A Memoir on the DISTILLATION of PERSIMONS,

By Mr. ISAAC BARTRAM.

THIS Society having propoſed at one of their meetings in November laſt, that a trial ſhould be made for drawing a ſpirit from the fermented juice of the *Perſimon*, I was appointed to make the experiment.

THE ſeaſon being then ſo far advanced, I apprehended it was too late; but being ſtill urged by the Society to make the eſſay, I purchaſed about half a buſhel of the *fruit* in the month of December, which was ſo much damaged by the froſt and rain, that I almoſt deſpaired of ſucceſs; the proper time for gathering it being in the month of October.

I HOWEVER proceeded in the following manner.

I CAUSED the *Perſimons* to be well maſhed, and put them in a five gallon keg, to which I added two gallons of water, and about two penny worth of *yeſt*, in order to promote a fermentation. This being compleated, I committed the whole to the *ſtill*, and drawed there from near half a gallon of proof *ſpirit*, of an agreeable flavor.

FROM the ſucceſs of this experiment, I think it may be concluded, that the *Perſimon* may be rendered very beneficial to thoſe who have many of them growing on their plantations, and that they are worthy of the public attention, as many advantages may be reaped from the cultivation of the trees; ſome of which I ſhall hint at in the courſe of this paper.

TO thoſe who would undertake to collect large quantities of this *fruit* for diſtillation, I would recommend the following proceſs.

LET a number of empty hogſheads, in proportion to the quantity of fruit, be provided; take out one of the heads of each, and in the other let a hole be bored, at about four inches

from the chimb, into which fix a plug, which may be occaſionally taken out from the lower end, when the caſks are fixed upon truſſels, at a ſmall diſtance from the ground. In theſe caſks, over the holes, lay a number of ſmall ſticks, covered with ſtraw, about two or three inches thick, to prevent the pulp from choaking them.

YOUR hogſheads being thus prepared, fill one of them half full with *Perſimons*, which have been well maſhed; add water until it ariſe within one third of the top; then cover the caſk with the head that had been taken out, and let it ſtand about nine days; by this time the pulpy or feculent part of the fruit will be ſeparated by the act of fermention; you are then to draw off the liquor, by the hole in the bottom of the hogſhead, and put it in a tight caſk, cloſely bunged up, to prevent a ſecond fermentation, whereby your liquor would become acid, and be rendered unfit for the *ſtill*.

HAVING thus extracted the more vinous parts from the firſt hogſhead, let as much water be added as before, which muſt be well ſtirred, and mixed with the pulp, thereby to procure the whole ſtrength of the *fruit*.

A SECOND hogſhead is then to be charged half full of *fruit*, well maſhed as the firſt, and inſtead of pure water, fill it two thirds full with the ſecond extract of the firſt hogſhead, leaving it to ferment, as before directed. This fermentation being perfected, draw off the liquor, and let it be bunged up cloſe. The third hogſhead is to be treated as the ſecond, and in like manner every ſucceeding caſk. After you have in this manner converted all your *fruit* into a fermented liquor, let it be kept at leaſt one month before it is diſtilled, if it can be preſerved without danger of its becoming ſour; for I have obſerved that vinous ſpirits, drawn from, new fermented liquors, are not equal in flavor to thoſe which have been meliorated by age.

THE *Perſimon Tree* is of a quick growth, and yields great quantities of fruit in a few years after it is planted. The

wood

wood is hard, has a fine close grain, and may be applied to many mechanical purposes ; it burns well, and its ashes contain a very large proportion of salts.

These trees grow spontaneously near all our tide water rivers, and succeed in almost any kind of soil. They thrive best when planted in an open place. I would therefore recommend, that they should be fixed at about ten feet apart, round the fields, by which means they would be no incumbrance, but contribute to the support of the fences, as they would serve for live posts. The leaves soon rot, and become good manure, insomuch that it is remarkable that grass grows better under these trees, than any other.

Every farmer who has *fifty acres* of land, might plant *three hundred* trees round his fields ; which being disposed as before directed, would be a great addition to the beauty of his farm.

Let us suppose each full grown tree will produce *two bushels* of *fruit* upon an average (some I have seen bear thrice that quantity.) From a farm then of *fifty acres*, *six hundred* bushels of fruit might be gathered ; and as from the foregoing experiment a bushel is found to yield a gallon of wholesome and very agreeable spirit, every farmer having that number of trees, might make *six hundred* gallons of liquor as good as rum.

The expences attending the process, we will suppose to amount to one half of the value of the liquor when distilled, which admitting to be worth but *Two Shillings* per gallon, will leave a profit of *Thirty Pounds* per annum ; a sum equal to the interest of a farm that would cost *Five Hundred Pounds*.

Were we to extend this calculation to what every fifty acres of cultivated land in this province *only* would produce, we should find that we might soon become independent of the West-Indies, for the expensive article of rum, and thereby yearly save many Thousand Pounds to this colony.

A VALUABLE *gum* exudes from this tree; for the collecting of which, the Society eſtabliſhed in London for promoting Arts and Manufactures, offered a premium of *Twenty Pounds Sterl.* for the greateſt quantity, not leſs than *fifty pounds weight*, that ſhould be collected from the *Perſimon Tree*, in any of the Britiſh colonies in America, and imported from thence into the port of London, between the firſt of April, 1762, and the firſt of April, 1763. And for the next greateſt quantity, not leſs than *twenty-five* pounds weight, a premium of *Ten Pounds Sterling*,

I HAVE alſo been informed, that an excellent *beer* is made of *Perſimons* in ſome of the ſouthern provinces.

HENCE it will appear, that the cultivation of the *Perſimon Tree* is an object worthy the attention of our farmers, as it promiſes great profit to themſelves, and a ſtill greater advantage to the community in general.

A letter from Doctor OTTO *to Doctor* BOND, *gives the following account of an* Oil, *made from the ſeeds of the common large* SUN-FLOWER, *viz.*

"THE oil is made much in the ſame manner as the "linſeed oil with fire, only that the huſk is taken off "before it is pounded and preſſed; tho' I think it would be "much better if it had been drawn cold. One buſhel of the "ſeed, in the manner this was made, yields about three "quarts of oil: What quantity of oil one acre of land will "produce, I cannot aſſert at preſent; however, there is a "ſpot of land planted, and the ſeed now ripening, the con-"tents whereof we will meaſure, and alſo the produce, and I "will inform you of the reſult. It is frequently uſed by our "brethren, inſtead of ſweet oil, for ſallad, and, with a ſmall "addition of the ſweet oil, ſerves very well for that purpoſe."

UPON examining ſome of the oil which was ſent by Dr. OTTO, it was found thin, clear, and agreeable to the taſte.

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