I. An Account of the Cinnamon Tree in Ceylon, and its several Sorts. Communicated by the Chief Inspector of the Cinnamon Trade and Manufacture in that Island to Albertus Seba, a noted Druggist at Amsterdam. Translated by the late Dr. Scheuchzer, F. R. S.

HE first and best Sort of Cinnamon, which grows in great Plenty in Ceylon, and is peculiar to that Island, is call'd by the Natives Rasse Coronde, which is as much as to say, sharp, sweet Cinnamon. 'Tis this choice Sort, which is exported Yearly by the Dutch East-India-Company, by whom it hath been prohibited under severe Penalties, that no other Sort whatever should be mix'd with it.

The fecond Sort is call'd Canatte Coronde, that is, bitter and adfiringent Cinnamon; for the Ceylonefe, in their Language, call Cinnamon in general Coronde, and Canatte fignifies bitter and adfiringent. The Bark of this Tree comes off very eafily, and smells very agreeably when fresh, but hath a bitter Taste. It is an Advantage to us, that it doth not grow in great Plenty hereabouts, because else one might easily mistake it for a better; as indeed, in general, it requires a good deal of Skill and Attention so to distinguish the Cinnamon Trees from each other, as not to choose now and then a worse Sort for the best. The Root of this second Tree yields a very good sort of Camphire.

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The third Sort is call'd by the Ceylonese, Cappe. roe Coronde, which is as much as to fay, Camphorated Cinnamon, because it hath a very strong Smell and Tafte of Camphire. It grows plentifully enough in the Island, but not in the Eastern Parts of it: However, they find Means now and then to fend it over privately, and fell it to the Danes and English, who come to Trade upon the Coasts of Cormandel; for as long as there is but one Port in the Island left open, abundance of this fort of bad Merchandize may be exported. Besides, there is a fort of a Canella, growing upon the Continent of India, about Goa, which is very like this fort of Cinnamon Tree, though it hath nothing of the true Cinnamon. The same fort of Canella agrees in many Things with the Canella Malabarica Sylvefiris, a wild Cinnamon Tree, growing upon the Coasts of Malabar. And although with regard to the Shape of the Tree, and the outward Appearance of the Bark and Leaves, there is very little Difference to be observed between these two forts of Canella, and the above-mentioned first and good fort of Cinnamon, yet the latter is vastly superior in Richness, Virtue and Sweetness.

The fourth Sort of Cinnamon is called by the Ceylonese, Welle Coronde, that is, the Sandy Cinnamon, because upon chewing it, one feels as it were, Bits of Sand between the Teeth, though in Fact there is nothing Sandy in it. The Bark of this Tree comes off easily enough, but is not so easily roll'd up into a sibular Form, as other forts of Cinnamon are, being apt to burst open and to unfold it self. It is of a sharp and bitterish Taste, and the Root of it yields but a small Quantity of Camphire.

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The fifth Sort is called Servel-Coronde, Servel in the Ceylonese Language fignifies mucilaginous, or glutinous. This fort of Cinnamon acquires, in drying, a very considerable Degree of Hardness, which upon chewing of it sufficiently shews it self. It hath otherwise but little Taste, and an ungrateful Smell; but the Colour of it is very fine, and it is not many Years since I first took Notice, that the Natives, who are all Blacks, mix a good deal of this mucilaginous Cinnamon along with the first and best Sort, the Colour of both being very much alike, excepting only, that in the good Sort there are some few yellowish Spots appear towards the Extremities.

The fixth Sort is called by the Natives Nieke Coronde, the Tree which bears it, having a good deal of Resemblance to another Tree, which is by them called Nieke Gas, and the Fruit it bears Nieke. The Bark of this fort of Cinnamon Tree, hath no manner of Taste or Smell, when taken off, and is made use of by the Natives only in Physick. For by roasting of it they obtain a Water and Oil, which they anoint themselves withal, thinking thereby to keep off all forts of noxious Fumes, and Insections in the Air. They likewise express a Juice out of the Leaves of it, which they say cools and strengthens the Brain, if the Head

The feventh Sort is called Dawel-Coronde, that is, Drum-Cinnamon, in Low Dutch Trommel-Caneel: The Reason of this Appellation is, because the Wood of this Tree, when it is grown hard enough, is light and tough, and that Sort, of which the Natives make some of their Vessels and Drums, which they call Dawel. The Bark is taken off, when the Tree P 2

be rubb'd with it.

grows as yet, and is of a pale Colour: The Natives use it in the same Manner with the sixth Sort.

The eighth Sort is called Catte-Coronde, that is, the thorny or prickly Cinnamon; Catte, in the Ceylonefe Language, is a Thorn, or Prickle; accordingly this Tree is very prickly. The Bark is in some Measure like Cinnamon, but the Leaves differ very much, and the Bark it self hath nothing either of the Taste or Smell of Cinnamon. The Natives use the Root, Bark and Leaves of this Tree in Physick, applying them in Form of Cataplasins, to Tumours and Swellings from a thick corrupt Blood, which they say it cures in a short Time.

The ninth Sort is called *Mael Coronde*, or the Flowering Cinnamon, because this Tree is always in Blossom. The Flowers come nearest to those of the first and best Sort, called *Rasse Coronde*, but they bear no Fruit, which the other doth. The Substance of the Wood becomes never so solid and weighty in this, as in the other Cinnamon Trees above-mentioned, which have sometimes eight, nine, or ten Feet in Circumference. If this everslowering Cinnamon Tree be cut, or bored into, a limpid Water will issue out of the Wound, as it doth out of the *European Birch Tree*, but it is of no Use, no more than the Leaves and Bark.

The Inhabitants of Ceylon say, that there is still another Sort of Cinnamon, which they call Toupat Coronde, or the three Leave Cinnamon. It doth not grow in that Part of the Country which the Dutch East-India Company is posses'd of, but higher up towards Candia. Having never seen it my self, I will also, out of regard to Truth, say nothing farther of it.

And

And thus, Sir, I have given you, I hope, a fatiffactory Account of the several Sorts of Cinnamon Trees growing in this Country. I can affure you, that you are the first to whom I ever communicated fo particular a Description; for having been for almost these fifteen Years last past, employed as chief Inspector of the Cinnamon Trade and Manufacture here, I have with much Pains and Attention, fo strictly enquired into this Matter, that at last I found out all the feveral forts of bad Cinnamon, which were formerly mix'd with the true and good one; and have been able to shew Samples of the Bark, Root and Leaves of every one of them to our Directors, who thereupon, to shew their Satisfaction, that a Thing of that Consequence was at last, after many laborious Searches discovered, and thinking it a Thing well worth a farther Enquiry, were pleafed to augment the Yearly Salary annex'd to this Office.

It now remains, that I should inform you, in how many Years the Cinnamon Trees grow ripe enough, and become fit to have the Bark stript off. And here I will confine my self only to the first and best Sort, which is Yearly exported by the Company, and what I shall mention of it, may serve at the same Time to answer in some Measure such Queries as might be made about the others.

All the several sorts of Cinnamon Trees, the best as well as the rest, must grow a certain Number of Years, before the Bark is sit to be taken off: With this Difference however, that some of the Trees of the same sort, as for Instance of the sirst and best, will ripen two or three Years sooner than others, which is owing to the Difference of the Soil they grow in; those for In-

ftance.

stance, which grow in Vallies, where the Ground is a fine whitish Sand (and there are many such Vallies in the Island of Ceylon) will in five Years Time be fit to have the Bark taken off: Others on the contrary, which stand in a wet slimy Soil, must have seven or eight Years Time to grow, before they are ripe enough. Again, those Trees are later, which grow in the Shade of other larger Trees, whereby the Sun is kept from their Roots: And hence also it is, that the Bark of such Trees hath not that Sweetness and agreeable Taste observable in the Bark of those Trees which grow in a white Sandy Ground, where with little Wet they stand full exposed to the Sun, but is rather of a bitterish Taste, something adstringent, and sinells like Camphire.

For by the Heat of the Sun's Rays the Camphire is made fo thin and volatile, that it rifes up and mixes with the Juices of the Tree, where it undergoes a small Fermentation, and then rising still higher between the Substance of the Wood, and the thin inner Membrane of the Bark, it is at last so effectually diffused through the Branches and Leaves, that there is not the least Footstep of it to be perceived any where. Mean while that thin and glutinous Membrane, which lines the Bark on the Inside between it and the Substance of the Wood, attracts and sucks in all the purest, sweetest, and most agreeable Particles of the Juice, leaving the thick and gross ones, which are push'd forward, and serve to nourish the Branches, Leaves, and Fruit.

What I here mention, is conform to my own Obfervations, and I have often had Occasion to prove this Fact to curious Persons by the Things themselves. For if the Bark be fresh taken off, that Juice which remains

remains in the Tree hath a bitterish Taste, not unlike that of Cloves. On the contrary, if you taste the inner Membrane of the Bark, when fresh taken off, you'll find it a most exquisite Sweetness, extreamly agreeable to the Taste, whereas the outward Part of the Bark differs but very little in Tafte from the common Trees; which shews plainly that all the Sweetness of it is owing only to the inner Membrane. But when the Bark is laid in the Sun in order to its being dried and wound up. this Oily and agreeable Sweetness of the inner Membrane communicates and diffuses it felf also throughout the whole outward Part of it (which however hath been first stripp'd, when as yet upon the Tree, of its outermost greenish Coat) and imbues it so strongly, as to make the Bark a Commodity, which for the Fragrancy of its Smell, and the Sweetness of its Taste, is coveted all over the World.

It may not be amiss to take Notice also, how many Years the Cinnamon Trees, when they are once come to a full Maturity, will continue in that State, so that the Bark, when taken off, shall have lost nothing And in order to clear of its Sweetness and Virtue. up this Point, it must be observed, that the Bark may as yet be taken off from Trees which have stood fourteen, fifteen, or fixteen Years, according to the Quality of the Soil they stand in: But beyond that Time they grow thicker, and lose, by Degrees, their Tafte and agreeable Sweetness, which makes the Bark have more of the Taste of Camphire: Besides, the Bark is then grown fo thick, that if it be laid in the Sun, it will no longer shrink and wind it self up, but remain flat.

And here it may be thought a fit Subject of Enquiry. how it comes to pass, that considering what vast Quantities of Cinnamon have been exported from this Island, and fold all over the World, by the Europeans as well as Natives, not only for these two hundred Years last past; and since the Way thither by the East-Indies hath been found out by the Portugueze, but for feveral Centuries before (for it was discovered and known long before) I fay, how, confidering this, it comes to pass, that there are yet such Numbers of good Trees fit to be Bark'd, remaining in the Island and growing there every Year? Now in order to folve this Que. stion, several Authors, who describ'd the island of Ceylon, committed a confiderable Mistake, when they assure their Readers, that when the Bark hath been stripp'd off the Tree, it grows again in four or five Years. and becomes fit to be ftripp'd a fecond Time. I can affure you. Sir, that this Affertion is entirely contrary to the Course of Nature and Observation: Nor do Ibelieve. that there is any one Tree whatever in any Part of the World, which, if it was entirely stripp'd of its Bark. could fubfift and grow any longer: That Part at least. where the Bark hath been taken off, will quickly grow dry, and so die away; but the Root in the mean while remains entire and in good Condition; and this shews the Reason why there is such a Number of Trees sit to be Bark'd every Year. For although the Cinnamon Trees, after the Bark hath been once taken off, is cut down to the very Root, as they do in Europe Oaks. Birch-Trees, Alders and Willows, yet the Root will quickly push forth new Shoots, which will ripen in a short Time, I mean in five, fix, seven or eight Years, some sooner, some later, and then yield their Quantity

Hence it appears, how far the old tity of the Bark. Roots are instrumental to the Growth and Plenty of Cinnamon Trees, but the Fruit which falls from the. Trees, contributes very much towards the fame End: And it is particularly owing to a certain kind of wild Doves, which from their feeding on the Fruit of the Cinnamon-Tree, they call Cinnamon-eaters, that these Trees grow fo plentifully in this Island; for the Doves, when they fetch Food for their young ones, flying here and there, disperse vast Quantities of the Fruit all over the Fields, which occasions the Rife of many thousand young Trees, which one shall see here and there along the Roads in fuch Quantities together, that they look like a little Wood. So plentifully grows this excellent Tree in this Island; I call it excellent, because indeed I don't know of any other that is preferable to I need not point out to you what remarkable Footsteps of Divine Providence the History of the Cinnamon Tree affords to an attentive Eye.

There is hardly any thing so universally grateful, and esteemed by all Nations, as true Cinnamon. The Oil drawn out of it by Fire is reckoned one of the strongest Cordial Medicines: The Camphire which comes out of the Root, is likewise of great Use in several Distempers, as are also the Oil of Camphire, a very costly Thing, the Leaves of the Tree, and the Oil distilled out of them; and lastly, the Fruits with their Oil. In short, there is no Part of the Cinnamon Tree, but what is of some singular Use or other in Physick. I purposely avoid speaking of the large Gains the Company makes by the yearly Export of this precious Commodity.

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Some Additions to the foregoing Account, by Albertus Seba. F. R. S.

As a farther Explanation of this curious Account of the Cinnamon Trees, it will not be amiss to subjoin the following Observations. Having some Years ago bought out of the East-India Company's Warehouses at Amsterdam, a considerable Quantity of Cinnamon Leaves, or Folia Malabathri, pack'd up in several large Chests, I happen'd to find in one of them the Flowers of the Cinnamon, as big as the Italian Bean-slowers, and of a blue Colour; I chanced likewise to meet with the Fruit. But I could not find either in any of the other Chests.

In 1722 and 1723, I bought of the fame Company the Oil, which is expressed out of the Fruit of the Cinnamon Tree, as also that which is boil'd out of them, which is of a very good Consistence and white, and is by the East-India Company called Cinnamon Wax, because the King of Candia causes Candles to be made out of it, which for their agreeable Scent, are burnt only by himself and at his Court. However he permits his Subjects to express the Juice out of another Fruit, not unlike the Fruit of the Cinnamon Tree; but this Juice being only a thin fat Substance, like Oil of Olives, they cannot burn it any otherwise but in Lamps.

The *Indians* use this Cinnamon Wax also in Physick, and give it inwardly in Luxations, Fractures, Falls, Contusions and Bruises, that in case any inward Part be touch'd or bruised, it may by its Balsamick

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Virtues heal them. They give it also in Bloody Fluxes to one Dram or a Dram and a half. Outwardly applied, it makes the Skin more beautiful, smoother and softer, than any one known fort of Pomade.

The Leaves of the Cinnamon Tree yield also an Oil, which is of a bitterish Taste, resembling Oil of Cloves mix'd with a little good Oil of Cinnamon. It is called Oleum Malabathri, or Oil of Cinnamon Leaves. It is an Aromatick, and is reckoned an excellent Remedy in Headaches, Pains of the Stomach,

and other Distempers.

The Oil of the Root of the Cinnamon Tree is. properly speaking, an Oil of Camphire, the Roots affording a good Quantity of Camphire. About two Years ago, or fomewhat longer, I bought a Bottle of it of our East-India Company at my own Price. There were feveral Bottles together in a Box, upon which was wrote in Low Dutch Dese Oliteyten syn tot cen geschenk nyt Candia geschikt; that is, these Oils were sent as a Present out of Candia, which shews that they are genuine, without any Adulteration; accordingly they are very much esteemed. this Oil be distilled in Glass Vessels, there comes over along with it, that fort of Camphire which the Indians call Campbire Baros, or Campbire of Borneo, which shoots in thin transparent Christals, forming a beautiful Variety of Trees on the Recipient, not unlike those, which in very frosty Weather are to be feen upon Windows. This fort of Camphire is of very great Efficacy in Physick, and is gathered and kept for the King of Candia his own Use, who esteems it an excellent Cordial Medicine. But not only the Camphire of Baros, but also the Oil of Camphire.

phire, which is drawn out of the Roots of the Cinnamon Tree, is a very great Cordial, if taken inwardly: It strengthens the Stomach, expels Wind, and hath been found of great Use in arthritick and gouty Disorders: It is also a Diuretick. The Dose is ten or twelve Drops upon a bit of Sugar, or in a proper Ve-Outwardly it is applied in all arthritick Pains from Cold and Obstructions, being rubb'd on the affected Part with a warm Hand, and it will presently lessen the Pain, and by Degrees take it off. about fix and thirty Years fince, ferving in the Shop of Mr. Nicolas Dumbstdorff at Amsterdam, that Gentleman was then fo cruelly afflicted with arthritick Pains, that he could have no Rest neither Night nor Day; and although he called in the Afliftance of feveral noted Physicians, and tried abundance of Medicines, yet he could find no Relief, till he was advised to cause himself to be anointed with the Oil of the Root of the Cinnamon Tree; of which he then happen'd to have a good Quantity by him. I remember very well, that I anointed him my felf, rubbing the Oil on all the affected Parts with my Hand warm'd by holding it to an Oven, and this I did twice every Day for an Hour together. And though, when this Cure was first begun with him, his Hands and Feet were by the Convulsions and the Violence of his Pain fo contracted, that they grew quite crooked, and were full of Nodes, yet in a Fortnight's Time he grew fo much better, that he could fleep well at Nights, feeling neither Pains nor Cramps. In about fix Weeks Time he could walk about his Room, whereas before the Anointing he was not able to stir either Hand This Anointing was continued for about three Months, when the Patient not only recover'd of that

that violent Indisposition, but continued free from the Gout ever after, and lived about fifteen Years in a very good State of Health. And this I cannot only affirm to be true of my own certain Knowledge; but also, that fince that Time I have advised several People in his Condition to do the same with as good Success. Several Physicians have wrote largely of the Virtues of common Camphire, but there are as yet many hidden Qualities in this excellent Medicine. Thus, for Instance, I can affirm, that in all Burnings, by Fire or otherwise, in any Part of the Body, and the Pains occasioned thereby, I have not yet met with any better and surer Medicine than this following.

R. Spir. Lumbricor. terrestr. cum Spir. Vini restissiat 3xij. Camphor. 3ij. M.

No fooner is a Bandage, or Compress, dipp'd into this Spirit, applied to the affected Part, but it will give instant Relief, and so effectually check the Inflammation, that it will creep no farther. But the Application of it must be continued till the Pain is quite gone, and the Ulcus, if there hath been any, is dried up. If the Exulceration is got deeper, and the Wound must be kept open, two Ounces of Camphire distolved in Oleo Hyperici, mix'd with a Pound of the common Unguentum Cerusse, applied according to Art, will quickly and effectually heal it, as I have often experienced.