Received January 4, 1771.

XLI. A Letter from Richard Waring, E/q; F. R. S. to the Hon. Daines Barrington; on some Plants found in several Parts of England.

SIR,

Read Nov. 14. WOULD sooner have acknowledged the honour of your very obliging answer to the letter, I took the liberty of writing to you, if I had not waited a while, in hopes of having something to communicate, that might, in some degree, merit your acceptance. Nothing better, than the following, having yet fallen in my way, I present you with

A catalogue of some indigenous plants, in places not heretofore mentioned, in the counties of Salop, Stafford, Chester, Flint, Denbigh, Carnarvon, and Merioneth, that are scarce in this island, or have been generally supposed to be so, or not indigenous; and occasionally of such in other counties; and some, that, though common in some other counties, are scarcely, or not at all to be found in these; and also of such as may be doubtful, perhaps originally foreign, though generally supposed to be natives of Britain.

Acer

Acer majus Ger. Nullibi quod sciam in Anglia sponte oritur. Raii Syn. A stranger in England, only where planted. Gerard. Perhaps we have not any tree more hardy, or more apt to be propagated from the seeds; since those of this tree do not often fail of taking root, upon whatever soil they fall, and if they were not heavier than some other winged seeds, or less coveted by birds than some of the more solid or pulpy kinds, there would perhaps be no reason, why this tree should not be as much dispersed throughout the country as the most common tree we have; except that it may have been more lately introduced among us.

Agaricus parvus lamellatus, pectunculi forma, elegans. Dill. Cat. Giff. Here in November, on

flicks rotted on the ground.

Agaricus trilobatus, supernè albus, lævis, infernè serrugineus, foraminibus oblongis et rotundis eleganter punctatus. An Fungus arboreus lobis rubellis, diversimodè siguratis et punctatis. R. Syn. On a hazel tree near Congleton, Cheshire, in October.

Angelica sativa C B, Ray in Cat. Angl. tit. Hypposelinum, says, "By this, when young, I suppose
they were deceived who gave information to the
compilers of Phyl. Brit. that Angelica sativa
grew on the rocks near Berwick." They might
have taken it from Dr. Johnson's Merc. Botan.
However it is wild in many places by the Thamesside, particularly at Stangate, Lambeth; and I have
found it far from any water, in a gravel-pit near
the end of St. Edmund's-bury, toward Sudbury.

Apium petraum, sive montanum album J. B. On Halton-castle, and on a wall at the chamber of the forest De-la-mer, Cheshire, and on the garden-wall of the Abbey of Pershore, Worcestershire.

Aquilegia flore cæruleo Ger. In sylvis et dumetis.

R. Syn. I have not seen it wild.

Aquilegia fl. purpureo. Some years ago I found one only in a wood here, where none has fince appeared.

Aquilegia fl. atro rubido. Four of this kind on a small bank by the high-way about half a mile

from Wore, Salop (towards Namptwich).

Berberis dumetorum. CB. In the hedges on each fide of the road from Ludlow, opposite to Hawford-chapel, and thence to a brook about a mile off, plentifully, and less so about half a mile further, toward Stretton, Salop; also in some places between Shrawarden and Ness-cliff, and between Blacker's-ford and Prees in that county: but whether elsewhere than in hedges, or there spontaneous, or sown, or planted, I do not know.

Betulus five Carpinus Ger. In sylvis et sepibus. R. Syn. I have not observed it more northward than Bedfordshire, though Gerard says, " plenti-

" fully in Northamptonshire."

Bistorta major Ger. In pratis humidis et umbross. Ph. Brit. In a trench without the Western wall

of the castle of Ruthin, Denbighshire.

Blattaria lutea J.B. By the road fide a little short of a place called the Marsh between Ludlow and Stretton, Salop, I once observed a single plant; and this year in a wild and long neglected part, perhaps three perches, of a gentleman's garden, Vol. LXI.

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near Oswestry in that county, I saw, I believe, above a hundred. Neither the gentleman, nor his gardener, could account for the production of them; or had ever observed them before that instant.

Cardamine tripla, sc. ad gradum quartum, prolifera, floribus plenis. I have often found it so hereabout, and near Oswestry, and suspect it may not be uncommon, though unobserved elsewhere.

Cardamine flore majore elatior Tourn. Inft. Nasturtium aquaticum, amarum. Park. In the bog near

the bath at Willowbridge, Staffordshire.

Carduus Mariæ Ger. Ad agrorum margines et in aggeribus fossarum non rarò occurrit. Ray Hist. Though frequent about London, it is so rare in these counties, that I have seen of it only in the church-yard at Ince in Cheshire, and about the eastle at Caergwrle, and in two other places, in this county of Flint. I have not seen one good figure of this elegant plant.

Carduus Mariæ non maculatus R. Hift. hirfutus non maculatus Ph. Brit. The word birfutus feems to have been improperly added, for Ray in Hift. fays, "non alia in re à vulgari Carduo Mariæ differt "quam quod folia edat maculis destituta;" and I have feen it about Kennington-common, Surry, as smooth as the former species, which is rather veined than spotted.

Carduus tomentosus, Acanthium dictus, valgaris R. Syn. Spina alba sylvestris Fuchsio J. B. "In aggeribus fossarum, ad sepes et in incultis non rard occurrit." R. Hist. I have seen it only in

the neighbourhood of London.

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Carduus capite tomentoso J. B. A little short of Gatehouse-green, in the road from Middlewich, Cheshire, plentifully; and not any where else, that I have seen, in these counties.

Carduus nutans J. B. "In agris incultis et restibilibus "non rarò provenit." R. Hist. It is not frequent in this part of the kingdom, where I have observed it only on the Bailey-hill at Mold (there but sparingly), and about Pont-newidd near Kilken in

this county, plentifully.

Carduus stellatus sive Calcitrapa J. B. "Juxta vias "publicas, circa oppida et pagos, inque incultis et "sterilioribus frequens est." R. Hist. And, according to Gerard, this and Carduus solstitialis are "in barren places by cities and towns, almost every "where." The last is a stranger to me, and I have not seen the former more Northward than between Northampton and Leicester.

Caryophyllata vulgaris majore flore, C. B. Vulgaris major Park. I once found it on a rock in a wood

near this place.

Caryophyllata aquatica nutante flore C. B. aquatica flore rubro, striato J. B. montana, sive palustris, purpurea Park. In many damp parts of the woods here, so abundantly, that a great deal of ground is intirely covered with it. Parkinson's figure, which is taken from that of Caryophyllata aquatica Matth. represents the leaves very different from those of this plant, and not at all answerable to his own description of it. He there very properly observes, that they are somewhat like to, but with longer foot-stalks than, his Caryophyllata montana, the figure of which he has copied from

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that of Caryophyllata major rotundifolia, Caryophyllata montana Matthioli L'Ob.Icon. but Matthiolus's figure of Caryophyllata montana resembles them only in the leaves and root. L'Obel's (and consequently Parkinson's) figure is much better in respect of the flower; though the petala are not very distinct, nor is the thrum prominent enough, which two faults are in all the figures, I have seen, of this plant.

I once found here, together with this kind, one of a fine bright yellow; but not otherwise different. An Caryophyllata montana flore luteo nutante Hort. Reg. Par.? and once also one of the usual hue, double and proliferous. An Caryophyllata montana flore pleno prolifero Breynii R. Hist.? But I suspect, they were only accidental varieties.

Caryophyllus montanus minor C.B. marinus minimus l'Ob. Icon. Not only on the falt marshes in our maritime counties, and on the higher rocks of Snowden, as already observed: there are two large inclosures, about two miles by computation, from Dôlgelle, and a large moorish place about two miles surther, toward Festiniog, almost covered with it.

Cassida palustris vulgation sl. coeruleo Tourn. Lysimachia galericulata l'Ob. In this part of England, I have observed it only by the sides of a ditch and rill dividing the parts and the homehouse pastures at Ince, Cheshire, and about thirty paces from Thornton-brook. There plentifully.

Centaurium luteum perfoliatum J. B. &c. Not very common in these parts; but we have it here in some of the upper pastures.

Cerasus

Cerasus avium nigra et racemosa, Ger. Very common in woods, thickets, and hedges hereabout. I have also seen it in hedges in Denbigh and Merionethshires.

Chamæcistus vulgaris, st. luteo, C. B. Heleanthemum vulgare, st. luteo, I B. On the rocky hills about Llanveras, Denbighshire. Though usually on such dry, and especially on chalky soils, I have seen it even in a damp and very shady part of a woody dingle, at Hayes near Oswestry.

Chamædrys vulgaris Park. seu sativa R. Syn. An Chamæmorus minor repens C.B.? Plentifully on a

wall of the castle at Whittington, Salop.

Chamæmorus—... Gerard has the Knot or Cloudberry twice, under the feveral articles of Chamæmorus and Vacinia nubis; and in Phyt. Brit. it is feverally understood under those of Chamæmorus, Ger. and Vaccinia nubis, Ger. et Chamæmorus ejusdem, the former of which, according to Gerard and Phyt. Brit. after him, is "upon Stanmore, between Yorkshire and West-"moreland," the other, according to Ph. Brit. upon the tops of the high mountains both of the "North and in Wales."

Parkinson makes two species or varieties of Chamæmorus, viz. Chamæmorus Anglica, and Chamæmorus Cambro-Britannica, sive Lancastrense Vaccinium nubis, and says, "Dr. L'Obel sound "the last growing in Wales, and the shires near thereunto, as well as in Lancashire:" but L'Obel has not given a figure of either. Parkinson's figure of the former is like that of Rubo Idæo minori assinis Chamæmorus J. B.

Childrey, in Brit. Bac. fays, the Cloudesberry is peculiar to the top of Pendle-hill in Lancashire, and I do not know that any later author places it in Wales.

Upon the 10th of August last, I found about Cader Vron-wen, the highest point of Berwin mountains, in Denbighshire, one species of Chamæmorus in vast abundance. The principal stalks, and the bosoms or wings of the footstalks of the leaves, were like those of the figure mentioned; but the leaves like those of Chamæmorus Cambro-Britannica Park. The calix, or rather the perianthemum, in some plants, had sive, in others only sour divisions. Not only the slowers were past, but the berries were fallen or had been gathered.

Clematitis fylv. latifol. five Viorna Park. "Ubique "in fepibus," Merr. Pin. I have not observed it more Northward than between Stouton and Pershore, Worcestershire; and between Plumb-park corner and Cuttle-mill, Northamptonshire.

Cochlearia rotundifol. minima, Park. In the grass,

near the top of Snowdon.

Conyza major Matthioli, five Baccharis quibusdam, J.B. More sparingly in these than in the more Southern counties. In the inner court, and the walls above the leads of the castle of Ludlow, Salop, and along the highways, many miles about that town; also about Stretton in that county: in the road about a quarter of a mile from Denbigh toward Llansanan, and on a rock almost at the bottom of Snowdon (near Llyn. synnon glâs).

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Conyza palustris serratifol. C. B. palustris major Park. By the Eastern side of the river Dee, just above Eaton-boat, Cheshire, sparingly.

Coronopus vulgaris five Cornu cervinum, Park. In this part of the county, I have not feen it far from

the sea.

Cratægus fol. laciniato Tourn. Sorbus torminalis, C. B.

Cratægus fol. subrotundo, serrato, subtus incano Tourn. Sorbus sylvestris Aria Theophrasti dicta, Park. I have not observed either this or the former in this part of the kingdom; though Gerard says, Sorbus (he seems to mean Sorbus sativa, CB. which is still more rare, if at all of natural growth in this land) and Sorbus torminalis grow "in woods and groves, in most places "of England."

Cratægus Fennica Kalmii, Lin. Fl. Suec. On the wall of Castell Dinas brân, Denbighshire, two plants in 1764, and in 1770, a few younger, but

the larger of the two former then dead.

Cruciata vulgaris, Park. From some particular native places mentioned by authors, it seems not to be common in the counties about London: but there is scarcely any herb more so in this part of the kingdom.

Cyanus fl. albo, maculis cœruleis five purpureis notato, staminibus cœruleis. About St. Edmund's-

bury.

Cymbalaria, C. B. On many walls, befide those already mentioned, by the Thames-fide; particularly from Mill-bank to Westminster-bridge, and at Lambeth, opposite: at the Savoy, and on Somerfet-house

fet-house garden-wall. On the brick-walls at Brinkinnalt, the seat of lord Dungannon, in Denbighshire, abundantly. I could learn only, that it was known to have been there above fifty years.

Dipsacus minor seu Virga pastoris, Ter. Emac. "In humidis et aquosis, ad sepes et rivulos." R. Syn. We have it hereabout, and I have seen it in a sew places in Denbighshire and Shropshire. It is however far from being general.

Echium vulgare, J. B. &c. "Secus vias et semitas, "inque muris non rarò, et arvis sterilioribus nimis etiam frequens." R. Syn. By the road-side, about a mile from Hamstead (toward Wolverhampton) Staffordshire, and at Wrine-hill, Cheshire; not elsewhere, that I have seen, nearer this way, than Broadway-hill, Worcestershire.

Elaphoboscum Matth. By the sides of Stanny-brook,

in many places toward Ince, Cheshire.

Equifetum sylvaticum tenuissimis setis, C.B. By the road-side (between Trevalin and Hope, Flintshire)

in the township of Llai, Denbighshire.

Erica vulgaris hirfutior, Park. That on one of the Camp-hills, Staffordshire, seems to be intirely such (though not on the adjoining hills), and it is very frequent, with the common fort, in many other places.

Erica baccifera procumbens nigra, C.B. On Salatin-mountain, Salop; on the driest parts only of the mountain called Gwern-to in Flintshire, and

on the bog at Willowbridge, Staffordshire.

Euonimus vulgaris, Park. "In sepibus frequens."
R. Hist. It is very infrequent this way. I have seen it growing singly, not in many places, in Shropshire,

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Shropshire, and in one place only in this county of Flint.

Fagus, Park. "This groweth through most woods "in England." Park. Not through many in this part of England, though I have sometimes, even this way, seen a young tree, spring from the fallen mast, among old ones, that had been planted; and this being more frequently the case in some parts, where the soil is more suitable, the observation of Casar may still be just, that in his time there were not any trees of this kind in Britain.

Flos Adonis, Park. Plentifully on the ground among the ruins of the Abbey, at St. Edmund's-

bury.

Formiculum sylvestre, Park. & vulgare ejussem; for according to R. Hist. they do not differ. On the castle-bank at Shrewsbury; in the trench within the castle of Ruthin; about the gravel-pit at Hyde-park corner; and in the year 1756, almost all over the church-yard of Warden in the isle of Shepey.

Frangula five Alnus nigra baccifera, Park. "In "fylvofis, udis persæpè reperitur." R. Hist. Though pretty common in such places about London, and in some parts of Kent, especially about Tunbridge-town and Wells, I have not observed it this way, except in the coppice, called the park, at Willowbridge, Staffordshire, where there is a good deal of it in a very dry gravelly soil.

Fumaria cum capreolis, J. B. On Caergwrle castlehill, and on other hills there-about in this county; on the Wreken, and on Arcal-hill, near it; under a rock in the Forest De-la-mer, and on Vol. LXI. B b b Helsby

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Helfby Tor, and most abundantly among the oak-bushes on two small hills at the foot of the Tor, Cheshire. It still grows where Mr. Ray observed it, near Bala, and also in many hedges about that town and neighbourhood; and in and about Dôlgelle, the roofs of many buildings are covered with it.

Fungus albus ovum referens R. Syn. oviformis Merr. ovatus, J. B. Martyn, in his Translation, &c. of Tournefort's Histoire des Plantes aux env. de Paris, says, he found it in great plenty at Chesterton, in May, and J. Bauhin says, it appears in April. We have it plentifully every year on the grass-plots about this house, and I have seen it in two places in Denbighshire; but never earlier than September, or later than November.

Fungus muscarius, Park. Fungi muscas interficientis 4. species, C. B. &c. R. Hist. venenati, muscarii dicti, quarta et elegantissima species J. B. About two beech-trees on the common opposite to Hayes near Oswestry, Salop; on Auger-heath, Cheshire; and most abundantly in a grove at the top of lord Chetwynd's garden at Mare, or Meer, Staffordshire, and in the coppice, called the park, at Willowbridge in that county; in October.

This is the most beautiful Fungus, I have seen; and I do not know that it has before been mentioned as of this land, though Parkinson generally says, "in the woods that have been felled." Perhaps this, that I have met with, is a variety of the above cited authors; for the striæ, or lamellæ, are white; whereas, according to J. Bauhin and Mr. Ray, they are black; and the pedicle, of which

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which they give us only the dimensions, is also white.

Fungus angulosus et velut in lacinias sectus, C. B. luteus sive pallidus, Chanterelle dictus, se contorquens, esculentus, J. B. In woods here, and elsewhere, in July, August, September, and October. It is very beautiful.

Fungus piperatus albus, lacteo succo turgens, J. B.

In woods here in September.

Fungus maximus, albus, lactescens, non acris. In Willowbridge-park, and Broughton-wood, Staffordshire. October.

Fungus parvus parvi galeri formam exprimens, rufus, C. B. On Caergwrle castle-hill in this county. October and November.

Fungus mediæ magnitudinis, pileolo supernè è ruso flavicante, lamellis subtus sordidè virentibus. R. With the last preceding.

Fungus medius pileo muco æruginei coloris obducto

R. Syn. Frequent hereabout. September.

Fungus acetabulorum modo cavus, radice carens, CB.

Fungi Pericæ Plinii Col.

Fungus Hepaticæ saxatilis forma, C. B. Fungi Pericæ altera species, Col. This and the last preceding in the foil about the stools of oaks cut down, hereabout, and about Willowbridge, Staffordshire, in November. They are of a fine orange colour, and of great beauty.

Fungus ophioglossoides non descriptus, Ph. Brit. ophioglossoides niger, R. Hist. Abundantly on the grass-plots about this house, and at Hayes, Salop. I have feen it elsewhere on dry ground in both

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both these counties, and believe it is often overlooked.

Fungi parvi lutei ad ophioglossoidem) Of these, and accedens, R. Hist.

Fungus terrestris, digitatus dictus, minor, Park.

Fungus candidus digitatus minor, C.B. have observed a Fungus ramofus candidiffimus ceranoides, five digitatus minimus, nonnunquam corniculatus. Plot. Nat. | ber and Novem-Hift. Staff.

of many other, approaching to them, and of feveral colours. I great variety here. about and elfewhere, in October.

Fungus ramosus, flavus et albidus, J. B. In a dry thicket by the brook Terrig, in Treithen in this

county. August.

Fungus parvus luteus, ramosus, R. Syn. On the grafs-flopes here; on the ascent from the river Alen to Gresford, Denbighshire; in the Park at Willowbridge, and on Heyley-castle-bank, Staffordshire.

Fungus pyriformis, Merr. Pin. In pastures hereabout.

September.

Fungus pulverulentus, Crepitus Lupi dictus, major, pediculo longiore ventricoso, R. Syn. In pastures hereabout, at the end of March, and in September.

Fungus phalloides, J. B. fætidus, penis imaginem referens, C. B. I suppose, it is common in September, in most counties, though oftener scented than It is hereabout known by the Welsh name, Gingroen, or Cingroen.

Genistella tinctoria, Ger. "In pascuis nimis fre-"quens." R. Syn. I have not feen of it in this

county

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county, though I have often in those of Chester and Stafford.

Genistella aculeata, Park. Not so frequent this way as about London. Abundantly about Horton, near Malpas, Cheshire, and between Dôlgelle and Festiniog.

Gentianella fugax autumnalis elatior, Centaurii minoris foliis, R. Syn. Variat floris colore, carneo, cœruleo, albo. On the bank at Clomendy in Llanveras, Denbighshire. It seems to differ only in size from Gentianella autumnalis Centauriæ minoris foliis Park.

Geranium batrachoides, J. B. In the field, which is next above the bridge, called Pont-Ilong, and between the rivers Alen and Terrig in this township, Leeswood; on the bank at Clomendy in Llanveras, and in the church-yard of Llanveras, Denbighshire, and most abundantly about the Derbyshire end of Burton-bridge.

Groffularia, Park. Not unfrequently in hedges and

thickets and upon walls.

Helenium, five Enula campana, J. B. I have feen it in a few fields in this county; in some waste places about Fresh-water, and elsewhere, in the Isle of Wight; but no where so plentifully as in the fields and lanes about Aber in Carnarvonshire.

Herba Paris, J.B. Sparingly in a wood in Treithin, and in one in Broncoed, both near this place, with

4, 5, and 6, leaves.

Hipposelinum sive Smyrnium vulgare, Park. "In "most places of England." Ger. It is certainly very rare. I have seen of it only in the two inner courts of the castle of Ludlow, Salop; near St. Edmund's-

Edmund's-bury, in a field at the angle between two roads leading to Newmarket and Farnham, where it grows abundantly; between the town and cliff of Harwich, as mentioned by Mr. Dale; and sparingly by the Thames-side between the planks supporting the bank at Stangate, Lambeth.

Horminum sylv. Lavendulæ flore, C. B. "In gla-"reosis frequens." R. Syn. In this part of the kingdom I have seen it only on Denbigh castle hill.

Hypericum pulchrum Traji, J. B. Plentifully on the hills about Cader Uronwen, Denbighshire.

Hypericum maximum, Androsæmum vulgare dictum R. Syn. In a thicket at Hays, Salop, and elsewhere; but not common.

Hypericum elegantissimum non ramosum folio lato, J. B. Upon an hour's search, I found only two plants of it, where Mr. Ray observed it near Denbigh.

Juniperus vulgaris baccis parvis purpureis, J. B. I have not seen it more Northward than between Woodstock and Enston, though I have heard that it grows on some mountains in Wales; nor could I find Juniperus Alpina, J. B. upon Snowdon, where we read it grows.

Laureola, Park. "In fylvis et sepibus satis frequens."
R. Hist. Though frequent in some counties; I

have not feen it this way.

Ligustrum, J. B. "In sylvis, vepretis et sepibus fre"quens." R. Hist. It seems to be rare in these
counties. In some hedges about Bridgenorth,
Salop; between Ivetsea-bank and Canock-heath,
Staffordshire. I have seen only three or sour shrubs,
and these in one hedge, in this county of Flint.

Litho-

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Lithospermum majus erectum, C. B. "Ad vias et "sepes." Cat. Angl. I have met with it but twice in this county, and not often elsewhere.

Lychnis, Saponaria dicta, R. Syn. Among the ruins of the monastery at Greenfield in this county; on the castle-hill at Denbigh; by the road-side between Llanamonerch and the new-bridge, Salop, and in a gravel-pit near the end of St. Edmund's-

bury, toward Sudbury.

Lyfimachia purpurea trifol. caule hexagono Spigel. Isag. Much more frequent than the quadrangular about Ince, Thornton, Stoke, and Stanny, Cheshire. Some of the stalks are pentagonal, and have their leaves singly at the joints, alternate. The quadrangular have only two opposite leaves. I have also observed some distinctly heptagonal; apparently only so, with sour leaves at a joint: but I suspect that they were in reality octagonal. All the other varieties frequently rise from one root.

Lysimachia lutea, J B, By Thornton-brook in two places between the Mill and Ince-common, Cheshire. The side shoots in pairs, in threes, and in fours: but so, as far as I observed, in different plants.

Lysimachia speciosa, quibusdam Onagra dicta, siliquosa, J.B. Chamænerion slore Delphinii, Park. Par. On the lest side of the hollow road just beyond Knowles-park, between Sevenoak and Tunbridge.

Mentha cattaria, J. B. It is common in a chalky foil: but of these counties I have observed it only in Shropshire, and there about Shisnal, Norton, Atcham, Nesscliff, Oswestry, and on the brow of the hill above the river Ceiriog on the road from Ofwestry to Chirk.

Menthastrum fol. rugoso rotundiore spontaneum, sl. spicato, odore gravi, J. B. By the high-way-side near, and Southward of, this house, plentifully.

Menthastrum spicatum sol. longiore candicante, J. B. By the brook-side, in a field called Maes Madoc issa, near this place, plentifully.

Mespilus vulgaris, J. B. Between Tunbridge-town and wells, and I heard it was common in woods thereabouts.

Myrrhis major, vel Cicutaria odorata, C.B. magno femine, longo, fulcato, J.B. Major, five vulgaris, Park.

"In Hassia circa Cassellas sponte provenire "Myrrhidem referebat Gillenius. Hæc, ut ait "Lobelius, non adeo frequens aut procera occurrit, "sed raro et in pratis. Fertur autem anud Ger-

" sed raro et in pratis. Fertur autem apud Ger" manos in pratis alicubi nasci, Dodonæo perhi-

"bente, cum apud Belgos hortensis tantummodo
si sit." I. Bauhin.

"It is thought to grow wild in some fields in Germany; but I doubt the report." &c. Park. Theat.

Dr. Hill, in Br. Herb. has given a figure of garden Myrrhis, and also one of garden Chervill. It is hard to know which he intends for this. The first he has left undescribed: the other he has given some account of, under the name of Chærophyllum sativum, which, he says, is so called by C. Bauhine, and, by our gardeners, Sweet Fern. But Chærophilum sativum, C.B. is an annual. This, though

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though the stalks are annually removed, has a perennial root.

"In the forest of Savernac (Wilts) grows a kind of sweet fern." Brit. Bac. Whatever that may be.

This grows plentifully here for the length of about 300 yards on both fides of the brook Terrig, in a field called Y Parki, and sparingly by the same brook, at a considerable distance below, in a field called Maes-Madoc. The soil of a dry sand, but sometimes overflown. I have also seen it sparingly in the church-yard at Kilken, in this county, and abundantly among the ruins of the Abbey of Llanegwast or de Valle crucis, in Denbighshire.

Myrtus Brabantica, five Elæagnus Cordi Ger. On a bog near the road from Mold to Northop, in this county; and on one near the Decoy, between Ofwestry and Babin's-wood, Salop.

Narcissus sylv. pallidus calyce luteo, C. B. I have seen it often in. waste places; but never, as I remember, far from a house.

Oenanthe aquatica minor, Park. Common in marsh ditches, and there seem to be some varieties of it.

Orobanche, five Rapum Genistæ, Ger. &c. "Not to be found, but where broom doth grow." Ger. "More often where no broom groweth." Park. I have not seen it in this neighbourhood, where we have no broom: but it may be found at Hayes in Shropshire, with broom, and very plentifully with furze, where there is no broom, over the sand rocks at Ince in Cheshire.

Vol. LXI. Ccc Pedicularis

Pedicularis pratenfis fl. candidis, C. B. quibusdam Crista galli flore albo, J. B. Hereabout, and else-

where, with the common red fort, sparingly.

Pentaphyllum, vel potius Heptaphyllum, fl. rubro. J. B. "No where near London." Martyn on Tourn. Par. On the bog at Willowbridge, Staffordshire; and on the moss near Hampton, Salop. In pits about Stoke and Stanny, Cheshire, plentifully.

Phyllitis multifida, Ger. I have sometimes seen it on moist and shady rocks, in this county, and in Denbighshire. Whether specifically distinct from the common fort, or not, I cannot determine; but in fome places where the common is in great plenty, and I have observed it many years, it has not varied in any one instance.

Populus ———. Though Populus tremula, C. B. feems not to be very common, I believe but feldom planted, I have reason to think that we have it of spontaneous growth; but I am not so well fatisfied with regard to any other species of this

genus.

Pulmonaria angustifol. rubente cœruleo slore, C. B. foliis Echii L'Ob. Icon. Among the ruins of Greenfield monastery in this county.

Pyraster, seu Pyrus sylvestris, J. B. "In sylvis et "sepibus passim." R. Syn. I have but very

rarely feen it.

Ranunculus montanus Aconiti folio, fl. globoso, C.B. Helleborus niger Ranunculi folio, fl. globoso majore Tourn. About Dôlgelle, Festiniog, Llanrhwst. &c. in Merioneth and Denbigh shires, and in the meadows at Hayes, Salop, plentifully.

Rhamnus

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Rhamnus catharticus, J.B. "Locis senticosis, sepi-"bus et sylvis non rarò." R. Hist. I have met with it most often in our Southern counties; seldom in Shropshire, and not at all in this neighbourhood.

Rorella longifolia perennis, R. Hist. si non Rorella longifol. maxima ejusdem; plentifully, but less so than Ros solis fol. rotundo, C. B. on the hillocks, called Triddle-bogs, on the great bog at Willowbridge, Staffordshire.

Rosa sylv. fructu majore hispido, R. Syn. Almost as

frequent as the common hep-tree.

Rosa Pimpinellæ solio, Ger. sylv. pomisera minor, C. B. "In sabulosis et petrosis frequens." R. Hist. Not generally so; on Twittenham-common, among the surze plentifully, and on other commons in Surry: the hedges along the road from the 11th to the 12th mile-stone from Worcester toward Kiderminster, are almost intirely of it; and it is almost all over the rocky-hill by the Northwest side of Denbigh.

Rubus Idæus spinoso fructu rubro, J. B. Very common in these, and I have often seen it in woods and thickets in some of the Southern counties.

Ruscus, Park. "groweth generally throughout this "land, in copies and upon heaths and waste-"grounds." Park. On the sides of the road, frequently, between Bromly-town and common, and between that common and Farnborough, Kent. It has not been my hap to meet with it elsewhere.

Sambucus vulgaris, Park. "groweth not wild, but "is planted in all places, to serve, &c." Park. It is certainly wild in woods and thickets, and not

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unfrequently even in the clifts of rocks and upon walls.

Sambucus humilis, five Ebulus, C. B. At Fern-hill near Whittington, and about Whittington-castle, Salop; about a mile from Hamstead toward Wolverhampton, sparingly; on Tamworth castlebank, plentifully; on the walls of Colchestercastle; in the ditches at the entrance of Long-Milford (from Sudbury); in Durson-field near Northampton, and on Slaton-hill at the croffing of Watling-street, between Northampton and Daventry; between Newport and Caresbrook-castle, Isle of Wight; sparingly by the ditches between Kennington-common and the Afvlum. Blackstone, in his Specimen Botanicum, says, " near the upper gate in Cuper's-gardens "undantly." I fearched diligently, both within and without the gate, September 16, 1759, and found not one plant of it; but within I found fmall plants of Sambucus vulgaris among the large, in vast abundance; yet I hardly think he could mistake one species for the other.

Sedum minimum, fl. mixto ex albo et rubro, Merr. On rocks, walls, and dry banks, almost throughout Carnarvon and Merioneth shires; and on and about Castell dinas-brân, near Llangollen, and in other parts of Denbighshire adjoining to those two counties.

Senecio hirsutus viscidus major odoratus, J. B. On dry banks, walls, and rocks, at Ince, Cheshire.

Solanum lethale, Park. Within the remains of Hawarden-castle, and abundantly in and about Hope in this county; about the Abbey de Valle crucis,

and at Vron, and other places near Chirk-castle, Denbighshire, and by the brook under the Northwest side of the town of Denbigh.

Sorbus sylv. foliis domesticæ similis, C. B. Ornus Dod. sive Fraxinus sylv. Park. "In montosis "et uliginosis in Cambria et Septentrionali Angliæ "parte." R. Syn. I may add, in the South too, having seen it in abundance even in the most southern parts of Kent and Sussex.

Sphondylium majus aliud laciniatis foliis, Park. 'found by Mr. G. Bowles in Shropshire, as I take it." Park. On both fides of the dingle, in the lower part of the wood, at Hayes, near Oswestry; it seems to be as common as Sph. vulgare; than which, scarcely any weed there is more so, though in other parts of that wood, where the common fort is no less plentiful, this is hardly to be found. I have not seen it elsewhere. The apparent difference is so great, that I cannot but suspect them to be specifically distinct. I have the seeds of both now upon trial.

Parkinson's figure of this plant is very bad, and

I know none other of it.

Taxus, Park. "This groweth in many places of this "land; but planted in all, whether at home, or "abroad." Park. It is very common, of natural growth, not only in woods and thickets, as well as in hedges, but upon rocks and walls.

Telephium vulgare, C. B. Far from being universal. Abundantly about Llangollen, and in Carnarvon

and Merioneth shires.

Tilia —— I do not believe that any species of this genus is wild in this part of the in and, however it be in other parts.

Tithy—

Tithymalus linifol. Cam. An Tith. fegetum linifol. R. Syn. With the oats hereabout.

Trachelium majus Belgarum, Park. In shady places hereabout, and elsewhere in Mold's-dale; but most abundantly in a field here, called y Parki, through which the Terrig runs; also about Egluyfeg and Llangollen, Denbighshire.

Trachelium majus fl. purpureo, Park. Par. In Shropshire toward Tenbury, as well as beyond, in Worcester and Hereford shires, plentifully; in thickets among the rocks by Clomendy in Llanveras, Denbighshire.

I am not certain of Trachelium minus, Park. which is faid to be common; but there are certainly in this island, and even in this neighbourhood, many species of this genus, that I cannot

find to have been described or mentioned.

Trichomanes, five Polytrichum, J. B. "In petris " umbrosis et roscidis, inque aggeribus umbrosis et " muris antiquis magnus ejus per totam Angliam "est proventus." According to my observation, it is rare in most of the English counties; but common hereabout, and much more so in some parts of Wales. The walls of the bridge and the walls and roofs of some houses at Bethgelert in Carnaryonshire, are almost covered with it.

Vaccinia nigra vulgaris, Park. Frequent on most heathy hills; but, as far as I have observed, more on dry than wet. It is scarcely two inches high on the most barren ground toward the top of Snowdon, with an extremely small leaf, having frequently a large red excrescence, the nidus of an

in lect.

Vaccinia rubra buxeis foliis, Park. On the summit only of the most pointed of the Camp-hills, Staffordshire, in a dry gravel. This too is very minute in all its parts upon Snowdon, and so it is about Cader Vron-wen, Denbigh.

Verbascum, fl. albo parvo, J. B. Abundantly along the roads about Gresford and Acton, Denbigh-

shire.

Verbascum nigrum, sl. parvo luteo, apicibus purpureis, J. B. By the highway and park-side, almost opposite to Shavington (vulgò Shenton) hall, Salop, for about 100 yards, plentifully; rather above a mile beyond Hamstead, toward, and near, Bar, Staffordshire; in many places between Sudbury and St. Edmund's-bury: at the descent from Gerard's Cross, and also in many places between the Chalk-hills, short of Loud-water, and a mile or two beyond West-Wickham, Bucks.

Viburnum, Park. "In fepibus passim," R. Cat. Angl. I have not observed it more Northward than about Southam, and between Stratford upon Avon and Henley, Warwickshire, and somewhat

short of Hisham, Northamptonshire.

Viola montana lutea grandiflora, C. B. Pretty plentifully on the mountains about Llanarmon, Dyffryn Ceiriog, Denbighshire, and thence about half way to Oswestry; sparingly about mid-way between Ruthin and Llangollen; between Bala and Festiniog, in some places, and abundantly between Festiniog and Dolgelle.

Virga aurea angustifol, minus serrata, C.B. Plentifully throughout the park at Willowbridge, Staffordshire, and in rocky places at Ince, Helsby, and

Frodsham,

Frodsham, Cheshire; also, but of a much more humble growth, on dry sandy banks about Deresbury, Norton, and Halton, Cheshire.

Virga aurea latifol. serrata, C.B. With the former

at Willowbridge, but less frequent.

—. I have not been able to affure myfelf that any species of this comes up spontaneously with us. I need not except the case of suckers; they being, till removed, but parts of trees, and many of the kinds, frequently planted, are so productive of fuckers, even from the extremities of the roots, that one might expect these trees to be much more general than they are. It is certain, there are many very extensive woods without any of them. I have often fown the feeds of fome kinds (that have visible seeds, which, I think, is not the case of all) and ever without success: but, having been informed that fuch have been raised this way, I mention my disappointments only as fome kind of testimony, that they are not apt to be increased from seeds that casually fall, and I have not observed such offspring.

Umbilicus Veneris, Ger. Much more common in Shropshire, Staffordshire, Cheshire, and in this county, than more Southward; still more in Denbighshire, and on almost every rock and old wall

in Carnaryon and Merioneth shires.

Umbilicus Veneris minor, Ger. Umbilicus Veneris, 2. Hist. des Plantes de l'Europe. Alter Cam. in Matth. & Matth. in Diosc. Cotyledon minus montanum Sedi solio L'Ob. Icon. 469, where the figure of this and that of Umbilicus Veneris are transposed. This is a species of Saxifraga. An Saxifraga

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Saxifraga Sedi folio angustiore, serrato Tourn.? I believe, it is not now to be found on Bieston-castle, Cheshire, where Gerard says he found it.

In this Catalogue, I have thought it needless to mention, except comparatively, the particular native places already pointed out by others. I have passed over the maritime plants, unless found also in inland places; because such as I have observed, are not peculiar to any part of our coast; and I have endeavoured to avoid a needless multipicity of synonyma, using generally the shortest name, if sufficiently descriptive, or that used by the author, whose icon, or description, seemed to me to be the best; and therefore I have not adhered to any one system.

Upon the whole, it may be difficult to determine

what plants, if any, are originally British.

With regard to biennials, if there has been immemorially a conftant annual flowering in waste places, or in ground that does not appear, or is not known to have been cultivated for the purpose, it may perhaps be reasonably presumed that they are the natural and spontaneous product of such places; for, in this case, I understand natural and fpontaneous, according to common acceptation, to be synonymous, and applicable to any seminal production, however happening, or effected, without the affishance of art, whether from seeds deposited there, or in that foil, at the creation, or from fuch as are conveyed by the wind, by birds, or any other cafual means. Otherwise, in strictness, there may be no such thing in nature as a spontaneous production; for as to the old doctrine of equivocal generation, I sup-Vol. LXI. pose pose it to be universally exploded; though I do not dispute that the stamina, or first rudiments, have existed, in the parent plants, from the beginning of all things, the vegetative principle being latent, till prepared to exert itself.

And upon the first conjecture, a difficulty may

arife.

It is, perhaps, not easy to conceive that the fecundity of seeds, once perfected, can be retained inert through many ages. Our experience seems to shew, that there are some kinds of seeds, that, at a certain age, or nearly so, either vegetate or perish; that, if kept out of their proper matrix, or in it at too great a depth, beyond that time, whatever we do with them afterward, will not grow; and if there be really such (so deposited ab origine) those kinds cannot, even in that sense, and in that case, be said to come up spontaneously.

Besides, if the seeds were so deposited in the earth, and in a perfect state, so numerous as they must be; the larger kinds, especially, could not escape our

notice.

As to the antediluvian nuts, cones, and stone-fruits, that, we hear, are sometimes found at vast depths within the earth, however they may suit the cabinets of the curious, I fear they are too antique to be

prolific.

But in the other way, the seeds may be conveyed, from whatever distance, in different years (for aught we know they are in every year), to the places where we see the plants; and not only thither, but to many places, that are not proper to receive and cherish them.

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It is evident that the oak, ash, and other our most common trees, are not naturally increased in any other way, except such as are productive of suckers at a considerable distance from the stems; and many of these do not generally persect their seeds: to say nothing of inferiour plants, that sometimes, in the phrase of gardening, lay themselves.

But those suckers, till parted from the parent trees, and removed from the place, are not often better than underwood, which may be one reason, why these kinds do not increase so extensively as the former.

And if our forefathers had not industriously raised and increased (if not previously introduced) the most common and most useful trees, perhaps we should not observe them to increase naturally more, or have found them more numerous, than many that we know to be exotic, and yet are as easily increased, and do of themselves increase as fast, proportionally, and are as hardy, as any trees we have.

Yet it is not to be expected, that these of exotic origin, more than those that have been long familiar to us, should increase alike in all soils, or in all counties, since there are some soils that are far from

being general.

Mr. Da Costa, in his Nat. Hist. of Fossils, observes, that "Chalk is found chiefly in the South-east part "of this island," so that, "if a straight line were drawn from Dorchester (in Dorsetshire) to the coast of Norfolk, it would almost include our chalky "strata;" and I believe his observation to be just, except that, though the line be drawn even to the most Western part of that coast, this soil extends considerably beyond it, into Wiltshire.

We

We know, that of all soils this is the most favourable to beech, white-beam, juniper, viburnum, traveller's-joy, and to many of the herbaceous tribe; though not only such, but many foreign plants, will increase also in soils that are not the most suitable to them.

In the woods here, and at a distant place, I find, not unfrequently, feedlings of the Scotch-pine (which whether indigenous of Scotland, or not, may be doubtful), spruce-fir, horse-chesnut, walnut, and perhaps more than I can at this time recollect. Of the four kinds mentioned, some trees, notwithstanding the tread and the browsing of cattle, now grown to a confiderable height, I am certain were not planted. Of the three first there are many not far off, that were planted, and probably may in most seasons bear perfect feeds: but of the walnut I do not know that there is, or has been, within half a mile of the first-mentioned woods, a tree that has produced a nut mature enough for vegetation. It is, however, easy to conceive, that the nuts may have been brought from a much greater distance by birds, or other animals, and dropped accidentally, or hoarded and forgotten, or perhaps not needed.

In a shrubbery, many years left to nature, I have observed very numerous progenies of various foreign shrubs, both from the seeds and roots; and it is well known to gardeners, that many of their once choice slowering herbs are apt to multiply in the way of suckers, while the seeds of others fow themselves so plentifully, as not easily to be kept within

bounds.

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It, therefore, seems to me not unlikely, that all these kinds, and many more perhaps yet unimported, may in suture ages be so far naturalized as to be deemed indigenous of this land.

But this conjecture, and the former, are offered, with submission. I am.

SIR,

Your most obedient

and most humble servant,

Leeswood, Dec. 24, 1770.

R. H. Waring.