

Received January 9, 1769.

V. *A Letter to Dr. William Watson, F. R. S.  
from the Hon. Daines Barrington, F. R. S.  
on the Trees which are supposed to be indi-  
genous in Great Britain.*

January 2, 1769.

DEAR SIR,

Read Feb. 9 and 16,  
1769.

SINCE you sent me the speci-  
men of supposed chefnut, which  
was taken from the old hall of Clifford's Inn, I have  
been at some pains to examine into the authorities for  
the prevailing notion, with regard to this being an in-  
digenous tree; as also with relation to some others,  
which are generally conceived to be of the native  
growth of Great Britain.

But, before I enter into other particulars, I shall  
venture to lay down some general rules, from which  
it may be decided, whether a tree is indigenous or  
not, in any country.

1. They must grow in large masses, and cover con-  
siderable tracts of ground; nor must such woods end  
abruptly, by a sudden change to other trees, except  
the situation and strata become totally different.

2. If the tree grows kindly in copses, and shoots  
from the stool, it must for ever continue in such a  
wood,

wood, unless grubbed up with the greatest care; nor is it then easily extirpated.

3. The seed of such tree must ripen kindly: nature never plants but where a succession may be easily continued, and in the greatest profusion.

Lastly; Many places in every country must receive their appellation from indigenous trees which grow there; as no circumstance is more striking, when a tract of ground is to be described or distinguished: hence so many towns, villages, and farms are named from the oak and ash, which are the most common trees of Great Britain.

When the instances of this are singular, it will prove directly the contrary; as I hope to shew soon with regard to the chestnut and the box.

Having ventured to premise these general rules, by which it may be determined, whether a tree hath been planted by the hand of nature or not; I shall now begin, by considering the proofs which are commonly relied upon, with regard to the Spanish, or sweet, chestnuts being indigenous in Great Britain.

And, first, the very name of Spanish seems most strongly to indicate the country from which it was originally introduced here, as much as if a particular species of oak was known in Spain by the name of the English oak.

There may be some doubts, perhaps, whether this tree is really a native of any part of Europe, as Pliny informs us, chestnuts were brought from Sardis to Italy, and that they were improved in taste by Tiberius, who took particular delight in cultivating them\*.

\* Pliny, lib. XV. cap. xxiii.

I have also been informed by you, that in Spain the chefnut trees, destined to produce the best fruit, are engrafted upon the wild chefnut, and that the French call the common sort *chataignier*, and the improved one *maronnier*.

Though so much hath been said of late, with regard to the excellence of this wood for building, I cannot, upon inquiry, find that it is greatly prized for this purpose either in Spain, Italy, or the South of France; but is chiefly valued for the fruit, which forms a considerable article of food for the inhabitants, as well as of exportation.

I likewise cannot hear that this tree is to be found in any considerable masses, till the traveller is at least two hundred miles to the south of Paris.

With us the nuts by no means ripen kindly, though I have sometimes eaten them very good from English trees.

In Scotland, neither the walnut nor chefnut produce good fruit, though there are some very fine and promising timber trees, of the latter kind, at the Earl of Bredalbane's, in the Highlands.

All these circumstances seem to afford a strong inference, that the Spanish chefnut cannot be a native of Great Britain; but I must now consider the proofs which are generally adduced to the contrary.

Mr. Miller (in his Gardener's Dictionary) hath endeavoured to prove, that the Spanish chefnut grew in great profusion to the northward of London, by a citation from Fitz-Stevens, which only implies, that there were large forests in the neighbourhood of the metropolis, without either the chefnut, or any other tree, being specified. " Proxime patet foresta ingens,

“faltus numerosi, ferarum latebræ, cervorum, damarum, aprorum, et taurorum sylvestrium.”

Mr. Miller also mentions, that some stumps of decayed chesnuts have been seen not far from the metropolis ; he does not, however, particularize the spot, and it should seem therefore, that he had received this information from others.

Most antiquaries suppose, that Old London was chiefly built with this kind of timber from these forests ; there is not the least appearance, however, of any such tree at present within twenty miles of London, which may not be accounted for, as being of infinitely a more modern introduction than the time of Henry the Second, when Fitz-Stevens wrote.

I remember the having once been present myself, when a wager on this head was won ; it being supposed that a small specimen of a beam, from a very ancient house in Chancery-lane, was of this wood ; which turned out to be nothing but common oak.

When you, therefore, lately put into my hands another such specimen of supposed chesnut, from the old hall of Clifford's Inn, I knew it immediately to be only the common oak.

As I had, however, at that time, an opportunity of proving this to a demonstration, by sending into the country for part of an oaken beam from a very ancient stable, and also a piece of Spanish chesnut, which grew near ; I shall, for your further satisfaction, send three specimens, which you will compare where the wood hath been cut transversly, and where they are marked with ink at top and bottom.

The large irregular piece, marked *Cl.*, is the supposed chesnut from Clifford's Inn.

The

The specimen, marked *O*, is from an oaken beam of an ancient stable.

The specimen, marked *C*, is from a Spanish chesnut.

I think it must immediately appear to any one, on inspection, that the specimens *C* and *O* agree in the grain and texture of the wood, and that specimen *C* is evidently of a different kind.

Upon weighing also the specimens *C* and *O*, which are exactly of the same size, the oak turned out to be heavier than the chesnut, by one fourth.

With regard to this latter difference between the two woods, it may be proper to inform you, that the specimen of chesnut was taken from a young tree; the grain of the oak must have therefore been closer than that of the chesnut; but, on the other hand, it must be recollected, that there must have been a very considerable evaporation from the oaken beam during a long course of years.

Dr. Ducarel, in his *Anglo-Norman Antiquities*\*, hath inserted a note of some length, to prove, that Old London was not only built with chesnut timber, but that there still continues a large tract of chesnut woods near Sittingbourn in Kent, which he conceives to be a full demonstration, that this tree is indigenous in England.

I had no sooner read this account, than I determined to examine these woods myself, as well as what trees might be found in their neighbourhood.

The result of a very minute inspection of them is, that I found those parts which consist of Spanish

\* P. 96.

chestnut to be planted in beds or rows, about five yards distant from each other; nor are there any scattering trees to introduce them, which is what must be expected near woods of natural growth.

I shall now proceed to answer Dr. Ducarel's other arguments, with regard to the Spanish chestnut's being an indigenous tree in this country.

He first mentions a grant *Decimæ Castanearum in Denâ*, which he supposes to mean the forest of Dean.

Upon looking into Spelman's Index Villaris, I find no less than two-and-twenty towns and villages which bear the name of *Dean*. Why, therefore, it should mean the Forest, rather than any of these places, is not so obvious; especially when, considering the vast tract of ground included within this forest, the grant must have been of so very extensive a nature.

Supposing it to be the tithe *Castanearum* in any particular parish, it will amount to no more than a grant of the tithe of walnuts would do, which we know to be a tree originally of foreign growth.

The fruit of a small number either of walnuts or chestnuts is very valuable, if near a considerable town. I have been informed, that a grove, not exceeding an acre, of the latter, at Beachworth Castle in Surrey, hath sometimes produced upwards of ten pounds, at the London market, when the season happened to be favourable, and the nuts ripened kindly.

I should suppose that this grove of chestnuts, from their size, may be about two hundred years growth; and they already begin to decay very much at the tops, being what the woodwards term stag-headed.

If

If it be still contended, however, that this grant of tithe includes the whole forest of Dean, I have been in almost every part of it, and can take upon myself to say, that there are not the least vestiges of any such tree at present.

Dr. Ducarel next relies upon a manor in the neighbourhood of Sittingbourne being called Chasteyne or Casteyne, from the circumstance of its being supposed to be amongst chestnut woods.

This, however, is a single instance of such a name to any place in England; and therefore the chestnuts being indigenous can be no more inferred from it, than that box naturally grows in this country, from the name of Box-hill, in Surrey.

Now we happen to know that this hill was so called from an Earl of Arundel's having introduced this tree there, in the time of James or Charles the First\*; and, from many circumstances, I should suppose that the chestnut plantations near Sittingbourne are not of a much more ancient date.

Dr. Ducarel then mentions two very fine chestnut-trees, which grow at Hagley in Worcestershire; this, however, only proves, that the owner of that estate, some time ago, might think it worth while to plant them either for their beauty or their fruit.

\* " This place (viz. Box-hill) was first planted by that famous antiquary (the Earl of Arundel), with box wood, designing to have built a house there; but want of water made him alter his resolution, and build one at Albury, hard by; now belonging to the Earl of Aylesford." Journey through England, vol. I. printed in 1722.

See also the Article BOX-HILL, in an Account of the Environs of London, printed for Doddsley.

The oldest tree we have any account of, perhaps in Europe, is a Spanish chestnut which grows in a court at Tortworth in Gloucestershire: it is supposed by Evelyn and Bradley to have been planted in the time of King John, from mention of it in deeds of that antiquity.

I have, however, procured more accurate information from Lord *Ducie*, to whom this tree belongs; and find that the notion of its great age rests merely upon a very uncertain tradition.

But although we should suppose it to have been planted in the time of King John, it affords no stronger argument of the tree's being indigenous, than those mentioned by Dr. Ducarel to grow at Hagley; especially as there are no straggling chestnuts to be found in the neighbourhood of either of these places.

In further proof that the chestnut formerly grew in this country, we are told, that the roof of Westminster-hall, Boston church in Lincolnshire, and many others, consist of this wood; not because any one hath found it to be so upon examination, but because there are no cobwebs upon such roofs.

Sometimes also, to account for spiders not harbouring in them, it is supposed that the timber is not English, but Irish oak; in short, recourse is had to any extraordinary and uncommon material, to solve the singularity of there being no cobwebs on these roofs.

Having examined several ancient ciplings with regard to this circumstance, I take the cause of the spiders not resorting to many of them to be the following:

This



This insect is known to subsist chiefly on the small flies which he surprizes in his nets; the consequence is, that he will no more be at the trouble of spreading his web where flies cannot be expected, than a fowler will lay his nets in a place where there is no resort of birds.

It is believed that few of the fly tribe are found at any great height from the ground, as they may be supposed to prey upon still smaller microscopical insects, which would be the sport of the winds at any considerable elevation. They are not therefore formed by nature for a high flight.

If one may be allowed also to argue from what is observed with regard to the smallest birds; neither the European wren nor the American humming-bird are ever seen upon any thing higher than a shrub.

Besides this, no fly is scarcely ever to be found but where there is a good deal of light and sun-shine; consequently a wide wooden roof (be it of what material it may) is the most improper place that the spider can lay his snares in.

If such roof therefore is dark, though it is at the same time very low, no flies will haunt it; for a proof of which I may refer you to the cloisters at Lincoln, or any gloomy cellar, though it may be above ground, and have windows which give it a certain degree of light.

Hence also spiders webs are more common on whitewash than on wainscot, especially if it be painted of a dark colour.

Having dwelt thus long upon the point of the Spanish chesnut's being indigenous or not, I shall

now trouble you with some observations relative to the Pine commonly called the Scotch Fir, which certainly is not to be found in any part of England at present, except where the plantation appears most evidently to be of modern date.

Cæsar, indeed, informs us, that no sort of fir was to be seen in this country at the time of his invasion.

It is well known that he made no very far advanced marches ; and his observations are, perhaps, more to be depended upon with regard to military operations, than what might rather engage the attention of a botanist.

There are, however, so many well-attested facts, both by Camden and others \*, of firs being found at a very considerable depth under the surface of the ground, that one cannot withhold one's assent to them, extraordinary as it may appear at present, when throughout England we have no such trees, which afford the least grounds to contend that they are of indigenous growth.

If these indisputable facts could want the addition of my poor testimony, I happened to see near Loch Rannoch, and in other parts of the Highlands of Scotland, subterraneous firs, which had been lately dug out.

I procured a labourer to chip off some parts of these trees, which smelt most strongly resinous ; there could be no doubt therefore, from this circumstance, but that they were firs, as well as from the grain of

\* See Camden in Lancashire, and Phil. Trans. N<sup>o</sup> 67, where such subterraneous firs are said to be found in great quantities in the island of Axholm in Lincolnshire.

the wood: the poor people in those parts use small pieces of them for candles.

There were, however, no fir woods near any of those places, in the Highlands, where I happened to see these subterraneous trees; and, indeed, the indigenous ones are by no means so common as is generally apprehended.

Though what I have last mentioned may, perhaps, make many imagine, that the timber found under ground must have been some other tree, which still continues to grow in the neighbourhood; yet I think there may be two causes assigned, why these bog-firs may be found in places where there is no such tree at present.

The first is, that no pine or fir ever shoots from the stool; and the second, that, being a resinous wood, it is very easily set on fire by lightning, after a dry summer; and thus whole tracts of them may be destroyed without their revegetating.

I was, indeed, informed by an old man at Ranoch-Bridge, that his grandfather used to mention a tradition of the fir wood in that neighbourhood having continued burning for a considerable time, and that the Irish came over to see the conflagration.

A wood of this kind is still growing near the western end of Loch Ranoch, but it is seven or eight miles from the place where I saw the subterraneous trees, near which there was scarcely any other wood but birch.

There seems to be little doubt, therefore, that the fir was formerly an indigenous tree in the northern parts of England; nor does this contradict any of the

rules which I have ventured to lay down, as they have been found in great masses under ground, and their not continuing to grow in the same spot or neighbourhood hath been endeavoured to be accounted for.

As I travel a good deal during the summer, and attend to matters of this sort, I shall now venture to mention some other trees, which do not seem to be indigenous, though they are commonly conceived to be so, as well as by some great botanists, who have treated of English plants and trees.

I cannot think that the elm, which we see every where, is indigenous. My reasons are, that I have never seen it out of a hedge-row, avenue, or clump, though it is a tree which shoots vigorously from the stool: I have likewise never observed any seeds on this tree, though you have lately informed me, that they stand on very short footstalks, and that the blossom in the spring is of a pale red.

Upon looking into Mr. Miller's Dictionary, I find he likewise asserts that this tree bears seed; but at the same time mentions its being difficult, if not impracticable, to supply the nurseries from it; which shews that it scarcely ever comes to maturity in this climate.

The Wych (or broad-leaved) elm, however, is certainly of natural growth in this country; though it is more common in Scotland, and the northern parts of England, than in the southern counties.

For the same reasons, I cannot allow the lime to be indigenous, though in some years the seed becomes mature.

The

The greater part of the limes, which we now see in every part of England, have been planted since the time of Charles the Second, and were introduced by a French gardener, whose name was Le Notre, at the same time with the horse-chestnut.

There are, however, at More-Park in Hertfordshire, six or seven of these trees, which appear to be the growth of some centuries; so small a number, as well as two or three limes of great antiquity on the banks of the river Neath in Glamorganshire, only prove, that they were planted by some gentleman, either for variety, or perhaps for the fragrancy of the flower. I should indeed rather suppose, that we owe most of the foreign trees which may have been introduced into England some centuries ago, to the alien abbots and priors, who, on special occasions, sometimes visited their benefices in this country.

The greater Maple (or Sycamore, as it is improperly called) is certainly a foreign tree, though very common in Scotland, the northern counties of England, and some parts of Wales.

I never saw the tree but in a hedge-row, avenue, or clump; it must be admitted, however, that its seed comes to its full perfection in almost every year.

I have already mentioned a reason for the box not being considered as indigenous; to which I must now add, that no such place as Box-hill is to be found in Saxton's maps, which were completed in the reign of Queen Elizabeth; nor is it taken notice of by Gerard, in his Article Box, who botanized so much in the neighbourhood of London.

We should, indeed, find great profusion of this shrub in Berkshire, as Affer Menevenfis hath derived the name of that county from the word Berroc: I could never either see, or hear of, box in any part of it, except where it had been used in a parterre, to separate the beds of flowers.

I have likewise looked into Benson's Saxon Vocabulary, nor can I find any such word as Berroc. Mr. Lye's new Saxon Dictionary furnishes also no such Article; on the contrary, he derives Βαρορϋϋπε a quadam nudâ quercu in foresta de Vinberoupe ad quam solebant provinciales convenire. He cites for this Joh. Bromton 801.

I shall now mention some trees and shrubs, which I have doubts whether they are natives of Great-Britain or not, though they are so considered by the Botanists; I cannot pretend, however, to be so positive as in some of the former articles.

I never saw the Yew where it grew in large masses, or appeared to have been sown by the hand of nature. The most considerable numbers which I have happened to meet with are on some of the Surrey hills: these, however, scarcely in any instance, cover more than an acre of ground.

If I should be right in supposing that this tree is of foreign growth, it may then be, perhaps, contended, that we have no ever-green tree or shrub which is indigenous, except the Holly, the Juniper, and the Ivy.

Every church-yard, indeed, proves that this tree hath been for many centuries introduced into England; it seems, however, very extraordinary that we should have no account when, or for what purpose, this

this so very general a practice hath so long prevailed with us.

As far as I can be informed, after very diligent inquiries, it is peculiar to England; and I never saw but one yew-tree in a Scotch church-yard; which was of so extraordinary a size, that you will forgive me, I am sure, for mentioning it, though it hath no relation to the main purpose of my letter.

It continues to vegetate at present in the church-yard of Glen-Lyon, a valley that takes its name from a river which runs through it, and empties itself into the Tay not far eastward from Taymouth, a most capital and picturesque seat of the Earl of Bredalbane's.

I measured the circumference of this yew twice, and therefore cannot be mistaken, when I inform you that it amounted to fifty-two feet. Nothing scarcely now remains but the outward bark, which hath been separated by the centre of the tree's decaying within these twenty years. What still appears, however, is thirty-four feet in circumference.

This, therefore, is, perhaps, the largest tree we have any account of; as the great chestnut at Tortworth, in Gloucestershire, was only 51 feet in circumference, when measured very accurately forty years ago by Greening, the father of the present gardener of that name.

To the catalogue of doubtful trees, I must also add the Abele, or White Poplar, having never seen it growing according to the rules which I have  
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ventured

ventured to lay down with regard to indigenous trees\*.

I have likewise my suspicions with regard to the Privet and Spindle tree; but these I must submit to your more accurate observations; and am,

Dear Sir,

Your most faithful

humble servant,

Daines Barrington.

\* I believe it hath hitherto escaped the botanists, that it is only in the last shoots of this tree, that the glossy and striking white is to be seen on the reverse of the leaf.