GENERAL VIEW

OF THE

AGRICULTURE

OF THE COUNTY OF

STAFFORD:

WITH OBSERVATIONS ON THE MEANS OF ITS IMPROVEMENT.

Drawn up for the Consideration of the

BOARD OF AGRICULTURE AND INTERNAL IMPROVEMENT,

By *W. PITT*, of PENDEFORD, near WOLVERHAMPTON;

With the additional Remarks of several respectable GENTLEMEN and FARMERS in the County.

Ye generous Britons, venerate the plough;
And o'er your hills, and long withdrawing vales,
Let Autumn spread his treasures to the sun,
Luxuriant and unbounded as the sea.

Be gracious, Heav'n! and when laborious man
Has done his part, ye fostering breezes blow;
Ye softening dews, ye tender showers, descend!
And temper all, thou world-reviving Sun,
Into the perfect year. Nor ye who live
In luxury and ease, in pomp and pride,
Think such like themes unworthy of your care.

So with superior boon may your rich soil,
Exuberant, Nature's better blessings pour
O'er every land; the naked nations clothe,
And be th' exhaustless granary of a world! THOMSON.

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and JOHN ARCHER, Dublin. 1796.

APPENDIX.

MISCELLANEOUS REMARKS AND OBSERVATIONS,

MADE IN A TOUR THROUGH THE COUNTY IN THE SPRING OF THE YEAR 1794, NOT INCLUDED IN THE AFOREMENTIONED ARTICLES.

CALLED at Fisherwick, the noble seat of the Marquis of Donegall, on the west bank of the Tame.

Here the genius of a Brown, aided and seconded by the munificence of the noble owner, have conspired to render a dreary morass one of the most delightful spots in nature, and have in a great measure succeeded: which success is still further heightening by the improvements of Mr. Elkington, in the interception of springs, and the discharging of stagnant water. The house and offices here are nobly magnificent, and the hospitality within correspondent. The shrubberies and plantations are not an exact copy of nature, but that improvement and embellishment of nature itself, which was reserved for human art, ingenuity, and industry. A small brook from Freeford, which here falls into the Tame, assumes, through art, the grandeur of a noble river; and even exceeds in appearance this river, except indeed when the Tame, after a profusion of rain, overflowing its banks, appears like an immense lake. The demesne at Fisherwick consists of nearly a square mile, or about six hundred acres. The pasture part of it is stocked with deer to the amount of three hundred couple, or more; also with horses, cows, and sheep. A considerable part is mown for hay, and the mown land kept in good heart by the overflowing of the Tame.

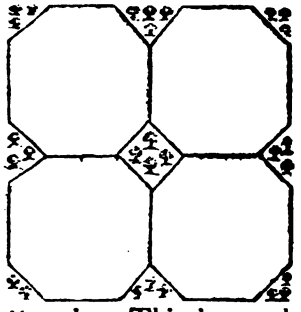
The cows here are very good, of the long-horned breed, thick and heavy in the carcass. The sheep are of different breeds; Leicester, Wiltshire, South Down, Cannock Heath,

and crosses from these. The South Down wethers had been killed with much profit, as the steward informed me. A few South Down ewes still remain: they are a thick, square, small sheep, to which the natives of our own commons, where they are bred with attention, bear a great similitude. But no respectable farmer here, with an inclosed farm, devoid of common right, would think them good enough for his inclosed pasturage, unless as annual stock.

I am obliged to the Rev. Dr. Falconer, for his remarks on some of the parishes in this neighbourhood, which made my own examination of them less necessary. His remarks extend to Fisherwick, Whittington, Tamhorn, Elford, Wigginton, Heselor, Thorp, Constantine, Clifton Campville, Harenton, Harleston, Statfold, and Scierscott. In this tract of country, the banks of the Tame are good meadow land. The upland in Fisherwick, Whittington, Tamhorn, and Statfold, rather inclines to a light or gravelly soil. The other parishes or lordships are a strong or mixed loam: the courses of crops are the same as mentioned under that article. Some considerable dairies are kept, and cheese is the main object of such dairies. The sheep are pretty generally of the Leicestershire breed. The country is wholly inclosed, except two commons or wastes, which are Whittington Heath, consisting nearly of six hundred acres, where Litchfield races are held. It is now a good sheep walk, and would, if inclosed and cultivated, be some of the best turnip and barley land in the county.* The other common is at Clifton Campville, now a good sheep-walk: it contains about four hundred and fifty acres. The inclosing of it is in contemplation. This country is in many places subject to wall-springs, which are cured by underdraining. Very little timber grows in these parishes, except at Fisherwick and Tamhorn Park, which latter, though a woodland, is more productive of rabbits than timber. The Roads in these districts are generally good. The cows at Tamhorn are subject to the foul water.

* With the assistance of marl and lime.—*S.*

Respecting timber and planting, the Doctor submits the following plan to the consideration of the Board: "That "in every Act for an inclosure, a clause should oblige the "proprietor of the new inclosed land to plant a certain num- "ber of oaks in proportion to his share of his inclosure, and "should direct the plantations to be made in the angles



"of the fields, agreeable to the "annexed sketch: by adopting "which plan, a less quantity of "posts and rails would be requi- "red, and the angles of each field "would be converted to a profit- "able use, and corn would grow "close up to the rails: whereas "no corn will now grow in such "angles. This is not the only advantage that would arise "from this plan: the trees full grown, would afford good "shade for cattle, and an easy communication through "these plantations would be found from field to field. It "would also be very ornamental to the country."

The stock of cows in this district are generally long-horned, and of superior quality. Considerable tracts of excellent meadow land, subject however to floods, are found on the side of the Tame. On the Trent also, we find excellent meadows; the hay meadow at Burton, which is a kind of public property, would be worth many guineas per acre, if rented. Burton is a considerable town, both of trade and manufacture.

Tutbury is a pleasant little town, containing nearly one thousand inhabitants, with a lately established cotton-work upon a considerable scale: it does also some business in the wool-combing branch. Tutbury Castle, now in ruins, stands on a lofty eminence, stupendously overhanging the Dove, the meandering of whose waters, and the range of fertile meadows on whose banks, may from hence be traced to a great distance either way, up or down. This eminence, abruptly formed by nature, has been rendered less easily accessible by

the defensive military arts of former times. It is composed of an immense heap of marl. The ruins of the building are principally of hewn free-stone, with admixtures of gypsum; it has apparently been battered from a hill on the contrary side of the town. The property is in Lord Vernon of Sudbury, in this neighbourhood. Here is a draw-well of good water, but of considerable depth; low enough, I suppose, to be supplied from the Dove. On the declivity of the castle-bank, on the west side, I observed the following remarkable plants.

1. Dwarf elder, (*sambucus ebulus*,) in great plenty.

2. Wild teasel, (*dipsacus sylvestris*,) in considerable quantity.

3. Wild woad, or dyers' weed, (*reseda luteola*,) a few specimens.

Having often observed the first and third of these plants in similar situations about the ruins of old castles, I am led to conjecture, that they have been formerly cultivated in these places for some use.

SOME PARTICULARS

OF THAT PART OF STAFFORDSHIRE CALLED MOORLANDS, NOT INCLUDED IN THE FOREGOING ACCOUNT.

THE north part of Staffordshire, called Moorlands, is situate to the north of a line, conceived to be drawn from Uttoxeter to Newcastle-under-Line. The face of this part of the county is various, but in general hilly, with large tracts of the land waste, or uncultivated. The first market-town from Uttoxeter is Cheadle, situate in a pleasant vale of good mixed soil, but surrounded by rude and barren hills: those hills are composed of huge heaps of sterile gravel, that on the west side overhanging the town.* The principal herbage on

* It is submitted, that the observation of the hill overhanging the town, has been hastily made.—*John Holliday, Esq.*

this hill consists of broom, heath, whortleberries, mountain cinquefoil; all beggarly and of diminutive growth: also of milk-wort, the mountain *carex's*, matt-grass, *cistus's*, and knap-weeds. The hills north and west of the town, in the parishes or liberties of Cheadle, Tean, and Dillorn, are of the same material, upon an understratum of sand or sandy rock: the herbage the same as before, but pitiful and beggarly: amongst which heath (*erica vulgaris*) is generally most predominant. These barren wastes are pretty extensive, and not worth, I think, one shilling per acre as pasturage for sheep, or any other animal: they are, I fear, generally too poor and beggarly to be reclaimable by cultivation for the purposes of corn or pasturage. I cannot, however, help entertaining a strong idea, that they might be converted into coppices and plantations of timber and underwood: the Scotch and other firs and sycamore would probably succeed. This last is now become a valuable wood, being worth from eighteen pence to two shillings per foot, at Birmingham, and has, I understand,

It is not meant literally, in that sense being impossible; but figuratively, a view of the town from this hill giving a bold command, even of the chimney tops.—*Wm. Pitt.*

Cheadle Park forms the hill, it is three miles in circumference, and consists of thirty-three bold inclosures, now let at 15*s.* an acre on an average, and abounds in mines of coal of great value.—*J. H.*

The observations made, refer only to the hilly part near the town, which has not been improved.—*W. P.*

Some of these lands in and near Dillorn have been greatly improved by John Holliday, Esq. lord of the manor of Cheadle; and the inexhaustible veins of excellent coal underneath, will greatly enhance their future value; in the valley too at Dillorn, in the grounds opposite that gentleman's house, is found a large quantity of strong raddle. In 1792, the gold medal was adjudged to Mr. Holliday, for having planted, at Dillorn on 28 acres, 3 roods, 28 perches of land, 113,500 mixed timber trees; besides which nature has abundantly enriched his truly romantic and extensive winding vales, with plenty of oak and other foliage.—*Rev. S. Shaw.*

I cannot but regret the not having waited on Mr. Holliday, and bestowed more attention on the property of that gentleman, and should with great pleasure have reported his extensive, and public spirited improvements: yet it cannot be denied, but that the sterile, barren, and miserable appearance of some pretty extensive hilly wastes, in the neighbourhood of Cheadle, justify the observations here made.—*W. P.*

succeeded well in some very exposed and barren situations. Perhaps, many other of our native timber trees might succeed, intermixed with these, as one would shelter and screen another. To give any such plantation a fair chance of success, I should propose to begin, not on the summits, but on the declivity of the hills: and as such first plantations increased in growth, to proceed with fresh ones nearer the summit, till the whole should be covered: by which management the plants of strength and growth would be made to protect and shelter those of tender age. The putrefaction and rotting of leaves from such plantations would increase and enrich the surface soil; and as they came to maturity, the woodlands, upon plain and practicable ground, might be cleared and converted into arable and pasture land. If such scheme be practicable, which I think it certainly is by judicious management and perseverance, these dreary barren hills, which now convey an idea of nothing but poverty, want, and misery, would not only ornament and beautify the country, but, by furnishing it with timber and wood, would answer the purposes of more valuable land, and enable an equal breadth of plain woodland to be converted to pasture and arable, without rendering the supply of these necessary articles uncertain or precarious.

The commons, or wastes, between Cheadle and * Oak-Moor, called High-shutt, Ranger, and Alveton Common, consist of an immense number of rude heaps of gravel upon an understratum of soft sandy rock, thrown together without order or form, or rather into every form that can be conceived, into sudden swells and deep glens, with scarcely a level perch: the mind, endeavouring to account for their formation, must conceive it owing either to some violent convulsion of nature, or some strange confusion of matter. This tract, impracticable to the plough, now rough, barren, and bare, might be improved into woodland and plantations, and some open spots of the most favourable aspects might be re-

* Called so from being nearly covered with dwarf oaks.—*S.*

served for gardens to cottage tenements, and cultivated with the spade and hoe. Above Oak-Moor, to the north-east, I had the pleasure of seeing the idea before stated of planting precipices executed. A plantation has been made there on a declivity as barren, rocky, and bare of soil as any before described. This plantation seems about twenty years old, is in a thriving state, and contains the following sorts, viz. Scotch fir, spruce, oak, lime, birch, sallow, and mountain ash. This is the highest improvement to which the sides of barren precipices can possibly be brought by human industry; and I think that all our public and patriotic societies, who offer premiums for planting, should confine such premiums to grounds impracticable to the plough, or of small value, not exceeding, *per* acre, a small specified sum. I consider extensive plantations upon rich, level, arable, or pasture land as a public nuisance and national evil, at least so long as there are large tracts of the above description remaining unoccupied.

A little north of Oak-Moor the limestone country begins, and extends over a great breadth of country to the north, east, and west, in many places rising out of the main surface in huge cliffs. The Weaver Hills are of considerable extent. They are composed of immense heaps of limestone, which I was much pleased to find covered with a rich calcareous loamy earth, capable of being improved into very good arable or pasture land. They are inclosed in large tracts by stone walls, but not subdivided, and large breadths have never undergone the least improvement; which I much lament, as the neighbouring lands which have been improved are covered with an excellent fine turf, and bear good crops of grain. These hills are a very elevated situation, overlooking, or at least as high as any of the Moorland or Derbyshire Peak hills, which may be seen from their summits. I believe them to be from one to two hundred yards perpendicularly higher than any of our hills in the south of the county: the fall even from the foot of these hills to the highest parts of the Dove or the Churnet, is very great, and

those rivers are very rapid. On one of the summits of these hills, in a very red soil, I found growing, indigenous, my old friend, which I had long since cultivated, the upland burnet (*poterium sanguisorba*).* This plant I have never before seen or heard of, as a native of Staffordshire: but it is very common in the calcareous soils of Rutland and Bedford, being a very different plant to the meadow burnet (*sanguisorba officinalis.*) The herbage of these hills contains many good plants, both grasses and trifoliums, but the hills are much over-run with uneven lumps, which seem to be worn out or decayed ant-hills, covered with moss or lichen; and though they are a tolerable sheep-walk, I must consider them as little better than waste, and capable of a high degree of improvement by cultivation. Stanton Moor, to the east of these hills, is a considerable waste on a limestone. The sheep-stock of this country has been mentioned before.

Large quantities of lime are burnt upon Cauldon Low, and elsewhere in this neighbourhood, and there are marks of lime-kilns formerly on Weaver Hills. Lime is much used here as a manure, being sometimes laid on ploughed ground, and at other times on turf, with very good effect in fining such turf. It has been remarked, that after liming a coarse turf, white clover has been produced in abundance, where that plant had not been observed before. The limestone here is intermixed with a proportion of gypsum or alabaster.

In a large tract of this county the fences are almost wholly stone walls.† This practice I cannot but consider as

* It grows in profusion amongst the limestones, in all the rough broken places, and others to the north of this county as well as in Derbyshire; and it might be useful to transplant the young roots, or sow the seeds, as winter food for sheep, (especially Dorsetshire ewes, which are very fond of it) the plant being remarkably hardy.—*S.*

† These stone fences having been originally raised from the prevailing motives of convenience, and cheapness, in finding the material on the surface, no wonder they should be continued; and in many places (particularly low situations) they are superior to hedges.—*S.*

I am sorry to differ in opinion from so respectable an authority, but I cannot still but think quickset fences infinitely superior, in every

barbarous. Quickset fences are much cheaper, better, more durable, vastly more beautiful and ornamental, and make the country and climate more temperate; for in winter the quickset affords much better shelter against storms of wind, rain, snow, or hail, to man or beast; and in summer, by its refreshing shade, renders not only more bearable, but pleasant, that solar heat which, under a stone wall, reflected into a focus as it were from a burning glass, is almost insupportable. The fanning breeze, the gentle zephyr, and those other pretty fancies of the poets, are unknown, and because never felt, would never have been conceived here. I hope the owners and occupiers of land will have so much regard for their own interest and the symmetry and beauty of their country, as by degrees to do away this invention of barbarous ages, and a violence to nature, by planting quicksets, to which the stone walls would be a fence and shelter on one side. With the quickset should be planted in corners and proper places, clumps of trees, and in the fences a few oaks, elm, witch-elm, sycamore, and other forest trees, but not ash, which should be in the clumps: these both afford shelter to cattle, and ornament to the country, as well as turn to the great advantage of the proprietor. When the quickset fences shall have been reared, the limestone walls burnt may turn to good account as manure, and the gritstone will be ready to repair the roads. This improvement, and some others before named, which I cannot but strongly recommend, once completed, posterity will wonder why the country was called Moorlands.

The Moorlands, in point of elevation, are far above anything we have in the southern part of the county, rising perhaps at least from 100 or 200 yards perpendicular above the general level of that country, hill above hill and plain above plain, on which heights large tracts of inclosed pasturage are situated. This elevation greatly increases the degree of

respect, to these loose stone walls, built without cement or mortar, and which a mischievous animal might demolish instantly. My reasons appear opposite these remarks.—*W. P.*

cold, by combining the different causes that produce it, and by being more exposed to the elements of air and water in every form and variety of wind, hail, snow, or rain. The air here, considerably more rarified, is less capable of retaining the solar rays; the country is almost in a state of nature; it has no clothing nor shelter except the stone walls, which have no effect whatever against the cold. Such a system of inclosure is completely barbarous. Plants, as well as animals, in this climate require shelter and clothing, or must be starved and limited in their growth. I am firmly persuaded that the calcareous part of the Moorlands, after quickset inclosures, and a sufficient number of plantations on the precipices and summits shall have acquired some maturity, may be improved into one of the finest tracts of land in the county. The calcareous part of the Moorlands, or that on a limestone bottom, is pretty extensive, reaching in length from the Weaver Hills to Longnor, and in breadth from the Dove to Morredge, including fifteen or sixteen parishes and fifty or sixty square miles. The quantity of limestone here is inexhaustible, being in many places in strata of immense thickness. This is the best part of the Moorlands, and the soil seems to have a natural aptitude for producing a fine herbage of grass; and, to the credit of the people here, I must observe, that their breed of cows, of the long horned kind, are generally superior to those in the south of the county, where the land has been longer in an improved state. I attribute this to the plough, and to the growth of corn, the chief consideration in the latter division, while stock here has been the principal object. But this general rule, like most others, must be admitted with some exceptions.

Not far from Okeover I observed a practice well worthy, perhaps, of imitation in other places, of washing young quickset hedges with lime-water, to prevent their being browsed on by cattle.

Cabbages for cattle are planted in the fields near Okeover, and the ground is well prepared. The extent of meadow-land on the Dove is here much narrower than lower

down. In a meadow where the water has been suffered to stagnate too much, a large quantity of the *polygonum amphibium* grows. The plantations at Okeover are flourishing with a due proportion of oak. The house and offices are neat, pleasantly situated in a paddock of excellent fine turf, commanding a view of the Dove and its banks, with a neat Gothic church at the very door. The paddock is well stocked with deer. At Ilam is a pleasant seat, the property of Mr. Port, but occupied by Mr. Clive. The romantic situation of this place suggests the idea of a glen in the Alps. Here two considerable rivers, the Hamps and Manyfold, burst from under the limestone hills, after a subterraneous passage of several miles, in separate streams, which has been proved by throwing corks into the streams above. The precipices which surround the valley in which Ilam stands, are well clothed with oak and other wood; and the pleasure-walks from the seat on one of these precipices are wonderfully romantic and various. These pleasure-walks resemble shelves, one almost perpendicularly above another; by the side of which, Nature with scarcely any assistance from Art, has furnished a profusion of flowers of no contemptible appearance; amongst others, native geraniums of different sorts, particularly the *Robertianum*, also the *centaurea scabiosa*, and many other showy natives whose names, for want of minutes on the spot, I have forgot. In a meadow over the water the ramson *(allium ursinum)*, a very showy flower, but no very desirable pasture plant, flourishes in profusion. The subterraneous rivers here are very considerable, at least equalling the Dove. In a limestone grotto, and elsewhere, there are several specimens of petrified* fish,

* These are broken irregular fragments of chert (*silex petre*) embodied in the limestone rock, when in a fluid state, which when swelling out towards the middle, bear some resemblance to fish, and as the limestone is softer than the chert, most of these fragments project. Three or four good specimens of these are shown to those who visit Ilam, at the confluxes of the Hamps and Manyfold, where by being much trod on, they project, and are become more and more observable.—*S.*

some of them apparently in the spot riveted by nature, others brought from elsewhere; some of them appear of the carp or barbel kind. In a grotto here, Congreve is said to have composed some of his plays: and indeed the situation is very advantageous for composing: the shady bower above, the murmuring stream below, the recluse and retired situation, without the reach or hearing of noisy intruders, all conspire to fix the mind upon its individual object, and enable it to send forth an effusion of its collected powers. The subterraneous rivers, after bursting up here, form two very fine cascades. From these pleasure-grounds we view a very bold and romantic prospect of two hills, called Thorp Cloud and Bunster, on either side the Dove: the latter, in Staffordshire, is an immense heap of limestone, but covered with a light earth, and well stocked with rabbits. Between these two hills the Dove falls in abrupt cascades, but is not in any degree superior to the subterraneous waters before named. Here are large quantities of limestone fallen from the overhanging precipices. The highest summit of Bunster I estimate at 300 yards perpendicular above the Dove, and the fall of the Dove from hence to Trent 100 yards more. The sides of these immense precipices of Bunster have a scattering of wood, which I doubt not might be easily increased in any desired proportion. The sorts are principally maple, elder, hazel, and hawthorn. The remarkable plants on this mountain are sedums, geraniums, veronicas, hypericums, and a savoury sweet-smelling mint; also a very rank *galeopsis* in some places; also on some of the summits, in great plenty, the mountain stitchwort, and a very diminutive *galium* amongst nettles, and a rank moss. The ridge of this mountain terminates, in some places, in a number of conical sugar-loaf hills of bare limestone. This hill, though of great elevation, is not nearly equal to the Weaver, nor so high as some of the Peak hills over the Dove.

To corroborate the justice of the idea of planting on precipices, I had the pleasure to find the stumps of some very large ashes, which have been sawn down on the declivity of

Bunster, facing Ilam, sitting on one of which, of more than a yard diameter, I make this memorandum, May 29, 1794; and I cannot but persevere, upon every occasion, in strongly impressing and enforcing this idea, as the dreary aspect of a great tract of this country is wholly owing to the neglect of the land proprietors and occupiers, in not raising quickset fences and plantations on the declivities; and it is one of the greatest absurdities and neglects in agriculture, that this bleak, elevated, and exposed division should have remained so long, and should still continue in a naked state.

One circumstance, however, in the farmer's management here, deserves commendation. The land is naturally much more adapted to grass than corn, the better sorts of grasses, and many of the trifoliums being produced spontaneously. To encourage their growth little more is wanted than to extirpate their enemies, the more luxuriant weeds, or the bushes of furze and heath. Accident, or the discernment of the occupiers, has adapted their management to this circumstance, and the much greater proportion of the land is pasture, stocked with cows and long-woolled sheep: the pasturage would be much improved in many places by pulverization, and by sowing clovers, trefoils, and hay-seeds. This is not in all places practicable, on account of the rocky surface, although large tracts inclosed with stone walls, but never yet cultivated, might be thus improved. The limestone under-stratum is generally covered with a calcareous loam of different qualities and depths. Where it is dry, friable, and sufficiently deep, it is rich; and with its spontaneous herbage only, it is admitted to be good feeding land, but only, as they say, for three months in the year. This is accounted for, from its naked state and exposed aspect. It would undoubtedly give good crops of any grain. The thinner soils nearer the rock not having a furrow of soil, are good sheep-walks, and are not subject to burn in any season. The moister and more tenacious loam is the worst of all, but might be improved by draining; but the stone fences do not even admit of ditches.

Mill Dale, near Alstonefield, is a long narrow vale or

glen, of great depth. The sides consist of overhanging precipices of limestone, estimated to be from 100 to 150 yards of perpendicular elevation, and so very steep, that they can be clambered up but in very few places. The width of this glen, vale, or dale, at the top, scarce exceeds the depth of its sides: it seems formed by the bursting or breaking of the hill which composes its sides, occasioned by a want of solidity in its bearing. The vale of Manyfold is situated between Wellon and Butterton, where the waters of the river Manyfold are absorbed by the fissures under the limestone hills, and discharged again at Ilam, four miles below. The warmest imagination can scarcely conceive a spot more extravagantly romantic than some parts of this vale. Thyrsis's Cavern* here is a considerable excavation, pretty high up the side of a lofty precipice: it has somewhat the appearance of the inside of a Gothic church, and appears to me to be a work of art. Starlings alone are its present inhabitants. Near this place, by the road side, the upland burnet, *poterium sanguisorba*, grows spontaneously. At Ecton is a very considerable mine of copper and lead, the property of his Grace the Duke of Devonshire; and there are other mines of the same metals in this district.† The calcareous or limestone bottom ends at Morredge; and the under-stratum in the tract of country west of Leek, and of this waste, is generally sandy or gravelly clay, or gritstone rock. This part of the country, north-east of Mole Cop, is the worst part of the Moorlands, and of Staffordshire, the surface of a considerable proportion of this land being too uneven for cultivation. Large tracts of waste land here, though so elevated in point of situation, are mere high moors and peat mosses; and of this sort are a part of Morredge, Axedge, the Cloud Heath, High Forest, Leek Frith, and Mole Cop, though ranking amongst the highest land in the county,

* Thor's-House Cavern (the god of thunder), there are very lofty rocks above, and the thunder is frequently tremendous here.—*S.*

† Particularly at Mixton, three miles south-west, belonging to Mr. Sneyd of Belmont, which has been worked 21 years, and produces plenty of good copper, though there is unfortunately a mixture of lead in one of the best veins.

The summits of some of the hills in this county terminate in huge tremendous cliffs, particularly those called Leek Rocks or Roches, and Ipstones' sharp Cliffs, which are composed of huge piles of rude and rugged rocks in very elevated situations, piled rock on rock in a most tremendous manner, astonishing and almost terrifying the passing traveller with their majestic frown. Here single blocks, the size of church steeples, are heaped together; some overhanging the precipice, and threatening destruction to all approachers; and some of prodigious bulk have evidently rolled from the summit, and broke in pieces. These stupendous piles, the work of nature, are a sublime lecture on humility to the human mind; strongly marking the frivolity of all its even greatest exertions, compared with the slightest touches of that Almighty hand which placed them here; in whose presence all flesh is as grass, and the proudest productions of the highest efforts of human genius, are but as chaff. The speculative mind, in endeavouring to account for their origin or formation by any known laws, agency, or operation of nature, is lost in amazement, and led to exclaim, with the Egyptian magicians, "this is the finger of God;" for the most superficial observer may perceive that it is his work. Leek Rocks or Roches, are composed of a coarse sandy grit rock; those of Ipstones * have for their basis gravel, or sand and small pebbles cemented together.

Upon Morredge and Axedge commons, large quantities of peat are dug for fuel, and a number of labourers were digging it when I examined this country the beginning of June, 1794. The peat mosses on Morredge were generally three or four feet deep; the soil afterwards was a gravelly clay The peat, both here and on Axedge is porous as a sponge, and equally retentive of moisture; so much so, that it was now, and I believe always is boggy, notwithstanding its high situation, and a dry season, and yields so much water from

* Those of Ipstones are *(breccia arenacea,)* or coarse plum-pudding stone.—*S.*

pressure, that it furnishes small lakes in the hollows, rivulets down the declivities, and starves the natural herbage around; so that scarcely any thing flourishes, or indeed grows, on or near these spots except heath *(erica,)* and that starved, whortleberries, the cottony rush or grass * *(eriophorum,) carex's* and rushes. I can have no doubt but these high bogs may be easily drained: † the fall is instantaneous, the cutting of drains easy, and stone in any quantity on or near the spot. Indeed another great obstruction to the improvement of these lands is the immense quantities of stone lying on, or of rocks rising out of, and above the surface. This would be somewhat lessened by such draining, as from the huge tremendous cliffs, in which the hills above named, and many others in this neighbourhood terminate, immense fragments of broken stones have fallen in every direction. It is evident that these rocks, in some early period, have fallen in pieces, ‡ either by some violent convulsion of nature, or more probably by an alteration in the earth's centre of gravity, from some agency under the immediate will of the Almighty Creator. These stone cliffs and fragments cover a considerable extent of land, particularly about Ipstones, Wetley Rocks, Leek Roches, to the west of Flash, High Forest, the Cloud Heath, and Mole Cop common. with the waste north of this last, and indeed in many other places. Here the warmest or most sanguine friend to agriculture can expect little more than sheep-walk or plantation; and I cannot but most strongly and repeatedly call upon the land proprietors to attempt the latter, in which I have no doubt, but a persevering attention will be crowned with success; and by which such land will be brought to the highest state of possible improvement.

* Eriophorum; the *eriophorum vaginatum*, generally grows in wet places among stones, but the polystachion in common bogs.—*S.*

† There is a clay bottom to the peat mosses that retains the wet.—*S.*

‡ "Have been torn in pieces;" probably at the time of the general burst, occasioned by volcanic minerals and water; when the strata lay regularly lapped round the globe; and consequently must have made a sufficient resistance to have occasioned the formidable convulsion.—*S.*

It is, however, an encouragement to attempt other agricultural improvements in uncouth spots, when every attentive observer can remark, that some such spots here, which have been levelled, cultivated, and improved, are now covered with a very good and fine herbage fit for pasture, and seem very gratefully to have answered or exceeded every expectation that could reasonably have been formed by those who attempted and executed such improvement. There is in all the Moorland soil, whether upon a calcareous or grit bottom, a staple, or a something, which has a tendency to produce pasture; so much so, that the pastures here, however thin the soil, or near the rock, never or scarcely ever burn or parch from drought. This, upon the limestone bottom, I should have expected; but upon the grit bottom should scarcely have believed, had I not in part seen, so far as the advance of the season, by no means a moist one, permits me; and had I not farther been informed from good authority, that symptoms of drought are here scarcely ever observable. Perhaps the climate or temperature of the atmosphere on this high ground, naturally cool, may in some degree favour this tendency to summer verdure.

Oat bread is eaten very generally in the Moorlands, and none other kept in country houses; this, however, I cannot consider as any criterion of poverty, or of a backward or unimproved state, as I think it equally wholesome, palatable, and nutritive with wheat bread, and little cheaper even here; for upon inquiry at Leek, I found the oatmeal and wheat flour nearly the same price. For several days during my stay in this country, I eat no other bread from choice, preferring it to wheat bread, and rather wonder it is not more general, and kept in London and elsewhere for such palates as prefer it. In the remote country villages it is often baked thick, with sour leaven, and a proportion of oat husks: this, even when ground mouldy, is eaten by the natives without murmuring.

South of Mole Cop, the country alters, and can no longer

be termed Moorlands. Here a regularly inclosed country commences, with all the beauties of quickset inclosure, shelter, and shade. The Potteries are of considerable extent and population, and very much a national object. The Trent and Mersey canal, which passes through them, has been a very great convenience in the conveyance of heavy articles used in this manufacture; which circumstance, united with the genius, spirit of enterprize, and exertion of the masters and workmen, has happily succeeded in raising this manufacture in a very rapid manner, from small beginnings, to its present importance and consequence. The great improvements introduced into this manufacture by Mr. Wedgwood and others, will be for ever an honour to their memory, and rank them among the benefactors of mankind. The cream-coloured ware has all the neatness and elegance of porcelain; is in very general use, and is wrought into a vast variety of forms for purposes both useful and ornamental. The raw material used in this business being of little or no value, the amount of value of the manufactured article, which is very considerable, and a great addition to the national capital, may be considered as wholly created by the industry of those concerned and employed in this manufacture: by the success of which, Burslem and Hanley Green, from small villages, have rapidly swelled into large market-towns, and are now equal in population to Newcastle and Leek; besides which, the Pottery includes a number of populous villages scattered over this neighbourhood. Mr. Wedgwood is no inconsiderable planter. His seat and pleasure-grounds at Etruria, are laid out with neatness and elegance, and very much ornament the country.

The land here is in general cold, inclining to a stiff soil, which continues to near Leek, within a mile or two of which its quality improves. From Leek, three or four miles towards Ashbourn, the land is very barren and rocky; yet about the church at Ipstones, and from thence to Belmont, it is much improved, and in many places good pasture land. Ipstones sharp Cliffs have been mentioned be-

fore; to the south of which is Belmont, the seat of John Sneyd, Esq. * pleasantly situated on the western declivity of a romantic glen, the slopes of which are well covered with oak and other wood, with a brook murmuring through the bottom into the Churnet. Mr. Sneyd's plantations are extensive, and of all the different stages of growth from infancy to maturity: I had the pleasure of observing some recent ones upon apparently barren rocky land, impracticable to the plough, where the young plants are healthy and promising. Had every gentleman who has landed property in the Moorlands improved their estates in this way, in an equal degree with Mr. Sneyd,† I should have had little occasion to have complained of the "nakedness of the land" in so large a portion of this country.

RARE PLANTS IN MR. SNEYD'S WOODS AND WALKS.

1. Cow-grass, or cow-wheat, *(melampyrum sylvaticum,)*‡ recommended by Withering as an excellent cow herbage. I found the same plant since in the woods at Upper Areley, and hedge sides, Walsall wood, and Brownhills.
2. Yellow pimpernel *(lysimachia nemorum,)*
3. Bearsfoot *(helleborus fœtidus.)*
4. Crimson grass vetch *(lathyrus nissolia.)*
5. Spleenwort *(asplenium scolopendrium,)*
6. Angelica.
7. St. John's worts, *(hypericum,)* four or five species.
8. Goat's beard, *(tragopogon,)*

* On a gently rising hill fronting the south-east, nearly surrounded by deep woods of oak, ash, elm, lime, maple, &c. with underwood of mountain ash, hazel, birch, alder, salix's of several species, &c. &c.; which underwood is cut, on an average, once in six years, to make crates for the Pottery. The brook, after feeding eight or nine large fishpools, runs into the river Churnet.—*S.*

† Thomas Gilbert, Esq. of Colton, and John Holliday, Esq. of Dillorn, whose respective and extensive plantations nearly adjoin to, and reflect their beauties on each other, being all of them comprized within the circumference of a few miles.—*Rev. S. Shaw.*

I wish these gentlemen were more generally imitated; very large tracts in the Moorlands still want a similar improvement.—*W. Pitt.*

‡ *Melampyrum pratense.—Dr. Withering.*

9. Adder's tongue, *(ophioglossum.)*
10. Avens, *(geum,)* two species.
11. Bistort, *(polygonum bistorta.)*
12. Chamomile.
13. Geraniums, five or six sorts.
14. Gentian, *(gentiana,)* two sorts.
15. Golden rod, *(solidago virgaurea.)*
16. Blackberried heath, *(empetrum nigrum.)*
17. Red whortleberries, *(vaccinium vitis Idæa.)*
18. Heaths, *(erica's)* three sorts.
19. Helleborine, *(serapias.)*
20. Twyblade, *(ophrys.)*
21. Moonwort, *(lunaria.)*
22. Goldilocks, *(trichomanes pyxidiferum.)*
23. Enchanters nightshade, *(Circæa lutitiana.)*
24. Meadow rue, *(thalictrum,)* two sorts.
25. Yorkshire sanicle, *(pinguicula vulgaris.)*
26. Strawberries, *(fragaria, vesca, sterilis,* and *oppositifolium.*
27. Golden saxifrage, *(chrysosplenium alternatifolium.)*

Besides many other curious plants, in common with other places.

Mr. Sneyd informed me, that the wintergreen *(pyrola)* is common in the neighbourhood; two species growing on shaded mossy banks.

Passed Trentham, the seat of the most noble Marquis of Stafford. Here the hanging wood with its umbrageous foliage, the verdant lawn with its beautiful shady spreading trees and clumps, promiscuously, as it were, disposed in infinite variety; the spreading sheets of water, with their accompaniments of impervious shade, and lost to the eye by their length, and winding behind the swelling hill and shady copse; have an effect truly magnificent, and worthy of the noble owner: the house and offices are correspondent. This place, for the beauties of shade, water, and turf, united, has few equals, and no superior.

Near Newcastle are made large quantities of excellent

blue tile, for covering buildings; which, on account of their superior quality in duration; are sent to a considerable distance.

From Talk-on-the-Hill I proceeded through Audley and Balterley to Betley. The country is inclosed with quicksets, well planted, and the timber trees are of luxuriant and flourishing growth. The soil in general is a mixed gravelly loam; the under-stratum is various: sand, gravel, marl, or gritstone rock. The soil here, being the happy medium between the sterility of sand, and the harshness of clay, is adapted to either tillage or pasture. The meadow and grazing land is covered with a good herbage, and the corn crops have a promising appearance; and upon the whole this district may be called a fine country.

Betley was formerly ranked amongst the market-towns of the county, but has now lost that honour, its market having declined. It is a neat little town, ornamented by two handsome seats; the one belonging to Mr. Tollet, and the other to Mr. Fletcher. There is a road through it from Newcastle to Nantwich and Chester.

Between Betley and Newcastle is a good deal of light land, light enough for turnips, and some few small closes were under preparation for that vegetable; but I think in too small a proportion. South of the road leading from Betley to Newcastle, a stronger soil, or friable clayey or marly loam, commences, and continues with some variations to Eccleshall, and farther; the under-strata being generally marl or rock, with some exceptions, principally on rising ground, where the surface is often lighter, and the under-strata are sand, gravel, or sandy rock. On waste also, or uncultivated ground, as Maer heath, Ashley common, &c. the surface is a thin, black peat moor, and the under-strata, especially of the hilly parts, sand, gravel, or sandy rock. The herbage is poor, being generally heath, gorse, whortleberries, *carex's*, and a small proportion in patches of the grasses. The soil mends, and approaches more to a friable marl nearer Eccleshall, where the upland is a rich, deep, red,

friable, marly loam, excellent for wheat, or any other grain. The meadows round the Bishop's palace are also generally rich, though some patches have yet the appearance of being morassy, * and seem to want draining.

The Bishop's woods in the neighbourhood of Eccleshall are very extensive, and well stocked with timber and underwood. Since drawing up the accounts of the woodlands and plantations of the county, I have received the following information respecting them from Mr. Harding, who I believe has the management of them.

"The extent of the woods near Eccleshall, including the "Bishop's woods and Burntwood, are, I believe, about one "thousand five hundred acres.

"The system of managing them is variable. Some parts "of the Bishop's woods are cut at fourteen years growth "for crate rods and heads for the potters' use; others at "seven years growth, for rods only. The timber trees are "mostly oak, and left as near an equal distance as can be, "from forty, to eighty on an acre. The soil being very poor "in most parts of these woods, the oaks are slow in growth. "This soil is in general of the gravel or grey sandy kind, "and would not be worth more than eight shillings per "acre if in cultivation. The value to the owner is more in "their present state, than if in cultivation; the employment "to the labourer of greater consequence, being in the winter season; and the benefit to the public much greater; "for without a supply of wood from these coppices, the "potters would experience a want of wood for the purpose "of making crates to pack their ware in.

"The best part of the wood, such as willow, alder, birch, "or ash that is clear, is made use of for the purpose of hay "rakes, scythe poles, mop stails, and other articles for the "brushmakers use. In the low parts of the woods, where "the soil is of a better nature, the underwood will pay

* The present bishop (Dr. Cornwallis) has done more than all his predecessors together, towards effecting this necessary work.—*S.*

" fifteen shillings per acre annually, if it is well stooled, " and attention paid to planting the spaces between the " stools.

" Ashley Heath, July 5, 1794. Thomas Harding."

Between Eccleshall and Stafford, about a mile south of the road, is Latford Pool. This Pool, quite neglected, and without being of the least use, keeps back the water so as to render upwards of one hundred acres of land a perfect morass, incapable of producing any useful herbage; a large proportion of which morassy land is the property of the Chillington family. The draining is, I understand, in agitation, and should by no means be neglected, as the land might be converted to useful meadow, and in its present state is a national loss. The water and damaged land are, I understand, different properties. This accounts for the neglected state of the land, which the owner has no means of draining without drawing down the Pool. The strong marly upland, with some variations, continues from hence southward, as far as Blimhill and part of Breewood parish. The nature of the soil in the midland part of the county is explained in the Map.

The southern part of the county having some peculiarities, they are attempted to be delineated in the following short remarks made on the particular spots, in a tour through that division of the county.

Rowley Regis. This parish exhibits a very striking singularity, being in itself distinct from any other district in the neighbourhood, or in the county. It is principally composed of an insulated mountain, ending or finishing in various peaks, pikes, or summits. The highest summit, called Turner's hill, is the highest ground in the south of Staffordshire, but much beneath the Moorland hills, or the Wrekin and Clay hills of Shropshire. The other highest points of Rowley mountain are Oakham and Corney hills. This mountain has for its basis, a singular species of quartzose stone, devoid of any grit quality, called Rowley rag-stone;

large quantities of which are carried to Birmingham and elsewhere for pavements and repairing roads. It is extremely hard, too much so to be hewn by a common tool; the colour is a rusty blue. This stone is totally void of any calcareous quality, but very probably containing a small proportion of iron. This stone lies in an infinite number of fragments, and some of them of immense bulk, both above, upon, and beneath the surface. The rock called Rowley hail-stone is of this quality, and of great size. Doctor Plott has most absurdly expressed a doubt whether this may not have been a production of art. It is evidently the work of nature. The Rowley stone when dug for, lies in no strata, but in rude heaps in every direction, generally beneath the surface soil, but often rising above it, with innumerable fragments both upon the lands and roads. The hills north of Rowley, near Dudley and Sedgeley, are composed of limestone; whilst those of Clent, to the south, may be termed a stone brash,* or innumerable small fragments of broken rock stone, intermixed with a red sand or sandy loam: whilst Rowley, as it were insulated, differs from both; the surface-soil a strong marly loam, retentive of moisture even in its elevated situation, and producing a good herbage of grass. The roads of this parish are rocky precipices, and most of the heavy carriage done on the backs of horses.

The *Hills of Clent* are, at and near their summits, composed of a light soil, intermixed with small broken fragments of rock. The lower ground is of a better staple, as containing more of a marly or loamy quality. The stone brash quality goes apparently to a great depth, rendering the soil porous, and passing the rains through, quick, which renders this soil liable to burn in hot summers, except where the moisture is retained by the marly loam abounding in the surface soil. A considerable part of these hills are nothing but sheep-walk, totally unimproved, but covered with a fine turfed herbage, intermixed with little rubbish, except here

* Or breccia, from which it is corrupted—*S.*

and there a furze or gorze bush. These hill summits are very high ground, nearly equalling those of Rowley; they seem for the greatest part capable of the turnip and barley culture. This part of the county has several extensive commons. On one near the Stewponey, I examined the herbage, and found it principally heath, fern, sheeps fescue, mattgrass, white galium, and sheep sorrel.

Kinver is a light gravelly soil, on a grit-rock bottom, of various quality, from fertility to sterility. On Kinver Edge is an old extensive military work or encampment, now occupied by sheep. Kinver common is still in an unimproved state; though inclosed and appropriated, but not subdivided. Of a considerable tract inclosed in this neighbourhood some years back, part is improved and part not; but some progress is making: the soil being sterile, the improvement, to render it fertile, must be a work of time. West of Kinver, and south of Enville, the soil changes into a strong clayey or marly loam, more or less harsh or friable, under which description is included the whole of Over-Areley, and part of Enville and Bobbington. The hills are often rocky, with small fragments upon and near the surface, in some parts quartzose, in others gritty. The surface soil varies in colour from red to grey, with all the shades of colour between. The cultivation the same as in other strong soils.* This parish has formerly been famous for fruit, especially apples; but the orchards have been suffered to decline, though some recent attempts have been making towards reinstating them, and the soil and aspect are doubtless well adapted for the purpose.

At Sir Edward Littleton's, at Teddesley Park, I observed a practice forgot to be named in its proper order, and in my opinion almost peculiar to the place. Although several hundred acres of land are kept in hand, yet almost the whole being kept in turf, little or no grain of any kind is grown; to supply therefore the deficiency of straw for

* Over-Areley.

litter, large quantities of fern are collected, of which one or more large stacks are formed every year; considerable breadths of the common being mown for that purpose.

BOTANICAL CATALOGUE,

Of the most remarkable Plants, Trees, or Shrubs, natives of this county; including generally, such as have been observed by the Writer of this Survey; with the addition of a few from Gentlemen named in this Work.

The dietetic or agricultural plants having been mostly noticed before, are here generally omitted, as well as those of local growth, or peculiar to particular places, which may be found by referring to the Index.

1. Star-grass *(callitriche verna,* and *autumnalis);* in ditches, very common.

2. Privet *(ligustrum vulgaris);* common in hedges on this farm, makes an excellent garden-fence when cropped.

3. Brook lime *(veronica beccabunga);* an wholesome but pungent spring-sallad, common in streams.

4. Common speedwell *(veronica officinalis);* heaths, and uncultivated ground (recommended by Hoffman as a substitute for tea, but is more astringent, and less grateful).—*Withering.*

5. Valerian *(valeriana officinalis);* common in moist ground; a variety of this plant is of considerable repute in medicine.

6. Water flag *(iris pseud-acorus);* in moist situations.

7. Cotton-grass *(eriophorum);* on bogs.

8. Matt-grass *(nardus stricta);* the staple grass of some of our waste lands: on Cannock heath.

9. Reed *(arundo phragmitas);* in rivers, ponds, and lakes, common.

10. Wild teasel *(dipsacus sylvestris);* near Tamworth common, and elsewhere on moist ground.

11. Field scabious *(scabiosa arvensis)*; pastures and corn-fields.

12. Broad-leaved plantain *(plantago major)*; road sides, common; the leaves are applied to bruises and cuts.

13. Cross wort *(galium cruciata)*; hedge sides, common.

14. Yellow ladies bed-straw *(galium verum)*; the flowers will coagulate milk, and cheese may be made from them.

15. Spurwort *(sherardia arvensis)*; on this farm, common.

16. Dog-wood *(cornus sanguinea)*; in hedges.

17. Parsley piert *(alchemilla aphanes)*; on arable land, common.

18. Pearlwort *(sagina procumbens)*; on this farm.

19. Pondweed *(potamogeton)*; various sorts, in water, and on moist ground.

20. Scorpion-grass *(myosotis scorpioides)*; hedges and fields, very common; in the dry parts of the county *(Mr. Gisborne)* and not unfrequently in water.—*W. P.*

21. Comfrey *(symphytum officinalis)*; hedge sides. The young stems and leaves are excellent when boiled.

22. Borage *(borago officinalis)*; road sides, and amongst rubbish: the young and tender leaves are good in sallads, or as a pot-herb.—*Withering.*

23. Bugloss *(lycopsis arvensis)* road sides, and corn-fields. Cows, horses, and sheep, eat it.

24. Viper-grass *(echium vulgaris)* a showy flower, worthy a place in gardens, very common.

25. Buckbean *(menyanthes trifoliata)*; in pits common, a beautiful flower, the leaves very bitter; two ounces, it is said, would supply the place of a pound of hops.

26. Featherfoil *(hottonia palustris)*; in watery places between Litchfield and Burton, by the road side; a beautiful flower.

27. Pimpernel *(anagallis arvensis)*; in corn-fields, common.

28. Great bindweed *(convolvulus sepium)*; moist hedges, common: the inspissated juice of this plant, in doses of 20 or 30 grains, is a powerful drastic purge.

29. Bell flowers of sorts *(campanulas)*; hedge sides.

30. Woodbine or honeysuckle *(lonicera periclymenum)*; in hedges.

31. Mulleins *(verbascums)*; several sorts, hedge sides.

32. Henbane *(hyoscyamus niger)*; amongst rubbish, at the Four-crosses on Watling-street-way; a poisonous plant of powerful medical qualities, but its uses seem not fully ascertained.

33. Dwale, or deadly night-shade (*atropa belladonna*); amongst the lime-works of Sedgeley and Dudley, very common; also at Moseley, in the parish of Bushbury, near the seat of Mrs. Horton: one of our most poisonous plants; the ripe fruit has a beautiful appearance, and is not unpalatable. Many instances are recorded of the deleterious effects arising from taking it internally; I have frequently eaten one or two of the ripe berries with impunity.—*W. P.*

34. Woody night-shade (*solanum dulcamara*); in pits and hedges, common.

35. Centory (*chironia centaureum*); extremely bitter; common in pastures on this farm.

36. Buckthorn (*rhamnus catharticus*); in hedges.

37. Smooth buckthorn (*rhamnus frangula*); in hedges on this farm.

38. Gooseberry (*ribes grossularia*); in hedges, and have seen it on a church tower.

39. Black currant (*ribes nigrum*); I have found this shrub in thickets, and remote situations.

40. Mountain currant (*ribes alpinum*); Mr. Sneyd of Belmont has found this shrub in the Moorlands of Staffordshire, of the dioica kind, that is unfertile, unless male and female plants grow near each other, of which he shewed me specimens, transplanted into his garden.

41. Periwinkle (*vinca major* and *minor*); in hedges, bitter, and slightly astringent.—*Withering.*

42. English Mercury (*chenopodium bonus Henricus*); on road sides; a good dietetic plant, worthy of cultivation; little, if at all, inferior to spinach.

43. White, green, and maple-leaved, goosefoot (*chenopodiums alba, viride,* and *hybridum*); common garden weeds.

44. Elm (*ulmus campestris*); a large timber tree, very common in this county.

45. Witch elm, or wych hazel (*ulmus montana*) a timber tree of quick growth, common here.

46. Sanicle (*sanicula europæa* ; hedge sides near Betley, and elsewhere; slightly bitter, aromatic, and astringent.

47. Pignut (*bunium flexuosum*); pastures, orchards, &c. the roots would be an agreeable addition to our winter deserts.

48. Hemlock (*conium maculatum*) in hedges common, a plant of active poisonous qualities.

49. Angelica (*angelica sylvestris*); in moist woods and hedges; warm, acrid, bitter, and aromatic.

50. Water parsnip (*sium augustifolium*); common in streams; a plant of active properties that ought to be inquired into.

51. Fools' parsley, or lesser hemlock (*æthusa cynapium*); common in gardens, and much resembling parsley, for which it is sometimes mistaken; when eaten it occasions sickness; if the curled leaved parsley only, was cultivated in our gardens, no such mistakes would happen.—*Withering.*

52. Sweet chervil (*scandix odorata*); Tixall, near Stafford. —*Withering.*

53. Rough chervil (*scandix anthriscus*); near Tamworth-castle.

54. Wild chervil (*chærophyllum temulum*); common in hedges.

55. Ground ash (*aegopodium podagraria*); in some hedges and orchards in great abundance; the leaves may be eaten early in the spring as a pot-herb.

56. Marsh elder (*viburnum opulus*); a handsome shrub, common in hedges; the Guelder rose is a variety of it.

57. Common elder (*sambucus nigra*); in woods and hedges; if turnips, cabbages, fruit-trees, or corn (which are subject to blights from insects), are whipped with the green

leaves and branches of elder, the insects will not attack them. If sheep that have the rot, are placed in a situation where they can get at the bark and the young shoots, they will soon cure themselves. The flowers are fatal to turkies; the berries are poisonous to poultry.—*Withering's Botany*; where many other qualities of this shrub are described.

58. White berried elder (*sambucus fructo alba*); at Cowbridge, near Rocester; also near the farm house occupied by Mr. Hordern, Essington, near Wolverhampton; a wine is made of the fruit, which by many is much esteemed.

*58. Chickweed (*alsine media*); on land rendered fine by cultivation, common, and well known: the young shoots and leaves when boiled can hardly be distinguished from spring spinach, and are equally wholesome.—*Withering.*

59. Purging flax (*linum catharticum*); in pastures on this farm; an infusion of two drams or more of the dried leaves is an excellent purge.—*Withering.*

60. Sundew (*drosera rotundifolia*); on Birmingham heath: the juice that exudes from this plant will destroy warts and corns: some ladies know how to mix it with milk, so as to make an innocent and safe application, to remove freckles and sunburn: if a fly light on the leaves of the drosera, it is said to be held fast by its clammy juice, till the leaf contracts, so as completely to infold the insect, where it will in a short time perish; whence it may be termed the British fly-trap. —*From Withering.*

61. Snowdrop (*galanthus nivalis*); in orchards; a beautiful early flower, of welcome appearance, as foretelling the approach of spring (Fair maids of February)—*Withering.*

62. Daffodil (*narcissus pseudo-narcissus*); orchards, hedges, and meadows; the fresh roots are acrid.—*Withering.*

63. English hyacinth or harebell (*hyacinthus non scriptus*); hedges, very common; the fresh roots are poisonous, and may be converted into starch.

64. Lily of the valley (*convallaria majalis*); in Rough Park, near Needwood Forest.—*Rev. Mr. Gisborne.*

65. Myrtle flag (*acorus calamus*); banks of rivers near

the river at Tamworth, at the bottom of Mr. Oldershaw's garden: the root powdered might supply the place of our foreign spices; it is our only native true aromatic plant. —*Linnæus in Withering.*

66. Barberry *(berberris vulgaris)*; hedges near Aldridge, and elsewhere; this shrub is said to have the quality of blighting the ears of wheat, even to the distance of three or four hundred yards across one or more fields; the leaves and berries are gratefully acid.

67. Water plantain *(alisma plantago)*; growing in water; common.

68. Willow herbs *(epilobium hirsutum* and *augustifolium)*; a beautiful showy flower, growing in hedges and moist ditches, on this farm and elsewhere *(codlings and cream)*.

69. Cranberry *(vaccinium oxycoccus)*; on the moist parts of Cannock Heath; they are much esteemed in tarts.

70. Heath *(erica)*; the *vulgaris*, *tetralix*, and *cinerea*, are all common on our heaths.

71. Knotgrass *(poligonum aviculare)*; road sides, paths, and corn fields, common; this plant, and several others of the same species, are very productive in seeds, which seem peculiarly the food of small birds, and intended by a bountiful Providence as a principal article in the support of that beautiful part of the animated creation.

72. Herb Paris *(Paris quadrifolia)*; hedge side, in a meadow on this farm in plenty; the roots will vomit as well as ipecacuanha, but must be given in a double quantity.—*Linnæus in Withering.*

73. Moschatel *(adoxa moschatelina)*; ditch banks on this farm, very early in the spring.

74. Flowering rush *(butomus umbellatus)*; in water, about Stafford and Tamworth.

75. Knawel *(scleranthus annuus)*; corn-fields on this farm.

76. Stichwort *(stellaria holostea)*; hedge sides, early in the spring.

77. Sandwort *(arenaria's)*; in various situations.

78. Navel wort *(cotyledon umbillicus)*; in moist marshy

ground, and on wet commons, where from its starved situation, it never flowers: in South Wales this same plant is common on the driest ditch banks and walls, where it flowers luxuriantly.

79. Stone crops (*sedums telephium* and *acre*); even the former growing on roofs in the Moorlands, particularly at Wetton, and elsewhere on mountains and in pastures; the latter on mountains in the Moorlands, and on roofs and walls elsewhere.

80. Wood sorrel (*oxalis acetosella*); woods and hedge banks, the juice is gratefully acid, and a conserve is made from it.

81. Lychnis's of sorts, particularly the (*lychnis flos-cuculi*) or cuckow flower; a ragged red flower in meadows, and the red-and-white wild campion in fields and hedges (*lychnis dioica*).

82. Mouse ear (*cerastium vulgatum*); in arable and pasture land, common.

83. Spurry (*spergula arvensis* and *nodosa*); common on this farm, on some poor thin arable land, when in tillage; very prolific in seeds, which are eaten by small birds.

84. Purple spiked willow herb (*lythrum salicaria*); on moist ground; a showy flower.

85. Agrimony (*agrimonia eupatorium*); hedge sides.

86. Dyers weed (*reseda luteola*); in the lime-works at Dudley, and at Hay-head in plenty; this plant is used in dying.

87. Spurges (*euphorbias exigua* and *helioscopa*); devil's milk; in gardens and corn-fields, common.

88. House Leek (*sempervivum tectorum*); on roofs and walls.

89. Prunus's; the bird cherry (*prunus padus*); is a beautiful flowering shrub, growing on this farm, also on Bushbury-hall farm, about Shelford near Walsall, and in the Moorlands: the wild plum, the bullace, and the sloe (*prunus domestica, insititia,* and *spinosa*), are also common in hedges.

90. Hawthorn (*cratægus monogynia*); the staple of modern fences, common every where.

91. Wild service (*cratægus terminalis*); a rare shrub, worthy a place in pleasure grounds; spontaneous on this farm.

92. White beam, or wild pear (*cratægus aria*, or *aria theophrasti*); in Dove dale, and elsewhere in the Moorlands. —*Mr. Sneyd.*

93. Mountain ash (*sorbus aucuparia*); a hardy shrub, common in hedges; but flourishing well on rocky and bleak hills.

94. True service, or sorb (*sorbus domestica*); in the Moorlands of Staffordshire.—*Withering's Botany.*

95. Crab-tree (*pyrus malus*); in hedges; the acid juice called verjuice, is a good astringent, or repellent, and used in strains; with a proper addition of sugar, a grateful liquor may be made of it, little inferior to old hock.—*Withering.*

96. Rose, sweet briar (*rosa rubiginosa*); and dog rose (*rosa canina*), in hedges; the leaves are a good substitute for tea.

97. Bramble, including the raspberry (*rubus idæus*); and the blackberry (*rubus fruticosus*); in hedges and woods.

98. Strawberry (*fragaria vesca*); in hedges and woods; Mr. Sneyd of Belmont observes, that all the strawberry kinds termed hautboys, are dioica plants; and unless they are planted judiciously, with a few males interspersed amongst the females (both easily distinguished) will prove abortive; by neglect of this, the males being the strongest plants, and shooting out the most vigorous runners, will in a few years overpower the females; gardeners then call them barren, but do not know why, and root out all the males, which does not, however, mend the matter.

99. Barren strawberry (*fragaria sterilis*); hedge banks; is this totally barren, or a male hautboy?—*W. P.*

100. Tormentil (*tormentilla reptans*); in woods and moist old pastures, common.

101. Herb bennet (*geum urbanum*); woods and hedges.

102. Water avens (*geum rivale*); one of the most elegant wild plants of this island, grows about Ilam.—*Rev. Mr. Gisborne.*

103. Marsh cinquefoil (*comarum palustre*); in muddy and boggy ponds; in this neighbourhood frequent.

104. Celandine (*chelidonium majus*); in hedges: the juice is very acrimonious, and will cure warts, and the itch.—*Withering.*

105. Water lily (*nymphæa-lutea* and *alba*); in rivers.

106. Lime tree (*tilia europæa*); a timber tree, common in groves and plantations.

107. Dwarf cistus, or little sunflower, (*cistus helianthemum*); near Thor's House Cavern; Moorlands.

108. Speatwort (*ranunculus flammula*); in boggy ground, and near water: it is very acrid; externally applied, it inflames and blisters the skin; its acrimony arises in distillation. The distilled water of this plant (like white vitriol) will operate as an emetic, the instant it is swallowed; and in case of poison, or other circumstances, in which it is desirable to make a patient vomit instantaneously, it is preferable to any other medicine yet known.—*Withering.* The plant is common in this neighbourhood.—*W. P.*

109. Water crowfoot (*ranunculus aquatilis*); plant growing in water, flowers white.

110. Pilewort (*ficaria verna*); hedge banks and pastures, early in the spring, flowers yellow.

111. Bugle (*ajuga reptans*); the roots are astringent.

112. Wood sage (*Teucrium scorodonia*); ditch banks and thickets.

113. Water mint (*mentha aquatica*); watery places.

114. Ground ivy (*glecoma hederacea*); hedge banks. A decoction of this plant is sometimes drank in the spring as a sweetener of the blood: the expressed juice, mixed with a little wine, and applied morning and evening, destroys the white specks upon horses' eyes.—*Withering.*

115. Nettle hemp (*galeopsis tetrahit*); corn-fields and gardens.

116. Yellow dead nettle (*galeobdolon luteum*); about Sedgeley frequent.

117. Betony (*betonica officinalis*) in woods and shady places, common.

118. Hedge nettle, or woundwort (*stachys sylvatica*) in hedges.

119. Stinking horehound (*ballotta nigra*) on rubbish and in hedges.

120. Wild thyme (*thymus serpyllum*) heaths and road sides, in the south part of the county.

121. Hooded-willow herb (*scatellaria galericulata*); on a moist ditch bank on this farm.

122. Selfheal (*prunella vulgaris*) meadows and pastures.

123. Cow-grass, or cow-wheat, (*melampyrum pratense*); common in woods, and I have found it in pasture land.—*W. P.* Where this plant abounds, the butter is yellow, and uncommonly good; cows are very fond of it.—*Withering.* It is very probably worthy of cultivation.

124. Snap-dragon (*antirrhinum majus*); a beautiful flower, abounding on the walls of Rushall castle, near Walsall.

125. Toad flax (*antirrhinum linaria*); common in hedges; an infusion of the leaves is diuretic and purgative; the expressed juice mixed with milk, is a poison to flies.—*Withering.*

126. Figworts (*scrophularia aquatica* and *nodosa*); in moist places. Withering says, swine that have the scab are cured by washing with a decoction of the leaves.

127. Fox-glove (*digitalis purpurea*) a showy plant, very common here; a very active medicine.—*Withering.*

128. Whitlow-grass (*draba verna*); walks and dry pastures; a diminutive plant, very early in spring in flowers: it is good as a sallad, but must take a good deal of time to gather a moderate quantity.

129. Coralwort (*dentaria bulbifera*); hedge sides on this farm.

130. Water-cress (*sysimbrium nasturtium*); in springs and

rivulets; an early and wholsome spring sallad; antiscorbutic and stomachic.

131. Hedge mustard (*erysinum officinale*); road sides and hedges; the juice of this plant is beyond any thing in ulcers of the throat.—*Withering.*

132. Jack-by-the-hedge (*erysinum alliaria*); hedge banks near Wolverhampton; very common, luxuriant, and early in the spring; the leaves eaten in Prussia with salted meats: they are useful with lettuce, and the colder sallads.—*Withering.* I think they require a good stomach, having a very rank garlic flavour.—*W. P.* The seeds excite sneezing.

133. Gilliflower (*cheiranthus cheiri*); on old walls, particularly, on the moat walls at Perry hall.

134. Codded mouse ear (*arabis thaliani*); dry pastures on this farm, very early in the spring.

135. Geraniums, various sorts, hedge banks and pastures.

136. Common mallow (*malva sylvestris*); road sides and hedges, common.

137. Musk mallow (*malva muschata*); hedge sides, common.

138. Common fumitory (*fumaria officinalis*); in gardens, hedges, and corn-fields.

139. Lesser bulbous fumitory, (*fumaria bulbosa minor*); stem, simple, erect; flowers and leaves much larger than those of any other British species; has never before appeared in print, as an English plant. I found it growing last spring in Perry park, between the mansion and the river: and from specimens sent to Dr. Withering, it will be accurately described in the next edition of his Botany.

140. Milkwort (*polygala vulgaris*); mountainous, healthy pasture, near Cheadle; limestone hills, Sedgeley.

141. Broom (*spartium scoparium*); dry pastures.

142. Dyers' broom (*genista tinctoria*); in some pastures.

143. Hairy greenweed (*genista pilosa*); on a gravelly bank on this farm.

144. Gorse, or furze (*ulex europæus*); heaths and uncultivated ground.

145. Creeping restharrow (*ononis repens*); road side near Himley; the other restharrow was named before.

146. Melilot (*trifolium melilotis officinalis*); this plant is not very common in this county; but I have seen specimens of it growing in Stafford field, and again between there and Eccleshall; I have sometimes wondered that it has been taken so little notice of as an agricultural plant, being the most luxuriant of all our trefoils, and the most tenacious of growth. Horses are extremely fond of it; this I have often remarked; cows, sheep, and swine, eat it. Linnæus calls it an annual plant, Hudson a biennial, and Berkenhout a perennial: in some parts of the counties of Rutland and Bedford, particularly the former, it is so abundant amongst wheat and other grain, that I have been assured on the spot, the drawing it out as a weed has frequently cost five or six shillings per acre; hence I should suppose it a perennial. This circumstance may perhaps be a sufficient warning against introducing it upon arable land; yet a plant so tenacious of growth, and acceptable to cattle, may possibly be a good addition to our meadow and pasture herbage.

147. Brimstone, or yellow clover, (*trifolium ochroleucum*); at Goscott, near Walsall.

148. St. John's wort (*hypericum perforatum*); thickets, woods, and hedges.

149. Tutsan (*hypericum androsæmum*); a beautiful flower, in hedges and waste baulks on this farm.

150. Marsh St. John's wort (*hypericum elodes*); on a wet common, called Calf-heath, in a place where, from its situation, it must be some months in the year under water.

151. Corn sowthistle (*sonchus arvensis*); corn-fields and ditch banks.

152. Common sowthistle (*sonchus olaraceus*); on cultivated ground; the leaves are good as a pot-herb, and a favourite food with hares and rabbits.

153. Hawkweed (*hieracium*); in woods and hedges.

154. Burdock (*aretium lappa*); ditch banks, and amongst rubbish. Before the flowers appear, the stems, stripped of

their rind, and boiled, eat like asparagus; when raw, they are good with oil and vinegar. A decoction of the roots is equal or superior to sarsaparilla.—*Withering.*

155. Double tooth (*bidens cernua*); wet ditches.

156. Hempweed (*eupatorium cannabinum*); in moist ditches and sides of brooks.

157. Tansy (*tanacetum vulgaris*); road sides, and banks of rivers. If a dead animal substance is rubbed with this plant, the flesh-fly will not attack it.

158. Wormwood (*artemisia absinthium*); road sides and rocky places; very bitter; the leaves put into sour beer soon destroy the acescency; they resist putrefaction, and are a principal ingredient in antiseptic fomentations. An infusion is a good stomachic, but will, like other bitters, weaken the nervous system.—*Withering.*

159. Mugwort (*artemisia vulgaris*); ditch banks.

160. Cudweed (*graphalium germanicum*); in pastures on this farm, good for cattle that have the bloody flux.

161. Ragwort (*senecio Jacobæa*); sides of roads and hedges.

162. Water groundsel (*senecio aquaticus*); moist ground.

163. Middle elecampane, or flea-bane (*inula dysenterica*); on moist land on this farm.

164. Feverfew (*matricaria parthemium*); hedges, waste places, and on walls.

165. Chamomile (*anthemis nobilis*); in the road between Cannock and Rudgeley, a little to the south-west of the Hedgford finger-post.

166. Sneezewort (*achillea ptarmica*); in moist pastures on this farm, and elsewhere.

167. Knapweed (*centaurea*); various sorts, road sides, and in corn-fields.

168. Violet (*viola odorata*); ditch banks.

169. Pansy (*viola tricolor*); corn-fields.

170. Cows and calves (*arum maculatum*); hedge banks: starch may be made from the roots.

171. Duckmeat (*lemna*); in ditches and ponds: ducks are exceedingly fond of all the species.

172. Catstail (*igpha latifolia*); marshy places.

173. Burr reed (*sparganium erectum*); watery places on this farm.

174. Birch tree (*betula alba*); a hardy tree, growing in all kinds of soil, but best in shady places.

175. Alder (*betula alnus*); succeeds best near water: the wood will endure long under ground, or in water.

176. Nettle (*urtica dioica*); ditch banks, and amongst rubbish: its stinging properties are well known.

177. Chestnut tree (*fagus castanea*); hedges, and in plantations: a timber tree.

178. Beech tree (*fagus sylvatica*); a large timber tree, common in hedges and plantations.

179. Hornbeam (*carpinus betulus*); a tree not very common here, but I have seen a few specimens of it.

180. Hazel (*corylus avellana*); in woods and hedges: the shrub, and its fruit, the nut, are well known.

181. Sweet willow (*salix pentandra*); hedges and sides of brooks, near the east gate, Stafford.

182. Sallow (*salix caprea*); a variety of this shrub, called here, withy, with narrow or small leaves; is very common in this county in hedges, on most sorts of land, moist or dry. If a stake of it be driven into the earth, it generally grows; but is in general too crooked to be of much use, except for fuel; when straight and kind, it makes good staves, being very tough.

183. Dwarf willow (*salix repens*, or *fusca*, or both); on marshy ground on this farm.

184. Osier (*salix viminalis*); willow beds, woods, and hedges; baskets and bird cages are made of the twigs.

185. White willow (*salix alba*); the largest tree of the species, hedges and sides of rivers: it grows quick, and bears lopping.

186. Mistletoe (*viscum album*); on apple trees, in some parts of the country adjoining Shropshire, where it is still more common.

187. Hop (*humulus lupulus*); in hedges, at Whittington

and elsewhere; the young shoots are eaten early in the spring as asparagus.

188. Black briony (*tamus communis*); thickets and hedges; the young shoots are good dressed like asparagus.

189. Poplars, and aspen tree (*populus alba*) white poplar; (*populus nigra*) common poplar, and (*populus tremula*) asp, or aspen tree; succeed best in moist situations, though the white poplar does well on dry land.

190. Yew tree (*taxus baccata*); in hedges: the loppings, in a half dried state, have frequently been fatal to horses and cattle.

191. Common briony, wild vine, (*bryonia dioica*) in hedges near Litchfield.

192. Cross wort (*valantia cruciata*; baulks, by hedge sides.

193. Pellitory of the wall (*parietaria officinalis*); on dry ditch banks, and old walls; on the gateway leading to Litchfield minster.

194. Sycamore tree (*acer-pseudo-platanus*); in hedges: a hardy tree, and has succeeded well on black mountains, as I have been informed.

195. Maple (*acer campestre*); in hedges.

196. Ash tree (*fraxinus excelsior*); in woods and hedges. The wood of this tree being stout and tough, is the best of all others for ploughs, and most farming implements: this tree is injurious to arable or pasture lands, the roots running near the surface, and extending to a great distance; it should therefore be planted in clumps or coppices.

197. Corn horsetail (*equisetum arvense*); a troublesome weed on some moist arable land; not easily destroyed.

198. Marsh horsetail (*equisetum palustre*); in marshes and watery places.

199. Rough horsetail, or shave-grass, (*equisetum hyemale*); on Prestwood farm, near Wednesfield; used by turners and cabinet makers to smooth their work.

200. Adder's tongue (*ophioglossum vulgatum*); meadows near Blimhill, and in the Moorlands.

201. Club moss (*lycopodium clavatum*); on Cannock heath.

202. Spleenwort, or hart's-tongue, (*asplenium scolopendrium*; mouths of wells, ditch banks, old walls, and rocks.

203. Polypody (*polypodium vulgare*); on old walls, shady places, and at the roots of trees.

204. Mosses (*musci*); in great variety on trees, roofs, commons, and worn out pastures, which should then be top dressed, or ploughed up.

205. Lichens; a numerous tribe of diminutive plants, growing on the trunks and bark of trees; heaths, old walls, pales, rocks, large stones, and the summits of high mountains; many of the species are used in dying.

206. Star jelly (*tremella arborea*, and *nostoe*); the former on rotten wood, the latter in mossy ground; is vulgarly supposed the remains of a falling star, but described by bontanical writers as a true vegetable.

207. River-weed, or crowsilk, (*conferva rivularis*); in rivulets under water.

208. Paper byssus (*byssus flos-aquæ*); on stagnant water, some years ago a pond on this farm, soaking away in summer, from under a profusion of this vegetable production; the whole was left formed into a substance resembling coarse paper, covering the whole surface of the pond; a small specimen of which I have preserved, and it is capable of being wrote upon.

209. Agaricus's; an extensive and numerous species, in general remarkable for quick growth, and sudden decay. The mushroom (*agaricus campestris*), one of the few of this species used as food; is well known at table, and plentiful in old pastures.

210. Stinking morel, or polecat, (*phallus impudicus*); in thickets.

211. Puff-ball (*lycoperdon proteus*, or *bovista*); on this farm, most common on drained peat; and sometimes eight or nine inches diameter.

The above are our most remarkable, and common, indigenous vegetable productions; so far as comes under my observation, besides those mentioned before as agricultural plants, weeds, or of local growth: but it is very probable many may have been overlooked, the writer is often indebted to Withering's Botany, for their uses.

A List of the commonly cultivated Plants of this county, with the generic and specific names of Linnæus, not given before.

1	Wheat	*Triticum æstivum.*
2	Rye	*Secale cereale.*
3	Barley	*Hordeum vulgare.*
4	Six rowed ditto	*Hordeum hexastichon*, has had some small trials.
5	Oats	*Avena sativa.*
6	Beans	*Vicia faba.*
7	Peas	*Pisum sativa* and *arvensis.*
8	Vetches	*Vicia sativa*, very improperly called tares, the latter being a different species.
9	Buckwheat	*Polygonum fagopyrum.*
10	Hemp	*Cannabis sativus.*
11	Flax	*Linum usitatissimum.*
12	Turnips	*Brassica rapa.*
13	Potatoes	*Solanum tuberosum.*
14	Cabbages	*Brassica arvensis.*
15	Rape	*Brassica napus.*

Garden Plants.

16	French beans	*Phaseolus vulgaris* and *nanus.*
17	Carrot	*Daucus carota.*
18	Parsnip	*Pastinaca sativa.*
19	Beet	*Beta vulgaris, cicla* and *maritima.*
20	Spinach	*Spinachia sativa.*

21	Savoys, &c.	*Brassica oleracea.*
22	Artichoke	*Cynara scolymus.*
23	Lettuce	*Lactuca sativa.*
24	Cresses	*Lepidium sativum.*
25	Sallad mustard	*Sinapis alba.*
26	Leek	*Allium porrum*, or pot garlic.
27	Garlic	*Allium sativum.*
28	Onion	*Allium cepa.*
29	Cives	*Allium tenuissimum.*
30	Rocambole	*Allium oleraceum.*

The last five are all of the garlic species.

31	Asparagus	*Asparagus officinalis.*
32	Radishes	*Raphanus sativus.*
33	Parsley	*Apium petroselinum.*
34	Mint	*Mentha sativa.*
35	Celery	*Apium graveolens.*
36	Endive	*Cichorium endivea.*
37	Cucumber	*Cucumis sativus.*
38	Melon	*Cucumis melo.*
39	Horse-radish	*Cochlearia armoracia.*
40	Pompion, or gourd	*Cucurbita*, several sorts.

The most common Fruits, not named before.

41	Vine	*Vitis vinifera.*
42	Apple	*Pyrus malus.*
43	Pear	*Pyrus communis.*
44	Plum	*Prunus domestica.*
45	Cherry	*Prunus cerasus.*
46	Apricot	*Prunus armeniaca.*
47	Peach	*Amygdalus persica.*
48	Almond	*Amygdalus communis.*
49	Fig	*Ficus.*
50	Walnut	*Juglans.*

Garden Flowers most commonly cultivated, including some medi cal Plants, Trees, and Shrubs.

51	Auricula	*Primula auricula.*
52	Tulips	*Tulipa.*
53	Jessamine	*Jasminum officinale.*
54	Rosemary	*Rosmarinus officinalis.*
55	Crocus	*Crocus vernus.*
56	Jacob's-ladder	*Polemonium cæruleum.*
57	Venus's Looking Glass	*Campanula speculum.*
58	Fennel	*Anethum fœniculum.*
59	Narcissus	*Narcissus poeticus.*
60	Jonquill	*Narcissus jonquilla.*
61	Lilies of sorts	*Amaryllis's, liliums,* and *convallaria.*
62	Crown imperial	*Fritillaria meleagris.*
63	Bethlehem-stars	*Ornithogalums.*
64	Polianthes	*Polianthes tuberosa.*
65	Hyacinths	*Hyacinthus's,* sorts.
66	Bay	*Laurus.*
67	Rhubarb	*Rheum, rhabarbarum,* and *palmatum.*
68	Rue	*Ruta graveolens.*
69	Pink, Carnation, and Sweet-william	*Dianthus's.*
70	Campions	*Cucubalus's,* many sorts.
71	Lychnis's	many sorts.
72	Laurel	*Prunus lauro cerasus.*
73	Pæony	*Pæonia officinalis.*
74	Columbine	*Aquilegia vulgaris.*
75	Anemones	many sorts.
76	Ranunculus's	many sorts.
77	Savory	*Satureia hortensis.*
78	Hyssop	*Hyssopus officinalis.*
79	Lavender	*Lavendula.*
80	Hibiscus	*Althea frutex.*
81	Lupine	*Lupinus,* several sorts.
82	Laburnum	*Cytisis laburnum.*
83	Old-man	*Artemisia abrotanum.*

84	Sun-flower	*Helianthus.*
85	Jerusalem Artichoke	*Helianthus tuberosus.*
86	Violet	*Viola's*, many sorts.
87	French-marigold	*Calendula.*
88	Indian corn	*Zea mays.*
89	Amaranthus's	many sorts.
90	Ever-green oak	*Quercux Ilex.*
91	Plane-tree	*Platanus orientalis.*
92	Cedar	*Pinus cedrus.*
93	Lanch	*Pinus larix.*
94	Savin	*Junipers sabina.*
95	Juniper	*Juniperus communis.*
96	Horse-chestnut	*Æsculus hippocastanum.*
97	Hollyhock	*Alcea rosea.*
98	Lilac	*Syringa persica.*
99	Stock july flower	*Cheiranthus.*
100	Marjoram	*Origanum marjorana.*
101	Balm of Gilead	*Dracocephalon.*
102	Scurvy-grass	*Cochlearia officinalis.*
103	Box	*Buxus sempervirens.*
104	Thrift	*Statice armeria.*
105	London-pride	*Saxifraga umbrosa.*

ON MAKING STARCH FROM VEGETABLES.

As in the present scarcity of bread corn, and in all similar cases, and indeed in every case, it seems to be an object deserving attention, to search out substitutes for those articles of manufacture which (though not used as food,) have generally been prepared from wheat; and Dr. Withering having stated in his botanical arrangement that starch may be prepared from the roots of the Arum, and of the English Hyacinth, I took the liberty to write to him on the subject, and have received the following for answer.

"Though starch may be made from the roots of Arum "and the Hyacinth, it is a doubt with me whether it can be "done in this kingdom profitably; in countries where living