

This fifh is of an oblong form and proportionably broad, but not very thick. The body is covered with fliated fcales, which, like the lamince that cover the gills, are all ferrated at the bafe. The mouth is fmall; the lips ductile; the jaws befet with very fmall teeth; and the brancbiofegeous membranes fuftained by eight officles. There is but one fin in the back, which is of a moderate length, depreffed a little in the middle, and fuftained by eleven ftiff and pointed radii in the forepart. The pectoral fins are of an oblong figure, and placed near the gills; but the ventrals are more remote and longer. The anal fin is very like and oppofite to the pofterior part of the dorfal; and fuftained by three ftiff and pointed radii in the fore-part, whereof that in the middle is largeft. The tail is forked, and fupplied with a few harp pointed fcales at the bafe. It is thought to be a good fifh, but is not common about $\mathcal{F}$ amaica: it feldom exceeds feven or eight inches in length in the moft perfect ftate.

## SCIÆNA I. Tota grifea, glandulis binis ad aperturas $\left.\begin{array}{c}\text { nafales. }\end{array}\right\}$ The Sun-fih.

This fifh is very like thofe of the following clafs, from which it is difinguihed by the ferrated lamine that cover the gils, and the nafal glands. The feales are large; and the brancbiofegeous membranes futained by fix officles each: it is reckoned a very delicate fifh, and much efteemed in moft parts of America.

## SCIÆNA 2. Subargentea fufco nebulata. The Silver Grunt,

This fifh is generally about fixteen or eighteen inches in length, and fix or feven over; but it is thinner in proportion than moft other finhes of this fize. The body is covered with large fcales of a filver white colour, clouded with black towards the back; the mouth is pretty large, and the jaws befet with fimall teeth; but the tongue and palate are pretty fmooth. The eyes are proportionable to the fize of the fifh, with the iris of the colour of the body, grewilh and clouded. The cover of the gills is made of two lamince, or thereabouts, whereof the lower is largeft and of a triangular form; and the brancbioftegeous membrane is fuftained by fix mobile arched officles, whereof three are remarkably fmadler and more flender than the reft. The fins of the breaft are of an oblong make and pointed, and fand in an oblique direction between the tail and back of the fifh: but the belly fins are fhort and

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moderately broad. The back-fin is fingle, but divided into two parts, whereof the fif or foremoft, which lies in a deep groove, is fuftained by eleven fliff-pointed radii, and erected and lowered at pleafure; but the back part is limber, and rounded a little near the tail. The anal fin is rounded and oblong, with the three firt radii robuft and pungent; but the tail is nlightly bifurcated.

> CORACINUS I. Minor, maculis rotundis rubris vario. $\}$ The Hync,
An Cugup, \&c. Catelb. ii. t. 14.?

All the fpecies of this kind are diftinguifhed from thofe both of the foregoing and following genus's, by, 1. The large fkinny flap that rearhes over the pointed extremities of the lower lamina that covers the gills, and floats over the bronchial apertures. 2. By their conic teeth, whereof two, or four, fituated pretty forward in the fides of each jaw, are remarkably larger than the reft. 3. By the number of the officles that fuftain the brancbioftegeous membrane, which in thefe is generally about feven. And, 4. By their general make, being remarkably thick and chubbed about the breaft, with large flethy heads, ample bronchial apertures, and a very wide mouth and paffage. The whole body is roundifh and flefhy, but moderately compreffed on the fides.
$0 b \int$. Moft of the fpecies are marked with fpots of fome kind.

$$
\begin{aligned}
& \text { CORACINUS 2. Subfufcus nebulatus, punctulis plurimis? The Grooper. } \\
& \text { nigris ad oculos, caudad. rotundatâ, } \\
& \text { maculâ majorinigrâ in extremo dorfo. See tab. 46.f. I. }
\end{aligned}
$$

CORACINUS 3. Fufco-mijcellus, caudâ quadratâ, macula majori nigrâ in extremo dorfo.


CORACINUS 4. Fufcus nebulatus, maculis minoribus ro-7 tundis nigris afperfus, caudâ rotun-
datâ.
Thefe three laft fpecies are very much efteemed, and generally reckoned the beft fifhes in America; but the fecond and laft forts, which are more chubbed, and covered with fmaller fcales than any of the reft, are thought to excel. Some of the laft fpecies have been known to weigh two or three hundred pounds.

CORACINUS 5. Fufor-rubellus, iride kermefinâ, $\left.\begin{array}{c}\text { radius penna dorfalis decem. }\end{array}\right\}$ The fmaller black Snaper. Anthea Cat. ii. t. 25.
This fifh feldom exceeds eight inches in length, and is generally about four in breadth.

CORACINUS 6. Fufcus major, iride argen- $\}$ The black Snaper, or Deepteo. water Snaper.
This filh grows to a pretty confiderable fize, and is deemed one of the beft fifhes in America.
$\left.\begin{array}{c}\text { CORACINUS 7. Autreo-fplendens, iride luteâ, oculis } \\ \text { E' dentibus caninis majoribus. }\end{array}\right\} \begin{gathered}\text { The yellow Snaper. }\end{gathered}$
CORACINUS 8. Rubellus, iride flammeâ, dorjo macula\} nigrá utrinque infignito.

The red Snaper.

CORACINUS 9. Rubellus major, pennis pecZoralibus bafi \} The deep water nigris.

## CORACINUS io. Sublutefcens, iride argenteâ. The Yellow Tail.

Thefe fix laft fpecies of the Coracinus are of a more delicate make, and covered with larger fcales than the reft; nor are the marks of the lamince, that cover the gills, fo remarkable: but they agree with the relt in all other particulars.

In this genus the dorfal fin is always fingle, and conftantly lower about the middle, where the pointed radii, by which the fore-part is fuftained, do terminate. The pectoral fins are roundifh, and near the gills; the ventrals near and cblong; and the anal roundifh, and fuftained by three ftrong pointed rays in the fore-part: but the tail fquare, or flightly bifurcated; and the lateral line parallel to the back. They are all greatly efteemed, efpecially the Grooper, the black Snaper, the Rockand the Jew-fifh, which are reckoned fuperior to moft of our European filhes, both in delicacy and richnefs.

## CROMIS i. Subargenteo-mifcellus, pinnâ dorfali ®̉ anali $\left.\begin{array}{c}\text { fofulâ immer/ss, cautâa birfurcâ. }\end{array}\right\}$ The Silver Shad.

This filh grows to the length of twelve or fourteen inches, and is pretty large in proportion. The body is moderately compreffed, and well covered with fcales; the mouth more or lefs ductile; the jaws denticulated, as well as the pharynx; and the flefh raifed about the fore-part of the dorfal or anal fins, fo as to form two deep grooves or chanels in which the pointed radii of each rife and fall occafionally.

## CROMIS 2. Aureo \& fusco varius, palato $\begin{gathered}\text { rubro. }\end{gathered}$ <br> Perca. Cat. ii. Tab. 8?

This fifh is fmaller than the foregoing, but fomewhat of a thicker and more firm make. The jaws, as well as the gullet, are furnifhed with fmall floatp teeth; the brancbiofegeous membranes fuftained by feven officles each; and the ventral fins placed at fome diftance from the gills. The twelve foremoft radii of the back-fin are pungent, and the other fixteen weak and branchy. The lateral line is oblique, and ftretches from the eye to the tail in a direction almoft parallel to the back. Both are good filhes, tho' not fo much efteemed in general.


The uppermoft of the lamine that cover the gills is ferrated in this filh; all the fcales are indented at the bafe; and the lips and pharynx denticulated.

Qurere, If not more properly a fpecies of the Scianc.

$$
\left.\begin{array}{c}
\text { CROMIS? 4. Subargenteus oblongus, radiis anterioribus } \\
\text { pinne dorfalis agrè pungentibus. }
\end{array}\right\} \text { The Drummer. }
$$

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Linea lateralis?
Lamina fuperior brancbioflega ad bafm dentata.
MACROCEPHALUS 1. Argenteus major, linpâ laterali lati-
ori rectânigra, labio inferiori longiorí
An, Parabucu Braflienfo. Will. t . N. 13. f. 4 .
This filh grows to a confiderable fize, being frequently no lefs than three feet and a half in length, and proportionately thick and tumid, efpecially about the breaft and belly. The head is of an oblong form, depreffed and boney; butt finaller than ufual in proportion to the fize of the fith. The mouth is wide; the eyes moderately large; and the iris of a filver colour. The lips, palate, and pharynt, are befet with very fmall teeth; and the whole body covered with large fcales. The lateral line is pretty broad, of a black colour, and ftretches from the upper part of the bronchial aperture to the tail, almoft in a ftraight line. The brancbioftegeous membrane is fuftained by feven arched officles; and the cover of the gills is made up of four of five lamina. The back is furninhed with two fins, of which the firft is aculeate, as well as the firft ray of the fecond. The pectoral fins are of an oblong form ; but the ventrals are broader, and have the outward rays fiff and pointed. The anal fin is alfo of an oblong form, and furnifhed with one harp ray in the fore part; but the tail is almoft fquare.

This fifh is generally looked upon as one of the beft in America, and eats very much like a full grown cod-fifh. It is greatly admired by mort people.

## PELMATIA 1. Minor fquamis majufculis. The Bull-head.

## PELMATIA 2. Major fquamis vix perfpicuis. Muttela pifcis. Will. app. t. 4 • <br> The Mud fifh.

The fpecies of this tribe are eafly diftinguifhed by the flemy appendicule at the anus: they are, in general, of a drowfy nature, and keep commonly about the bottom, between the weeds. They are largeft about the head and breaft, but grow tapering and roundifh towards the tail. The head is depreffed, flattim, and pretty broad; the eyes fmall; the branchiofegeous membrane fuftained by fix officles; and the jaws, lips and pharynx befet with fmall delicate teeth. The back is furnimed with two fins, whereof the foremoft is fuftained by fix (in the firft) fimple and nightly pointed radii. The pectoral fins are of an oblong make, rounded, and placed near the gills; and the ventrals are nearly in the fame line; but the anal is roundifh, and fuftained by nine or ten rays; and the tail is nearly of the fame make. All the fpecies have a fmall flemy apendicle at the anus: they are common in all the rivers and creeks of Famaica, and generally reckoned very tender fifies, and eafy of digeftion. The fecond fort is moft efteemed, and grows frequently to the length of feventeen or twenty inches: It is the moft delicate fifh I have yet known, when in full perfection.

MUGIL Argenteus minor, pinna anteriori dorfo radium quatuor.
$A n$, Thymus Will. t. N. 8?
This filh is of an oblong and pretty tumid form : the head is fomewhat depreffed, rounded, and thin; the mouth fmall; the fuperior lip ductile and fmooth; but the pharynx is flightly befet with teeth; and the eyes covered by a clear tranfparent coat, which fpreads over the neighbouring parts of the head. The body is of an oblong make, moderately compreffed, and covered with large fcales; and the brancbioflegeous membrane fuftained by four officles. The pectoral fins are of an oblong form, and placed near the apertures of the gills; but the ventrals are more round. ifh, and fomething more remote. The firlt dorfal fin is fill more romote than

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thefe, of a triangular form, and fuftained only by four flender and moderately ftiff radii; but the poferior dorlal and the anal fins refemble one another much, and are placed oppofite to each other. The tail is flightly hollowed, and the fcales difpofed In parallel feries the whole length of the body, with a very fmall lateral line thro' the middle of each. The peritoneum is always blackinh in this fith.

> MUGIL 2. Major a senteus, pimáa anteriori dor $\sqrt{2}$ ra- $\} \begin{gathered}\text { The Calapaver, or } \\ \text { diorom quinque. }\end{gathered}$

This fim is fo like the foregoing, both in habit and appearance, that it is generally thought to be the fame feecies in a more perfect ftate: it is commonly about two feet or better in length, and is looked upon as a very delicate fifh. The eggs of the calapaver's rowe are very large in proportion to the body.
$\left.\begin{array}{c}\text { MI GIL 3. Argenteus minor, refro productiori } \\ \text { rotundiori. }\end{array}\right\} \begin{aligned} & \text { The Mountain or } \\ & \text { Hog-fnout Mullet. }\end{aligned}$
Ail thefe fpecies are rich and well-tafted, and abound with a thin yellow to gives them a very delicate flavour. The laft fort is thought to excel; it is ath-water fifh, and generally found in the mountain rivers, but the two other forts live indifferently either in frefh or falt water.

PERCA? I. Minor fibargentea. The Sinnet.
PERCA 2. Major fubargentea maculata, pinnis $\begin{gathered}\text { nigrantibus. }\end{gathered} \begin{gathered}\text { The Paracuta, and Para- } \\ \text { cute of Cat. ii. t. I. }\end{gathered}$
Thefe two fifhes are folike each other, Gat it is neceffiary to be well acguainted with the different appearances of both, to be able to diftinguifh the one from the other with invecitainty. The frift foldom exceeds feventen inches in length, but the cthor isorvs frequently to be three feet and a half or betier. The head is of an oblong coaic form, bony and pretty fharp at the point; but the lower jow is fomewhat longer than the upper: the mouth or rictus is very large; the jaws in proportion to the head, and weil furnifhed with teeth of an oblong lanceolated form, whereof the two foremof pierce through fo many fockets formed in the tip of the upper jaw, while the nthers lodge on either fide of the oppofite teeth. The tongue is of an obiong figure, rough and denticulated; and the brancbiofegeous membrane foftained by feven officles. The aperture of the gills is very wide; the eyes large; the iris of a filver white; the body long and tapering, pretty tumid, and flightly covered with frall fcales. The pectoral fins are of an oblong make and placed near the bronchial apertures; but the ventrals are more remote. The dorfal fins are two in number, the foremoft of which is fuftained by five pointed radii, and fituated in the fore part of the back; but the other is placed oppoffte to the anal, which it refembles very much, both being nearly of the fame fize and of a triangular figure. The tail is forked; and the lateral line ftretched almoft in a direct line from the upper part of the bronchial aperture, or opening of the gills, to the middle of the tail. They are fifhes of prey, and feidom fpare any thing that comes in their way; but the laft fecies is very ravenous, and being much larger than the other, is more remarkable for its daring attempts: they are both firm and palatable fifhes, and much efteemed by many people.

## THYNNUS 1. Corpore craffiori \& breviori, pinnulis $\left.\begin{array}{c}\text { fuperioribus novem, inferioribus octo. }\end{array}\right\}$ The Bonecto. <br> Thynnus Bontii.

This fin has two back fins, and is fupplied with a great many fmall pinnula befides; but the firt of thofe of the back is almoft joined to the laft ray of the hindermoft
dermoft fin of the back. The brancbiofegeous membranes of this finh are fuftained each by four arched officles that grow gradually fmaller; the head is large, rounded and compreffed; and the body pretty thick, tapering gradually to the tail. It is a dry coarfe finh and not much efteemed, though a hearty wholefome food.

> SAURUS 1. Argenteus cute longitudinaliter friata, Sriis?
> prominulis brevibus \& interruptis, Tab. 46. f. 2.

Corpus compreffum oblongun; maxilla utraque denticulata; iris argentea. Pinna dorjales gemina; anterior radiorum quinque acutorum; poferior ad caudam fere porrecta ninuta. Pinna analis' poferiori dorfali Jamilis eft, cum aculeoduplici remoto ad anum. Linea lateralis incurva, ad caudam glabra; cauda lunata.
Membrana brancbioftega oficulorum fex, vel Septem.
This fpecies is diftinguifhed from the reft of the tribe by its ftriated flin, and the frall anterior aculeate fin at the anus, which feldom exceedstwo radii. It is of an oblong flatted make, and it agrees with the reft in moft particulars.

SAURUS 1. Argenzeus laminis brancbiofegis utrinque macula $\left.\}^{\text {nigrâ notatis, pinnis lutefcentious. }}\right\} \begin{gathered}\text { The red tailed } \\ \text { Jack. }\end{gathered}$ Corpus latiufculum compreffum utrinque arcuatum; ventre $\mathcal{E}$ dorfo acutis. Caput proportionatum; maxilla fuperiore breviore.
Oculi proportionali iridibus argenteis.
Os fatis amplum; maxilla utrinque denticulata; lingua \& palatum ajpera.
Membrana brancbioffega officulorum utrinque feptem arcuatorum.
Pinnae dorf dua; prior radiorum feptem vel octo acuminatorum; poferior membranacea, ad caudam fere porrecta, radiis prioribus crafioribus. © longioribus.
Pinna pectorales tenues acuminata longiores, ultra curvitatem lined lateralis porrecta.
Pinna ventrales breviores valida trapezioides.
Pinna ani gemina; prior radiorum duorum breviorum \&o aculeatorum; polerior pofteriori dorfali fimillima, fed paulo minor.
Pinna cauda bifurca.
Linea lateralis, e regione radiorum longiorum pinne pofterioris dorfalis $\xi^{\circ}$ ani arcuata $\mathfrak{E}$ dorfo fere parallela; fed inde ad caudam recia atque dentata, dentibus pofterioribus majoribus.

## SAURUS 3. Minor argenteus glaber, maculâ nigrâ ad cau- $\left.\begin{array}{c}\text { dam, lineâ laterali vix dentatâ. }\end{array}\right\}$ The White fifh,

SCOMBER 1. Caruleo-argenteus nudus.
Guarabuca Braflienfis. Will. App. i. 3 .
\} The Spanif Macarell.
This fifh is of an oblong form but flightly flatted, and tapering very gradually towards both ends. The 1 kin is fmooth, and the lateral line remarkably crooked. The genus is eafily diftinguifhed by the little pinnula that run between the back and anal fins, and the tail, Ecc. See Artedius.

SCOMBER 2. Maximus, pinnulis utrinque novem, tuberculo $\}$ rigido acuminato utrinque ad caudam. $\}$ The King-fih.
This fifh is very like the foregoing both in make and appearance; they
are both hard, dry eating, but anfwer extremely well coveecbed (a); and when well dreffied in that manner, are very agreable to molt over-heated paiates.

Corpus craffufculum catbetoplateum: caput $\mathcal{E}$ dorfum arcuatis; maxilld utraque denticulata; oculi appropinquati; iris argentea. Pinna dorfalis gemina; anterior radiorum feptem aculeatorum; pofterior membranacea, radiis prioribuslongifinis, polerioribus minimis \& ad caudam fereporrcctis: pinna pectorales longa acuminata; ventrales fubrotunda breviores; anahis dorfali pofteriori fimilis, fed brevior. Cauda bifurca. Linea lateralis incurva; fed verfus caudam refla \& dentibus majoribus munita. Membrana brancbiofega officulorum Septem; lingua glabra; palatum fubajperum.

This is a coarfe dry fifh, and not much efteemed.

> TRIGLA 1. Capite quatuor fpondilis acutis armata.
> Trigla capite parum aculeato, pinna ingulari ad pinnas . The larger Alying pectorales Art. \& Gro. Muf. Icht.
> Hirunda aquatica. Boatii. 78.
> Pirabebe. Pif, 6 I.
> \} Trigla.

Obf. Corpus Squamis acuminatis "prominulis, verfus caudam Jenfinzauctis, tcatim.
This finh is of a very fingular form: it is pretty well delineated in Foknfon, and defcribed perfectly well by Gronovius, p. 44-5. The head is pretty round, but flatted in the fore part, and pretty prominent about the eyes: it is covered with a ffrong bony fouta, terminating in two ftrong thorns that ftretch back clofe over the fhoulders, as thofe of the lower jaw do on both fides under the pectoral fins. The jaws are befet with fmall teeth, and the branchiofegous membranes fuftained by four arched officles. The body is of an oblong form, pretty fquare, and tapering towards the tail; it is well covered with fcales every where, but thofe of the fides are frequently prominent and fometimes fharp-pointed. The back is furnifhed with two fins, but the radii of the foremoft, which is fixed immediately over the breaft, are weakly, and only fix in number, with a fmall rugged one behind; but the fecond is membranous and fultained by eight rays: it is placed oppofite to the anal, which it alfo refembles, though this is fuftained only by fix radii. The pectoral fins are very large, and furnifhed each with an appendicle, confifing of two or three fimple radii. The tail is almoft fquare, and fupplied with fome flort prickles at both fides of the bafe. The filh is commonly from ten to twelve or thirteen inches in length, and the pectoral fins are feldom under fix and a half, each, or under five in breadth when expanded; fo that the diftance between the tips of the expanded fins is commonly about fifteen inches.

TRIGLA 2. Capite aculento © fquamato, Squamis craf: fis ofeis radiatis; cirris tribus cartilagineis cum aculeo unico utrinque ad The fmaller flying pinnas pectorales, Tab.47. f.3. Trigla.
An Trigla capite aculeato, appendicibus utrinque tribus ad pinnas peEZorales. Art. Syn. 73 ?
This finh is readily known by its flated breaft, which is fuftained by a large triangular ferrnum, placed between the breaft-fins, immediately under the fkin; and by the areolated and radiated ftructure of the fouta that covers the head, which is much depreffed in the fore part. The breaft-fins aie very large in this fpecie, though not
(a) To coveech a firh, it muft be cut into juncks, fryed with onions and oils and afterwards potted with vinegar, a little pepper or cloves, fryed onions, and fome oil.

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fo wide nor fo long as thofe of the other fort; and both the dorfals are almont joined, but the lateral line is quite ftrait and parallel to the back.

TRIGLA 3. Subfufca nebulata, capite aculeato, cirris binis ad oculos, alis brevioribus. An Scorpius Saliv. Will. t. x. 12. Grooper.

The head of this fifh is moderately large and full of prickly protuberances: the breaft-ins are broad and roundih, of a dark purple colour with round white fpots underneath, and arch a little out from the body, which is pretty chubbed near the head. The upper fins meet in the middle of the back, fo as to appear almoft but one continued fin.

$$
\left.\begin{array}{c}
\text { CHIETODON 1. Fufcus, fafciis quinque tranfverfss } \\
\text { fronte luteis. }
\end{array}\right\} \text { The Sea Butterfly. }
$$

This little finh is extremely beautiful, and makes a moft charming appearance in the water: the gills are free and open; the mouth fmall, like the reft of the clafs; and the teeth flender and fetaceous. The back and anal fins terminate each in a pointed manner behind, which gives the firh a fquare appearance; 'and the upper branchial lamina terminates in a thorn on each fide, as in all the following fpecies.

$$
\left.\begin{array}{c}
\text { CHETODON 2. Subgrifeus, lineis nigris obliquis varius, } \\
\text { ad caudam macula majori notata. }
\end{array}\right\} \begin{aligned}
& \text { The ftriped } \\
& \text { Angel-fifh. }
\end{aligned}
$$

This beautiful fihh is marked with a black belt that runs acrofs the eyes, and a large fpot near the tail, furrounded by a white or yellow circle. The lines run obliquely from the middle of the fides towards the tail-part, on each fide; but the upper ones crofs the lateral line, which is parallel to the back: all the fins are of a roundifh figure in this fifh.

$$
\text { CHETODON 3. Minutè variegatus imis fouamarum }\} \text { The variegated }
$$

## CHÆTODON 4. Luteo variegatus $\mathfrak{E}$ fafcia- $\}$ The belied and variegated tus.

The lips are duatile in all thefe fpecies and move over the teeth very eafily; but thefe are all fetaceous and very thick fet in the jaws. The mouth is fmall; the head under proportion; the body roundith and flat, and covered every where with fmall ferrated fcales. Each of the upper bronchial laminæ terminate in a thorn at the lower angle; and the branchiofegous membrane is fuftained by four, five or fix officles, whereof fome are extremely flender and fmall. The pectoral fins are placed near the bronchial aperture; and the ventrals, which are of an oblong make, are placed below them: but there is no more than one fin in the back, which ftretches from the neck to near the tail ; in this however the radii are pretty thick, but the fix foremoft are fhorteft and pointed, and the middlemoft largeft. The anal fin is like and oppofite to the pofterior part of the dorfal fin, and guarded alfo by three pointed radii which fuftain the fore part of it. The tail is pretty broad and roundinf and the lateral lines ftrait, and difpofed in the very middle of the fides.

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TEUTHIS I. Fufca cceruleo nitens, aculeo fimplici utrinque ad caudam.
Turdus Rbomboides. Cat. ii. \(\mathfrak{t}\). 10 .dam lanceolâ mobili armatum.

\section*{O F J A M A I C A.}

Os parvum cute labili teitum: maxilla utraque crafiufcula, dentibus compreffis acutis donata.
Pinna pectorales trapezioides, branchiis approximata; ventrales minores, radiorum Jex, quorum extimus acuminatus © acutus eft.
Pinna dorf unica, aqualis Es a nucâ ad caudam fere producta, radiosprioribus octo acutis.
Pinna analis, dorfali fimillima e medio abdomine ad caudam fere ducta. Cauda quadrata.
Membrana brancbioftega tenuis Ej parva, oficulis quinque fuffulta, Ev laminâ obliquè radiata femitecta; officulis extimis vix notabilibus.
Linea lateralis obliqua dor \(\int 0\) inter pimnas parallela, ad caudam recta.
Aculei caudam verfus erigibiles.
RHOMBOIDA 1. Alepidota argentea, pinnis omnibus 7 brevibus.
Guaperva Braflien/s. Will. t. O. I. f. 4.
Corpus cum capite compreffum fubrbombeum, ad caudam anguftiorem cute levi argenteo tectum.
Iris argentea; maxilla utraque lingua \& palatum denticulata.
Membrana brancbiofega oficulis utrinque jeptem arcuatis mobilibus.
Pinna dorfo duce. Anterior minima, quatuor radiis minimis aculeatis flexilibus fufulta. Poferior radiis inermibus fuflentata, © e medio dorfo ad caudam fere porrecta.
Pinna pectorales oblonga © acuminate, brancbiis appropinquata.
Pinnce ventrales, quae anum tegunt, minimes, ex radirs binis vel trinis flexilibus \& brevibus confructio jint, © e regione pinaarum patoratiun fere fita.
Pinna que dicitur ani a medio corpore ad caudam fere extenditur, © membranacea eft, radiijque inermibus (priore brevifimo excepto) Jiffulta.
Pinna cauda bifurca.
Linea lateralis, fupra cavitatem abdominis arcuata eft, \& dorfo fere parallela; inde ad caudam recta.
Longitudo totalis oEtodecim polliceum; latitudo ab ano ad medium dorfum, fex fere pollices.

RHOMBCIDA 2. Major alepidota, radiis anterioribus) pinna dorfalis \& analis longifimis, The larger Silverpinnis ventralibus \& cauda majoribus. \(>\) fihh with long Zeus caudá bifurca. Art. Syn. 78, \& Gro. Muf. Icht.\} fins. Abacatuaia. Pif. 55.
RHOMBOIDA 3. Squamo \({ }^{\text {a }}\) ex argenteo aqualiter ni-) \(\left.\begin{array}{l}\text { grans, radis pinna prioris dorfalis } \\ \text { phurimis, ultimis breviffmis. }\end{array}\right\}\) The Portugife. Acarauna major. Will. t. O. 3. f. I.
This filh differs from the two foregoing fpecies in many particulars; for the tail is fquare, the bronchial aperture very narrow, and the body of a more oblong form.
\[
\begin{array}{lllll}
\mathrm{S} & \mathrm{E} & \mathrm{C} & \mathrm{~T} . & \text { III. }
\end{array}
\]

BALISTES I. Major fafciata, dorfá triacantbo, caudâ bi-, Baliftes caudà bifurcâ, \&cc. Art. Syn. 82. Gronov. \(>\) Old Wife of Cat. Muf. Ich. Guaperva. Pif. 57. \& Will. t. I. 23.
Corpus compreflum oblongo-quadratum Squamofum rigidum; Squamis lima inftar afperis. Os edentulum parvum; dentes conici utrinque, anteriores longiores: lingua nulla; pbarynx utrinque denticulatum: Oculi remoti \(\mathcal{E}\) proportionati. Membrana brancbiofega officulis fex Juffulta, ©o fub cutem perforaiam recondita. Pinne pectorales fubroturda. Dorfales bine: ; anterior aculeis tribus validifimis Juffulta; poferior inermis radiata § caudam verfus arcuata, radicis prioribus lonijifrmis. Pinna ventralis unica, rugofa, radio priori maximo, unguiformi ajpero. Pinna ani dorfali fimillima, Jed minor minufque producta. Pinna cauda linata, radiis extimis longi/fimis.
This fih is very much liked in America, but muft be fkinned before it is dreffed. Its name has given rife to a faying frequent in thofe parts, viz. That an Old Wife is the beft of finh, and worft of flefh. It is ferved up either boiled or ftewed, and makes a very agreeable difh either way. The body is generally about twenty inches or better in length, and nine over.

BALISTES 2. Subcinerea minor dorfo diacantbo, aculeo anteriori majori barbato, caudâ fub-\} The little Old-Wife.
rotundâ. Baliftes aculeis dorfi duobus, \&cc. Art. \& Gr. Muf. Ich.
Pira-aca Braf. Will. t. I. 4 .

\section*{BALISTES 3. Subcinerea maculata minor, cauda longiori,? \\ dorfo diacantho, anteriori majori fimplici. \(\}\) The Mingo. Acara-mucu Braf. Will. t. E. f. 2.}

OSTRACION 1. Oblongus glaber, fubcinereo-mifcellus, ) oculis viridibus.
Orbis oblongus, major levis, \&c. Bar.
Obf. Dentes incijorit valde acuti funt in bảc 历pecie.

ribus, pinnulis omnibus brevifimis. The prickly BottleOrbs echinatus Jive muricatus Rondoletii. Will. t. \(\}\) filh. I. 4 .

OSTRACION 3. Conico-oblongus, fufco-mifcellus, prominu- \(\left.\begin{array}{l}\text { lis inermibus medio corpore denforibus. }\end{array}\right\}\) The Bottle-fifh.
OSTRACION 4. Oblongo-tumidus, aculeis longis undi-
Hiftrix pijcis Clufii. Will. t. I. 5 . The Sea-Porcupine of Pet.Gaz. 60. i.
This is but rarely found in the feas about Jamaica, but is pretty common about the coafts of North America.

\section*{\(\left.\begin{array}{c}\text { OSTRACION 5. T'riquetrus gibbus, tegmine ofeo areolato, } \\ \text { dorfo acuto. }\end{array}\right\}\) The Trunck-film.}
\[
\left.\begin{array}{l}
\text { OSTRACION 6. Triquetrus gibbus, tegmine offo areo- } \\
\text { Oftracion triangularis, duobusu acurleits in fronte. Art. \& }
\end{array}\right\} \text { The Cuckold-fifh. }
\]

The two laft fpecies are fo like each other that they can be diftinguifhed only by the horns that fhoot from above the cyes of the latter; they are alfo furnithed each with two other horns that rife from the pofterior angles of the trunk, on both fides of the belly; but thefe are equally common to both. They are very rich food, and, when well ftuffed and baked, excel all other forts of firh in America: but none of the other fpecies are ufed in Famaica.

\section*{LOPHIUS I. Minor, cute tenuiori rugofo, pinna dorjali majori, cirro nafali bi-
furco.}
'This fifh feldom grows above four or five' inches in length, and is pretty thick and chubbed in proportion: the riEtus is large; the jaws denticulated; the brancbial apertures placed backwards under the fins of the breaft, which are much of the Thape of claws;" and it is furnihed with a branchionegeous membrane, fupported by regular offcules, as well as with a membranous lung-bag, which is moft beautifully interwoven with blood-veffels.

\section*{LOPHIUS 2. Major monoceros, loricatus .E tuberculatus.) Tab. 48. fig. 3. \\ The Sea-Batt. Guaperva Brajlienfs. Will. t. E. F. 2.}

This curious firh is of a very uncommon form; and, by the expanfion of its fide-fins and its fmall ventrals, reprefents a bat in fome meafure, whence its name. They have each a fet of covered gills, and a pair of lungs befides, which they fill with air or water upon occafions; but thefe are only fimple membranous bladders or bags, charged with an infinite number of fmall blood-veffels, difpofed like a network on the infide. They receive the air by the mouth, and difcharge it again at pleafure by two round apertures placed at the alx of the lateral fins. Thefe finhes are alfo fupplied with brancbioftegous membranes, futtained each by five Hender arched officles; but they lie under the fk in , and can't be feen until the fim is opened.

Each of thefe fifhes is furnihned with a fmall membranous fin in the back, and two fmall ones underneath in the fore-part of the breaft they alfo have two confiderable fide-fins placed about the center of the body; befides a fmall anal fin, and a moderate tail. The laft fort grows fometimes to the length of a foot, or better : the mouth is fmall; the lips ductile; and it throws out a hlender, bifurcated, flehy feeler, or cirrus, from the hollow face that lies between the horn and the upper lip. The eyes are fmall, and very beautifully radiated with yellow.

\section*{LOPHIUS 3. Maximus monoceros nebulatus. \\ Lophius fronte unicorni Art. \& Gro. Muf. Icht.}

This fifhy monter is very large, and weighs commonly from ico to 3000 pounds: it is very frequent in the harbour of Kingfon, efnecially in the fouth-weft part, towards Paffage-Fort, where the fea is leatt reforted, and the bottom foft and muddy. The mouth of this fpecies is very large.

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\section*{S E C T. IV.}

\section*{SQUALUS 1. Roftro offeo cufpidato plano utrin- The Saw-fifh; commonly que dentato Art. Syn. 93. \(\}\) called the Sword-finh in Prittis five ferra Cluf. Will. t. B. g. f. 5. \} Famaica.}

This creature feldom comes near the fhore, tho' frequent enough in the open feas, where it meets with abundance of prey. It is faid to join frequently with the Threfher (a), to attack the Grampus; and many, who pretend to have feen them aet thus together, fay that the Sword-fifh keeps under the Whale, and endeavours to wound him in the belly, while the other attacks above, and ftrikes it with its monftrous armed tail.


This is one of the moft ravenous inhabitants of the fea, and feldom fpares any thing that comes in its way, let its nature or form be,what it will. The pupil of the eye, in this creature, is long and narrow, like that of a cat and alligator, which renders its fight not fo ready in the water: but whatever may be wanting in this refpect is fupplied by thofe fmall oblong, clouded fifhes called pilotes, that attend it conftantly wherever it goes, and direct its motions on all fides. I have obferved thefe fmall guides wait on fome of thofe fithes (when hooked) to the very fide of the Chip, and remain about the veffel for days after, but I could never take any of them ; they are faid to run in and out of the Shark's ftomach when they pleafe: Credat qui vult. The young Sharks are much efteemed by the negroes.

The mouth of thefe monfters, when full grown (and then they are nineteen feet or better in length) is very large, and each jaw befet with fix ranges of lanceolated and ferrated teeth, which rife gradually upright, from under the gums, as they grow old; but thofe of the upper jaw are narrow and pointed. The fore part of the head of this fifh ftretches a good way beyond the under jaw, which, when its motion is fwift, frequently obliges it to turn upon its back to catch its prey more eafily. The fkin is rough and hard, and ferves to fcrape and polifh all forts of hard wood.

\section*{SQUALUS 3. Dorfo bipinni, utraque aculeo majori armatá pinnis ani geminis. \\ Muftelus Jpinax. Will. t. B. 5. f. I. \\ The Dog-fifh.}

The eyes of this fin perfectly refemble thofe of the common Shark, and the teeth are equally fingular in their make. The whole fifh feldom exceeds three feet and a half in length, and, like moft of this tribe, is viviparous, its young being nourihed by large eggs in the womb, from each of which a vafcular cord runs to the breaft of the correfponding feetus, as in embryo-chicken. This is commonly found in the channel, and feldom goes, as far as Famaica.
 Zygania falivani. Will. t. B. 1.
This filhy monfter is like the fecond fpecies in nature, fize and make; but the head is broad and thin, and ftretches out on both fides, in which expanfions both the eyes and noftrils are placed.
(a) A large fecies of the Raia.
\[
\begin{array}{lllllllll}
O & F & \mathrm{~J} & \mathrm{~A} & \mathrm{M} & \mathrm{~A} & \mathrm{I} & \mathrm{C} & \mathrm{~A}
\end{array}
\]

In this genus there are five tranfverfe branchial apertures placed clofe to each other at the alx of the brealt fins.

\section*{RAJA 1. Minor corpore nebulato glabro, aculeo unico \(\left.\begin{array}{c}\text { barbato in caudá. }\end{array}\right\}\) The Maid:}
\(\left.\begin{array}{c}\text { RAJA 2. Major nebulata, a culeo quandoque duplici } \\ \text { majori barbato in caudá. }\end{array}\right\}\) The Sting-ray.
RAJA 3. Media caruleo-mijcella, linguad offea, aculeo ma- \(\left.\begin{array}{c}\text { jori barbato in caudâ impinná. }\end{array}\right\}\) The Whip-ray
Thefe fpecies, efpecially the firft, are frequently brought to table in Gamaica; and when well dreffed are liked by molt people.

RAJA 4. Maxima armata. The Threfher or Father-Laher.
This fpecies grows to a monftrous fize, and is feldom obferved fo far as Famaica to the fouthward; it is faid to combine with the fword filh to attack the grampus.

\section*{S E C T. V. \\ DELPHINUS I. Corpore fubtereti oblongo, roftro producto \({ }^{\text {acto }}\) The Porpefs.}

\section*{PHYSETER 1. Pinna dorfi altij/ima, apice dentium plano \(\left.\begin{array}{c}\text { Art. Syn. 104. }\end{array}\right\}\) The Grampus. \\ This large monfter is common in all thefe fouthern feas, and may be frequently feen between Hijpaniola and Famaica.}

\section*{BALENA 1. Fitula in medio vertice, rofro obtufiori fur- \(\}\) fum Bepando. \(\begin{aligned} & \text { Botle-nofe. } \\ & \text { fut }\end{aligned}\)}

There are great numbers of thefe large fifhes in the fouthern feas, but we could not hitherto remark any thing particular concerning them.

\section*{CATODON Fifulâ in nucbâ, dorfo topho inftructo. The Sperma-ceti Whale}

This monftrous creature is generally from fifty to fixty feet in length, when full grown; and proportionably broad and corpulent. The teeth are ftrait, of a conic form, near eighteen inches long, and about the thicknefs of a man's wrift: and the back is furnifhed with a large bump; but this is of no regular fhape to deferve the name of a fin. People have of late found the art of reducing the very oil of this fifh to fperma-ceti, which is likely to prove of fervice to the world, as it is now very much ufed in candles.

We are at prefent chiefly fupplied with fperma-ceti and whalebone from Nantucket in North America, about which there filhes are found in great abundance. I have obferved great numbers of them in \(42 \frac{1}{2}\) north latitude, and \(40^{\circ}\) weft longitude. They are eafily known at a diftance by their frequent and continued expirations, for they fometimes fpout out the water thisty or forty times running before they difappear.

\section*{THRICHECUS נ. Mammis pectoralibus binis. The Manatee. \\ Thrichecus. Art.}

This creature has an exquifite hearing, and lives commonly about the openings of great rivers near the fea: It is frequent enough near the main, where its fleih is much efteemed; but it is not often brought to famaica. It has two regular nafal apertures, as well as fo many fmall ear-holes; and the fkin, which is very

\section*{\({ }_{4} 60\) THENATURAL.HISTORY}
thick, being cut into regular pieces, makes fine riding fwitches; and may be ufed in whips inftead of whale-bone. It takes in air both by the mouth and noftrils, and raiies to the furface whenever it wants to breathe: but it always groans very hideoufly on thofe occafions. It weighs from 1000 to 2000 lb . in common: the tail-fin is broad and fpreading.

\section*{C H A P. III. Of \(R E P \quad\) T I L E S.}

IE we confider with what pernicious qualities many of the individuals of this clafs are endowed, we muft certainly be very thankful to the divine Author of all beings, who has diftributed them fo fparingly among us. They are, indeed, often quite harmlefs; nay fome of them are, in many refpects, beneficial to our kind; and yet there are but few people who have not a natural averfion to moft of the tribe.

The greatelt part of the individuals of this clafs live chiefly in open air, tho" many of them pafs a confiderable part of life in water; but they are all furnified with lungs, whofe cells and compartments, are vaftly larger than thofe of other creatures, which enables them to keep in that element much longer thati any other inhabitants of air can do. And their fluids are naturally cool, and the circulation flow and languid, which is the principal reafon they fubfift fo long withous food; the greateft vigour of their juices depending chiefly on their motions and the heat of the fun, in whofe rays they are frequently obferved to bafk during the fammer feafon. But they grow quite languid as the heat declines towards the winter months, during which they are generally obferved to live almof in a fate of inaction, in all the colder climates. All the animals of this tribe now found in "famaica, I thall divide into four claffes, according to their different appearances and difpofitions; and range them under the following heads, in four feparate fections.
\[
S \quad E \quad C \quad T . \quad I .
\]

Of the Serpents, or fuch as bave no regulor limbs; but whofe bodies are generally covered with fcales, and moved by reguilar mifcles fupported by Jolid props.

A
MPHISBENA 1. Subargentea ad caudam breviorem? crafisima, corpore fauamis aquali- The Silver Snake. bus undique tecto. Tab. 44.f. 1. S
Serpens biceps vulyo dicza. Barr.
This reptile feldom exceeds fixteen inches in length, and grows gradually thicker from the frout to the end of the tail; but the anus is placed fo near this part both in this and fome others of the fame kind, that it has been frequently miftaken for the mouth, which has given a rife to the name Ampbibena, by which all the fpecies are now commonly known. This little reptile is generally met with in the nefts of ants, and about hollow or decayed trees: it is thought to be very venomous, but I could never learn any inftance of its poifonous qualities, nor is it freauciatly met with in the ifland.

\section*{\(\bigcirc\) F J A M A I C A.}

CENCHRIS I. Tardigrada major lutea, maculis nigris \(\left.\begin{array}{c}\text { notata; caudabreviori Eo crafliori. }\end{array}\right\}\) The yeliow Snake.
This reptile is very common in the country parts of \(\mathcal{F}\) amaica, and runs frequently from eight to fixteen or twenty feet in length; they have a horny protuberance on each fide of the anus, which probably affitts in the acts of copulation, and may, upon occafion, help them in climbing trees, which they often do, and with great eafe.

The yellow fnakes move but flowly, catching their prey more by ftealth or chance than by agility; but when they fix themfelves in a tree, their length generally enables them to catch every thing that paffes underneath; for they, wind the tail-part round fome limb, and fretch the fore part down, in which fituation, it is affirmed, they have been fometimes known to attack both men and beafis; but I could not find any credible authority for this affertion.

Many of the negroes eat thefe reptiles, and look upon them as a rich and delicate food; but they generally preferve the fat, which is confidered as a good refolutive, and highly recommended for fuch purpofes:
\(\left.\begin{array}{c}\text { COLUBER I. Major fufca lutco fubvariegata, caudả } \\ \text { tenuiori. }\end{array}\right\}\) The large black Snake.
I have feen only one of this fort, which was about twelve feet in length; it was more flender and active than the yellow fnake, and the tail-part more tapering and longer.

COLUBER 2. Minor nigra, ventre albido. The fmall black Snake.
This little reptile is very flender, and extremely active; it is generally from two feet and a half to three feet, or better, in length; and thought, by fome people, to be venomous; but this notion prevails chiefly among the negroes, who have many idle prejudices among them. I have never heard of any damage done by them, though they are frequent in mort of the colonies, and will often erect the fore-part of their bodies, and ftand in very daring poftures.

\section*{S E C T. II.}

\section*{Of Lizards, and Reptiles of the Lizard Tribe.}

I chofe rather to defcribe this creature under its antient name, than to give it among the lizards, from which it feems to differ in many effential particulars. It grows to a monftrous fize, and is frequently obferved from fourteen to twenty four feet in length. It moves very flowly on the ground, and generally feeks its prey in water ; but when any fmall animals come within its reach, it feizes them with great eagernefs, and foon deftroys them. It is quite tongue-lefs, but the place of this member is fupplied by a fmall elaftic valve fituated between the joints of the jaws, in the bottom of the mouth, which covers and clofes up the fwallow occafionally: both the jaws are mobile, efpecially the upper one, and well befer with large conic and moderately compreffed teeth.

The creature has a ftrong mufky fcent, by which it is frequently difco-

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vered at a diftance; and its eyes are like thofe of the cat and fhark, the pupilla or fight, which is very narrow, running flraight forward. They are obferved to live for many months without any vilible fuftenance, which experiment is frequently tried in Famaica, by tyeing their jaws with wire, and putting them, thus tyed up, into a pond, well, or water-tub, where they often live for a confiderable time; but they rife to the furface, from time to time, for breath. On opening this animal, the ftomach is generally found charged with flones of a pointed oval but flatted thape, to which they feem to have been worn in its bowels: doubtlefs, it fwallows them not only for nourihment, which is evident from the attrition and folution of their furfaces, but alfo to help its digeftion, and to ftir up the ofcillations of the flothful fibres of its fomach, as many other creatures do. Some people think it fwallowed them to keep the eafier under water at times; but how reafonable foever this conjecture may feem to fome people, it will not take with fuch as are better acquainted with the nature of aquatic animals.
It is like the lizard in the fhape of the body, and the whole furface is covered over fomething like a tortoife; but the fkin may be more properly faid to be hardened into a horny fubftance from fpace to fpace, than to be furnifhed with real fcales. The tail is oblong, pointed, and nearly quadrilateral, and the fcales or protuberances at the two upper angles rife upright, and are fomewhat of a lanceolated form. They lay their eggs in the fand; but thefe are fomewhat larger than the eggs of a goofe, and, as they are pretty tranfparent, readily fhew us the firft formation and growth of the animal, in which we obferve the whole mafs of the femen mafculinum, which lies in the white round the middle of the egg, turn gradually into the young one. Analogy may, hence, induce us to think, that the formation of the human fpecies from animalculæ is but a phantom; and that we, like other creatures, are formed of more confiderable mafles.

\section*{LACERTA 1. Major, fquamis dorfin lanceolatis erectis, enu-? cba ad extremitatem caude porrestis.
d of Davies, 69. The Guana. The great Lizard of Davies, 69.}

This reptile, like the reft of the lizard kind, has a long forked mufcular tongue, divided toes, and a fcaley fkin. It is a native of moft parts of America, and generally an inhabitant of the woods; but, like moft of the tribe, lives a very confiderable time without food, and changes its colour with the weather, or the native moifture of its place of refidence. I have kept a grown Guana about the houfe for more than two months; it was very fierce and ill-natured at the beginning, but after fome days it grew more tame, and would, at length, pafs the greateft part of the day upon the bed or couch, but it went out always at night. I have never obferved it to eat any thing, except what imperceptible particles it had lapped up in the air; for it frequently threw out its forked tongue, like the chameleon, as it walked along.

The flefh of this creature is liked by many people, and frequently ferved up in fricafees at their tables, in which flate they are often preferred to the beft fowls. The Guana may be eafily tamed while young, and is both an innocent and beautiful creature in that fate.

LACERTA 2. Major cinerea maculata. The great spotted Lizard of Edw. 203.
This creature is frequent in moft parts of America, and remarkable for its fize and fpotted fkin: it changes its colour like the reft of the clafs; and (I know not by what chance) is more apt to have a double tail than any of the reft.

\section*{O F J A M A I C A.}

\section*{LACERTA 3. Media fquamofa, corpore \(\mathcal{E}\) caudâ \(\left.\begin{array}{c}\text { oblonra-fubquadratis, auribus ma- }\end{array}\right\}\) The Galley-Wafp. See oblongo-fubquadratis, auribus ma- \(\left\{\begin{array}{l}\text { The Galley-Wafp. Se } \\ \text { joribus nudis. Gaz. } 69.13 .\end{array}\right.\)}

This reptile is moft frequently met with in the woods, but is fometimes obferved in low marhy places alfo. It is generally of a dirty colour, clouded with crofs ftripes of a lighter or darker hue, and changes often from that to a fine golden yellow. It is reckoned the moft venomous reptile in thefe illands; and, it is faid, no creature can recover from the bite of it; but tho' this is a general affertion, and told by every perfon, I could never learn any pofitive fact from perfons worthy of credit. The creature's teeth are fhort, even, and fixed, fo that I imagine the poifon, if any there be, muft lie in the faliva. The tail is longer than it is generally reprefented in cuts, and tapers gradually to the end. It is generally from one to two feet or better in length.

> LACERTA 4. Minor, caudâ longiori attenuatâ, fafciâ The fmall Ground fubviridi in utroque latere. Lizard.

This creature is very innocent, and changes its colour lefs than any of the others. It is the moft common of all the forts, and keeps in holes in the ground during the night; but is always out by day to feek for food. It is very frequent in all the fugar-illands, and the moft common prey of the cats, in thofe parts of the world.

\section*{LACERTA 5. Minor viridis, caudâ Squa-\} The Guana-Lizard; and blue mis erectis criftata. \(\int\) Lizard of Edw. p. 5.}

This fpecies is common in Yamaica, and keeps generally of a beautiful green colour; but it changes its hue with its feat, like the reft of the kind, and feems more ready than any of them in all its mutations; for it affumes the colour of every place it moves to very foon. The whole body is flightly fcaled, but thofe in the upper part of the tail are erected into a fmall indented creft, fomewhat like the Guana. It feldom exceeds nine or ten inches in length, and is very innocent.

\section*{LACERTA 6. Minor, corpore depreffo \& utrinque at-? \\ tenuato, lateribus fafciá longitudinali al-\} The Wood-Slave. bidâ ventri approximatâ notatis.}

This fpecies is generally thought to be venomous, but I have never known an inftance of it, tho' they are common in moft of the inlands where I have been. They are generally of a flatted oblong form, and taper gradually and almolt equally towards both ends. I have feen thefe creatures, when ftuck with a fork, or other weapon, to the wall, throw off all the tail by joints, one, two, or three at a time.

\section*{LACERTA 7. Minor fubcinereo-mifcella, caudâ tenui- \(\}\) \\ The Houfe-Lizard.}

This feecies feldom exceeds five or fix inches in length, and is of a delicate llender make. The tail is long and tapering, but generally more or lefs erect in its pofition. I have fometimes put one of this fort under a large feaking-trumpet, and on fhaking the machine, it was fo terrified that it was hardly able to ftir for a confiderable time after. I have alfo obferved that, in fuch places they always turn of a mottled black colour; and, on being removed to a tuft of wet grafs, change again to a green colour. This fpecies is of a delicate make, and catches flies very readily. It is frequent about all the fettlements in the country parts of Famaica.

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\section*{LACERTA 8. Minima Jubfufca. The fmall Houfe-Lizard.}

This creature is very common about all the houfes in the inland : it feldom exceeds three inches in length, but is not of fo delicate a thape as the foregoing. It climbs the furface of the fmootheft glafs with eafe, and lives much upon fics; but it is not fo apt to change its colour as the other forts.

It is obferved that, in all thefe fpecies, efpecially the fmaller forts, if the tail be cut off, it fhoots a-new in fome time, and often attains the natural fize and figure.

This fpecies is generally about ten inches, or better, in length, of a delicate flender make in proportion, and very beautifully fpotted. I had one of them from the coart of Guinea.

> CHAMELEON 1. Major cinereus, cauda in Spiram involuta, pedibus pentadancylis unguicula- The large grey Chameleon. tis, digitis duobus tribufque coadnatis \& oppofitis.

I have taken the liberty of defcribing this creature alfo under its ancient appellation, having feparated it from the lizard kind on account of the peculiar form of the head, and difpofition of the toes; which, with fome other remarkable particularities both in its mechanifm and genus, diftinguifh it fufficiently from the reft of the tribe.

The head is large and boney in all the fpecies of this genus; the fockets of the eyes very deep; the jaws befet with teeth; and the bone that covers the forehead ftretches a good way back over the neck and fhoulders. The body is moderately large, and thicker than moft of the lizard kind, in proportion to the length. The tail winds downwards in a firal form ; and the toes are difpofed like thofe of parrots, in two oppofite bundies, which enables it to hold itfelf very fteddily on the fmaller branches of trees, where it chiefly keeps.

This fpecies is a native of Africa, and was brought to Famaica from the coaft of Guinea. It is extremely flow in its motion, though it chiefly fupplies itfelf with food from the molt nimble tribe of infects (a); but whatever nature has denied it in agility, feems to be abundantly fupplied in mechanifm; for its flow and eafy motion renders it but little fufpected at a diftance; and when it comes within a certain fpace of the object, it Aretches out its tail, poizes its body, and fixes itfelf fo as to meet but feldom with a difappointment in its attack: when all is ready, it uncoils iss long, flender, mufcular tongae, and darts it, as it were, with fuch unconceivable fwiftnefs that it hardly ever fails of its prey. But though the nownefs of its motion alone would naturally prevent any fufpicion in thofe agile little bodies, while it keeps at a diftance, it adds another piece of mechanifm to the former, and changes its colour conftandy with its flation, putting on the fame hue and complexion with every fprig or branch, \(E_{0}\) c. on which it fixes itfelf.
(a) Elies,

\title{
\(O^{\circ} \mathrm{F} \quad \mathrm{J} A \mathrm{M} A \mathrm{I}\) C A.
}

\section*{S E C T. III.}

\section*{Of the Tortoife and Turtle kind.}

TESTUDO i. Major, unguibus utrinque qua- \(\}\) the Hawk's-bill Turte.
The flefh of this fpecies, though frequently ufed in all parts of America, is not fo delicate nor fo much efteemed as that of the green turtle; but its fcales (a) are the moft valued, being generally the thickeft and beft coloured.

\section*{TESTUDO 2. Unguibus palmarunn duobus, plantarum \(\}\) jingularibus. \(\}\) The green Turtle.}

This fpecies is frequent on the coafts of Gamaica, where it is often caught; and generally bought and fold, like beef, in all the markets. It is delicate tender food while young; but as it grows old it grows more tough and griftly, and is not fo agreeable to the ftomach in thofe warm countries; the juices, however, are generally reckoned great reftoratives, and often obferved to heal and fmooth the fkin in fcorbutic and leprous habits; nay, is faid to cure even the moft obftinate venereal taints.

The fcales of this fpecies are ufed like thofe of the foregoing, but they are neither fo thick nor fo beautifully clouded.

\section*{TESTUDO 3. Unguibus utrinque binis acutis, Jquamis dorf quinque gibbis. \\ Teftudo, Ec. Cat. ii. t. 39. \\ The Loggerhead Turtle.}

This fpecies is not very common about Gamaica, and feems to be rather a native of more northern climates, being generally found in greateft abundance about the Weftern Ifands and the neighbouring ocean. The head is of a moderate fize, but the-mouth is wider, and the bill longer and ftronger than that of the other forts. The kk in about the neck and the infertion of the fins is rugged and warty; the back part of the fhell more gibbous and prominent than in the other fpecies; and each of the five upper fcales terminates in a pointed bunch behind; but all are pretty thick and well coloured: in the whole, it is extremely like the other fpecies.

The Turtle from which this defcription is made, was taken up near the \(W_{\text {eftern }}\) 1/aands many leagues out at fea. The back was covered with mofs, and barnicles; and the crab, Tab. 42. f. I. was found Aticking in the wrinkles about the anus; the guts were full of Galatea's and Medufa's, which, with a few branches of fome fea-weeds, made up all its nourifhment; yet it was fat and rich, but of a ftrong, rank, filhey tafte. I eat fome, and it agreed pretty well with my fomach. It is a flrong incentive.

> TESTUDO 4. Minima lacultris, unguibus palmarum,? quinis, piantarum quaternis, telia\}
deprefla The Terrapin. deprefla.

'This fpecies is pretty frequent about all the lagoons and moraffes in Famaica, and lives chiefly among the weeds that grow in thole places. The body is generally of a compreffed oval form, and feldom exceeds eight or nine inches in length. It is often ferved up at gentlemen's tables in that illand, and looked upon as delicate wholefome food by many people.

\footnotetext{
(a) Thefe lie contiguous to ench other, on the furface of the flrong boney trunk that inclofes the entrails of the creature.
}

This fpecies is a native of the main-land, but frequently imported to Famaica, where it is often common. The fhell is very deep, and often above a foot and a half in length; but the furface is generally divided into oblong hexagons, yellow in the center, and radiated with flender even ftreaks from thence to the circumference.

\section*{S E C T. IV.}

\section*{Of the Frog kind.}

RANA .. Maxima compreffa mifcella. Curruru. Pif. \(29^{8}\).
\(A n\), Rana tereftris. Cat. ii. t. 69. An, Rana dorfo pullifero. L.S.N.

The Toad.

This creature is very common in the inland parts of \(\mathcal{F}\) amaica, where it keeps a continued croaking at night, but lies ftill during the day. It is large and thin, climbs with eafe, and lies fo flat, wherever it is, that an attentive eye alone is able to obferve it.

RANA 2. Minima palmis © plantis fifis.
This little fpecies is frequent in Moisntferat, and may be fometimes feen in \(\mathcal{F a}\) maica. It is a very active creature, but never furpaffes an inch and a half in length.
\(\qquad\)

\section*{C H A P. IV. Of \(B \quad I \quad R \quad D \quad S\).}

THOUGH the individuals of this clafs are very numerous, and all furnifhed with proper limbs to convey them from one region to another, either by land or water, we feldom obferve the fame in any country or kingdom, Many forts, I muft acknowledge, are of a vague difpofition, and alike the inhabitants of very remote provinces, among which we often find thofe that we leaft expect (a); while others of a different nature, which are alfo the inhabitants of diftant countries at times, feck different regions wih the different feafons of the year, and return as regularly the enfuing changes. This might naturally induce a traveller to divide the birds of every country into the Refilentiaries, the Polyclimacoines, and the birds of paffage; but, as Naturalifts, we niuft endesvour to divide them into orders and genera more appropriated to therr natural dippcitions, and the peculiar forms of particular parts; for they bave a more general uniformity in their habits and appearances than any other tribe of beings; and the ules to which many of them are put, either for food or pleafure, oblige us to be as clear as poffible both in the diftribution and characteriftics of the individuals: and the better to avoid all

\footnotetext{
(a) Who would expect to find the Moor-hen an inhabitant of fo difant a country as America? and yet there is hardly a fowl more common in thofe parts. a zJUC.
}
manner of confufion on this occafion, I thall divide the following chapter, in which we give fome account of moft of the birds now commonly feen in and about Yamaica, whether natives or imported there from foreign parts, into eight fections. The Ift of thefe will contain the fmaller birds of the granivorous and frugivorous tribe, having thort conic bills that taper very regularly to a tharp point, feld m exceeding half the length of the middite digits: and in the ad we will give the birds very nearly of the fame fize and nature, wih lengthened, flender, conic bills. The 3 d will comprehend the larger granivorous tribe with robuft and moletately arched conic bills; well-proportioned limbs, and open claws: and in the 4 it we fhall give thofe that have ftrong crooked beaks, and open claws whofe digits are generally furnithed with ftrong piercing nails. The 5 th will contain thote that have broad ftraight bills of a moderate length, and generally flated more or lefs on the upper fide; proportioned legs, and open claws. In the 6th we thall give an account of fuch as have open claws and long flender bills, nearly of a length with, or rather longer than the middle digits, arching aud tapering very moderaitly from the bale to the top. The yth thall contain thoie that have long and flender, or robuft and angular ftraight bills, long legs, partly naked thighs, and divided claws; and generally refort to watery places: and in the 8 wh we thall give thofe that have webbed feet, and live chiefly in water.

\section*{S E C T. I.}

Of the finaller frusicorous and granivorous Birds, with fhort and pointed conic bills, which nearly equal balf the longth of the middle digits.

I RUNDO 1. Minima tenuior nigra, dorfo cano. The fmall black Swallow.
HIRUNDO 2. Major fubfufca mincella, macula alba Jpbre-) rica in utrâque ala. Hirundo, E'c. Cat. iit t. 8. The leffer Goat-fucker of Edw. \$. 63 .
This bird is about the fize of a fparrow-hawk, and of a darkin, mottled, and ftriped colour. It is feldom feen; but when it flies it takes a thoufand turns in its flight, which generally is very lofty. The bill is very fhort, but thicker than is common to the kind in general, and a little arched.

HIRUNDO 3. Nigramedia, collario albo. The Martin-Swallow.
HIRUNDO 4. Mediâ minor fufca, pectore albicante. The Houfe-Swallow.
All thefe fpecies are very diftinct, and generally go in feparate parcels; they are all frequent in the different parts of the inland. The houfe-fwallow varies fometimes, for it is often without any white in the breaft:

\section*{LOXIA I. Major rubra.
Coccotrauftes rubra. Cat, t. 38.}

This bird is frequently imported here from Soutb Carolina, where it is a native: it is the largeft bird I have feen of this kind, and has a pretty note.

\section*{FRINGILLA 1. Minor pulla, fronte \& uropi-- \(\left.\begin{array}{c}\text { gio ruffecentibus. }\end{array}\right\}\) The Mountain Sparrow*}

This is a native of Jamaica, but keeps chiefly in the woods, where it is frequent enough. I have rot had an opportunity of examining it clofely hitherto.

FRINGILLA 2. Minor fuffo © albo friation variegata. The Grafs-Bird.
FRINGILLA 3. Fuffo-divacea minor. The Sugar-Bird.
FRINGILLA 4. Subfulca, capite varie Ariato, Ariis \(\left.\begin{array}{c}\text { quandoque rubris quandoque favis. }\end{array}\right\}\) The Gold-finch.
This little bird is common in famaica, and very like the European goldfinch.
\[
\begin{aligned}
& \text { FRINGILLA 5. Corpore albicante, alis \& caudavirefen- }\} \text { The Canary-Bird. } \\
& \text { tibus. D. H. }
\end{aligned}
\]

The Canary-bird is daily introduced to \(\begin{gathered}\text { famaica, where it is kept by all forts of }\end{gathered}\) people: It thrives well in all cool and airy houfes, and it feldom fails to give the purchafers great fatisfaction.

MOTACILLA I. Subolivacca, yulâ, peçore © remigibus)
exterioribus luteis.
Larus luteus. Cat. I. t. 63.
The yellow Fly-catcher of Edw. p. 5 .
The Ortalan of Famaica.

This is a bird of paffage.
\[
S E C \text { T. II. }
\]

Of the fmaller granivorous and vermivorous Birds, with conic and moderately flender lengtbened bills.

Note, The bills of thefe birds are fomewhat tho' little fhorter than their middle digits.
COLUMBA i. Carulefiens maculàa alarum duplice nigrâ.? The Houfe Pigeon:
J. Hill.
COLUMBA 2. Silvatica major nigro-ccerulefcens. The Mountain Pigeon.
COLUMBA 3. Major nizro-ccerulefens, caudâ \(\left.\begin{array}{c}\text { fafiatâa }\end{array}\right\}\) The Ring-tail Pigeon.
COLUMBA 4. Vertice depreffo albido.
Columba capite albido. Cat. t. \(25^{-}\)
This fpecies vifits the lower lands very frequently, where it feeds upon the feeds of the red mangrove, and wild coffee-berries: but the two other forts keep chiefly in the woods, and feed upon other berries, the produce of the more remote inland parts.

> COLUMBA 5. Subfufca media, iride croceo, palpe-
> bris impinnis cceruleis.
> The brown Indian Dove of Edw. \(\mathrm{t} \cdot 76\). \(\quad\) Sthe white-winged Dove.

This bird has a good deal of white both in the belly and wings, and the tail is tipped with white underneath.

COLUMBA 6. Media fubfufco maculata, oculis nigris. The Pea-Dove.
This bird makes fo loud a cooing in the woods, that it is often heard at a confiderable diftance. It has a few white feathers in the wings.

\section*{O F J A M A I C A.}

COLUMBA 7. Media, ventre albido. The white-bellied Dove,
COLUMBA 8. Pwpures-pesticens, iridi-7 The Mountwin With, Mountain bus Es palpebris coccineis. \(\}\) Patridge, or Mountain Dove.
This bird is ching an inhabitant of the woods, but not vary common is any part of Famaica; it is about the fize of the Ped-Dove, and muthed about the breaft.

\section*{\(\left.\begin{array}{c}\text { COLUMBA 9. Minor fubcinerea, peebore maculáoblon- } \\ \text { sâ nigrâ infrito. }\end{array}\right\}\) The Birbbary Dove.} COLUMBA 10. Subfifca minima, maculis ni- The Ground-Dove of Cat. ridibus mifcellis. \(\quad\) t. 20. and of Edw. P. 5 .
All thefe fpecies, except the firft and ninth, are natives of afamaica, and reckoned very rich and delicate meat; elpecially the fecond and third, which excel in flavour, and add fomething of a bitter to the tafte. Thoie that live in the woods are not often uled at inferior tables, being only the produce of the fowlers labours: but fuch as refort to the lower lands are very common in the markets, being generally taken in large bafkets, and the work of every negro that pleafes to toil for them.

They are all wild, and feed on moft forts of wild grain, particularly the fects of the different forts of Croton, but uch as live in the wonin, feet ciacfly on the
 flavour in the feafon.

TETA I. Subrufefcens pedibus longioribus rubris. "The Mountain-Cock.
This bird is about the fize of a Pea-Dove; but its legs are mach longer and of a red colour. The bull is butar than half thelonath of the mume digt, feright, pretty flender and conic, a little compreffed on both fides, with two obloner in fal apertures not far from the bafe. The head, body, and wings are much like thofe of a dove or fmaller pigeon, but there is no wax about the upper part of the bill. The tail is thort, and feems fometing luke that of a duck, but a liad.agur in proportion. The legs are lon', faled, and red; and the digits four, whoreof one ftands behind, and three befoe: they are pretty long, fouled, and red, with tharp flender arched nails. The apex of the tongue lacerated.

I was favouted with this curious bird by Mrs. W allen.

\section*{TURDUS 1. Niger, rolero palpebris pedibufut fiteis,? alis macula oblong à alba inforgitis. \}. The E'uckbird.}

This hird is a native of Fanaica, and not uncommon in the cooler wouds, where it chietly lives. It differs but litite, cither in fize or make, from the European Blackbird.

terioribus albidis, alis fafai tranf, The Mock-bird or verfalivelaid notatis.

Nugutingale.
The Jamaica or lefer Mock-bird of Edwards; t. \(7^{9}\).
This cerainiy excels all other birds both in fwectiveis of melody, and variety of notes. It \(\mathfrak{l i}\) gs often with extafy; and in its ratares I ave frequently oberved it fly upint ime yards from its fand, and ran ha dong down to the Came place ag in. I have feen them ofter perchon fome convenient uree near the houfes in the Savannas, and pour forth their hifio nuts for many minutes together, is if they
had been been confcious of the pleafure they gave: and you may frequently obferve the notes anfwered from the neighbouring woods on thofe occafions, but then they generally liften and fing by turns.

Thefe birds are feldom kept in cages, which I fuppofe may be owing to the negligence of the people, who feldom like to keep any thing that is common. They fay they never thrive when confined; but, if this be the cafe, it muft be owing to their want of knowing the proper food of them, which is only the oily kernel of the hoop-withe berries and fmall bird-peppers. It is extremely like the Mock-bird of North America in fhape and fize, but they differ a little in colour.
\[
\begin{array}{lllll}
\mathrm{S} & \mathrm{E} & \mathrm{C} & \mathrm{~T} . & \text { III. }
\end{array}
\]

Of Birds of the larger granivorous tribe with thick, conic, and moderately arched bills, proportioned limbs, and divided claws.

PAVO .. Caudâ longà, plumis uropigii pulcherrimis. The Peacock.
Thefe beautiful birds have been introduced to famaica fome years ago, and are now common at moft of the gentlemen's feats there ; but they do not breed well in climate.

CRAX 1. Niger, iride Jubfufco-croceo, ventre albido.
Gallus Indicus. Slo. Hift.
The Curaçoa Bird.
This bird is of the fize and make of the Pea-hen, but the legs are longer and the tail narrower and more producted. It has a very beautiful creft of frizzled or curled feathers along the crown of the head; they are fomething like thofe in the tail of a drake, and rife in fucceffion one beyond another in two ranges which are nearly intermixed. The fkin is pretty loofe over the head, and continues fo over the thickeft part of the bill, where it generally is of a yellow colour: the eye is full, round and blackih.

MELEAGRIS I. Caudam erigens. The Turkey.
Thefe birds breed very well in fome parts of \(\mathcal{F}\) amaica; but they require a good deal of care and a moderate climate while young.

GALLUS 1. Clamofus maculis minoribus orbiculatis va-? rius, criftâ corneâ, caudá borizontali. Galina Afficana Jonft. Ecc. Barr.
\(\left.\begin{array}{c}\text { GALLUS 2. Clamofus maculis minoribus orbiculatis? } \\ \text { varius, crifâa corneâ, caudâa borizon- } \\ \text { tali, pecfore albo. }\end{array}\right\} \begin{gathered}\text { The white-breafted } \\ \text { Guinea-Hen. }\end{gathered}\)
Both thefe fpecies are very common in Famaica, and breed often in the woods, where they are frequently found wild. They generally lay from twenty to eighty or a hundred eggs, and raife a great number of young at a time.

GALLUS 3. Caudâ erecta, crifâ carnea. The Dunghill Cock.
There is a great variety of thefe birds in Famaica, where they are eafily raifed, there being a great variety of fine grain that grows naturally there, and the climate both pleafant and favourable: thefe, with turkeys, Guinea hens, and ducks, fupply the greateft part of the tables of that illand, efpecially in the country parts, where they cannot be fo well fupplied with butchers meat; and no people, for this reafon,

\section*{O F J A M A I C A. 47I}
take a greater care of their breed. At prefent, you may obferve the following varieties there, viz.

GALLUS. 1. Pugnax. 2. Licinus. 3. Minor Banticus. 4. Maximus ovis fublutefcentibus. 5. Rectricibus carens.
But the chicken of all the fpecies, as well as thofe of the turkeys and Guinea-hens, are extremely fubject to the yaws, a diforder that breaks out in little warty ulcers about the gills and jaws, which deftroys great numbers of them.
\(\left.\begin{array}{c}\text { TETRAO 1. Lineâ fuperciliarum } \\ \text { albấ. }\end{array}\right\} \begin{gathered}\text { The Quail, commonly called a Partridge } \\ \text { in famaica, }\end{gathered}\)
Thefe birds were introduced there from North America, and fet loofe in many parts of the ifland; but it cannot be expected that they will increafe much, any more than other birds that nefle upon the ground, in a country that abounds with frakes.
\[
\begin{array}{lllll}
\mathrm{S} & \mathrm{E} & \mathrm{C} & \mathrm{~T} . & \mathrm{IV} .
\end{array}
\]

Of Birds that bave frong crooked bills, and open claws whole digits are generally furnibed with Arong arched nails.
Note, Moft of thefe birds are carnivorous, though many live entirely on fruit and other vegetable fubftances: they are all of the hawk, vulture, parrot, and owl kind.

\section*{F} ALCO I. Major fufco undulatim mijcellus, ventre The Mountain-Hawk.
This bird is a native of Gamaica, and lives chiefiy in the cooler mountains; it is about the fize of the European kite, and a bird of prey, living chielly on young birds and lizards, \(\mathcal{E}_{6}\).

\section*{FALCO 2. Minor rufefcens, undulatim mifcellus. The Sparrow-Hawk.}

This little bird is generally about the fize of our fmalleft pigeons; it is very active, and a bird of prey, living chiefly on eggs and the fmaller lizards. It is very common in the Windrward Iflands.

\section*{FALCO 3. Maximus fubcinereus crifatus. The Oronooko Eagle.}

This bird is very large, and a native of thofe countries eaftward of Santa Martha, on the main continent ; but is often brought to \(\mathcal{f}\) amaica by our traders.

> VULTUR 1. Pullus, capite implumi cute craffá rugofá )
> ultra aperturas nafales laxatâ tecto.
> Vultur Gallina Africance facie. Slo. H. t. 254.
> The Carrion-Crow. The Turkey-buzzard of Cat. t. 6 .

This bird is rather fmaller than a turkey-pout, which it refembles very much both in the form and appearance of the bead; the apertures of the nofe are very large, ftretched lengthways, and lined with a loofe red flin that covers all the upper part of the beak. We know of no other creature that has the fenfe of fmelling fo exquifite as this; it generally flies very flow, and with its wings expanded, waving of one fide and the other as it moves againft the wind; and it foon difcovers by the fubtile exhalations where any carrion lies. It is of fervice to the country in general, by preventing the putrefaction (and infections arifing therefrom) of fuch creatures as die among the buthes, and the flops that are

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generally thrown carelenly into the ftreets, Ecc and the leginative body of the illand were fo fenfible of this, that they have carefully provided for its fufety, as a bird of general ufe and benefit to the itland.

Theto buds are of a very alkuleicent naure, and find mucin in a few minutes after they are killed; they are no great breeders.


This beautiful bird is a native of 'Famaica, tho' feldom catched there; moft of thofe that are generally feen about gentlemen's houfes, being introduced there from the main, where they are more common. I have feen one or two of thefe birds wild in the 'woods of St. Amn's, and yet keep fome of the feathers of one that was killed there by me; but they are very rare in the illand, and keep generally in the mont unfrequented inland parts.

PSITTACUS 2. Maximus coccineo varius,
coudâ producta.
Pfittacus cauda cuneiforni, temporibus nu- The red Mackaw of Edwards. dis rugo/is. L.S.N.
Pfittacus maximus Jonf. Barr.
This beautiful bird is as large as the foregoing, and of a more gandy thongh not fo agreeable an appearance. It is not a native of \(\mathcal{F}\) amaica, but they are frequently brought there from the neighbouring parts of the main, wheie they are pretty common.

PSITTACUS 3. Minor viridis caudâ pro- \(\} \begin{gathered}\text { durda. }\end{gathered}\)
This is a native of \(\mathcal{G}\) amaica, and often proves good; but it is not reckoned a hardy bird.

PSITTACUS 4. Medius viridis luteo quandoque variuss, \} The Mukecto-fione
infina fronte nigra.
Parrot.
This fpecies comes from that part of the main continent commonly called the Mufketo-foore; and generally proves better than any of the other forts, if taken while young. The eyes are black, as well as the prominent waxen part between the forehead and the bill; and as the feathers, which are all green at firft, fall off, they are commonly fucceeded by others of a yellow colour.

PSITTACUS 5. Medius viridis luteo quandoque varius, \(\left.\begin{array}{c}\text { angulis alarum rubris. }\end{array}\right\}\) The Main-Parrot.
PSITTACUS 6. Medius cinereo cerrilefcens, cauda \(\left.\begin{array}{c}\text { rubra. }\end{array}\right\}\) The Guinea Parrot.
This bitd is often brought to 'famaica in the Ajrican hips, and generally turn out well when taken up young, which may be known by the hue of the iris, that part of the eye being generally of the colour of the down of the cotton-tree, which is a faint grey at firft; but it changes with age, and runs through all the ftages to a milk white, and from thence to a yellowih white, which is its flanding colour whea the bird is old.

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PSITTACUS 7. Medius viridis, oculis Ev raftro ni- \(\left.\begin{array}{c}\text { gris. }\end{array}\right\}\) The \(\begin{gathered}\text { Iamaica Parrot. }\end{gathered}\)
This is a native of Famaica, and, I acknowledge, of no great beanty; but it often proves a fine bird. There is a variation of it with a yellow bill, which is more liked.

\section*{PSITTACUS 8. Medio minor, viridi-carule- \(\left.\} \begin{array}{c}\text { fiens. }\end{array}\right\}\) The Santa Martba Parrot.}

\section*{PSITTACUS 9. Medio minor, pectore © ventre rubello mi/cellis, vertice albo. \(\}\) \\ An, Pfittacus viridis capite albo, Barr. L. S. N. ?}

This is a very pretty bird, and frequently turns out well.
PSITTACUS 10. Minimus viridis pectore rubro. The Parroket.
PSITTACUS 11. Minimus totus viridis. The green Parroket.
Both thefe birds are natives as well of Famaica as of the neighbouring parts of the main continent; and, like the reft of the kind, feed chiefly on fruit: but they are alfo great lovers of corn; which frequently brings them to the fowlers toils; which are feldom any other than fmall pieces of flick daubed over with birdlime, or the refinous liquid that diftils from the gum-tree, fet up in convenient places.

Parrots are generally reckoned very delicate meat, and eat not unlike pigeons; they are very common in the woods of Famaica, and frequently ferved up at gentlemen's tables in all the country parts of the illand.


\section*{STRIX 2. Capite levi, plumis grizeo-albidis, labiorum ) pilofos. \\ Noctua minor ex albido \&f fufco varia. Slo. H. 296. The Screech-Owl, t. 255. \\ Strix filvatica major pulla. Barreri.}

Both thefe birds are very frequent in the woods; but the latter fort come often down to the low lands, and frequently deftroy the young pigeons in the pigeonhoufes. Both are carnivorous, and feed upon all manner of infects; they are much of a fize when full-grown.

\section*{S E C T. V.}

Of Birds that have large fraight bills, of a length nearly equal to the middle digits, and moderately flatted above.

CORVUS 1. Garrulus ater. The gabbling Crow.
This bird is a native of 7 amaica, and very common in the cooler inland woody parts, though feldom feen in the more open Sarannas. They are extremely cautious and watchful, very noify, and feem to imitate the founds of moft fyllables in

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every language, in their gabblings. They feed generally upon fruits and other vegetable productions, and are frequently ferved up at table while young. The bill is about the length of the middle digits, ftraight, and flightly compreffed at the fides; but the upper part is fomewhat longer than the under une. In the natural pofition of the bird the wings ftretch beyond the middle of the tail.

\section*{CROTOPHAGUS 1. Ater, roftro breviori com- \\ preffo fuperne arcuato-cultrato. \& The Savanna Blackbird. The Savanna Blackbird of Cat. app. t. 3. S}

This bird is about the fize of a Barbary Dove, or fomething larger, black all over, and fplay-footed like a parrot. It has a long fquare tail, a broad comprefied bill, and a fhort thin tongue; but the beak, or upper part of the bill, is flatted on the fides, arched and fharp above, and ftraight at the edges below. They live chiefly upon ticks and other fmall vermin; and may be frequently feen jumping about all the cows and oxen in the fields: nay, they are often obferved to fly on their backs, unlest they lie down for them, which, if much troubled with ticks, they generally do when they fee the birds about them; but if the beaft be heedlefs, they hop once or twice round it, looking very earnefly in the face every time they pafs, as if they feemed to know that it was only requifite to be feen, to be indulged. They are very noify birds, and one of the moft common forts in all the paftures of Famaica: their flight is low and hort.

\section*{PICUS I. Pullus albo variegatus, vertice coccineo, lin-? \\ gua ad apicem barbata. \\ The Wood-pecker. Picus niger crifa coccinea. Barr. 143.}

I do not know whether it be peculiar to this fpecies to have a flender bearded point to the tongue, not having an opportunity of examining many of the fort; but, if not, it is a very peculiar circumftance omitted in the character of the genus. The bird is nearly of the fize of a Barbary Dove, with a long bill and fhort rounded wings. The tongue is very thin and flender at the top, and furnihed with feven or ten flender fliff briftes on both fides; but below it is round and mufcular, like a worm, and terminates in two long mufcular and tendinous branches, which enable it to ftretch to a confiderable length, and contract again to its ufual limits, at pleafure; running in fo many loofe vaginæ, on both fides of the fkull, to the fore part of the forehead, where they are fixed near the bafe of the bill. The toes are divided into pairs, as in the reft of the kind ; and furnifhed with fharp, arched long nails, which enables it to hold to the trunk or limb of any timber or tree in whatever fituation it pleafes to fix itfelf. It generally lights on decayed trees, and, on knocking with its bill, foon finds by the found where it is hollow, and where the thell is thinnelt over the cavity: juft there it fixes, and by the mufcles of the neck fers the bill to work fo quick that the founds feem to fucceed one another as clofely as the half notes in a quick-played jig. It foon makes a hole for the bill to get in, and then picks out whatever it pleafes with its tongue; but if the fpoil fhould be too remote, it goes again to work, and foon makes a paffage for the body. It neftes alfo in fuch places, and thereby generally fecures its young from both fnakes and hawks. It is a very beantiful bird; but the feathers of the tail, which are always fixed againft the body of every limb or tree it works at, the better to fupport itfelf when in action, are gencrally much worn, and look like fo many naked flumps.

The bill of this bird is ftraight, tapering, obtufely triangular, and much longer than any of its digits: it is flatted on the fides, and pointed, in the form of a wedge, at the top. The mouth ftretches pretty high, and the nafal apertures are rounded, low, and covered. The eyes are fmall and black, and furrounded with black eyelids. The feathers about the eyes, nofe, ears, and throat, are whitioh;
\[
\text { O F J A M A. I C A. } 475
\]
but from the middle of the forehead, or a little lower, to the middle of the neck, they are of a fine fcarlet colour and fpread gradually as they defcend. The feathers of the lower part of the neck, back, rump, and thighs, are blackith, and variegated with narrow tranfverfe white lines, towards the top. The wings are blackifh, and almoft of an even colour. The breaft and belly is of an olive culcur, mixed with a little fcarlet between the thighs, which are pretty long in proportion to the reft of the body. The legs are thort, about the length of the longeft digits, and fcaled. The toes are placed two before, and two behind; but thofe on the outfide, which are almoft even, are the longeft: the feathers of the tail are pretty ififf.

BARISTUS I. Major fubcinereus, capite nigro, The Loggerhead.
\(\left.\begin{array}{l}\text { BARISTUS 2. Minor fubcinereus vertice nigro, } \\ \text { pectore albido. }\end{array}\right\}\) The fmaller Loggerhead.
BARISTUS 3. Minimus pullus, vertice nigro. The leaft Loggerhead.
In all thefe fpecies the bill is long, ftraight, and large in proportion to the body, flatted above, and fharp at either fide: they are very pugnacious, and fight defperately. The bills of thefe birds are very ftrong, and broader in proportion to the fize of the body, than thofe of any other birds that I have feen; but not at all like thofe reprefented by Sir Hans Sloane, t. 259. The length and breadth of their bills alone makes me range them in this c'afs.
\[
\begin{aligned}
& \text { S E C T. VI. } \\
& \text { Of Birds that bave long Mender bills that arch and taper very mode- } \\
& \text { rately to the top. }
\end{aligned}
\]

Note, The birds of this tribe are generally well proportioned: they have moderate legs and open claws, whofe middle digits are nearly of a length with their bills ; and live commonly in dry hilly places.
DOLYTMUS s. Major nigrans aureo varie fplen- The long-tailed, black-caped dens, pinnis binis uropigiilon- \(\}\) Humming-bird of Edw. giffimis.
t. 34. \& SI. t. 264.

POLYTMUS 2. Medius nigrans aureo fubplendens, The fhort-tailed black pinnis uropigii defitutus, cauda
fubtus fubcroced.
POLYTMUS 3. Viridans aureo varie fplendens, pin- \(\left.\begin{array}{c}\text { The long-tailed green } \\ \text { nis binis uropigii longiflimis. }\end{array}\right\} \begin{gathered}\text { Humming-bird of }\end{gathered}\) Regulus omnium minimus, \&c. Barr. 146,7. S Edwo t. 33 .
POLYTMUS 4. Minimus variegatus. The little Humming-bird of Ed. t. ult.
All the birds of this kind are eafily diftinguifhed by their very delicate make, various gloffy colours, fmall fize, long flender arched bills, very fhort leas and thighs, and fwift eafy flight. They live chiefly upon the nectar of flowers, which they fip upon the wing, and pafs from one bloffom or tree to another with inconceivable agility. They are naturally very gentle; but when they neftle they grow fierce, and are frequently obferved to chace the largeft birds that come near their haunts, with great fury; and this they can do the more readily, as their Hight, which is extremely quick, enables them to attack their adverfary in every part of the body, and continue an equal progreflive motion alfo : but they generally attack the eyes and other

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tender parts, and by that means put the others in great confufion, while they endeavour to make off. The motion of there little birds is extremely nimble, flying frequently backwards and forwards, to an fro, in an inftant; and that, often, with their bodies in a perpendicular pofition: but as they return from thofe chacing combats, their flight is fo fwift that you cannot obferve them; nor know what courfe they take, but by the rufhing noife they make as they cut through the air.

They make their little nefts chiefly of cotton, or the down of fome other plants, intermixed with a few hairs and a little fine mofs; and faften them generally to fome fmall branch of an orange or lemon tree, where they are well covered by the foliage and larger branches.

> TODUS r. Viridis, pectore rubro, rofro recto. Rubecula viridis elegantifima. SI. H. to 263.\(\}\) The Tom-tit. The green Sparrow of Edw. t. 22 I.

This little bird is hardly larger than the green Humming-bird; but its legs and thighs are longer, and the bill more compreffed and quite ftraight. It is a very familiar and beautiful bird, and will often let a man come within a few feet, and look for minutes together at it, before it moves. It keeps much about houfes in the country parts, flies very flow, and probably may be eafily tamed.


I believe this to be a bird of paffage, and pretty frequent in fome of the neighbouring parts of America; but it is alfo often feen in Famaica, and fometimes continues there for a confiderable part of the year. It has not many notes, but thefe are loud and fweet. Its claws are of the common form; but the bill is rather longer than the middle digit, ftraight and roundifh, and the upper part ends in a flender crooked point that turns over the extremity of the other.

\section*{CUCULUS i. Major olivaceus, caudal longiori, ciliis ru- \(\}\) bris. The Old Man.}

This bird is feldom feen out of the bufhes or woods, where it generally lives; the bill is longer than any of the digits, Atraight, conic, and moderately compreffed on the fides; but the top of the uppermoft part is pretty flender and bends over the end of the lower. The tip of the tongue is as if lacerated; the rictus is pretty large, and the eyes, which are not far from it, are furrounded with red lids. The colour of the whole body is nearly of an olive; but, on the back and upper part of the wings it approaches to a light brown: about the throat it is whitifh; and the belly is almoft yellow. The wings are roundifh and hort, not reaching beyond the rump: but the tail is almoft as long as the reft of the body, and compofed of ten feathers, whereof the four uppermoft are the longeft, and cover the reft, which grow gradually fhorter, are tiped with white underneath, and placed three on each fide. It has four toes on each foot, but two of thefe are placed before, and an equal number behind. It has a fhort eafy flight, and is not timorous: it climbs and holds like the Wood-pecker.

\section*{MEROPS 1. Niger, iride Jubargenteâ. Monedula, Ec. Slo. H. t. 257. The purple Jackdaw of Cat. \(\mathbf{t}\). 12 .}

This bird is of a delicate form, and all mining black, except the iris which is whitifh. The bill is nearly of the length of the middle toe, pretty thick at the bafe, of a conic form, tapering and arched moderately to the top. The tail is pretty long;
but the wings are rather roundif, and fretch fcarcely beyond the rump. It has a pretty mufical note, and would probably prove a very agreeable bird in a cage: but it feeds chiefly upon ticks and other vermin.
\(\left.\begin{array}{l}\text { XANTHORNUS 1. Major, nigro varius. } \\ \text { Icterus major, \&c. Slo. H. } \\ \text { The black-beaded Icterus of Edw. 1. 77. }\end{array}\right\} \begin{aligned} & \text { The large Banana Bird; } \\ & \text { and Banana Bird of Cat. } \\ & \text { app. t. } 5 .\end{aligned}\)
Rofrum longitudine digiti medii, conico-acutum, levifime arcuation, ad bafing crafiufculum leucopboum, ad apicen attenuatum nigraiss. Linguacod apicembifida, ad latera quaji Jerrata. Corpus fuperne olivaceus, fibtus lutius, ad oculos, guiam \& partem fuperiorem pectoris nigrum. Caudn \&o ala nigra, remigibus fecundis albis. Alaultra uropigium vix porrecta.
XANTHORNUS 2. Minor, nigro varius. \(\}\) The Banama Bird; and Banana
ICterus minor, \&cc. Slo. H.
Both thefe birds are very beautiful, and have a delicate fweet note; but the firf is chiefly brought from the main, few having yet bred in the inand. The fecond fpecies is a native of Famaica; it builds its neft of the fibrous part of the Renealmia, and hangs it from the moft extended branches of the talleft trees, efpecially fuch as fread over rivers or ponds, if any lie convenient, the better to fecure both its eggs and young from the fnakes. The neft is curioully interwoven, and looks as if it had been made of horfe-hair; but, upon a frict examination, the fibres are found branched, which thews it to be made of fome vegetable fubiknce, as we have already mentioned; and I know of none that anfwer the appearance except thofe of the Rencalmia and UJnea, which grow both naturally in this country.

It is rare to fee thefe birds in cages in Famaica, tho' fuch as might be efteemed in the fineft aviaries in the world; but there, they are no more than Bonana birds; and not fo much regarded as the common farrow that hauls his bucket.

\section*{S E C T. VII.}

Of Birds woboge bills are of a length with or longer than the middle digits, buang long legs, partly naked thighs, and divided claws; and living cbief应 in watery places, tho they do not foim:
Note, Though the claws are divided in all the individuals of this clafs, the two outward digits are generally webbed a little at the bafe.

> OR D E R I.
> Of fuch as bave long feender bills.
\(\left.\Gamma^{\text {RINGA i. Pulla maculis minoribus roturdis albis varie- }} \begin{array}{c}\text { gata, ventre albicanti. }\end{array}\right\}\) The snipe.
Rofrum cylindraceum teretiuffulum rectum, digito medio ungue armuto tontillo brevius. Lingua gracilis acuminata. Pedes quadridacyly, digitis exterioribus ad imum membranâ connectis. Crura longiora.
This bird is not uncommon in the low lands after heavy rains; it lives chiefly about ponds, and feeds on worms and fmall grain.

\footnotetext{
TRINGA 2. Subcinerea, ventre albido, collo anulo\} The larger grey Snipe albo nigro marginato cineto. \(\}\) with a white neck.
}

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I have feen a few of thefe birds about the lagoons in St: George's; but they are very uncommon, and feidom obferved in any other part of the country.

NUMENIUS 1. Pullus Jubtus albidus. The grey Plover, or Wag-tail.
This bird is pretty common in Famaica: it lives chiefly about lonely ponds; and is often feen near the fhore, in calm weather.

> O R D E R I.
> Of fuch as bave large angular bills.

\section*{ARDEA I. Major grijea criftata, capite nitro, \\ vertice \(\mathcal{E}^{2}\) cilius albicantibus. \\ Ardea corulea. Sl. t. 264. f. 5. \\ Ardea criftata. Cat. t. 79.}

This bird is one of the largeft of the tribe in Yamaica: the gresten part of the head is black; but the crown, and a little fpace ibout the eyes is whie; and tlee reft of the body of an even grey colour, except the long feathers of the lack winch are moftly black in the middle and grey at the edges. The feathers of the creft are fome black, others white, few in number, and very long.

This bird is not uncommon in famaica, and lives chitfly about rivers and lagoons. It is fometimes ferved up at table, like other wild fowl, and generally thought pretty good meat.

\section*{ARDEA 2. Plumbea crijfata, capite nigro, ver-? \\ tice albo. \\ Ardea caruleo-nigra. Slo. H. t. 263. \\ The blue Gaulding.}

The bill of this bird is very ftrong, long and pointed, and the greatelt part of the head covered with black feathers; but the crown, from the buck mart of which it throws out a long creft, is all white, as well as two oblong ftreaks that lie under the eyes, and run from the opening of the jaws to a latle diraice bevord the ears. All the reft of the body is of a lead-colour, cxcept the bak, whole feathers are moftly of a blacker hue. They live, like the foregoing, in marflyy places; and are fometimes ferved up at table, like other wild fowl.
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ARDEA 3. Subfufca major, collo \& pectore albo un-?
dulatis.
An, Ardea fivatica coloris ferruginei Barr.
The Clucking-Hen. An, Ardea flvatica coloris ferruginei Barr.

```

This bird is pretty frequent in Gamaica; but it keeps chiefy in the woods ard more lonely inland parts of the ifland. It is generally looked apon as the bet wild fowl in the ifland.

ARDEA 4. Alba major.
Ardea alba maxima. Slo. H. t. 266. \& Barr. \(\}\) The white Gaulding.
ARDEA 5. Minor fubfufco-grifea, cruribus breviorim?
Ardea fellaris minor, \&cc. Slo. Hift. t. 263. \(\}\) The Crab-catcher. Ifpida Cat. t. 69. \& Cancrofagus major Barr.
ARDEA 6. Minor fubgrifea albido friato, alis \} The fmall red-winged fufco-rufefcentious. \(\}\) Crab-catcher.
This is the fmalleft fpecies of the Crab-catcher in \(\mathcal{F}\) amaica: the bill is lange and ftrong; the body ftriped, and the wings of a lively brown colour. The whote bird is very beautiful, and not above the fize of a pigeon.

\section*{O F J A M A I C A.}

ARDEA 7. Fufco-plumbea; collo fupernè jubfufco, \(\}\) The larger Crab catcher.
This bird is much larger than the foregoing, and crefted; but this is mort and eafily erected, and, in fome fhape, refermbles the creft of an Indian cock. The breaft of this bird is marked with white pretty low.

\section*{S E C T. VIII.}

Of Water-fowls, or Birds that pafs a confiderable part of their time upon the water.

Note, All the birds of this clafs have broad membranous webs between their toes, or have them furnifhed with membranous edges, which enable them to move with great eafe in the water.

\section*{O R D E R I.}

Of fuch as bave their toes garnibed with membranous edges, but not at all connected or joined together. trientis digut medii vel ultra, ad apicem fubluteum ultra cocconeum. Frons cerâ coccinea levi oblongo-quadrata ultra medietatem obdusta. Oculi minores nigri. Color totius corporis nigro-plumbeus leniter nitens, ad dorfum fubolivaceus, ad ventrem levior, inter crura albo mifcellus. Cauda brevior conico-obtufa, rectricibus marginalibus inferioribus albo marginata. Ala oblonge ultra medietatem cauda porrecta remigibus exterioribus albo marginatis. Crura longiora ultra medietatem plumata, infra nuda cocinea. Tibic long a olivaceas fquamofa. Digiti longiores quaterni, margine angufo inferne utrinque donati, fed membrana nulla connecti; borum unus pofice fitus eft. Ungues acuti longi levifimè arcuati. Lingua crafiufcula, apice cartilagineo integro.

> FULICA 3. Major pulla, fronte cerà albâ fupernè?
> acuminata glabrâobduciad, membranẩ The Plantane Coote. digitorum latiori lacerâ.

FULICA 3. Minor pulla, cerâ minori albi- \(\}\) cante. The fmall Plantane Coote.
FULICA 4. Minima mifcella, fronte plumata, peciare? The leaft Water-hen of Jubplumbeo, menbrana digitorum an- guffifina. \(^{\text {Edieards; P. } 5 \text {. }}\)
All thefe fpecies are frequent in the lagoons about the Ferry, and often killed and ferved up at gentlemen's tables: but they eat a little fifhy; though the fecond and third fpecies, which are reckoned the beft, feed chiefly on plantanes, when any of there trees grow by the water fide. They are very wary birds; and though their feet be not webbed, they dive, fwim and move in the water with as much facilicy as any of the tribe, and frequent it the mon of all that live within land. The laft fpecies has never been deferibed before; it is a very beautifal little bird, and

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very maturalíy pictured by Mr. Edwards, in a book with which he intends to favonr the public foon.

\author{
COLYMBUS I. Minor pullus, digitis inferne connectis - The fmall dark-con \\ fiupernè marginatis. \} loured Dab-chick us \\ Colymbus fue Podiceps minor Will.Slo. H.ii. t.271. S Di-daper.
}

This bird is very frequent in all the lagoons about the Ferry, and keeps in the water the mort of any birds in that part of the world.

\section*{ORDER II.}

Of fuch as bave the three foremof toes connected by membranous webbs.

PHOENICOPTERUS I. Pallus, vertice © angulis alarum coc-2 Phœenicopterus Cat. t. 79. \& Barr. I40.
Thefe birds tho' the inhabitants of the neighbouring coafts of Cuba and the main, are Feldom feen in Gamaica, except when forced over by ftormy weather, or imported by the curious. They go in flocks, and keep generally by the fea fide, where they have often proved a fafe-guard to the neighbouring fettlers; their numbers, fize, and colour having fometimes impofed on the timorous and the unwary, who have taken them for foldiers. While thefe birds are young, they are of a dark colour, except a few feathers in the crown of the head and corners of the wings; but as they advance in years they turn chiefly of a fcarlet colour. They are tail upright birds, and feem to hold a medium between thofe that live chiefly in the water and fuch as only frequent watery places; for tho' they fwim with great eafe, they live moftly near the furf. When thefe birds feed they turn the upper part of the bill towards the ground, and the point towards their feet.

\section*{\(\left.\begin{array}{l}\text { PELECANUS I. Subfufcus, gula difenfili. } \\ \text { Onocratulus gula faccata L. S. N. }\end{array}\right\}\) The Pelican.}

This bird is pretty frequent about \(\mathcal{F}\) amaica, and lives chiefly on the produce of the fea, which is no where more plentiful or more eafily obtained. It flies and fwims with great eafe, and paffes the greateft part of the day out at fea; but keeps upon the rocks and fmall illands at night.
\(\left.\begin{array}{c}\text { CYGNUS 1. Subcinereus Subtus albidus, rofro recto latiuf- } \\ \text { culo. }\end{array}\right\}\) The Goofe. raducx ue

CYGNUS 2. Subfufcus, collo longiori, rofiro latiori baf \(\}\) gibbo. The Cbina Gcofe.

This bird is very like what we call the Mufcovite goofe in Europe; but its cackle is very different from that of the other. Both thefe fpecies are common enough in Jamaica, and breed very well in the inland parts of the ifland, where they have plenty of water and a pleafant cool air.

ANAS .. Maxima, capite cerâ interruptâ obducto。 \(\}\) The Mufcovite Duck.
Anas. Indica Gefn. Bar.
\(\left.\begin{array}{c}\text { ANAS 2. Domefica varie variegata, pinnis uropigii furfum } \\ \text { recurvis. }\end{array}\right\}\) The Duck.
ANAS 3. Subfulca major, roforo et vertice nigrican-
\(\begin{aligned} & \text { tibus, alis variegatio. } \\ & \text { Anas fera major Barr. \& Anas fftularis Slo. H. }\} \text {. }\end{aligned}\) The whinling Duck. I

ANAS

\section*{O.F J. A M A I C A. 48 t}

ANAS 4. Subfufca, alis nigris, rofro rubenti. The Spani/b-main Duck.
\[
\left.\begin{array}{l}
\text { ANAS 5. Fufca crifata ad gulam alba, } \\
\text { iride flammeâ. } \\
\text { Anas crifata. Cat. t. } 97 .
\end{array}\right\}
\]

\section*{ANAS 6. Subfucca minor, remigibus extimis caru-? leis, mediis albis, maximis fubvirefcentibus. Sthe Teal.
Fafcia alba in fronte.}

The third and fixth fpecies are natives of Jamaica, and breed wild in many parts of the courtry, efpecially where it abounds in ponds and lagoons. The firft fort breeds fo eafily that it is now very common in every part of the ifland, and the molt common dih at every table in the country; but the others do not thrive fo well, nor have they yet come into a breed of the whifling duck, though a native, and a fine fort; and its young are too frequently deftroyed by the amphibious kind, to breed well abroad.

> ANETHETUS i. Major melinus fubtus albidus, \(\left.\begin{array}{r}\text { roflto Serrato-dentato. } \\ \text { Anferi bafino affinis. Slo. Hift. }\end{array}\right\} \begin{gathered}\text { The Booby; and the Booby } \\ \text { of Catefby; t. } 87 .\end{gathered}\)

This bird is fomewhat fmaller than the common fea-gull, which it refembles both in its flight and make; but it is rather of a more oblong form, and varies much in its colour, which moft frequently borders upon the yellowih. The genus is eafily diftinguifhed by their ftraight pointed bills, with a fmall prominence underneath, and the web that runs between the three fore toes. It lives, like the following, on the productions of the fea, and flies fomething like the Shear-water, between the waves; but it generally reforts to the next rock or unfrequented place in the evening, to pafs the night more at eafe. The bird is common about all the lonely rocky clifts and unfrequented iflands in America.
\[
\left.\begin{array}{r}
\text { ANETHETUS 2. Minor fufcus, vertice ci- } \\
\text { nereo, roftre glabra. } \\
\text { Anas angufirgftra, \&c. Barr. }
\end{array}\right\} \begin{aligned}
& \text { The Noddy; and the Noddy } \\
& \text { of Cat. t. } 88 .
\end{aligned}
\]

This bird is much about the fize of the red-fronted Coote, and of a flate colour, bordering upon the brown, except the forehead, which is whitih. The bill is black, pointed and flraight, and the three fore toes webbed like thofe of the foregoing. It lives on the productions of the fea, for which it hunts all the day-time; but at night it retires, like the Booby, to the next firm ftand it obferves, and perches fometimes upon the mafts or yards of a Chip, when any fuch is near, inftead of a tree; nor does it chufe to fly until the approach of day, and will frequently be rather laid hold of than quit its ftation, in which it endeavours to maintain itfelf by its threatening but harmlefs bill. Its flight is low and eafy.

LARUS 1. (a) Minor albidus, vertice ni-
gro. \(\begin{gathered}\text { The fmaller black-caped white } \\ \text { Sea-Gull. }\end{gathered}\)
This little bird hardly exceeds the Martin in fize, and is remarkable for its great agility. It is frequent about the north-eaft coaft of Famaica, where the influx of to many rivers occafion an extraordinary refort of all forts of filh.

\footnotetext{
(a) N.B. This genus may be very properly divided into, I. Thofe that have tubular noftrils; and, 2. Thofe that have only nafal apertures in the mandibles; as Mr. Edwearis has done.
}

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\section*{LARUS 2. Medius fubcinereus ad oculos niger. \(\}\) The large grey Sea-Gull.
An, Larus pifator cinereus Barr.}

This bird is about the fize of a common duck, "and of a bright grey colour, but black about the eyes: it is frequent about the harbours of Port-Royal and Kingforn, where it meets with a great variety of all forts of filh, which is its conftant food.

\section*{LARUS 3. Medius fubfufcus. The large dark Sea-Gull.}

This bird is rather larger than the foregoing, and keeps generally in large flocks about the harbours and keys of Jamaica.
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LARUS 4. Subfufcus major, vertice nigro, ventre al-
bido, reatricibus intermediis longif- Thelarge Sea-Gall, with
fimis.
Larus rectricibus intermediis longifimis. L. Sy. (thers longer than the
Nat.
The Arctic Bird of Edwards, 148, 9 .

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This bird is about the fize of the grey Sea-Gull, and very common in the feas to the north of Bermudas, where I obferved it in my voyage from famaica. The failors call it a Shear-water, and obferve it in all thofe northern feas; but it is feldom feen to the fouthward.

\section*{STERNA I. Minor fubnigra uropigio © ano (Mother Kery's Chick ; or albis, alis tranfverfe \& obli- the fmaller Petterill, or Seaquè fufco fafciatis. Swallow, with a light cloud a-crofs the wings.}

This bird is fomewhat larger than the common fwallow, which it refembles greatly, both in fize and make. The tail is a little forked and pretty broad, and the body fartounded with a white ring, about the rump. They are common in the weftern feas, and generally appear with a frefh gate of wind; for they feed on fuch recrements as fwim on the furface of the waves in fuch weather.

STERNA 2. Major fufca bumile vo- \(\}\) The larger dark Petterill, or Shear-
This bird is obferved in all parts of the fea; it is rather fmaller than a pigeon, of a dark or blackifh colour, and flies fo clofe to the furface of the water, that it frequently lies hid between the waves for a confiderable time.

STERNA 3. Media, dorfo fufco, ventre uro- \(\}\) The white-faced Shear-wapigio © fronte albidis. \(\}\) ter.
This bird is rather (maller than the foregoing, and not fo common: I obferved it about the latitude of 36, in my voyage from \(\mathcal{F}\) amaica.
\[
\text { dive mote áónlutition } \mathbf{O} \mathbf{D} \mathbf{E} \quad \mathbf{I I I} \text {. }
\]

Of fuch as bave all their toes connected by membranous webbs.
\(\left.\begin{array}{c}\text { LCYON I. Media alba, rectricibus } \\ \text { binis intermediis lon- }\end{array}\right\}\) The Tropic Birdof Edwards, 149. and
gifimis. The Tropic Birdof Cat. app. t. 14.
\[
\text { O F J A M A I C A. } 483
\]

The ftraight make of the bill, the length of the tail, and the continued web that runs between all the toes, diftinguifh this genus fufficiently from all others. It lives, like the following, within the tropics, and refembles it very much in make, flight, and manner of nourilhment; but it is feldom feen fo near the fhore. It breeds on the moft defolate rocks and lonely iflands, and is often feen at very confiderable diftances from land.

\section*{ALCYON 2. Major pulla, caudâ longiori The Man-of-war Bird; or the bifurca. \(\}\) dark-coloured Alcyon with a Hirundo marina major, \&c. Barr. S flender forked tail.}

This bird is of a confiderable fize, coming neareft to the Pelican of all the birds that live in thofe feas: but it keeps chiefly abroad, and is often feen from one to two hundred leagues from fhore. It is remarkable for its lofty eafy flight and unincumbered make, reforts to the moft unfrequented rocks and lonely places, and is feldom feen near any inhabited fhores.

\title{
C \(\quad \mathrm{H}\) A P . V. Of \(Q\) U A D RUPEDES.
}

THOUGH the habits, ufes, and properties of the greateft part of this clafs are very well known, there are many of the individuals, and fome of thofe very ufeful too, of which we hardly know more than the names, or fome other diftant particulars. There are, indeed, but few that are peculiar to Gamaica; and, among thofe that are, we hardly find one of any note: but, as there are great numbers of different forts daily imported there, as well from Africa as from the neighbouring coafts, and that the methods of living, or other natural caufes, are frequently obferved to change the difpofitions even of thofe that are imported there from Europe, I was induced to give a brief but general account of all the animals of this clafs I obferved there; and I doubt not but every man, who looks into the particulars, will excufe my having inlarged this part of the work with 2 recital of fome of the beft known fpecies.
\[
\begin{array}{cccc}
\mathrm{S} & \mathrm{E} & \mathrm{C} & \mathrm{~T} . \\
& \text { Of the Glires. }
\end{array}
\]

Note, The individuals of this tribe are chiefly the prey of moft of the carnivorous kind, and for this reafon generally very fearful and wary, feldom venturing abroad but by night, or in the dulk of the evening; which has given a rife to fo general a notion of their flothfulnefs, from whence they haye received this appellation.
\(\left.\boldsymbol{S}^{\text {CIURUS 1. Major grifeus, caudâ extremâ comofâ, pilis }} \begin{array}{l}\text { diffutis. }\end{array}\right\}\) The grey Squirrel.
SCIURUS 2. Medius'rufefcens. The brown Squirrel.
SCIURUS 3. Minimus, bypocondriis prolixis volans, \(\left.\begin{array}{l}\text { ventre albido. }\end{array}\right\}\) The Flying-Squirrel.
Thefe

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Thefe three fpecies are natives of North America, and frequently brought to Jamaica for the amufement of the curions.

MUS 1. Subfufcus maximus, caudâ oblongâ pilofa ul- \(\}\) The Spanib Racoon.
tra trientem albida.
\(\left.\begin{array}{c}\text { MUS 2. Maximus pullus, caudâ oblong â } \\ \text { pilofa, dorfo fubfetofo. }\end{array}\right\}\) The large brown Indian Coney.
MUS 3. Major fufco-cinerefcens caudâ truncatâ. The fmall Indian Coney.
MUS 4. Major albo fulvoque varia, couda nulla. The Guinea Pig.
\[
\left.\begin{array}{l}
\text { MUS 5. Domeficus medius, caudâ longâ Jubnudâ, } \\
\text { corpore fufco-cinerefcente. }
\end{array}\right\} \text { The Houfe and Cane-Rat, }
\]

\section*{MUS 6. Domefticus minor, cauddal longal fubmudâ, corpore fulfo- \(\left.\begin{array}{l}\text { cinerefcente, abdomine albicante. }\end{array}\right\}\) The Moufe.}

Though one only of thefe be a native of \(\mathcal{F}\) amaica, all the fpecies are pretty common there. The firft is generally imported from Cuba and the neighbouring illands, where it is moft common: its eyes, lips and teeth, are like thofe of a rabbit, but the ears are fhorter and fmaller, though much of the fame form. The hair is pretty ruff; and the feet have each five digits, but the innermoft of the fore feet are fmaller than the reft. The noftrils are wider and more free than thofe of the rabbit; the penis hangs out pretty far, and the tail is ftraight, tapering, and hairy. It feeds on vegetables like the reft of the kind, but holds its food fometimes in one of its fore-paws.

The fecond fpecies is a larger animal, being feldom lefs than one of our hares; but it is of the fame make with the other, and of an uniform colour, having fome very ftiff hairs, of rather briltles, on the lower part of the back. And the third, which is a native of Gamaica, and fmaller than either of there two, differs but little from them either in form cr method of living; except the tail, which is fhort and ftumped, being feldom above two inches and a half in length.

The fourth fpecies is pretty frequent in all the inands, and often kept to breed like other animals; but it is not liked by many people.

The fifth fort is very common in all the fugar-colonies, where it proves extremely deftructive to the fugar-canes, efpecially where the cane-pieces are covered with tra/h, or over-run with weeds. They generally cut and deftroy a vaft number of the plants, and frequently reduce the produce of a piece by one-fourth, or better. There are great numbers of them in every plantation, though they take great pains to get rid of them; for the watchmen have feldom any thing elfe to do but to fet traps for them, which they do with infinite art and eafe. Numbers of the negroes roaft thefe animals in the ftoke-holes, and eat them; and I have been informed by men of character, who have tafted of them, that they are very delicate meat.

The laft fort is alfo very common every where, but not at all different from the European moufe either in form or difpofition.

LEPUS I. Caudâ abruptâ, pupillis rubris. L. S. N. The Rabbit.
Thefe creatures have been frequently carried to all the fugar-illands; but they do not breed falt in any of thofe warm climates, though all abound with potatoeflips and other weeds proper for their fuftenance.

CASTOR 1. Cauda lineari tereti. L. \} The Water-Rat, commonly called S. N. \(\}\) Price's Rat.

Thefe creatures, though the natives of fome foreign land, are now grown very

\section*{O. F J A M A I C A. 485}
common in Famaica, and are generally looked upon as pernicious animals; for they fpare neither fowls nor provifions, and are much larger than rats, among which they are commonly numbered there.
\[
\begin{gathered}
\text { S. E C. II. } \\
\text { Of the Feræ. }
\end{gathered}
\]

Note, Moft animals of this tribe are carnivorous, and live chiefly by prey when wild, which is the natural ftate of them, from whence they have rereceived this common appellation.

URSUS I. Major pullus. The black Bear. URSUS 2. Medius canus. The grey Bear.
Both thefe fpecies are natives of North America, and often brought to Fa maica by the traders from thofe colonies; but they have not been yet known to breed in the illand.

FELIS I. Caudâ elongatâ, maculis fubrotundis ferè \(\}\) The American Tiger.
This ferocious animal is a native of the main continent, but has not been yet feen alive in 'Jamaica; tho' the fkins, which are much efteemed by our fadlers, are daily imported there from the Mukeeto-Jbore, where they are often killed by the native Indians.

\section*{FELIS 2. Caudá elongatâ, unguibus retractilibus, auribus, aqua- \(\begin{gathered}\text { libus. }\end{gathered}\) The Cat.}

This is the fame fort we have in Europe; but as the feafons are always mild in that part of the world, and the country full of proper prey, fuch as birds, Indian coneys, cane-rats, toads and lizards, they are apt to run wild. To prevent this inconveniency, the country-people fplit or cut off their ears, to expofe thefe tender organs the more to the rain or dews; and by thefe means gerically prevent them from going too much abroad.

A Cat is a very dainty difh among the negroes.


Rogrum productum fubacutum barbatum, maxillả inferiore longè breviore. D. Dentes primores juperiores- fex fubcompreff acuti, exteriores paulo majores. Inferiores totidem confimiles Jubcompreff \(\mathcal{F}\) Jubobituf, caninis approximati. Canini Juperiores conici, medio inter molares ef primores positi, Lingua retrorfum aculeis fcabra. Caput oblongum, Oculii oblongo-rotundati medio inter aures \(\mathcal{E}\) apicem rofri locati. Aures compreffe, Jenielliptica reníformes, buimanis fere fimiles. Pedes lacertof validi foflorii; metatarfis oblongis. Digiti utrinque quinque. Caida conico-cylindracea producla, attenuata, recta, declinata: Mamma? (Duas inguinales tantum obfervare licuit). Corpus oblongum muri majori fimillimum, fubfufcum, birjutum, pilis villis sentioribus \(\mathcal{E}\) brevioribus intermixtum.
This creature is often brought to ofamaica from the coafts of Guinea, where it is a native, and frequent enough about all the negro-fettlements. It burrows under ground, and lives chiefly by plunder. It is of the fize of a fmall rabbit or cat, and very frong in is fore-feet, which are much thorter than the hinder.

\section*{\(\left.\begin{array}{c}\text { MUSTELA 1. Subfufca, linear longitudinali albâ } \\ \text { per utrumque latus ductio. }\end{array}\right\}\) The Guinea Weafel.}

I had this creature from the coaf of Guinea: the body is pretty long, the tail bufny, and the fides marked each with a white ftreak near the belly ; its hairs are fliff.

> DIDELPHIS I. Mammis bulga ventrali tectis, capite \(\}\) The Opoffum. vulpino fimile.

This is a native of North America, and frequently brought to Famaica by the failors. Nature has furnifhed the female with a very curious lodge between the integuments of the abdomen, to carry and preferve its young from danger.

CANIS Pilis carens, minor. The Indian Dog.
This creature is frequent among the Feres and negroes in Famaica: it is generally about the fize of a cur-dog with a rough fkin, which looks like the hide of a hog. I take it is a different fpecies from any I have ever feen, though the general form agrees. They have moft of the other forts imported there from time to time, where they mix and degenerate into a variety of mongrels; and, as there is no particular game in the country, they require only fuch as may be difinguifhed for their care and watchfulnefs. The other fpecies I have obferved there from time to time, are,

CANIS 1. Pafor fidelis dictus, auribus erectis mediis. The Cur-dog.
CANIS 2. Aquaticus pilis, undulatis, quandoque caudâ carens. The Water-dog. There is a variation of this that is pretty fmall.

CANIS 3. Roftro crafiori repando major. The Bull-dog.
There is a variation of this, called the Dutcb-pug, common enough in Jamaica.
CANIS 4. Molofeustardivox, capite majore. The Dew-lap, or Dane.
CANIS 5. Minimus pilis longioribus undulatis. The Lap-dog.
There is a large variation of this kind called King Cbarles's breed.
CANIS 6. Venaticus oblongus tardigradus fubcrafus. The Hound.
CANIS 7. Venaticus pectore ampliori, rofro §ventretenui- \(\begin{aligned} & \text { oribus. }\end{aligned}\) The Greyhound.
I have at times feen the fmall Italian greyhound, the greyhound, and the wolf-dog in Famaica; but they are all very rare in that country, efpecially the latter fort.

VESPERTILIO 1. Minor angulis ©o extremitatibus) alarum unguiculis uncinatis or-\} The Bat. natis.
Andira. Pifonis.
hefe creatures are very common in Gamaica, and generally reft, during the day, in caves and hollow trees, but come out at night to feek for food.

VESPERTILIO 2. Maxima glabra. The large fmooth Bat.
I have not feen this creature; but have been informed by Mrs. Carrol that one was caught at her houfe which was quite bare and very large.
\[
\text { O. F. J A M A I C A. } 487
\]

HIYSTRIX 1. Subcinereus nitens, aculeis longifimis. The Porcupine.
This creature is feldom feen in Famaica; though frequent enough on the coaft of Guinea, from whence it is fometimes brought there in the African thips. The force and mechanifm with which this animal darts its long thorns at its enemy, when it is enraged, is really admirable: nor is the infinitely fmall feta thefe are befet with, lefs remarkable, by which they ftick in the flefh with more obftinacy than a fimple body of the fame form could do. Thefe little fetre are very obfervable to the touch; for, on holding a thorn in your hands, and cndeavouring to pull equally with both, you will find the thickeft end to glide with much more eafe through your fingers than the other.
\[
\begin{gathered}
\text { S } \begin{array}{c}
\text { E } \\
\text { Of Jumentes. }
\end{array} .
\end{gathered}
\]

EQUUS i. Caudâ undique Setofâ. L.S.N. The Horfe.

Thefe quadrupedes, without doubt, were firft carried to Gamaica in the time of the Spaniards, moft of thofe that are ftill feen there being of that breed. They are generally fmall, but very fure-footed and hardy, which renders them extremely fit for thofe mountainous lands: and their hoofs are fo hard that they feldom require fhoes; but this is the effect of the heat of the country and drynefs of the land in general.

The fkins of thefe animals are generally ufed by the country peopie to cover their couches, without tanning or drefling; and feem to be very fit for that purpofe, but muft be kept dry.

\section*{EQUUS 2. Caudâ extremá fetofâ. L. S. N. The Afs.}

There are not many of thefe animals bred in Famaica, but molt of thofe that keep breeding mares keep a Jack-afs commonly with them; for mules are more valuable and far more ferviceable than any other cattle in thofe hilly countries; and the moft generally ufed both for carriage and the mill in all mountainous eftates. But as the country does not produce a fufficient number of thefe animals to fupply a fourth part of the demands of the inland, they are frequently imported there at a great expence both from Europe and the neighbouring coafts of America, and are generally fold from ten to twenty or thirty pounds a-piece.

SUS 1. Dorfo anticè fetofo, caudá pilofá. L.S.N. The Hog and wild Hog.
Thefe animals, when tame, differ in nothing from thofe of the fame fort commonly feen in Europe, being generally bred and raifed in the fame manner; but the wild, which are very common in all the inland woody parts of the ifland, where they meet with a great variety of different fruits in every feafon of the year, are very fierce; and, if not wounded in any principal part, generally return with great fury upon the affailant, who is obliged to climb into fome neighboaring tree to avoid the fury of the beaft. They are generally caught in toils, or hunted down with dogs, whom they frequently deftroy, unlefs they be very cautious and well ufed to the game.

\section*{SUS 2. Dorfoponè Jetofo, caudâ fubnudâ, L. S. N. The Guinea Hog.}

This, though a fmall fort, anfwers beft in America; for it breeds a greater number of pigs than any other kind, and thefe, very rich and delicate: but the old ones are fo fat, that none, except the boars, are ever brought to table.

\title{
S E C T. IV. \\ Of the Pecora, or fleceed tribe.
}

\section*{CAMELUS 1. Toppo dorfa unico, vertice glandulofo.? Camelus topbo dorf unico. L.S.N.}

This, properly fpeaking, is the Dromedary, of which great numbers have been lately imported into Famaica; but the people are as yetfo little acquainted with their cuftoms and manner of feeding, that they have been hitherto of little fervice there. This creature has a gland in the pole of the neck, by the drynefs or moifture of which a man may judge of the ftate of its ftomach. It feeds there chiefly upon pinguins; but its moft natural food is the boughs and tops of trees. It is a very patient and laborious eafy creature: the penis turns back between the hind legs, and difcharges the urine that way; but they never make much at a time.

The fleth of them is reckoned very tender and wholefome; and the milk is faid to be a great reftorative; confumptions being never known wherever it is ufed for food, as it is by many on the coafts of Barbary.

CERVUS 1. Cornibus ramofis teretibus incurvis. L. S. N. \(\}\) Cervus cornibus ramofis teretibus incurvis. Hill.Hif.Tab. 28. \(\}\)

The red Deer.
Thefe animals are frequently carried to \(\mathcal{F}\) amaica from North America, and kept by many gentlemen in convenient inclofures; but they do not thrive well in that ifland.

\section*{CAPRA 1. Cornibus carinatis arcuatis L, S. N. The Nanny-goat.}

\section*{CAPRA 2. Cornibus erectis uncinatis, pedibus longioribus.? Capra cornibus erectis uncinatis. L. S. N.}

Thefe are not, either of them, natives of \(\mathcal{F}\) amaica; but the latter is often imported thither from the main, and Rubee-ifand; and the other from many parts of Europe. The milk of thefe animals is very pleafant in all thofe warm countries, for it lofes that rancid tafte which it naturally has in Europe. A kid is generally thought as good, if not better than a lamb, and frequently ferved up at the tables of every rank of people.

\section*{CAPRA 3. Cornibus nodofis in dorfum reclinatis.
L. S. N.}

This fpecies feems to be a baftard fort of the Ibex-goat; it is the moft common kind in 'famaica, and efteemed the beft by moft people. It was firft introduced there by the Spaniards, and feems now naturalized in thefe parts.

OVIS 1. Cornibus comprefis lunatis. L.S. N. The Sheep.
Thefe animals have been doubtlefs bred in Famaica ever fince the time of the Spaniards, and thrive very well in every quarter of the ifland; but they are generally very fmall. A theep, carried from a cold climate to any of thote fultry regions, foon alters its appearance; for, in a year of two, inftead of wool it puts out a coat of hair, like a goat, which may be probably owing to the opennefs of the pores, and the moiture with which the fkin is conftantly bedewed in thofe parts.

\section*{\(\left.\begin{array}{l}\text { BOS i. Cornibus terctibus arcuatis. } \\ \text { Bos cornibus teretibus flexis L.S. N. }\end{array}\right\}\) The Bull and Cow.}

Thefe animals were firft carried to famaica, by the Spaniards: they thrive very well there, and may be feen wild in moft of the woody parts of the country.

\section*{O F J A M A I C A.}

They are bred there, as in all other parts of the world, for the ufe of the table; but they ferve alio to cart the fugars from the plantations to the fores and thippingplaces; and draw fometimes in the mill, where the ox, bull; and cow, are brought indifcriminately to labour for the ftated hours. The ox draw alio, and the kindeft of all animale, in the plourt, the ufe of which they have of late found to anfwer well in many parts of that inland.

Cows taiks is generaliy very thin in thofe parts of the world, and taftes frequently rancid, elpecially when they feed in the lower lands, where the acacia and the Guinea-hen-weed grow in plenty.

The hides of thefe animals are feldom dreffed in Famaica, though the country abounds with fine tanning barks; but they are often cut up into large thongs, which they twift in the form of whips, and fell in the public markets. Thefe are the principal inftruments of correction ufed among the negroes, and the enfigns of their overfeers.

\section*{S E C T. IV.}

\section*{Of the Anthropomorphits, or fuch as partake more or lefs of buman flape and difpofition.}

\section*{B RADYPUS 1. Crinitus, palmis tridanylis, unguibus arcuatis) longifimis. \\ Bradypus manibustridačylis, caudâ brevi. L.S.N. Ignavus Barr. \& Ai Pif.}

This creature, which is a native of the main continent, is fometimes brought to \(\mathrm{Fa}_{\mathrm{a}}\) maica by the curious; but it is not common even in its native country. All its motions are very flothful, from whence its name; and when it is inclined to fleep, it climbs into fome neighbouring tree, faftens the fore feet to one of the limbs, and lets the body hang down during the hours of reft.

\section*{SIMIA I. Fufca major, caudâ longifimâ. The large brown Monkey: \\ SIMIA 2. Fufca major, palmis tetradactylis, caudâ pra- \(\}\) The four-fingered Benfili ad apicem Jubtus nuda. \(\}\) Monkey.}

This creature has no more than four fingers to each of its fore-paws; but the top of the tail is fmooth underneath, and on this it depends for its chief actions; for the creature holds every thing by it, and flings itfelf with the greatelt eafe from every tree and poft, by its means: but, in every other refpect, it agrees with monkeys in general. It is, like the foregoing, a native of the main continent, and a part of the food of the Indians.

\section*{\(\left.\begin{array}{c}\text { SIMIA 3. Minor fubfufco-mifcella, ventre albido, caudá ad } \\ \text { apicem nudá. }\end{array}\right\}\) The Tittee.}

This creature is very fmall, though much larger than the following: the back and tail is of a clouded brown colour, and the belly whitifh. The head is bare about the ears and eyes; but the hair grows in a narrow flip down the forehead.
\[
\begin{aligned}
& \text { SIMIA 4. Minima, capite albido, dorfo fufco ponè rufe- } \\
& \text { fcenti, caudâ crinitâ. }
\end{aligned}
\]

This, like the foregoing fpecies, is a native of the continent, and often brought to Jamaica by the curious; but they are very tender and feldom live long there.

HOMO (a) 1. Afaticus, fufcus, crinibus rectis. The Indian.
HOMO 2. Africanus, niger, crinibus crijpis. The African, or Negro.
HOMO 3. Americanus, fulvus, crinibus rectis. The American.
HOMO 4. Europeus, lacteus, crinibus variis. The European.
(a) Animal eft rationale-mechanicum, fupenda fiructura, animâ immortali proditum to millenis calamitatibus fubjoctum.

I would willingly have added the Three Differtations I propofed to publifh with this work; but as it has already fwelled to the limits I defigned, and that the feafon is too far advanced to finifh the whole this year, I determined to publifh the Civil and Natural Hiftory alone; leaving thofe, with another on Worm-fevers, Oc. which will make a fmall volume in \(8 v o\), to be printed the enfuing feafon.

16

\section*{E R R A T A.}

\(\mathbf{P}\)A GE vii. Egr. for Linneus r. Linneus.
P. 295. read 皮chynomene.
P. 18.1.37. dele chiefly and 1.35. for and there r. which
P. 26 and \(\mathbf{2} 7\). for urgit read urget.
P. 74. 1. 3. add Tab. 40. f. A.
P. niz. E'c. for ftile and filus, \(r\). fyle and Jylus.
P. 119. 1. 28. for femineo \(r\). fermina.
P. 139 and 152. for Alcine \(r\). Alfine.
P. 164. 1. 40. for St. Tho. read Port-Maria.
P. 165.1. 26. for bafem \(r\). balim.
P. 166. read BUTTNERIA.
P. 259. read GALEOPSIS.
P. 3I4. for DELEA reodCRITONIA.
P. 334. 1. 18, for a reedo
P. 362. 1. 10. read the brown Cocoon.
P. 387 . for t. 46 . read t. 48 .
P. \(421,1.89\). and 424.1. 43. for tab. 47 \& 44 . T.t.4. P. \(430 \& 431 . r\) BUPRESTIS.
P. 433.1.9. for T. read F .
P. 438. for GRILLUS read GRYLLUS.
P. 460. read AMPHISBKNA.
P. 439. read APPENDIGASIER.
P. 462. 1.12. for fwallowed read fwallows.
\[
\begin{array}{lllll}
F & I & N & I & S .
\end{array}
\]





496
Gravel
Green-heart
Grewia -





Strix
Struchium


fig,


9.C. Choot delin. 5 53.


Tab. 6



「ab. 8



Giat.in.





Sublut


Tab. 15

fr. Ih Eiturid ardine



Tab. 18




G.D.Ehret delin. 195
opectos



Tab NIM




Shlizo




5月号

\(\sum_{\text {a }}^{\text {civility }}\)


Shig.





Tab. 36.



9.0.eithet delinis5.5

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0,4
\]

Tah. 11


 （1）






t. Gavden fo.```


[^0]:    from Palos in Andalufza about the 3 d of Auguf 1492. The peopie, after having pared a consicrate time at fea, began to mutiny, and refolved forthwith to return; they were, however, periuaded to continue the voyage a few days longer, and in a day or two after (which was about the inth of Ulader) came in view of feveral inands, whercof Hiftaniola was the principal, on which they landed about the 18th. On the firf approach of the Spaniards the Indians retired to the woods, but one of the women, who was overtaken in her flight; being treated with great humanity and decency, and then fet at liberty, joined the relt, and brought them foon after to an amicable interview; at which fuch a friendfrip whs contracted between both parties, that the natives treated our adventurers with the greition enaduab and liberality for fome time after.
    Abvut the $y^{\text {th }}$ of Fanuary following Colon fet out on his voyage homewards, having firt built a fmatl fort at the Nativity (where he hitherto had been) for the fecurity of about 80 of his propic whom he defigned to leave bethind; but he carried 10 of the natives with him, that he might le the better able to fatisfy the curiofity of the Royal Family at his return.
    When he artiou io. the court of Spain, he met with a mort grasious recertion, alld was foon after appointed Preftet or Admiral of the Spanifh navy in the weftern feas. About the midgle of the year be began to prepare for another voyage, for which there had been no lefs than in fhips appointed; on board of which he put no lefs than 1200 men, among whom he had been careful to mix peonle of all forts of trades well provided with tools, and a great variety of cattle and grain.

    With this fleet he failed about the 7 th of Oczober 1493, and, after pafing fome wecks at fea, fell in with the Caribbec iflands, whofe inhabitants he difoovered to be cannibals. He paft fome diays amoncie there iflands, to which he gave thofe names many of them ftill retain; and then failed directly for 1 Hit. paniela, where he arrived about the 4 th of the nones of February following.

    After he had fettled his new colony in this ifland, he put to fea again with a defign to obferve the !and of Cuba, taking it to be a part of the main continent, which (he was informed) had been hituated more to the weftward;" but meeting with a hard gale of wind on the çaft of that inand, after he had ran down a confiderable diftance on the fouth fide thereof, he was forced out to fea, and foon after difcovered the high lands of "Jamaica for which he failed directly", and anchored in one of the ports on the north fide of tho inland, where he continued fome time to refit his veffel.
    (c) Dela Cafas affirms that the Spaniards had foon deffroyed above five thoufand of the natives, there being not above two or three hundred left in his time, which was but a few years after they had taken poifeffion of the place.
    (d) Sir Antbeny Shirly was the firf that invaded this inland after it was in the hands of the Spamiards; he landed there in 1592 , without oppafition; but left it foon after, not thinking it then worth keeping. It was afterwards invaded by Colonel Fackfon, former General of the Leeward Ifands, who in $16.33^{\circ}$. had fitted out a fmall fleet with which he failed down among the Spanif fettlements, and plunderelt b h St. Domingo and St. Fagr. This valiant officer landed with about five hundred men at Paf are Fort, and cut his way through the feveral breaft-works caft up by the Spaniards, to the very town of Sto Fayr, from -hence he carried a very confiderable booty. See Hickeringill, \&c.

[^1]:    ( $m$ ) See the Hiftory of the Buccaneers.
    (n) Morgan (it is faid) was a native of Wales, and the fon of a farmer. He was tranfported to Barbadoes in the quality of a fervant, and from thence, (after the expiration of his time,) went to famaica, where he joined with the pirates; among whom he was foon diftinguifhed for his fuperior conduct and daring refolution, and in confequence was foon after elected a leader; in which fituation he always behaved with great intrepidity, and was as conftantly attended with fuccefs. He brought no lefs than 250,000 pieces of eight from Porto Bello, and as much from Maracaiba and Gibraltar, befides jewels, plate and flaves to a confiderable value. By his expedition to Panama, it is computed he got 400,000 pieces of eight to his own fhare; and about 200 more for each of his party, at that time near 1200 in number. He left off his courfes immediately after this, and became a fober fettler, and a great promoter of induftry. He was both an excellent citizen and a happy planter; and in the courfe of time, was admitted one of the council: but he was afterwards knighted and appointed Lieutenant Governor, in which ftation he behaved with great applaufe from 1680 , to the year 1682 . When the peace was concluded with the King of Spain, that Monarch infifted on his being punifhed for his former depredations; and he was accordingly fent for, and committed to the Tower in $1683-4$, where he continued for three years without trial or hearing; at which he could hardly fail of clearing his own character, as he had always acted under regular commiffions, from the Governors of Jamaica, while he continued in that active fate of life. But indeed, fuch barbarities as were frequently committed on thefe occafions, were not to be authorifed or countenanced by any Chriftian power, nor committed by any but fuch as looked upon themfelves as lawlefs people.

[^2]:    (a) The office of Marfhal was, doubtlefs, firf eftablifhed in Famaica, while the inhabitants were all military men, and under the guidance of their officers; but as the fettlers grew more numerous, whereof many were better acquainted with the fpade than the fword, this office changed gradually into a mixt ftate, whofe duties, in regard to the civil part of the government, were, at firft, conducted according to the cuftoms of England, but have been fince fixed and regulated by proper laws.

[^3]:    (d) In 1673-4.

[^4]:    (a) See the nature of thefe different forts of earth and mould in the Natural Hifory, Part I. where we treat of native fofiils.

[^5]:    
    

[^6]:    (d) A cafk or hoghead of fugar in England weighs generally from 13 to 14 hundreds weight; but moft of the fhips that left famaica late this year, had long paffages, and many noted fhips were not arrived at this time.
    (i) Jamaira currency is to for. as 7 to 5 , or 140 to 100 .

[^7]:    (a) The wines imported from that illand are but few, and generally run, as they cannot be entered in the Cuftom-houfe; they are commonly cordial wines, and much wanted there in fickly feafons; therefore overlooked.

[^8]:    ${ }^{(b)}$ See the nature and growth of this tree among the vegetables.

[^9]:    ACROSTICUM 7. Simplex villofum, foliis lanceolato-ovatis crenatis $\mathfrak{\mathcal { O }}$ fubauritis petiolatis minimis.
    Acrofticum Frondibus pinnatis, pinnis oblongis integris ferratis acutis fipitibus Squamofis. L. Sp. Pl.
    Trichomanes Majus, Eic. Slo. Cat. 17. \& Hift. t. 35. Filicula E Galipoli villofa, Ėc. Pet. Gaz. t. 17. f. 13.
    Trichomanes Argenteum ad oras nigrum. Plum. t. 175.

[^10]:    (a) See voyage du Levant, Tom.ii. p. 23-4.
    (b) Since my writing the above, I have had the following account of this tree from a perfon whofe knowledge in regard to vegetables, can hardly be excelled; and on whofe information we may fafely depend. He fays that the tree fhould be hardly ever pruned, or but as little as polfible; but if it fhould grow too luxuriant, he advifes the ground to be dug up of one fide of it, and about two or three feet from the

[^11]:    bottom of the trunk, all the roots (both big and little) to be cut away in that place, and the hole to be filled up with rubbifh, of a dry barren kind; which, if the fame growth fhould ftill continue, may be tried on another fide the following year. But if the tree does not bear thick, or the fruit be obferved not to come to perfection upon it, he advifes to cut off the top ftems, or buds, as foon as they and the fruit begin to appear in the fpring.

[^12]:    VERBENA 5. Foliis cordato-ovatis, floribus fpicatis, calicibus inflatis, feminibus echinatis.
    Verbena Diandra calicibus fubrotundis erectiufculis Seminibus ecbinatis. L. Sp. P.

    Blairia Houft. \& Scorodonia, \&c. Slo. Cat. 66. \& H. t. 110.
    An, Herba-vulneraria Mart. 453 .
    The ftiptic or velvet Bur.

[^13]:    (f) This is the general methol in the Windward Inands, but in Famaica they rarely cool the coppers above once a weck.

[^14]:    $(g)$ In the Windward Iflands they lay by as much of this fiirit as will carry a full beat, the remainder, while capable of taking fire, being put up as lower wines for a fecond diffillation; but in famaica, where they make all the firits high proof, they generally mix the whole of the firf diffillations together, and pals them over again, referving the lower wines of this fecond procels for the fame purpole.
    (b) See an Eflay upon Planterfhip, printed Antigua, 1750.

    Nn
    cul-

[^15]:    (a) Mr. Ebret who has diffected the fpecimen reprefented here, has drawn it with four feeds, but I could never obferve more than one in any of the berries.

[^16]:    (a) The fmell of all the outward and more tended parts of this tree perfectly refembles that of $A J a$ fas tida, but is rather heavier.

[^17]:    GUAJACUM I. Foliis fere impetiolatis, bijugatis, obovatis \& leniter raaiatis; pinnis $\mathbb{E}^{3}$ ramulis dicbotomis.
    Guajacum foliolis bijugatis obtuls. L. Sp. Pl.
    Guiacum Jamaicenfe, \&c. Pk. t. 35 . f. 3 \& 4 .
    Guiacum. Plum. t. 17. \& Guiacum Off,
    Pruno vel Evonimo affinis arbor, ©c. Slo. Cat, 186. \& H. t. 222.
    $\mathrm{Nn} n$
    Lignum-

[^18]:    (a) The gum, or rather refin of this plant, tranfudes frequently of its own accord, and may be feen concreted on many parts of it at all feafons of the year; but is generally found in greatef abundance where the bark has been cut or wounded.

[^19]:    (a) A Canoa, Conoa, or Conoo, is but a junk of fome large tree, hollowed as much as the dimenfions of its axis will bear: the 1 ngth being regulated by fancy, or proportioned to the ufe it is intended for. They are fometimes very large, and hold the water fo well, in thofe fmooth feas, that people frequently venture twenty or thirty leagues from the fhore in 'em.

[^20]:    SATYRIUM I I: Bulbofum, vel parafiticum vel terrefire; caule comprefo, fobiis difichis oblongis, Jpica fimptici torminali.

[^21]:    VISCUM 1. Parafiticum, ramulis verticillatis, foliolis obowatis trinerviis, baccis tridentatis.
    Vifcum caule verticillato. L. Sp. Pl.
    Vifcum Gerb. emacul. Slo. Cat. 168.
    The Mifletoe, with verticillated branches.

[^22]:    (a) In cali they do not catch one of the Species readily, they take a fired flick, or a candle, and wave it up and down inftead of a fly.

    GRILLES

[^23]:    (a) See Cacius. (b) Thefe are fpacious fheds, well filled with rich mould, and covered with thatch, in which the breeders are preferved and fupplied with proper nourifiment, during the inclemency of the feafons. (6) It is, probably, a fpecies of the Melafoma, or fome milky plant.

