A Description of the Pimienta or Jamaica Pepper-Tree, and of the Tree that bears the Cortex Winteranus: Communicated by Hans Sloane, M. D. and Reg. Soci. S.

Myrtus arborea foliis laurinis aromatica: sive Pimienta, Jamaica-Pepper, or All-Spice-Tree.

His Tree has a Trunk as thick as ones thigh, rising streight about 30 feet high, covered with an extreamly polite or smooth Skin of a gray colour, and branched out on every hand, having the ends of its Twigs fet with Leaves of several sizes, the largest being 4 or 5 inches long, and 2 or 3 broad in the middle where broadest, and whence it decreases to both extreams ending in a point, smooth, thin, shining, without any incifues, of a deep green colour, and standing on inchlong footstalks; when bruis'd very odoriferous, and in all things like the Leaves of Bay-tree. The ends of the Twigs are branch'd into bunches of Flowers, each footstalk sustaining a Flower made up of four herbaceous of pale green Petala bowed back or reflected downwards, within which are many Stamina of the same colour. To these follows a bunch of crowned or umbilicated Berries (the Crown being made up of four small Foliola or Leaves) which are bigger when ripe than Juniper-berries, at first when small, greenish; but when ripe, they are black, smooth and shining, containing in a moist, green, aromatick and biting Pulp two large Acini or Seeds, separated by a Membrane lying between them, each whereof is a Hemisphere, and both join'd make a Globe or Spherical (appearingly one) Acinus, whence Clusius makes in one Seed divisible into two parts.

It grows on all the hilly parts of the Island of Jamaica, but chiefly in the North-side thereof; and where-ever these

these Trees grow, they are generally left standing when other Trees are fell'd, or they are sometimes planted where they never grew, because of the great profit from the cur'd Fruit sent in great quantities yearly into Europe.

It flowers in June, July and August, but in several places sooner or later, according to their situation and different Season for Rains: and after it flowers the Fruit soon ripens; but 'tis to be observ'd, that in clear'd open

Grounds, 'tis sooner ripe than in thicker Woods.

There is no great difficulty in the curing or preferving of this Fruit for use, 'tis for the most part done by the Negro's; they climb the Trees, and pull off the Twigs with the unripe green Fruit, and afterwards carefully separates the Fruit from the Twigs, Leaves, and ripe Berries; which done, they expose them to the Sun from its rifing to fetting for many days, spreading them thin on cloaths, turning them now and then, and carefully avoiding the dews (which are there very great.) By this means they become a little wrinkled or rugous, dry, and from a green change to a brown colour, and then they are fit for the Market, being of different fizes, but generally of the bigness of black Pepper, something like in fmell and tafte to Cloves, Juniper-berries, Cinamon and Pepper, or rather having a peculier mixt smell, somewhat akin to them all, whence the name of All-Spice. The ripe Berries are very carefully separated from those to be cured, because their wet and plenteous Pulp renders them unfit for Cure. Whence these Berries always coming unripe dryed into Europe, has been the occasion of Naturalists thinking it to be fructu umbilicato sicco. The more fragrant and smaller they are, they are counted the better.

This Fruit with water distilled per Vesicam, yields a very odoriferous Chymical Oyl sinking to the bottom of water like Oyl of Cloves. It may deservedly be coun-

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ted the best and most temperate, mild and innocent of common Spices, and sit to come into greater use, and to gain more ground than yet it hath of the East-India Commodities of this kind, almost all of which it far surpasses by promoting the digestion of Meat, attenuating tough Humours, moderately heating, strengthening the stomach, expelling Wind, doing those friendly offices

to the Bowels we generally expect from Spices.

It is now commonly fold by Druggists for Carpobalfamum, which I suppose came from Hernandez, who says it may be its succedancum; but it is not that Fruit, but seeems more fragrant and less adstringent and balfamick. Clausus says, that it takes away, if chew'd, a stinking Breath. John de Barrios tells us, 'tis one of the Ingredients of Chocolate in New-Spain; and Franciscus Uria, who brought it from New-Spain and gave it to Redi, said it was there commended against the Epilepsie and Gutta serena, which he in divers persons tryed, but without success; but he at the same time says, he thinks it a good Stomachic and Cephalick Medicine moderately given, Exper. Nat. pag. 132.

It has been taken by Clusius for Pliny's Garyophyllon, and by others for Amomum: But 'tis not likely that it was known to the Ancients, not being known to grow in the East, but West-Indies, whence it was brought into England, and sent to Clusius, who first describ'd and figured it, giving it this name Amomum quorundam; An Caryophyllon Plinii, Exor. p. 17. from whence came that in Gerard, Amomum quorundam, forte Caryophyllon Plinii, p. 1610. and that of Parkinson, Amonum aliud quorundam, & Garyophyllon Plinii à Clausio suspicatum, p. 1567. likewise that of Caryophyllus aromaticus fructu rotundo, E. B. p. 411. & Amomum quorundam odore Caryophilli, J. B. Tom. 2. p. 194. Redi in his Exper. Nat. p. 132. speaks of this, and figures it under the name of Piper Chiapæ. And Dr. Trapham in his Discourse of the State

State of Health in the Island of Jamaica, calls it the Baytree or Spicy Piemento, p. 38. And Dr. Grew in his Musaum Regalis Societatis calls these, being very large, Aromatick Indian Berries, or Cocculi Indi aromatici, p. 211.

It is also very likely that Hernandes does describe this under the name of Xocoxitl, seu Piper Tavasci, p. 30. his Description agreeing in every thing only the Flower, which must, if he rightly describes it, make it different; for he makes it to have a Scarlet Flower like to the Pomegranate, smelling like Orange-flowers, no way agreeing to this. And Ximenes in the Spanish History of Hernandez printed at Mexico, describes it the same way by the name of Xocoxitl o Pimienta de Tavasca, fol. 2. so that I remain in doubt, but am apt to believe it the same, only ill described by this Author.

I am likewise, on account of an ill description, very much at a loss to know whether this be the Tree, Piso describes in the first Edition of his Book, p. 98. 1648. under the name of Anhuiba miri.

Arbor Baccifera, laurifolia, aromatica, Fruetu viridi calyculato ramoso.

Wild Cinamon-tree, commonly but falfly called Cortex Winteranus.

Thigh, rifing to about 20 or 30 foot high, having many Branches and Twigs hanging downwards, making a very comely Top. The Bark confifts of two parts, one outward, and another inward. The outward Bark is thin as a mill'd Shilling, of a whitish Ash or gray colour, with some whiter spots here and there on it,

and feveral shallow Furrows of a darker colour, running variously through it making it rough, of an aromatick taste. The inward Bark is much thicker than Cinamon, being as thick as a mill'd Crown-piece, fmooth, of a whiter colour than the outward, of a much more biting and aromatick taste, something like that of Cloves, and not glutinous like Cinamon, but dry and crumbling between the teeth. The Leaves come out near the ends of the Twigs without any order standing on inch-long foot-stalks, they are each of them two Inches long, and one Inch broad near the end where broadest, and roundish, being narrow at beginning, from whence it augments in breadth to near its end, of a yellowish green colour, shining and smooth, without any incifures about its edges, and somewhat resembling the Leaves of Bay or Laurocerasus. The ends of the Twigs are branched into bunches of Flowers, standing something like Umbels, each of which has a foot-stalk, on the top of which is a Calix made up of some Foliola, in which stand five Scarlet or purple Petala, within which is a large Stylus. these follow so many Caliculated Berries of the bigness of a large Pea, roundish, green, and containing, within a mucilaginous pale-green thin Pulp, four black shining Seeds or Acini, of an irregular figure.

All the parts of this Tree, when fresh, are very hot, aromatick, and biting to the taste, something like Cloves, which is so troublesome as sometimes to need a remedy

from fair Water.

It grows in the Low-land or Savanna Woods very frequently, on each fide of the Road between Passage-Fort and the Town of St. Jago de la Vega in Jamaica, in An-

tigua, and other the Caribbe Islands.

The Bark of this Tree is what is chiefly in use, both in the Plantations of the English between the Tropicks, in the West-Indies, and in Europe, and is without any difficulty cured by only cutting off the Bark, and letting it dry in the shade.

It is in use in the West-Indies by the more ordinary fort of People in place of all other Spices, being thought very good to consume the immoderate humidities of the Sto-

mach, help Digestion, expel Wind, &c.

It is likewise as well there as in Europe thought a very good Remedy against the Scurvey, and to cleanse and envigorate the Blood, being in London-Druggists and Apothecaries Shops used for those purposes, under the name of Cortex Winteranus, which it is not, that being different (as may appear from the Descriptions) but may very well supply its place: it is in the West-Indies mixed and given with Steel, and other Medicies; but if the Patient be any way of a hot Constitution, it does more harm than good, being very warm.

Rum, a vinous Spirit drawn from Molossus or bad Sugar fermented with Water, if it be mixed with some of this Bark, loses in part its loathsome empyreumatick

Smell.

This Bark if mixed with Water, and distilled per Vificam, yields an aromatick Oil sinking to the bottom of Water like Oil of Cloves, with some small quantity of which it being mixed has sometimes been sold for true Oil of Cloves.

The first Author I find to mention this was Peter Martyr in Decad. Ocean, under the name of Cortex Cinamomi saporem, Gingiberis amaritudinem & Caryophylli suavem odorem præse ferens. Nocolaus Monardes was the next, who describes this under the name of Lignum Aromaticum, from whom the Hist. Ludg. took the same, and Clusius in this Comment on this Author corrects him, giving it the name of Lignum seu potius Cortex Aromaticus, Exot. p. 324. & Johannes Baubinus, Lignum Aromaticum seu potius Cortex Monard. Hist. pl. tom. 1. p. 460.

By the Description, &c. of another Bark, in Authors under the name of White Cinamon I question not, it is

the same with this, every thing agreeing.

This

## This is therefore

Canella alba quorundam. Cluf. Exot. p. 324. I. B. p. 461. Canella alba Park. p. 1581.

Canella alba ex arbore, Ejusdem ibid.

Cinamomun sive Canella tubis minoribus alba. C. B. p. 409. It is likewise what Linschoten in his Description of America, translated into French gives an account of, as I suppose from Peter Martyr, under the name of Arbre ou les Pigeons nichent; and what Dr. Trapham in his Discourse of the State of Health of Jamaica, calls Winter-Bark, or West-Indian Cinamon-Tree p. 38. Hernandez, p. 43. and Ximenes who publish'd his History at Mexico in Spanish, fol. 9. likewise describe this under the name of Caninga.

It may be doubted whether this be Ascopo of Hariot, which he mentions p. 24. of his Latin Edition of his Voyage by Theodore de Bry, and by Hakluyt in his Col-

lection of Voyages, p. 275. of Vol. III.

Thus far this most excellent Botanist; who was likewise pleased to communicate the elegant Figures of these Plants hereto annexed, by which the Reader may see what may be hoped in Natural History from so Curious a Hand.

SOME time fince, I shewed an Experiment of the Quantity of Water raised in Vapour from the surface of the Sea in a day's time, which was so far approved by some honourable Members of this Society, that I have received their Command to prosecute those Enquiries, and particularly in relation to the Method used by Nature to return the said Vapours again into the Sea, which

An Account of the Circulation of the watry Vapours of the Sea, and of the Cause of Springs, presented to the Royal Society. By E. Halley.

