

and, in one patient, reduced it 38 beats. And in other cases in which the *Rhododendron* has been used at Edinburgh, it has been productive of good effects; and, accordingly, it is now introduced into the Edinburgh Pharmacopœia.

The manner of using this plant by the Siberians was, by putting two drams of the dried leaves in an earthen-pot with about ten ounces of boiling-water, keeping it near a boiling heat for a night, and this they took in the morning; and by repeating it three or four times it generally effected a cure. It is said to occasion heat, thirst, a degree of delirium, and a peculiar sensation of the parts affected.—*Woodville's Med. Bot.* p. 239.

SECT. VIII.—MEDICINAL PLANTS not contained in either of the BRITISH DISPENSATORIES.

For the use of the Medical Student I selected in the foregoing section such plants as are contained in the Pharmacopœias of the present day: but there are many mentioned in *Woodville's Medical Botany*, *Lewis's Dispensatory*, &c. which, although discarded from the College list, are nevertheless still used by medical practitioners and others.

It would be difficult to give a full history of all the plants that have from time to time been recommended for medical uses. The old writers, as Gerard, Parkinson, Lyte, &c. attributed medical virtues to all the plants which came under their notice; and, on the other hand, as we observed above, the vegetable department of the Pharmacopœias has from time to time been reduced so much, that, if we had confined ourselves to that alone, we fear our little treatise on this head would, by many persons, be thought defective. The following list is therefore given, as containing what are used, though probably not so much by practitioners in medicine, as by our good housewives in the country, who, without disparagement to medical science, often relieve the distresses of their families and neighbours by the judicious application of drugs of this nature, and many of which are also sold for the same purposes in the London herb-shops.

291. *ACANTHUS mollis*. SMOOTH BEARS-BREECH. *The Leaves*.—Are of a soft sweetish taste, and abound with a mucilaginous juice: its virtues do not seem to differ from those of *Althea* and other mucilaginous plants.

292. *ACHILLEA Ptarmica*: SNEEZEWORT. *The Root*.—The roots have an acrid smell, and a hot biting taste: chewed, they occasion a plentiful discharge of saliva; and when powdered and snuffed up the

nose, provoke sneezing. These are sold at the herb-shops as a substitute for pellitory of Spain.

293. *ACHILLEA Ageratum*. MAUDLIN. *The Leaves and Flowers*.—This has a light agreeable smell; and a roughish, somewhat warm and bitterish taste. These qualities point out its use as a mild corroborant; but it has long been a stranger in practice, and is now omitted both by the London and Edinburgh Colleges. It is however in use by the common people.

294. *ACHILLEA Millefolium*. YARROW. *The Leaves*.—The leaves have a rough bitterish taste, and a faint aromatic smell. Their virtues are those of a very mild astringent, and as such they stand recommended in hæmorrhages both internal and external, diarrhœas, debility and laxity of the fibres; and likewise in spasmodic hysterical affections.

295. *AJUGA reptans*. BUGLE. *The Leaves*.—These have at first a sweetish taste, which gradually becomes bitterish and roughish. They are recommended as vulnerary medicines, and in all cases where mild astringents or corroborants are proper.

296. *ALCHEMILLA vulgaris*. LADY'S MANTLE. *The Leaves*.—These discover to the taste a moderate astringency, and were formerly much esteemed in some female weaknesses, and in fluxes of the belly. They are now rarely made use of; though both the leaves and roots might doubtless be of service in cases where mild astringents are required.

297. *AMMI majus*. BISHOPS-WEED. *The Seeds*.—The seeds of common bishops-weed are large and pale-coloured: their smell and taste are weak, and without any thing of the *origanum* flavour of the true *ammi*, which does not grow in this country. They are ranked among the four lesser hot seeds, but are scarcely otherwise made use of than as an ingredient in the theriaca.—*Lewis's Mat. Med.*

298. *AMYGDALUS Persica*. ALMONDS. *Flowers*.—They have a cathartic effect, and especially to children have been successfully given in the character of a vermifuge for this purpose; an infusion of a dram of the flowers dried, or half an ounce in their recent state, is the requisite dose. The expressed oil of almonds has been for a long time, and is at present, in use for many purposes in medicine. The concentrated acid of the bitter almond is a most dangerous poison to man and all other animals.

299. *ANAGALLIS arvensis*. PIMPERNEL. *The Leaves*.—Many extraordinary virtues have been attributed to them. Geoffroy esteems

them cephalic, sudorific, vulnerary, anti-maniacal, anti-epileptic, and alexiterial.

300. *ANCHUSA angustifolia*. BUGLOSS. *The Roots, Leaves, and Flowers.*—Bugloss has a slimy sweetish taste, accompanied with a kind of coolness: the roots are the most glutinous, and the flowers the least so. These qualities point out its use in hot bilious or inflammatory distempers, and a thin acrimonious state of the fluids. The flowers are one of the four called cordial flowers: the only quality they have that can entitle them to this appellation, is, that they moderately cool and soften, without offending the palate or stomach; and thus in warm climates, or in hot diseases, may in some measure refresh the patient.

301. *ANEMONE Hepatica*. HEPATICA. *The Leaves.*—It is a cooling gently restraining herb; and hence recommended in a lax state of the fibres as a corroborant.

302. *ANTIRRHINUM Elatine*. FLUELLIN. *The Root, Bark, and Leaves.*—They were formerly accounted excellent vulneraries, and of great use for cleansing and healing old ulcers and cancerous sores: some have recommended them internally in leprous and scrophulous disorders; as also in hydropic cases.

303. *ANTIRRHINUM Linaria*. TOAD FLAX. *The Flowers.*—An infusion of them is said to be very efficacious in cutaneous disorders; and Hammerin gives an instance in which these flowers, with those of verbascum, used as tea, cured an exanthematous disorder, which had resisted various other remedies tried during the course of three years.—*Woodville's Med. Bot. p. 372.*

304. *AQUILEGIA vulgaris*. COLUMBINE. *The Leaves, Flowers, and Seeds.*—It has been looked upon as aperient; and was formerly in great esteem among the common people for throwing out the small-pox and measles. A distilled water, medicated vinegar, and conserve, were prepared from the flowers; but they have long given place to medicines of greater efficacy.

305. *ARISTOLOCHIA longa*. LONG BIRTHWORT. *The Roots.*—This is a tuberous root, sometimes about the size of the finger, sometimes as thick as a man's arm: great virtues used to be ascribed to this plant as a specific in most uterine obstructions and gout: the outside is of a brownish colour; the inside yellowish.

306. *ARTEMISIA vulgaris*. MUGWORT. *The Leaves.*—These have a light aromatic smell, and an herbaceous bitterish taste. They are principally celebrated as uterine and anti-hysterical: an infusion of them is sometimes drunk, either alone or in conjunction with other substances, in suppressions of immoderate fluxes. This medicine is certainly a very

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mild one, and considerably less hot than most others to which these virtues are attributed.

307. *ASCLEPIAS Vincetoxicum*. SWALLOW WORT. *The Root*.—This root is esteemed sudorific, diuretic, and emmenagogue, and frequently employed by the French and German physicians as an alexipharmic, sometimes as a succedaneum to contrayerva; whence it has received the name of *Contrayerva Germanorum*. Among us it is rarely made use of.

308. *ASPERULA odorata*. SWEET WOODROOF. *The Flowers*.—It has an exceedingly pleasant smell, which is improved by moderate exsiccation; the taste is sub-saline, and somewhat austere. It imparts its flavour to vinous liquors. *Asperula* is supposed to attenuate viscid humours, and strengthen the tone of the bowels: it was recommended in obstructions of the liver and biliary ducts, and by some in epilepsies and palsies: modern practice has nevertheless rejected it.

309. *ASPENIUM Ceterach*. SPLEENWORT.—It is recommended as a pectoral, and for promoting urine in nephritic cases. The virtue which it has been most celebrated for, is that which it has the least title to, *i. e.* diminishing the spleen.

310. *ASPENIUM Scolopendrium*. HARTS-TONGUE. *The Leaves*.—These have a roughish, somewhat mucilaginous taste. They are recommended in obstructions of the viscera, and for strengthening their tone; and have sometimes been made use of for these intentions, either alone, or in conjunction with maiden-hair, or the other plants of similar properties.

311. *ATROPA Mandragora*. MANDRAKE. *The Leaves*.—The qualities of this plant are very doubtful: it has a strong disagreeable smell resembling that of the narcotic herbs, to which class it is usually referred. It has rarely been any otherwise made use of in medicine, than as an ingredient in one of the old officinal unguents. Both that composition and the plant itself are rejected from our Pharmacopœias.

312. *BALLOTA alba*. BASE HOREHOUND. *The Leaves*.—These are doubtless an useful aperient and deobstruent; promote the fluid secretions in general, and liberally taken loosen the belly. They are an ingredient only in the theriaca.

313. *BELLIS perennis*. DAISIES. *The Leaves*.—They have a subtile subacid taste, and are recommended as vulneraries, and in asthmas and hectic fevers, and such disorders as are occasioned by drinking cold liquors when the body has been much heated.

214. *BERBERIS vulgaris*. BERBERRY. *The Bark and Fruit*.—The outward bark of the branches and the leaves have an astringent acid

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taste; the inner yellow bark, a bitter one: this last is said to be serviceable in the jaundice; and by some, to be an useful purgative.

The berries, which to the taste are gratefully acid, and moderately restraining, have been given with good success in bilious fluxes, and diseases proceeding from heat, acrimony, or thinness of the juices.

315. *BETONICA officinalis*. WOOD BETONY. *The Leaves*.—These and the flowers have an herbaceous, roughish, somewhat bitterish taste, accompanied with a very weak aromatic flavour. This herb has long been a favourite among writers on the *Materia Medica*, who have not been wanting to attribute to it abundance of good qualities. Experience does not discover any other virtue in betony than that of a mild corroborant: as such, an infusion or light decoction of it may be drunk as tea, or a saturated tincture in rectified spirit given in suitable doses, in laxity and debility of the viscera, and disorders proceeding from thence.

316. *BETULA alba*. BIRCH TREE. *The Bark and Sap*.—Upon deeply wounding or boring the trunk of the tree in the beginning of spring, a sweetish juice issues forth, sometimes, as is said, in so large quantity, as to equal in weight the whole tree and root: one branch will bleed a gallon or more in a day. This juice is chiefly recommended in scorbutic disorders, and other foulnesses of the blood: its most sensible effect is to promote the urinary discharge.

317. *BORAGO officinalis*. BORAGE. *The Flowers*.—An exhilarating virtue has been attributed to the flowers of borage, which are hence ranked among the so called cordial flowers: but they appear to have very little claim to any virtue of this kind, and seem to be altogether insignificant.

318. *BRYONIA alba*. WHITE BRYONY. *The Roots*.—This is a strong irritating cathartic; and as such has sometimes been successfully exhibited in maniacal cases, in some kinds of dropsies, and in several chronic disorders, where a quick solution of viscid juices, and a sudden stimulus on the solids, were required.

319. *CALENDULA officinalis*. MARIGOLD. *The Flowers*.—These are supposed to be aperient and attenuating; as also cardiac, alexipharmic, and sudorific: they are principally celebrated in uterine obstructions, the jaundice, and for throwing out the small-pox. Their sensible qualities give little foundation for these virtues: they have scarcely any taste, and no considerable smell. The leaves of the plant discover a viscid sweetishness, accompanied with a more durable saponaceous pungency and warmth: these seem capable of answering some useful purposes, as a stimulating, aperient, antiscorbutic medicine.

320. *CANNABIS sativa*. HEMP. *The Seeds*.—These have some smell of the herb; their taste is unctuous and sweetish; on expression

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they yield a considerable quantity of insipid oil: hence they are recommended (boiled in milk, or triturated with water into an emulsion) against coughs, heat of urine, and the like. They are also said to be useful in incontinence of urine; but experience does not warrant their having any virtues of this kind.

321. *CARTHAMUS tinctorius*. SAFFLOWER. *The Seeds*.—These have been celebrated as a cathartic: they operate very slowly, and for the most part disorder the bowels, especially when given in substance; triturated with aromatic distilled waters, they form an emulsion less offensive, yet inferior in efficacy to more common purgatives.

322. *CENTAUREA Cyanus*. BLUE-BOTTLE. *The Flowers*.—As to their virtues, notwithstanding the present practice expects not any from them, they have been formerly celebrated against the bites of poisonous animals, contagious diseases, palpitations of the heart, and many other distempers.

323. *CENTAUREA rhapontica*. GREATER CENTAURY. *The Root*.—It has a rough somewhat acrid taste, and abounds with a red viscid juice; its rough taste has gained it some esteem as an astringent; its acrimony as an aperient; and its glutinous quality as a vulnerary: the present practice takes little notice of it in any intention.

324. *CHELIDONIUM majus*. GREAT CELANDINE. *The Leaves and Juice*.—This is an excellent medicine in the jaundice; it is also good against all obstructions of the viscera, and, if continued a time, will do great service against the scurvy. The juice also is used successfully for sore eyes, removing warts, &c. It should be used fresh, for it loses the greatest part of its virtue in drying.

325. *CHENOPODIUM olidum*. STINKING GOOSEFOOT. *The Leaves*.—Its smell has gained it the character of an excellent anti-hysterical; and this is the only use it is applied to. Tournefort recommends a spirituous tincture, others a decoction in water, and others a conserve of the leaves, as of wonderful efficacy in uterine disorders.

326. *CHRYSANTHEMUM Leucanthemum*. OX-EYE DAISY. *The Leaves*.—Geoffroy relates that the herb, gathered before the flowers have come forth, and boiled in water, imparts an acrid taste, penetrating and subtle like pepper; and that this decoction is an excellent vulnerary and diuretic.

327. *CISTUS ladaniferus*. GUM CISTUS.—The gum labdanum is procured from this shrub, and is its only produce used in medicine. This is an exudation from the leaves and twigs in the manner of manna, more than of any thing else. They get it off by drawing a parcel of

SECT. VIII.— PLANTS NOT IN THE DISPENSATORIES. 83

leather things over the shrubs. It is not much used, but it is a good cephalic.—*Hill's Herbal*, p. 72.

328. *CLEMATIS recta*. UPRIGHT VIRGIN'S BOWER.—The whole plant is extremely acrid. It was usual for Dr. Stoerck to employ the leaves and flowers in ulcers and cancers, as well as an extract prepared from the former; yet the preparation which he chiefly recommended was an infusion of two or three drams of the leaves in a pint of boiling water, of which he gave four ounces three times a-day, while the powdered leaves were applied as an escharotic to the ulcers.—*Woodville's Med. Bot.* p. 431.

329. *COCHLEARIA Coronopus*. SWINES-CRESS.—This is an excellent diuretic, safe and yet very powerful. The juice may be taken; and it is good for the jaundice, and against all inward obstructions, and against the scurvy: the leaves may also be eaten as sallet, or dried and given in decoction.—*Hill's Herbal*, p. 105.

330. *CONVALLARIA Polygonatum*. SOLOMON'S-SEAL. *The Root*.—The root has several joints, with some flat circular depressions, supposed to resemble the stamp of a seal. It has a sweetish mucilaginous taste. As to its virtues, practitioners do not now expect any considerable ones from it, and pay very little regard to the vulnerary qualities which it was formerly celebrated for. It is used by pugilists to remove the black appearance occasioned from extravasated blood, and for curing bruises on the face, particularly black-eyes obtained by boxing.

331. *CONVALLARIA majalis*. MAY LILY. *The Roots and Flowers*.—The roots of this abound with a soft mucilage, and hence they have been used externally in emollient and maturing cataplasms: they were an ingredient in the suppurating cataplasm of the Edinburgh Pharmacopœia. Those of the wild plant are very bitter: dried, they are said to prove a gentle errhine; as also are the flowers.

332. *CONVOLVULUS sepium*. BIND-WEED.—The poor people use the root of this plant fresh gathered and boiled in ale as a cathartic; and it is found generally to answer that purpose. It would, however, nauseate a delicate stomach; but for people of strong constitutions there is not a better medicine.

333. *CUSCUTA europæa*. DODDER. The whole plant gathered green is to be boiled in water with a little ginger and allspice, and this decoction operates as a cathartic; it also opens obstructions of the liver, and is good in the jaundice and many other disorders arising from the like cause.—*Hill's Herbal*.

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334. *CYNOGLOSSUM officinale*. HOUNDS-TONGUE. *The Root*.—The virtues of this root are very doubtful: it is generally supposed to be narcotic, and by some to be virulently so: others declare that it has no virtue of this kind, and look upon it as a mere glutinous astringent.

335. *CYPERUS longus*. LONG CYPERUS. *The Root*.—This is long, slender, crooked, and full of knots: outwardly of a dark-brown or blackish colour, inwardly whitish; of an aromatic smell, and an agreeable warm taste: both the taste and smell are improved by moderate exsiccation. Cyperus is accounted a good stomachic and carminative, but is at present very little regarded.

336. *DICTAMNUS albus*. WHITE OR BASTARD DITTANY. *The Root*.—The cortical part of the root, dried and rolled up into quills, is sometimes brought to us. This is of a white colour, a weak, not very agreeable smell; and a durable bitter, lightly pungent taste. It is recommended as an alexipharmic.

337. *EQUISETUM palustre*. HORSE-TAIL. *The Herb*.—It is said to be a very strong astringent: it has indeed a manifest astringency, but in a very low degree.

338. *ERYSIMUM officinale*.—It is said to be attenuant, expectorant, and diuretic; and has been strongly recommended in chronical coughs and hoarseness. Rondeletius informs us that the last-mentioned complaint, occasioned by loud speaking, was cured by this plant in three days. Other testimonies of its good effects in this disorder are recorded by writers on the *Materia Medica*, of whom we may mention Dr. Cullen, who for this purpose recommends the juice of the *Erysimum* to be mixed with an equal quantity of honey and sugar; in this way also it is said to be an useful remedy in ulcerations of the mouth and throat. —*Woodville's Med. Bot.* p. 407.

339. *ERYSIMUM Alliaria*. SAUCE ALONE.—The leaves of this plant are very acrimonious, and have a strong flavour of onions. It is considered as a powerful diaphoretic, diuretic, and antiscorbutic. —*Woodville's Med. Bot.*

340. *EUPATORIUM cannabinum*. HEMP AGRIMONY, &c. *Leaves*.—They are greatly recommended for strengthening the tone of the viscera, and as an aperient; and said to have excellent effects in the dropsy, jaundice, cachexies, and scorbutic disorders. Boerhaave informs us, that this is the common medicine of the turf-diggers in Holland, against scurvy, foul ulcers, and swellings in the feet, which they are subject to. The root of this plant is said to operate as a strong cathartic.

SECT. VIII.—PLANTS NOT IN THE DISPENSATORIES. 85

341. *EUPHORBIA Esula*. SPURGE PLAX. *Its Berries*.—These are useful in removing warts and excrescences, if bruised and laid thereon. They are so acrid in their nature as to be altogether unfit for internal use.

342. *EUPHRASIA officinalis*. EYEBRIGHT. *Leaves*.—It was formerly celebrated as an ophthalmic, both taken internally and applied externally. Hildanus says he has known old men of seventy, who had lost their sight, recover it again by the use of this herb.

343. *FRAGARIA vesca*. THE STRAWBERRY. *The Leaves and Fruit*.—They are somewhat styptic, and bitterish; and hence may be of some service in debility and laxity of the viscera, and immoderate secretions, or a suppression of the natural evacuations depending thereon: they are recommended in hæmorrhages and fluxes; and likewise as aperients, in suppressions of urine, obstructions of the viscera, in the jaundice, &c. The fruit is in general very grateful both to the palate and stomach: like other fruits of the dulco-acid kind, they abate heat, quench thirst, loosen the belly, and promote urine.

344. *FUMARIA officinalis*. FUMITORY. *The Leaves*.—The medical effects of this herb are, to strengthen the tone of the bowels, gently loosen the belly, and promote the urinary and other natural secretions. It is principally recommended in melancholic, scorbutic, and cutaneous disorders; for opening obstructions of the viscera, attenuating and promoting the evacuation of viscid juices.

345. *CALEGA officinalis*. GOAT'S RUE. *The Herb*.—This is celebrated as an alexipharmic; but its sensible qualities discover no foundation for any virtues of this kind: the taste is merely leguminous; and in Italy (where it grows wild) it is said to be used as food.

346. *GALIUM Aparine*. GOOSEGRASS, OR CLEAVERS. *The Leaves*.—It is recommended as an aperient, and in chronic eruptions; but practice has little regard to it.

347. *GALIUM verum*. LADIES BEDSTRAW, OR CHEESE-RENNET. *The Herb*.—This herb has a subacid taste, with a very faint, not disagreeable smell: the juice changes blue vegetable infusions to a red colour, and coagulates milk, thus exhibiting marks of acidity. It stands recommended as a mild styptic, and in epilepsy; but has never been much in use.

348. *GERANIUM robertianum*. HERB ROBERT. *The Leaves*.—They have an austere taste, and have hence been recommended as astringents: but they have long been disregarded in practice.

349. *GLECHOMA hederacea*. GROUND-IVY. *The Leaves*.—This herb

is an useful corroborant, aperient, and detergent; and hence stands recommended against laxity, debility, and obstructions of the viscera: some have had a great opinion of it for cleansing and healing ulcers of the internal parts, even of the lungs; and for purifying the blood. It is customary to infuse the dried leaves in malt liquors, to which it readily imparts its virtues; a practice not to be commended, unless it is for the purpose of medicine.

350. *HEDERA Helix*. Ivy. *The Leaves and Berries*.—The leaves have very rarely been given internally; notwithstanding they are recommended (in the *Ephem. natur. curios.* vol. ii. obs. 120.) against the atrophy of children; their taste is nauseous, acrid, and bitter. Externally they have sometimes been employed for drying and healing ichorous sores, and likewise for keeping issues open. The berries were supposed by the ancients to have a purgative and emetic quality; later writers have recommended them in small doses, as diaphoretics and alexipharmics; and Mr. Boyle tells us, that in the London plague the powder of them was given with vinegar, with good success, as a sudorific. It is probable the virtue of the composition was rather owing to the vinegar than to the powder.

351. *HERNIARIA glabra*. RUPTUREWORT. *The Leaves*.—It is a very mild restraining, and may, in some degree, be serviceable in disorders proceeding from a weak flaccid state of the viscera: the virtue which it has been most celebrated for, it has little title to, that of curing hernias.

352. *HYPERICUM perforatum*. St. John's Wort. *The Leaves and Flowers*.—Its taste is rough and bitterish; the smell disagreeable. Hypericum has long been celebrated as a corroborant, diuretic, and vulnerary; but more particularly in hysterical and maniacal disorders: it has been reckoned of such efficacy in these last, as to have thence received the name of *fuga demonum*.

353. *JASMINUM officinale*. JASMINE. *The Flowers*.—The flowers have a strong smell, which is liked by most people, though to some disagreeable: expressed oils extract their fragrance by infusion; and water elevates somewhat of it in distillation, but scarcely any essential oil can be obtained from them: the distilled water, kept for a little time, loses its odour.

354. *IRIS Pseudacorus*. FLOWER-DE-LUCE. *The Root*.—The roots, when recent, have a bitter, acrid, nauseous taste, and taken into the stomach prove strongly cathartic; and hence the juice is recommended in dropsies, in the dose of three or four scruples. By drying they lose this quality, yet still retain a somewhat pungent, bitterish taste: their smell in this state is of the aromatic kind.

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355. *IRIS florentina*. FLORENTINE IRIS, OR ORRIS-ROOT.—The roots grown in this country have neither the odour nor the other qualities that those possess which are grown in warmer climates: so that, for the purposes of medicine, they are usually imported from Leghorn.

The root in its recent state is extremely acrid, and, when chewed, excites a pungent heat in the mouth which continues several hours; but on being dried, this acrimony is almost wholly dissipated, the taste becomes slightly bitter, and the smell approaching to that of violets. It is now chiefly used in its dried state, and ranked as a pectoral or expectorant. The principal use of the roots is, however, for the purposes of perfumery, for which it is in considerable demand.

356. *LACTUCA sativa*. GARDEN LETTUCE. *The Leaves and Seeds*.—It smells strongly of opium, and resembles it in its effects; and its narcotic power, like that of the poppy heads, resides in its milky juice. An extract from the expressed juice is recommended in small doses in dropsy. In those diseases of long standing proceeding from visceral obstructions, it has been given to the extent of half an ounce a-day. It is said to agree with the stomach, to quench thirst, to be greatly laxative, powerfully diuretic, and somewhat diaphoretic.

357. *LAMIUM album*. WHITE ARCHANGEL, OR DEAD NETTLE. *The Flowers*.—The flowers have been particularly celebrated in female weaknesses, as also in disorders of the lungs; but they appear to be of very weak powers.

358. *LAVENDULA Stæchas*. ARABIAN STÆCHAS, OR FRENCH LAVENDER. *The Flowers*.—They have a very fragrant smell, and a warm, aromatic, bitterish, subacid taste: distilled with water, they yield a considerable quantity of a fragrant essential oil; to rectified spirit it imparts a strong tincture, which inspissated proves an elegant aromatic extract, but is seldom used in medicine.

359. *LEONURUS Cardiaca*. MOTHERWORT. *The Leaves*.—These have a bitter taste, and a pretty strong smell: they are supposed to be useful in hysteric disorders, to strengthen the stomach, to promote urine; and indeed it may be judged from their smell and taste, that their medical virtues are considerable, though they are now rejected both from the London and Edinburgh Pharmacopœias.

360. *LILIUM candidum*. WHITE LILY. *The Roots*.—These are used in poultices. The good housewife doctors cut the roots in slices and steep them in brandy; and they are said to be an excellent remedy for all bruises and green wounds: for which purposes it is applied by them with considerable effect.

361. *LITHOSPERMUM officinale*. GROMWELL. *The Seeds*.—These are roundish, hard, and of a whitish colour, like little pearls. Pow-

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dered, they have been supposed peculiarly serviceable in calculous disorders. Their taste is merely farinaceous.

362. *LYSIMACHIA Nummularia*. MONEYWORT, OR HERB TWO-PENCE. *The Leaves*.—Their taste is subastringent, and very slightly acid: hence they stand recommended by Boerhaave in the hot scurvy, and in uterine and other hæmorrhagies. But their effects are so inconsiderable, that common practice takes no notice of them.

363. *MALVA alcea*. VERVAIN-MALLOW. *The Leaves*.—Alcea agrees in quality with the *Althæa* and *Malva vulgaris*; but appears to be less mucilaginous than either.

364. *MATRICARIA Parthenium*. COMMON WILD FEVERFEW. *The Leaves and Flowers*.—Simon Pauli relates, that he has experienced most happy effects from it in obstructions of the uterine evacuations. I have often seen, says he, from the use of a decoction of *Matricaria* and chamomile flowers with a little mugwort, hysteric complaints instantly relieved, and the patient from a lethargic state, returned as it were into life again. *Matricaria* is likewise recommended in sundry other disorders, as a warm stimulating bitter: all that bitters and carminatives can do, says Geoffroy, may be expected from this. It is undoubtedly a medicine of some use in these cases, though not perhaps equal to chamomile flowers alone, with which the *Matricaria* agrees in sensible qualities, except in being weaker.

365. *NEPETA Calamintha*. FIELD CALAMINT. *The Leaves*.—This is a low plant, growing wild about hedges and highways, and in dry sandy soils. The leaves have a quick warm taste, and smell strongly of pennyroyal: as medicines, they differ little otherwise from spearmint, than in being somewhat hotter, and of a less pleasant odour; which last circumstance has procured calamint the preference in hysteric cases.

366. *NEPETA cataria*. NEP, OR CATMINT. *The Leaves*.—This is a moderately aromatic plant, of a strong smell, not ill resembling a mixture of mint and pennyroyal; it is also recommended in hysteric cases.

367. *NIGELLA romana*. FENNEL-FLOWER. *The Seeds*.—They have a strong, not unpleasant smell; and a subacid, somewhat unctuous disagreeable taste. They stand recommended as aperient, diuretic, &c. but being suspected to have noxious qualities should be used with caution.

368. *NYMPHÆA alba*. WHITE WATER-LILY. *The Root and Flowers*.—These have a rough, bitterish, glutinous taste, (the flowers are the

least rough,) and when fresh a disagreeable smell, which is in great measure lost by drying: they are recommended in alvine fluxes, gleet, and the like. The roots are supposed by some to be in an eminent degree narcotic.

369. *OCYMUM Basilicum*. BASIL. *The Leaves*.—These have a soft, somewhat warm taste; and when rubbed, a strong unpleasant smell, which by moderate drying becomes more agreeable. They are said to attenuate viscid phlegm, promote expectoration, and the uterine secretions.

370. *OPHIOGLOSSUM vulgatum*. ADDERS-TONGUE. *The Leaf*.—An ointment is made of the fresh leaves, and it is a good application to green wounds. It is a very antient application, although now discarded from the apothecary's shop.

371. *PEONIA coralloides*. MALE PEONY. *The Seeds*.—These are strung, and worn round the neck to assist detention, and are probably as good as other celebrated anodyne beads which have been so long recommended for the same purpose.

372. *PHELLANDRIUM aquaticum*. HONEWORT.—The seeds of this plant, according to Dr. Lange, when taken in large doses, produce a remarkable sensation of weight in the head, accompanied with giddiness, intoxication, &c. It may probably prove, however, an active medicine, especially in wounds and inveterate ulcers of different kinds, and even in cancers; also in phthisis pulmonalis, asthma, dyspepsia, intermittent fevers, &c. About two scruples of the seed, two or three times a-day, was the ordinary dose given. Medicines of this kind should be used with great caution.—*Woodville's Med. Bot.* p. 91, 92.

373. *PIMPINELLA saxifraga*. BURNET SAXIFRAGE. *The Root, Leaves, and Seeds*.—This root promises, from its sensible qualities, to be a medicine of considerable utility, though little regarded in common practice. Stahl, Hoffman, and other German physicians, are extremely fond of it, and recommend it as an excellent stomachic, resolvent, detergent, diuretic, diaphoretic, and alexipharmic.

374. *PLANTAGO major*. COMMON BROAD-LEAVED PLANTAIN.—The leaves are slightly astringent, and the seeds said to be so; and hence they stand recommended in hæmorrhages, and other cases where medicines of this kind are proper. The leaves bruised a little, are the usual application of the common people to slight flesh wounds. The Edinburgh College used to direct an extract to be made from the leaves.

375. *POTENTILLA anserina*. SILVERWEED. *The Leaves*.—The

sensible qualities of Anserina promise no great virtue of any kind; for to the taste it discovers only a slight roughness, from whence it was thought to be entitled to a place among the milder corroborants. As the astringency of Tormentil is confined chiefly to its root, it might be thought that the same circumstance would take place in this plant; but the root is found to have no other than a pleasant sweetish taste, like that of parsnip, but not so strong.

376. *POTENTILLA reptans*. CINQUEFOIL, OR FIVE-LEAVED GRASS. *Root*.—The root is moderately astringent: and as such is sometimes given internally against diarrhoeas and other fluxes; and employed in gargarisms for strengthening the gums, &c. The cortical part of the root may be taken, in substance, to the quantity of a dram: the internal part is considerably weaker, and requires to be given in double the dose to produce the same effect. It is scarcely otherwise made use of than as an ingredient in Venice treacle.—*Lewis's Mat. Med.*

377. *POPULUS niger*. THE BLACK POPLAR. *Its Buds*.—The young buds or rudiments of the leaves, which appear in the beginning of spring, abound with a yellow, unctuous, odorous juice. They have hitherto been employed chiefly in an ointment, which received its name from them; though they are certainly capable of being applied to other purposes: a tincture of them made in rectified spirit, yields upon being inspissated, a fragrant resin superior to many of those brought from abroad.

378. *PRIMULA officinalis*. COWSLIP. *The Flowers*.—The flowers appear in April; they have a pleasant sweet smell, and a subacid, bitterish, subastringent taste. An infusion of them, used as tea, is recommended as a mild corroborant in nervous complaints. A strong infusion of them, with a proper quantity of sugar, forms an agreeable syrup, which for a long time maintained a place in the shops. By boiling, even for a little time, their fine flavour is destroyed. A wine is also made of the flowers, which is given as an opiate.

379. *PRUNELLA vulgaris*. SELFHEAL. *The Leaves*.—It has an herbaceous roughish taste, and hence stands recommended in hæmorrhages and alvine fluxes. It has been principally celebrated as a vulnerary, whence its name; and in gargarisms for aphthæ and inflammations of the fauces.

380. *PULMONARIA officinalis*. SPOTTED LUNGWORT. *The Leaves*.—They stand recommended against ulcers of the lungs, phthisis, and other like disorders.—*Lewis's Mat. Med.*

381. *RANUNCULUS Ficaria*. PILEWORT. *The Leaves and Root*.—The roots consist of slender fibres, with some little tubercles among

them. These, with the leaves, are considered of considerable efficacy in the cure of hæmorrhoids; for which purpose, considerable quantities are sold at herb-shops in London.

382. *RANUNCULUS Flammula*. SMALL SPEARWORT.—It has been lately discovered that this plant possesses very active powers as an emetic, and it is supposed to be useful in some cases of vegetable poisons.

383. *RHAMNUS Frangula*. THE BLACK OR BERRY-BEARING ALDER. *Its Bark*.—The internal bark of the trunk or root of the tree, given to the quantity of a dram, purges violently, occasioning gripes, nausea, and vomiting. These may be in good measure prevented by the addition of aromatics; but we have plenty of safer and less precarious purgatives.

384. *RIHUS coriaria*. ELM-LEAVED SUMACH.—Both the leaves and berries have been employed in medicine; but the former are more astringent and tonic, and have been long in common use, though at present discarded from the Pharmacopœias.

385. *RIBES nigrum*.—The juice of black currants boiled up with sugar to a jelly, is an excellent remedy against sore throats.

386. *RUMEX Hydrolapathum*. THE GREAT WATER DOCK.—The leaves of the docks gently loosen the belly, and have sometimes been made ingredients in decoctions for removing a costive habit. The roots, in conjunction with other medicines, are celebrated for the cure of scorbutic and cutaneous disorders, for which the following receipt is given by Lewis.

Six ounces of the roots of the water dock, with two of saffron; and of mace, cinnamon, gentian root, liquorice root, and black pepper, each three ounces, (or, where the pepper is improper, six ounces of liquorice,) are to be reduced into coarse powder, and put into a mixture of two gallons of wine, with half a gallon of strong vinegar, and the yolks of three eggs; and the whole digested, with a moderate warmth, for three days, in a glazed vessel close stopped: from three to six ounces of this liquor are to be taken every morning on an empty stomach, for fourteen or twenty days, or longer.

387. *SALVIA Sclarea*. GARDEN CLARY. *The Leaves and Seeds*.—These have a warm, bitterish, pungent taste; and a strong, not very agreeable smell: the touch discovers in the leaves a large quantity of glutinous or resinous matter. They are principally recommended in female weaknesses, in hysteric disorders, and in flatulent colics.

388. *SAMBUCUS Ebulus*. DWARF ELDER, OR DANEWORT. *The Root*,

Bark, and Leaves.—These have a nauseous, sharp, bitter taste, and a kind of acrid ungrateful smell: they are all strong cathartics, and as such are recommended in dropsies, and other cases where medicines of that kind are indicated. The bark of the root is said to be strongest: the leaves the weakest. But they are all too churlish medicines for general use: they sometimes evacuate violently upwards, almost always nauseate the stomach, and occasion great uneasiness of the bowels. By boiling they become (like the other drastics) milder, and more safe in operation. Fernelius relates, that by long coction they entirely lose their purgative virtue. The berries of this plant are likewise purgative, but less virulent than the other parts. A rob prepared from them may be given to the quantity of an ounce, as a cathartic; and in smaller ones as an aperient and deobstruent in chronic disorders: in this last intention, it is said by Haller to be frequently used in Switzerland, in the dose of a dram.

389. *SANICULA officinalis*. SANICLE. *The Leaves.*—These have an herbaceous, roughish taste: they have long been celebrated for sanative virtues, both internally and externally: nevertheless their effects, in any intention, are not considerable enough to gain them a place in the present practice.

390. *SAPONARIA officinalis*. SOAPWORT. *The Herb and Root.*—The roots taste sweetish and somewhat pungent; and have a light smell like those of liquorice: digested in rectified spirit they yield a strong tincture, which loses nothing of its taste or flavour in being inspissated to the consistence of an extract. This elegant root has not come much into practice among us, though it promises, from its sensible qualities, to be a medicine of considerable utility: it is greatly esteemed by the German physicians as an aperient, corroborant, and sudorific; and preferred by the College of Wirtemberg, by Stahl, Neumann, and others, to sarsaparilla.

391. *SAXIFRAGA granulata*.—Linnæus describes the taste of this plant to be acrid and pungent, which we have not been able to discover. Neither the tubercles of this root, nor the leaves, manifest to the organs of taste any quality likely to be of medicinal use; and therefore, though this species of Saxifraga has been long employed as a popular remedy in nephritic and gravelly disorders, yet we do not find, either from its sensible qualities or from any published instances of its efficacy, that it deserves a place in the *Materia Medica*.—Woodville's *Med. Bot.* p. 551.

392. *SCABIOSA succisa*. DEVIL'S BIT. *The Leaves and Roots.*—These stand recommended as alexipharmics, but they have long given place to medicines of greater efficacy.

393. *SCANDIX Cerefolium*, CHERVIL. *The Leaves.*—Geoffroy as-

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ures us, that he has found it from experience to be of excellent service in dropsies: that in this disorder it promotes the discharge of urine when suppressed, renders it clear when feculent and turbid, and when high and fiery of a paler colour; that it acts mildly without irritation, and tends rather to allay than excite inflammation. He goes so far as to say, that dropsies which do not yield to this medicine are scarce capable of being cured by any other. He directs the juice to be given in the dose of three or four ounces every fourth hour, and continued for some time, either alone, or in conjunction with nitre and syrup.

394. *SEDUM Telephium*. ORPINE. *The Leaves*.—This is a very thick-leaved juicy plant, not unlike the houseleeks. It has a mucilaginous roughish taste, and hence is recommended as emollient and astringent, but has never been much regarded in practice.

395. *SEMPERVIVUM tectorum*. GREATER HOUSE-LEEK. *The Leaves*.—These are principally applied in cases of erysipelatous and other hot eruptions of the skin, in which they are of immediate service in allaying the pain arising therefrom: great quantities are cultivated in Surrey, and brought to the London markets. It is remarkable of this plant, that its juice, when purified by filtration, appears of a dilute yellowish colour upon the admixture of an equal quantity of rectified spirit of wine; but forms a beautiful white, light coagulum, like the finer kinds of pomatum: this proves extremely volatile; for when freed from the aqueous phlegm, and exposed to the air, it altogether exhales in a very little time.

396. *SENECIO Jacobæa*. RAGWORT. *The Leaves*.—Their taste is roughish, bitter, pungent, and extremely unpleasant: they stand strongly recommended by Simon Pauli against dysenteries; but their forbidding taste has prevented its coming into practice.

397. *SOLANUM nigrum*. COMMON NIGHTSHADE. *The Leaves and Berries*.—In the year 1757, Mr. Gataker, surgeon to the Westminster Hospital, called the attention of the Faculty to this plant, by a publication recommending its internal use in old sores, scrophulous and cancerous ulcers, cutaneous eruptions, and even dropsies; all of which were much relieved or completely cured by it.

398. *SPIRÆA Ulmaria*. MEADOW-SWEET. *The Leaves and Flowers*.—The flowers have a very pleasant flavour, which water extracts from them by infusion, and elevates in distillation.

399. *SPIRÆA Filipendula*. DROPWORT. *The Root*.—The root consists of a number of tubercles, fastened together by slender strings; its taste is rough and bitterish, with a slight degree of pungency. These qualities point out its use in a flaccid state of the vessels, and a slug-

94 SECT. VIII.—PLANTS NOT IN THE DISPENSATORIES.

gishness of the juices: the natural evacuations are in some measure restrained or promoted by it, where the excess or deficiency proceeds from this cause. Hence some have recommended it as an astringent in dysenteries, a diuretic, and others as an aperient and deobstruent in scrophulous habits.

400. *SYMPHYTUM officinale*. COMFREY. *The Root*.—The roots are very large, black on the outside, white within, full of a viscid glutinous juice, of no particular taste. They agree in quality with the roots of *Althæa*; with this difference, that the mucilage of it is somewhat stronger-bodied. Many ridiculous histories of the consolidating virtues of this plant are related by authors.

401. *TAMUS communis*. BLACK BRYONY. —The root is one of the best diuretics known in medicine. It is an excellent remedy in the gravel and all obstructions of urine, and other disorders of the like nature.

402. *TANACETUM vulgare*. TANSY. *The Leaves*.—These have a bitterish warm aromatic taste; and a very pleasant smell, approaching to that of mint or a mixture of mint and maudlin. Water elevates their flavour in distillation; and rectified spirit extracts it by infusion. They have been recommended in hysteric cases.

403. *TEUCRIUM Chamæpitys*. GROUND PINE. *The Leaves*.—These are recommended as aperient and vulnerary, as also in gouty and rheumatic pains.

404. *THYMUS vulgaris*. THYME. *The Leaves and Flowers*.—A tea made of the fresh tops of thyme is good in asthmas and diseases of the lungs. It is recommended against nervous complaints; but for this purpose the wild thyme is preferable. There is an oil made from thyme that cures the tooth-ache, a drop or two of it being put upon lint and applied to the tooth; this is commonly called oil of origanum.

405. *TRIGONELLA Fœnum-græcum*. FENUGREEK. *The Seeds*.—They are of a yellow colour, a rhomboidal figure; have a disagreeable strong smell, and a mucilaginous taste. Their principal use is in cataplasms, fomentations, and the like, and in emollient glysters.

406. *VERBASCUM Thapsus*. MULLEIN. *The Leaves and Flowers*.—Their taste discovers a glutinous quality; and hence they stand recommended as an emollient, and is in some places held in great esteem in consumptions. The flowers of mullein have an agreeable, honey-like sweetness: an extract prepared from them by rectified spirit of wine tastes extremely pleasant.

407. *VERBENA officinalis*. COMMON WILD VERVAIN. *The Leaves*

and Root.—This is one of the medicines which we owe to the superstition of former ages; the virtue it has been celebrated for is as an amulet, on which a pamphlet was some years ago published. It was recommended to wear the root by a ribband tied round the neck for the cure of the scrophula, and for which purpose, even now, much of the root is sold in London. As the age of superstition is passing by, it will be needless to say more on the subject at present.

408. *VERONICA officinalis*. MALE SPEEDWELL. *The Leaves.*—Hoffman and Joh. Francus have written express treatises on this plant, recommending infusions of it, drunk in the form of tea, as very salubrious in many disorders, particularly those of the breast.

Observations on the Drying and Preserving of Herbs, &c. for Medicinal Purposes.

THE student who has paid attention to the subject described in the foregoing sections, will be struck with the admirable contrivance of Divine Wisdom; that has caused such astringent substances as are contained in the oak and Peruvian bark, to be produced from the same soil, and in a similar way to those mucilaginous and laxative ones which we find in the juice of the marsh-mallow, and the olive oil. It is not intended in this small elementary work to enter into any investigation of the primitive parts of the vegetable creation, or how such different particles are secreted. It may therefore suffice, that, although the science of vegetable physiology admits of many very beautiful and instructing illustrations, yet they only go so far as to prove to us, that the first and grand principle of vegetable life and existence, as well as of the formation of all organic substances, consists in a system of attraction and combination of the different particles of nature, as they exist and are imbibed from the soil and the surrounding atmosphere. Thus, during their existence, we observe a continual series of aggregation of substance; but no sooner does the principle of life become extinct, than the agents of decomposition are at work, dividing and selecting each different substance, and carrying it back from whence it came:—

“From dust thou comest, and to dust thou shalt return.” This, there-

fore, seems to be the sum total of existence; the explanation of which, with all its interesting ramifications, is more fully explained by the learned professors in what is called the science of chemistry.

As plants of all descriptions, and their several parts, form a link of that chain by which the welfare of the universe is connected, the industry of mankind is excited to preserve them for the different purposes to which they are applicable, in the oeconomy of human existence, to whose use the greater part of the animal and vegetable creation appears to be subservient. As men, then, and rational beings, it becomes our duty so to manage those things, when necessary, as to counteract as much as possible the decomposition and corruption which are natural to all organized bodies when deprived of the living principle.

We find that some vegetables are used fresh, but the greater part are preserved in a dry state; in which, by proper management, they can be kept for a considerable time afterwards, both for our own use as well as for that of others who reside at a distance from the place of their production.

In the preparation of the parts of plants for medicinal purposes, we should always have in view the extreme volatility of many of those substances, and how necessary it therefore is, that the mode of preparation and drying should be done as quickly as possible, in order to counteract the effects of the air and light, which continue to dissipate, without intermission, these particles; during the whole time that any vegetable, either fresh or dried, is left to its influence.

If we consider the nature of hops, which I shall take as an example, as being prepared in this way on the largest scale, we shall find they consist of three different principles; namely, an aroma, combined with an agreeable bitter taste, and a yellow colour; all of which properties are, by the consumers and dealers therein, expected to exist in the article after drying.

The art of drying hops, therefore, has been a subject of speculation for many years; and although we find the kiln apparatus for preserving them differ in many places, from the various opinions of the projectors, yet they are all intended for the same mode of action, *i. e.* the producing of a proper degree of heat, which must be regulated according to the state of the atmosphere at the gathering season, and the consequent quantity of the watery extract that the

hops contain at the time: thus it is usual to have two kilns of different temperatures at work at the same time. It should, however, be observed, that the principal art of drying hops is in doing it as quickly as possible, so as not to injure them in their colour. As soon as they are dried, it is considered necessary to put them up into close and thick bags.

It should be observed, that all vegetables contain at every period of their growth two distinct species of moisture: the one called by naturalists the *common juice*, which is the ascending sap, and is replete with watery particles: the other is termed the *proper juice*, which having passed up through the leaves, and being there concocted and deprived of the watery part, contains the principle on which the various properties and virtues of the plants depend. We therefore find that the operations above described only go to this, that the watery particles in the common juice should be evaporated, as being a part necessary to be got rid of; and the proper juice being of a volatile nature, the less time the plants are exposed for that purpose, the less of this precious material will be lost: and as those parts are flying off continually from all dried vegetables, there should be one general rule made with regard to their preparation; for, if we instance mint, balm, pennyroyal, &c., the longer these are kept in the open air, the weaker are they found to be in their several parts.

From hence we may naturally infer, that the usual mode in which the generality of herbs are dried, is not so good for the purpose, as one would be if contrived on similar principles, as, during the length of time necessary for the purpose, a great deal of the principal parts of the plants must of course be evaporated and lost; for little else is regarded than to dry them so as to prevent putrefaction. Although the generality of herbs met with are prepared as above described, yet in such articles as *Digitalis*, *Hyoseyamus*, *Conium*, *Toxicodendron*, &c., where the quantity necessary for a dose is so small, and so much depends on its action, practitioners are often obliged to prepare it themselves. I shall therefore relate the following mode as the best adapted to that purpose. The *Digitalis* is prepared by collecting the leaves in the summer, and stripping them off from the foot-stalks; these should be then carefully exposed to a slow heat, and the watery extract slowly thrown off; in which they should not be exposed to any great degree of

heat, which by its action will deprive them of their fine green colour. When this is effected, the whole may be put in contact with a heat that will enable the operator to reduce it to a fine powder. And in order to keep it with its virtues perfect, it will be necessary to deprive it as much as possible of the influence of air and light. Hence it is preserved in close glass bottles which are coated, and also placed in a dark part of the laboratory. Now, it is necessary that all plants intended to be used in a dried state, should be prepared and protected in a similar manner; and although it may be considered as a superfluous trouble, so far as regards the more common kinds, particular attention should be paid to these, when a *small quantity is a dose*, and an *over-dose a certain poison*.

Other kinds of vegetables require a certain degree of fermentation, as Tobacco. The principal art of preserving it consists in this operation being duly performed; for which purpose, as soon as the leaves of the herb are fit, the foot-stalks are broken, and the leaves left on, in order for the moisture in part to be evaporated. Afterwards these are gathered and tied in handfuls, and hung up in the shade to dry; and when sufficiently divested of moisture, the bundles are collected together and laid in large boxes or tubs, in which these are fermented, and afterwards taken out again and dried; when it is found fit to pack up for the market.

The properties of *Stramonium*, which has been so much recommended for curing asthma, consist principally in the aroma, which is only to be preserved in a similar manner: and I have found from experience, that if the leaves are separated from the plant in a manner similar to that of tobacco, and the rest of the plant, both roots, stalks, and seed-vessels, be slit and sufficiently dried in the sun or in an oven, and the whole fermented together, a very different article is the produce than what it is when dried in the usual way, and left entirely to the chance influence of the atmosphere.

In the common operation of hay-making it may also be observed, that the continued turning it over and admitting its parts to the action of the sun and the air, is for the purpose of getting rid of the watery particles contained in it; and the quicker this is done, the better it is. And although this operation is so essentially necessary, yet care should be taken at the same time, that it be not made too dry, so as to prevent

a due degree of fermentation being allowed to take place in the rick. And it may be observed that the best grasses, or other plants used for hay, if made too dry, so as to prevent the natural fermentation which their proper juices will excite, can never make either palatable or nutritive food for cattle. Neither can the same be effected if the article is used in too small quantities. It should be observed, that herbs of all kinds should be gathered for preserving when in full bloom; but when roots or barks are recommended, these should be collected in the autumnal months. The principles laid down for preserving dried plants generally, will apply to these parts also.

SECTION IX. — PLANTS USED FOR CULINARY PURPOSES.

“Man's first great ruling passion is to eat.”

In the following section I have confined myself principally to such as are in cultivation. There are many of our indigenous plants which, in times of scarcity, and in other cases of necessity, are used as food by the people in the neighbourhood where they grow. But of these I shall make a separate list.

409. ARTICHOKE. *Cynara Scolymus*.—We have several varieties of this plant in cultivation; but the most approved are the large green and the globe. They are propagated by taking off the young suckers from the old roots in May, and planting them in a piece of rich land. Artichokes have been raised from seed, but they are seldom perfected in this country.

410. ARTICHOKE, JERUSALEM. *Helianthus tuberosus*.—Is cultivated for the sake of its tubers, similar to the potatoe; but they are not generally esteemed.

411. ASPARAGUS. *Asparagus officinalis*.—A very delicious vegetable in the spring, and well known to all amateurs of gardening.

There is a variety called the Gravesend Asparagus, and another called the Battersea; but it is the richness of the soil and manure that makes the only difference.

412. BASIL, SWEET. *Ocimum Basilicum*.—A pot-herb of considerable use for culinary purposes. It is an annual; and the seeds