

would suggest to those spirited foreigners who have offered to supply the English market, to attempt the manufacture of different sized hand-glasses, made of moderately clear glass, to take the place of those fragile things composed of lead, &c., liable to be twisted into all shapes by the wind.—*Falcon.*

Foreign Correspondence.

Simla, March 27, 1845.—Some time since I had the pleasure to receive your letter when on my return from an excursion into the great mountains, the extreme cold and deep snow, and employ myself in examining the campaign by which Sir D. Ochterlony theatre in possession of these mountains; and I may say I have returned with a very high idea of the military talent which enabled him, with somewhat inefficient means, to drive a very formidable enemy from still more formidable positions, and thus, among other benefits, secure a refuge for such miseries as myself from the ungenial heat of the plains. But, however folks at Bombay might glory at the sight of snow, I assure you that when the mountains are clothed with a too permanent coat of from 3 to 5 feet of it (and 15 feet only a few miles in the interior), the matter runs into the other extreme! I returned a week since, and now the cold enemy being almost melted, I think our climate is not to be surpassed in the world. All the seeds I have left are of course quite ripe, but one of them, which lies in the sunshine before me, will require a day or two more to dry; I allude to the seeds of an Ivy, which differs from our English one in bearing yellow or orange berries instead of black, and may therefore be a curiosity at home—a sort of antithesis to our faces in Europe and India. In addition to this are packets of our famed Deodar, one of the largest, most beautiful, and useful trees in the world, of which in September and October any desired quantity of seed may be had; *Abies Smithiana*, an immense and very beautiful Spruce, but nearly worthless for timber; *Pinus excelsa*, nearly resembling the Weymouth Pine; *Pinus Gerardiana*, which affords a very agreeable, though not very wholesome, article of our dessert. This tree only grows in the district of Kunawur, beyond the snowy range, where rain never falls, though snow does in plenty; it will require the most rocky spots and the driest climate England can furnish; and even then I have my doubts of its thriving. *Cupressus torulosa* (a Cypress), attains a great size, and the wood is the most fragrant with which I am acquainted; our mountaineers burn it largely as incense to their favourite goddess, Devi; it also affects our driest, rockiest, and sunniest exposures, but flourishes where the rainy season is very heavy, which the *Neozia* (*Pinus Gerardiana*) does not. *Rhododendron arboreum* I also send; and on the outside of the packet I have written a few directions,* derived from observation of the tree in this its native locality. Our woods are now absolutely masses of the most brilliant scarlet, from its large and countless bunches of blossoms. There are two Clematises, both handsome, and one of them (*grata*) very fragrant; and *Hydrangea altissima*. If this latter will flourish at home, it will be a great curiosity; instead of being a humble shrub, like our garden one, it aspires to the summit of the loftiest trees, forming great festoons from their boughs, like some of our gigantic *Bauhinias*.—*D. M.*

Societies.

HORTICULTURAL SOCIETY.

August 5.—*R. H. SOLLY, Esq.*, in the chair. Lord Southampton, the Hon. R. P. Arden, F. H. Cornewall, Esq., W. Evetts, Esq., T. G. Parry, Esq., W. W. Valk, M. D., A. Unthank, Esq., and the Rev. J. Horner, were elected fellows. At this meeting a considerable number of gay plants were brought together, and some remarkable for their novelty. Messrs. Fairbairn, of Clapham, received a Banksian medal, for an exceedingly well-grown collection of Cape Heaths, in which were two seedlings named *Vernonii* and *Wilsonii*, both improvements on their parents in point of size; but not otherwise sufficiently distinct from them; the latter has, however, large bold flesh-coloured flowers. On the same table was a number of small plants from the nursery of Messrs. Henderson, of Pine Apple-place. These consisted of *Elæodendrum indicum*, mentioned at p. 529, a *Gesnera*-like plant from Brazil, a *Besleria*, and an *Angelonia*, together with an *Achimenes* called *Leibmanni*, which is, however, not distinct from *grandiflora*; *Ismene calathina*, *Oncidium incurvum*, and the pretty greenhouse plant *Franciscea Pohliana*.—From the Royal Botanic Garden, Kew, was the little *Achimenes argyrostigma*, whose beauty is confined to its fine silvery spotted leaves rather than to the blossoms, which are small.—*Mr. Moore, gr.* to the Earl of Auckland, was awarded a Banksian medal for a capital specimen of the beautiful twining Brazilian plant *Stigmaphyllon aristatum*. This plant, which is rarely to be met with in collections, stood about 4 feet in height, and was covered with clean dark green foliage, which contrasted well with the clusters of bright yellow flowers.—Messrs. Veitch and Son, of Exeter, sent a seedling Heath, which was stated to have been raised between *ampullacea* and *Aitoniana*; combining the flowers of the latter with the foliage and habit of the former.—Of ORCHIDS, *Mr. Robertson, gr.* to Mrs. Lawrence, sent *Stanhopea Wardii, oculata*, and

* Young plants may be tried in the open air in England, if planted on ground thoroughly drained, or on the steep side of a hill, with Oak trees as nurses. The soil should be poor, and rest on rubble of clay or mica-slate."

graveolens, Persicaria elata, the little white blossomed *Eria densiflora*, *Vanda Roxburghii violacea*, *Epidendrum radiatum*, the rare *Cattleya grandiflora*, *Leianthus longifolius*, with panicles of yellow blossoms, and a fine *Aerides quinquevulnera*, for which a Knightian medal was awarded.—Of FLORISTS' FLOWERS, *Mr. Norman*, of Woolwich, produced two excellent stands of Picotees and Carnations; these were, however, received too late to be taken into consideration for a prize.—From Uxbridge, Messrs. Brown and Attwell sent 20 varieties of Carnations, and the same number of Picotees, for which a certificate was awarded.—Cut blooms of Picotees likewise came from *Mr. Ferguson*, of Aylesbury, who also received a certificate for an excellent specimen of *Oncidium incurvum*. *Mr. Pullen*, of Islington, sent two seedling Pelargoniums, named *Triumphant* and *Prince Albert*. And *Mr. Cole, gr.* to *C. Lewis, Esq.*, was awarded a certificate for an excellent *Clerodendrum fallax*; he also sent blooms of seedling *Verbenas* and *Fuchsias*, and six varieties of *Phlox Drummondii*.—Of BORDER FLOWERS, *Mr. Cuthill*, of Camberwell, showed bunches of his *Prince of Denmark* clove-scented Carnation; a Chinese Cucumber, which was said, when young, to be a good sort for pickling; *Passingham's* green-fleshed Melon, a good small kind, and apparently a great bearer; and a fine plant of *Lisianthus Russellianus*, for which a certificate was awarded.—From *Mr. Linford, gr.* to *Mrs. C. L. Francis*, was a seedling *Fuchsia* named *Francisii*.—From *C. B. Warner, Esq.*, were *Cattleya violacea*, and the pretty little *Maxillaria stapelioides*; a certificate was awarded for the former.—Messrs. Van Houtte sent a bouquet from Ghent, composed of *Alströméria* blooms from the open ground. These were hybrids of various colours, and although somewhat tarnished by the journey, and wet weather, to which they were stated to have been lately exposed, yet they sufficiently showed what beautiful objects large masses of them would be in the flower-garden, and fully justified the opinion given of them by the Dean of Manchester in a late Number. Of FRUIT, *Mr. Daniell, gr.* to the Rev. T. Stevens, sent two Melons, weighing respectively 3 lbs. 15 oz., and 2 lbs. 5 oz. The larger of the two was stated to have been raised from seed which had been sent from Jellalabad this spring; the other was from seed which had been received a few years ago from Palestine. The specimens were, however, unripe, and deficient in flavour; a circumstance possibly owing to the gloomy weather we have had, which has been very unfavourable for oriental Melons. They were mentioned to have been grown in heat obtained from fermenting material. The bed was made 1 foot deep, of loamy turf cut up into rough pieces, and pressed together over a subsoil drainage of charcoal 2 feet deep, into which the Melon roots were found to delight to dive. *Mr. Fraser, gr.* to *E. D. Davenport, Esq.*, sent three Pine-apples, the heaviest of which (a Queen) weighed 3 lbs. 12 oz. These were stated to have been turned out into the border of a Melon-pit, which was heated by linings similar to the pit in which *Mr. Mills*, of Gunnersbury, grew his large Providence Pines, of which mention was made at page 619 of our volume for last year. *Mr. Fraser* stated that most of his Queen Pines, turned out into the bed and forced by dung linings, average from 3 to 4 lbs., while those produced in pots plunged in tan and heated by hot water, seldom weigh more than from 2 to 2½ lbs. Finally, *Mr. Toy, gr.* to *Col. Challoner*, sent a Queen Pine, handsomely formed, weighing 3 lbs. 9 oz. Messrs. Youell and Co. sent fine specimens of the *Fastolf Raspberry*.—From the Garden of the Society were beautiful masses, in pans, of the different species of *Achimenes*, which were mentioned to have been raised in close pits, heated by no other means than by the rays of the sun. The advantage of this method of culture is that the plants are not drawn up weakly, but are stiff and short-jointed, and are better able to stand any hardship to which they may happen to be exposed. *Niphaea oblonga*, a near relation of these, and whose tufts of white blossoms, produced at this season, render it very useful, was also grown in the same way, and with equal success, without any artificial heat or moisture farther than what was obtained from sun-heat and damp arising from the earthen floor of the pits. Along with these was the pretty little hardy herbaceous plant, *Silene Schæfftii*, whose masses of pink, starlike blossoms recommend it to a place in the flower-border. From the same collection were also *Viscaria oculata*, which, being raised in a greenhouse, had the eye better and the colour brighter than when grown in the open air; *Roscoea purpurea*, a plant related to the Ginger, from the north of India; the pretty marbled-flowered *Aconitum ovatum*, a Himalayan production, which is quite different from any *Aconite* with which we are acquainted; it is not quite hardy, however, and will not stand the winter without protection. Along with these were the blue and white varieties of *Lobelia gracilis*, and the bright blue *L. ramosa*; the dark variety of *Fuchsia fulgens*, which has a handsomer foliage and better-coloured flowers than the original species, or any of the sorts raised from it. This native variety, we believe, was raised from seeds imported by *Mr. Lee*, of Hammer-smith. In the same group was a noble plant of *Sobralia macrantha*, having on it two open blossoms, two coming and two just past. This is a terrestrial species, on the top of whose long reedy stems are produced magnificent purple blossoms, 5 or 6 inches across; it is a native of Guatemala, where it was found by *Mr. Hartweg*. Along with it were *Myoporum parvifolium*,

Gesnera discolor, *Statice Dickensonii*, together with *Oncidium luridum*, *Campanula garganica*, and the pretty Mexican bulb, *Bravoa geminiflora*.

ROYAL PHILANTHROPIC SOCIETY OF GARDENERS.

July 30.—*F. Moor* in the chair. This meeting was held in the Commercial Tavern, King's-road, Chelsea. From a report which we have received we are glad to learn that after paying away a great many prizes at their annual exhibition, which took place at Cremorne House, the books showed a balance of 20l. 13s. 7d. in favour of the Society; and it was agreed that this sum should be immediately deposited in the savings bank, with the general fund. From the same source it also appears that several of the successful competitors who are members returned part of their prizes, which was added to the funds of the Society.

Country Show.

Dorking Horticultural Society.—Connected with this Society there are two exhibitions every year for cottagers' productions only, and the good that has resulted from this branch of the Society is amply apparent in the excellence of the fruit and vegetables exhibited, and in the improved management of the cottagers' gardens. The first of these exhibitions, for the present year, was held at the National School-room, Dorking, on July 24, when between 30 and 40 labourers competed for the prizes offered, which were awarded as follows:—24 Gooseberries: 1, P. Croucher; 2, W. May; 3, J. Goring. 24 bunches of Red Currants: 1, W. Niblett; 2, W. Sayers; 3, W. May. 24 bunches of White Currants: 1, J. Goring; 2, P. Croucher. 24 bunches of Black Currants: 1, J. Goring; 2, J. Shepherd. 1 gallon of Peas: 1, T. Adams; 2, H. Letts; 3, T. Cox; 4, W. Niblett. 1 pottle of Scarlet Runners: 1, W. Niblett; 2, J. Morris. 3 Lettuces: 1, G. Rose; 2, J. Martin; 3, T. Adams. 3 Cabbages: 1, J. Worsfold; 2, W. May; 3, G. Rose; 4, J. Bixley; 5, J. Shepherd. 12 Turnips: 1, J. Martin; 2, J. Worsfold; 3, H. Letts; 4, G. Rose; 5, W. May. 1 gallon of Beans: 1, G. Rose; 2, T. Adams; 3, J. Worsfold; 4, T. Nye. 12 Potato-onions: 1, W. Sayers; 2, T. Worley; 3, J. Lane; 4, T. Cox. 12 Potatoes: 1, W. Niblett; 2, G. Rose; 3, J. Bixley; 4, H. Letts; 5, J. Worsfold; 6, W. May. Collection of Vegetables: 1, J. Shepherd; 2, T. Adams; 3, G. Rose. EXTRA PRIZES were given to T. Lee, for Cauliflowers, and for a nosegay; J. Comport, for Red Currants; W. King, for Carrots; J. Lane, for Gooseberries; T. Nye, for Peas; J. Yarnley, for Beans; Widow Brett, for Turnips; J. Lawrence, for Turnips; T. Rowe, for Peas. The prizes (amounting to 7l. 14s.) were distributed by the President, who, in an appropriate address, urged the unsuccessful exhibitors to increase their exertions, and assured them that ultimately they must be rewarded. One praiseworthy custom at these meetings is, that the articles exhibited are afterwards purchased by the visitors, and thus the owners are insured against loss, even if unsuccessful.

Reviews.

Darwin's Journal of a Voyage round the World. Part I. Murray. 12mo.

NONE of our voyages of discovery, or of survey, have produced a result more satisfactory to the naturalist than that of the *Beagle*, a ship commissioned about 14 years ago to survey the coast of Patagonia and Terra del Fuego, and to examine some other parts of the South American continent. On that occasion *Mr. Darwin*, the author of the very entertaining and instructive *Journal* before us, volunteered to act as naturalist, and it was a white day for zoology when his services were accepted.

Mr. Murray could scarcely have chosen a better work than that of *Mr. Darwin* for a portion of his Home and Colonial Library, a periodical especially intended for those who seek for solid information at a cheap rate. It is an inexhaustible mine of observations and anecdotes concerning the natural history of the South American continent, written with the intelligence of a quick-sighted observer, and the tone of a gentleman. The only thing to be regretted is that to his graphic accounts of the zoology, ornithology, malacology, and geology of the survey *Mr. Darwin* should not have added more botany, a theme which to so many readers is even more interesting than the subjects specially treated of. We are, however, thankful for the abundant entertainment actually provided for us, from which we must make a few extracts, with the persuasion that they will lead to a careful perusal of the work itself.

At Rio Janeiro *Mr. Darwin* first saw *Tree-ferns*, which he speaks of thus,—

"During the second day's journey we found the road so shut up, that it was necessary that a man should go ahead with a sword to cut away the creepers. The forest abounded with beautiful objects; among which the *Tree-ferns*, though not large, were from their bright green foliage, and the elegant curvature of their fronds, most worthy of admiration. In the evening it rained very heavily, and although the thermometer stood at 65° I felt very cold. As soon as the rain ceased, it was curious to observe the extraordinary evaporation which commenced over the whole extent of the forest. At the height of 100 ft. the hills were buried in a dense white vapour, which rose like columns of smoke from the most thickly-wooded parts, and especially from the valleys. I observed this phenomenon on several occasions: I suppose it is owing to the large surface of foliage, previously heated by the sun's rays."

At Bahia Mr. Darwin had an opportunity of studying the habits of that queer creature which one of the old travellers maintained was a plant with a worm for its root. Captain Lancaster, in his voyage in 1601, narrates that on the sea-sands of the Island of Sombrero, in the East Indies, he "found a small twig growing up like a young tree, and on offering to pluck it up, it shrinks down to the ground, and sinks unless held very hard. On being plucked up, a great worm is found to be its root, and as the tree groweth in greatness, so doth the worm diminish; and as soon as the worm is entirely turned into a tree it rooteth in the earth, and so becomes great. This transformation is one of the strangest wonders that I saw in all my travels; for if this tree is plucked up, while young, and the leaves and bark stripped off, it becomes a hard stone when dry, much like white coral: thus is this worm twice transformed into different natures. Of these we gathered and brought home many."

Of this our author gives the following interesting explanation:—

"I will only mention one other animal, a zoophyte (I have Virgularia Patagonica), a kind of sea-pen. It consists of a thin, straight, fleshy stem, with alternate rows of polypi on each side, and surrounding an elastic central axis, varying in length from 8 ins. to 2 ft. The stem at one extremity is truncate; but at the other is terminated by a vermiform fleshy appendage. The elastic axis which gives strength to the stem may be traced at this extremity into a mere vessel filled with granular matter. At low water hundreds of these zoophytes might be seen, projecting like stubble, with the truncate end upwards, a few inches above the surface of the muddy sand. When touched or pulled they suddenly drew themselves in with force, so as nearly or quite to disappear. By this action, the highly elastic stem must be bent at the lower extremity, where it is usually slightly curved; and I imagine it is by this elasticity alone that the zoophyte is enabled to rise again through the mud. Each polypus, though closely united to his brethren, has a distinct mouth, body, and tentacles. Of these polypi, in a large specimen, there must be many thousands; yet we see that they act by one movement; they have also one central axis connected with a system of obscure circulation, and the ova are produced in an organ distinct from the separate individuals. Well may one be allowed to ask what is an individual."

But it is not the mere natural history of the countries visited that Mr. Darwin has recorded. Unhappily in the barbarous regions of Spanish America there is so much to study in the inhabitants themselves, who seem to have been brutalised by their Spanish masters to a degree that would be incredible upon worse testimony than that before us. Take the following scene as a specimen of the discipline of a Spanish American detachment of soldiers:—

"The next day 300 men arrived from the Colorado, under the command of Commandant Miranda. A large portion of these men were Indians (*mansos*, or tame), belonging to the tribe of the Cacique Bernantio. They passed the night here, and it was impossible to conceive anything more wild and savage than the scene of their bivouac. Some drank till they were intoxicated; others swallowed the steaming blood of the cattle slaughtered for their suppers, and then being sick from drunkenness, they cast it up again, and were besmeared with blood and gore.

Nam simul expletus dapibus, vinoque sepultus
Cervicem inflexam posuit, jacuitque per antrum
Immensus, sanien eructans, ac frustra cruenta
Per somnum commixta mero."

We trust that the reader will not rest satisfied with these extracts, which are taken quite at random from the first part of Mr. Darwin's Journal; another equally rich is to appear, and the two are perfectly indispensable to all who are interested in natural history.

New Plants.

TASMANIA AROMATICA. Aromatic Tasmania. (*Evergreen shrub*). Magnoliaceae. Polygamia Monoclea.—This plant was first made known in De Candolle's "System," where it was described from specimens gathered on the mountains of Van Diemen's Land by Brown, and in the country round D'Entrecasteux Channel by Lichenault, a French traveller. But at that time nothing was known of the flowers, except that they were dioecious. At a much more recent period Edlicher described the flowers as being composed of two flat deciduous sepals, and from two to five petals. Such is certainly not the structure of Tasmania aromatica, whose sepals are three, and very concave, and the petals six in two rings, or occasionally eight, in consequence of the addition of one petal to each ring. Edlicher's character cannot then have been taken from Tasmania aromatica, but possibly belongs to *T. dipetala*, which perhaps does not belong to the genus. The species is a handsome evergreen bush, with dull purple branches, and light green leaves, distinctly marked with transverse parent dots; they are of a dead green and veinless on the underside. Mr. Gunn informs us that it is very abundant in Van Diemen's Land. "Between Burghley (at the Surrey Hills) and May Day Plain, the Van Diemen's Land Company's track, commonly called road, of a mile; at that place its usual height is from 9 to 12 feet. It always grows in the richest humid soil; in the neighbourhood of Launceston, usually on the margins of rivers or small streams in umbrageous ravines. Every part of the plant is highly aromatic and pungent to the taste. The fruit is occasionally used as pepper."

In fact it is nearly related to the aromatic Winter's bush, *Drimys Winteri*; from which its unisexual flowers and solitary carpels chiefly distinguish it; and it would follow the affinity of that plant. For this reason it seems necessary to associate it with the order of Magnoliads rather than with that of *Kadsurads (Schizandraceae) or Anonads. The three orders are generally distinguished by the following characters. Magnoliads are bisexual, have stipules of large size, and their flowers have an imbricated aestivation. Kadsurads resemble them in all things, except the want of stipules, and their flowers being absolutely unisexual. Anonads are bisexual like Magnoliads, but they have no stipules, their corolla is valvate, and their albumen ruminant. Moreover, Magnoliads are astringent subaromatic trees or bushes; Anonads are similar in quality, but they are more aromatic; Kadsurads are scrambling plants with no aroma. It is a question of some interest to determine to which of these Tasmania really belongs. If we regard its aromatic quality, it will belong to either Magnoliads or Anonads; but from the former it differs in the want of stipules, from the latter in its imbricated corolla, and from both in its unisexual flowers. On the other hand, it has the unisexual flowers of Kadsurads, but not their habit, nor their mucilaginous qualities. Its unisexual flowers, however, point strongly in the direction of Kadsurads; but, then, it is not separable from *Drimys*, which is bisexual, and, moreover, its own flowers are in reality in many cases furnished with a central carpel: the two first flowers taken off one of Mr. Gunn's specimens proved in fact to be in that condition. Tasmania must, then, be regarded as having a manifest tendency towards hermaphroditism, while no such attribute is known among Kadsurads. For these reasons it will be stationed along with *Drimys*, among bisexual natural orders; and, then, will necessarily fall into the ranks of Magnoliads; for its imbricated corolla and homogeneous albumen are at variance with the most essential peculiarity of Anonads. It, however, like *Drimys* itself, wants the stipules of Magnoliads, in which respect it is exceptional to the usual character of that natural order, and must be regarded as a genus stationed on the frontier between Kadsurads and Magnoliads. It is a hardy greenhouse evergreen shrub, grows freely in a mixture of sandy loam and peat, and only requires to be kept free from frost. It flowers freely in April, and is easily increased by cuttings put in sand and covered with a bell-glass, and placed where there is a gentle bottom-heat. The plant is in the garden of the Horticultural Society, to which it was presented by Mr. Low, of Clapton.—*Botanical Register*.

Miscellaneous.

Psychotria leucocephala (*Ad. Brongniart*).—This is a straight shrub growing to about a yard and a half in height; its leaves are opposite, about 18 inches long and 10 inches broad, tough, and of a dark green, furnished with deeply serrated stipules, a remarkable fact in this species. The flowers are pure white, rather large, sessile, and appear in bunches on the top of the plant. The specimen that flowered for the first time in France, in the Garden of Plants, had but one head of flowers; but I have seen these shrubs in Brazil having eight or ten heads at once of beautiful white flowers, surrounded by dark green leaves, which relieved them, and produced a charming effect under the large forest-trees of Rio Janeiro. I brought the plant which has just flowered, in 1839, from the Coreovado mountain. The shrub requires a good hothouse, and cannot bear the action of the sun's rays. We cultivate it in the Garden of the Plants, in peat and maiden soil mixed with decayed vegetable matter.—*R. Houlet, in the Revue Horticole*.

Dwarfed Plants.—There is the following interesting account (somewhat abridged) of these singular productions by Professor Morren, in the 3d Number of the "Ghent Annals," p. 109. "Nowhere has the mania for dwarfing plants been carried farther than in Japan. Thunberg, in his flora of that country, had spoken of an Apricot-tree, which he called *Amygdalus nana*, although the tree, which he thought to be very like our common Apricot, was from 15 to 20 feet high. Messrs. Siebold and Zuccarini have determined Thunberg's plant to be the Mume Plum (*Prunus Mume*), which the Chinese call Bai. This tree is really a marvel in the history of dwarfed plants, and is thus spoken of by Dr. Siebold. The Mume is common in Japan, and thrives in the most northern part of the country, where it grows 15 or 20 feet high, and is very like an Apricot tree. It is, however, in its wild state, or when made into hedges, only a thick bush, very much branched, and 8 or 12 feet high. It is commonly cultivated for its beautiful flowers, as well as for its fruit. The Mume is much spoken of in the Chinese and Japanese legends of their saints, and in the history of great men and celebrated poets; it is even looked upon as something holy. Pilgrims are shewn ancient trunks of this tree, under which deified princes have rested, and celebrated priests or inspired poets composed their psalms and sublime canticles. For this reason young plants struck from cuttings of such holy trees have a great value throughout the empire of Japan. The fruit ripens in June. When ripe it is insipid, and therefore it is salted in a green state like cucumbers, and then is eaten, as a vegetable, with rice and fish. Europeans, however, do not admire the sharp and bitter taste. When salted the plums are often mixed with the leaves of *Ocimum crispum*, which gives them a red tint. The juice of the green fruit is

used as a refreshing drink in fevers, and is also indispensable in preparing a beautiful light pink colour with *Carthamus* or Safflower. In good seasons the tree is in full flower in February, when the altars of idols, and dwelling-houses are everywhere decorated with its branches, which the Japanese regard as a symbol of the return of spring. The blossom of the wild plant is white, but there are cultivated varieties, with various shades of colour between white and red, and some are even green or slightly yellow. Double varieties are in most request, and dwarfed trees of that description are planted everywhere near dwellings and round the temples. The largest collection of these varieties, said to amount to several hundreds, is in the possession of the Prince of Tsikusen, to whose kindness we are indebted for drawings of some of the rarest kinds. The passion of the Japanese for dwarfed trees is inconceivable, and it is principally on that account that the cultivation of the Mume is one of the most common and profitable occupations of the country. They graft it by approach, and in this way obtain trees whose branches hang to the ground like those of a weeping willow. A dealer offered us in 1836 a bush in full flower, and scarcely 3 inches high. This prodigy of gardening was growing in a little varnished box with three steps, like the boxes of medicine which the Japanese carry at their girdle. In the upper step was the Mume, the next step was occupied by a Fir tree of similar smallness, and on the lower step was a Bamboo not above an inch and half high.—*Flora Japonica*, pp. 29, 31. These details, adds Dr. Morren, were confirmed to me by Dr. v. Siebold himself, when he was at Ghent in 1844; he did not, however, confirm all the tales that are current as to the manner by which the Japanese succeed in dwarfing everything. It is said that they select the very smallest seeds, taken from the very smallest plants, two circumstances which are certainly quite rational and conformable to all the facts known to us in connection with varieties of race. No doubt, indeed, exists, about the operation thus far; but the following assertions are much more apocryphal. It is said, that as soon as the plants have germinated, the Japanese cover them with fluid honey, or with dissolved sugar; that they afterwards paint them with a camel's hair pencil, using the same material, and that they afterwards introduce into the little box, which serves as a greenhouse for these marvellous pigmies, a nest of little ants, whose eggs soon hatch and produce an active colony greedy of sugar, and incessantly running over the plants, which, although alive, have really been converted into a cold preserve. Gardeners know very well that aphides, scale-insects, the cocei, and other vegetable leproses, do in fact torture and distort plants till they are quite disfigured. The everlasting play of these insects, which are always running over every part of the plant, keeps up a peculiar excitement which ends in producing the state of dwarfism in question. At least that is what the Japanese say. The Fir of which Dr. Siebold spoke, in the paragraph above quoted, as being only 3 inches high, and growing on the second stage of the box, was the *Pinus Massoniana*, the *Womatza* of the Japanese, or the *Kok sjo* of the Chinese. Thunberg mistook it for the Scotch Fir. Its history is very curious, and is also given in the 'Flora Japonica' (p. 25, vol. ii.) Of all the Conifers we generally found this the commonest through the whole empire of Japan. In places where it does not grow wild, it has been universally cultivated. It has a great reputation on account of the fables, miraculous stories, and idle tales of all sorts, mixed up with its history, and is a religious symbol in the ceremonies and festivals of the people. A true Japanese cannot possibly dispense with it, and takes care to have it wherever he lives. A *Womatza* and a Mume are planted before the residence of Mikado. It forms groves round the temple of the Sun-god, of saints, and of holy men; and it overshadows all the little chapels and gardens adjoining the dwelling-houses, &c. On the high road it forms alleys 100 leagues long; and the course of every highway is marked by hillocks planted with this Pine and species of Nettle trees. The art of the Japanese gardener is exhausted in the cultivation of these Pines. They are clipped and cut into all sorts of shapes; their branches are spread into fans, or horizontal trellises, and are thus fashioned into a sort of flat dish. In this kind of gardening extremes are made to touch, and the traveller is astonished to find specimens of an immense size placed by the side of others of the most tiny dimensions. While staying at Ohosaka I went to see the celebrated Pine-tree before the Nawiwa Tea-house, the branches of which are artificially spread out into a circumference of 136 feet. On the other hand, they showed me at Jeddo a dwarf tree in a lacquered box, with branches not occupying more than 2 square inches. They even know how to graft Conifers in Japan; and we saw dwarfed specimens on which almost every variety of Pines known in Japan was fixed by grafting."

—*Botanical Register*.

Curator to the Leeds Zoological Gardens.—We are glad to state that Mr. Mearns, the talented and indefatigable curator of these gardens, has been re-elected. Mr. Mearns has been connected with the Gardens ever since the period of their formation, and of the efficiency of his management, his re-election over a large number of other candidates, bears the most substantial and gratifying testimony.

Bees.

Swarming of Bees.—"Curtis," at page 495, remarks "what can be the utility of preventing swarming, when we can profit so largely by this admirable provision of

ought to decide the character of the flower for the public, and for which the Medals of the Horticultural Society are most judiciously given, is that of the second year of blooming, and surely he must be a dunce in his profession who could not get seedlings of 1845 ready for exhibition in 1846.—*Anti-Puff, Walton.* [We do not think that any such evil as this writer represents exists among nurserymen, who are generally most respectable persons: but if it is so, and we must interfere, why then we will do so, and the names of offenders must be exposed.]

The Weather.—I beg to state that we had two very severe frosty nights, in this neighbourhood, on the 22d and 23d ult., which destroyed all my Dahlias—not a single solitary flower having escaped its effects. Many annuals were also killed, among the prettiest of which, to my taste, was the beautiful *Hibiscus Africanus*. Several greenhouse plants, which were placed out of doors, suffered more or less, such as *Ericas*, *Pelargoniums*, *Salvias*, *Heliotropiums*, *Genistas*, *Epacris*, *Pultenaeas*, &c.; even the beautiful deciduous shrub, the *Button-wood* (*Cephalanthus occidentalis*), suffered considerably. I may also remark, that my Peas were almost destroyed. French Beans (*Phaseolus vulgaris*), and Scarlet-runners (*P. multiflorus*), are totally destroyed. A catastrophe like this, at the beginning of autumn, I never remember to have witnessed. The nearest approach to it was, I believe, on the 3d and 4th of October, 1842, when I had all my Dahlias killed; being a difference of 10 days against the current year.—*W. Boardman, Fallowfield, near Manchester.*

Societies.

BOTANICAL SOCIETY OF LONDON.

Sept. 5.—The President in the chair.—The Secretary announced that British plants had been received from Dr. Bossey, V. P.; Dr. Dewar; Dr. Wood; the Rev. W. S. Hore; the Rev. C. A. Johns; Mrs. F. Russell; Mr. Freeman; Mr. S. Hailstone; Mr. G. Fitt, and Dr. Taylor. Mr. W. Mitten presented a species of *Carex*, recorded in the "Annals of Natural History" under the name of *Carex montana* (L.); but owing to the imperfect condition of the one specimen before the Society (in which the flower-stems had withered without perfecting fruit), it could not be certainly referred to the *Carex montana* (L.) of the continental authors. The specimen was collected "in the county of Sussex, a mile south of Tunbridge Wells, in the way to Eridge, in July last." Read, communication from Mr. T. Bentall on the *Luzula congesta* of British authors, in which Mr. B. supported the views set forth in Koch's "Synopsis," and repeated in Babington's "Manual," where the plant is described under the specific name of *Luzula multiflora*. Mr. Bentall's remarks run as follows:—"I beg to lay before the Society the inclosed specimens of *Luzula multiflora* (Babington's 'Manual'), which, after a close examination, I am disposed to consider as a perfectly distinct species, although often confounded with *L. campestris*. This error has, probably, arisen from the great variation of the inflorescence in different specimens. The flowers are often collected into an almost orbicular head, when it becomes the other times they form a panicle of numerous sessile and stalked clusters, when it bears a strong resemblance to the common form of *L. campestris*, and is often mistaken for it. There appears to be a decided and strongly marked difference in the form of the seeds of the two plants, those of *multiflora* being usually nearly twice as long as broad, whilst those of *campestris* are nearly globular; the basal appendage with which they are furnished I find to be much more conspicuous in the latter than in the former. The character pointed out by Mr. Babington as existing in the filaments I believe to be constant. *L. multiflora* generally inhabits woods and shady places, being seldom found in dry open pastures, in which *campestris* usually abounds."

CALEDONIAN HORTICULTURAL SOCIETY.

Sept. 18.—This was the Fruit and Dahlia competition. The display of the former was extensive, especially in Peaches, Apricots, Grapes, and Plums; and, considering the unfavourable season, it was in general of fine quality. For the prize offered for the best Peaches, three sorts, three specimens of each, there were 11 competitors. The Silver Medal was voted to Mr. Robertson, gr. to Lord Gray, for Royal Kensington, Noblesse, and Galande, all from the open wall. A second premium was assigned to Mr. Thomson, gr. Strathallan Castle, for Red Mignonne, Galande, and Red Magdalen; and a third to Mr. Crocket, gr. to Colonel Ferguson.—In Nectarines there were seven competitors, each producing two sorts. The first prize was again awarded to Mr. Robertson, for Elruge and Scarlet, from the open wall; and a second premium was assigned to Mr. Young, gr. to Mrs. H. N. Ferguson, for Elruge and Duc de Tello.—For the best Grapes, three sorts, exclusive of Muscat, Hamburg, and Frontignan, there were four competitors. The Silver Medal was voted to Mr. Ramsay, gr. to Sir G. Clerk, Bart., for Victoria, Royal Muscadine, and Southfield Black; and a second premium was assigned to Mr. Gow, gr. to Count Flahault, for Cannon-hall, Black Prince, and Chasselas Musque. For the best two clusters of Muscat of Alexandria, the premium was gained by Mr. Goodall, gr. to the Marquis of Lothian, his specimens being quite ripe and high flavoured, although not the largest exhibited. Seven competitors produced Black Hamburgs; the Silver Medal was

voted to Mr. Aitken, gr. to P. G. Skene, Esq.; a second premium to Mr. Crocket; and a third to Mr. Young. The prize for Frontignan Grapes was gained by Mr. Crocket, the kinds being the Grizzly and the White.—There was no proper competition in Pineapples, and this was the only fruit in which there appeared a deficiency. Small awards were, however, made to Mr. Thomson, for a New Providence, and to Mr. Weir, gr., Grangemuir, for a Black Antigua. In Moorpark Apricots the competition was very extensive, there being no fewer than 15 competitors, all of them producing beautiful specimens. The Silver Medal was voted to Mr. Robertson; a second premium to Mr. Ramsay, gr. to Sir D. Baird, Bart.; and a third to Mr. Murray, gr. to A. Fletcher, Esq. For the best two sorts of Apricots, other than Moorpark, the premium was awarded to Mr. Crocket, for the Hermskirk and Royal.—In Green-gage Plums there were 11 competitors. The Silver Medal, as first prize, was voted to Mr. Goodall, his specimens being the highest flavoured, although not the largest. The Bronze Medal, as second prize, was assigned to Mr. Russell, gr. to Miss Rae; and a third award was made to Mr. MacLachlan, gr. to W. R. Ramsay, Esq. For the best three sorts of Plums, exclusive of Green-gage; there were five competitors. The Silver Medal was awarded to Mr. Crocket, for Washington, Purple Gage, and Magnum bonum; and a second premium to Mr. Young, for Washington, Kirke's, and White Magnum.—For the highest flavoured Melon there was a keen competition among nine gardeners. The Silver Medal, as first prize, was voted to Mr. Lyall, gr. to Sir John Hope, Bart., M.P., for Irish green-fleshed Melon; and a Bronze Medal to Mr. Kerr, gr. to R. Brown, Esq., for the green-fleshed Melon called Duke of Bedford.—For very large Jargonelle Pears, an award was made to Mr. Jack, jun., Causewayside; and for Apples another award to Mr. Robertson, the kinds being Golden Drop, Oslin Pippin, and Ribstone Pippin.—The display of Dahlia blooms was very extensive and rich. In the Nurserymen's department there were five competitors; and the highest prize was assigned to Messrs. J. Dickson and Sons; the kinds being Bermondsey Bee, Antlea, President of the West, Gloria Mundi, Nonpareil, Standard of Perfection, Princess Royal, Rouge et Noir, Antagonist, Paul Pry, Dazzle, Beeswing, Prince of Waterloo, Admiral Stopford, Lady Harland, Marquis of Lansdowne, Mrs. Shelley, Sir Robert Sale, Bathonia, and Burnham Hero. The Society's Silver Medal, as second prize, was voted to Messrs. T. and W. Handasyde, of Musselburgh. Among practical gardeners there was a keen competition, eleven being in the field. The highest prize was awarded to Mr. Thomson, for Antagonist, Mrs. Shelley, Nonpareil, Gloria Mundi, Admiral Stopford, Standard of Perfection, Rouge et Noir, Beeswing, Bathonia, Burnham Hero, Phenomenon, Eclipse, Emperor of Whites, Lady Harland, Raphael's Aurantia, Rembrandt, and Beauty of Bucks. A second premium was voted to Mr. Sharpe, gr., Pitfour Castle; and a third to Mr. Thom, gr., St. Germain's. The competition among Amateurs was interesting, all of them producing excellent specimens. The first prize was voted to Mr. A. Ambrose, for Phenomenon, Lady Harland, Windsor Rivals, Rembrandt, Bridesmaid, Essex Triumph, Nonpareil, Hope, Duchess of Richmond, Yellow Defiance, Mrs. Shelley, and Beauty of Bucks. A second premium was awarded to Mr. Martin; and a third to Mr. Sanderson. No prize was, on this occasion, awarded for Seedling Dahlias. Among extra articles sent for exhibition, for new species of the genera *Cleome*, *Nuttalia*, *Ipomopsis*, and *Centaurea*, raised from seeds received from the Rocky Mountains, the Silver Medal was voted to Messrs. P. Lawson and Son; and an honorary premium was awarded to Messrs. Carstairs, Kelly, and Co., for a fine flowering specimen of *Cestrum aurantiacum*. They also exhibited a collection of named Hollyhocks and Dahlias. Messrs. Handasyde sent a series of white-edged or tipped, and also light striped Dahlias, which attracted much attention. Thanks, and in some cases small awards, as marks of approbation, were voted as follows:—To Mr. W. Smith, for good Peaches and Plums, from an open wall in a garden 460 ft. above the level of the sea; to Messrs. J. Dickson and Sons, for a magnificent plant of *Gesnera zebrina*, and other showy specimens; Mr. Addison, for seven varieties of Grapes; Mr. W. Baxter, Riccarton garden, for baskets of retarded Strawberries, Victoria and Elton; Mr. Lyon, gr., Leith, for a very large specimen of the Ice plant, *Mesembryanthemum crystallinum*, grown in Dawson's animal charcoal manures; Mr. Cathie, gr., Airthrey Castle, for a cluster of Cannon-hall Muscat Grape, produced on a graft put on in March last; W. Lothian, Esq., for Jargonelle Pears of very large size; Mr. Foulis, for a stand of beautiful seedling Hollyhocks in the first year of flowering; and Mr. Anderson, gr., Drylaw, also for fine seedling Hollyhocks; Mr. Frances, gr., Balbirnie, for a pretty seedling Fuchsia; Mr. Kidd, gr., Rossie Priory, for a tray of seedling Dahlias, of considerable beauty; and to Mr. Rutherford, for beautiful late Pansies. The collections of French and African Marigolds and China Asters were numerous and brilliant, particularly those from Mrs. Gray, W. Young, Esq., J. Logan, Esq., J. Weddell, Esq., Mr. Young, Newington Lodge, and Mr. Gemmell, Hermitage Park.

Country Show.

Kincairdine Horticultural Society, Sept. 10.—This was the seventh Annual Show of flowers, fruits, and

vegetables. The exhibition room was, through the kindness of Mr. Gow, richly decorated with beautiful Heaths and plants from Tulliallan Gardens. Among articles for exhibition were a large stand of some hundreds of blooms of beautiful Pansies, from Mr. Finlayson; a fine Cactus, from Mr. Wright; and collections of Pansy blooms, from Messrs. Oliver Brothers, of Falkirk, and Messrs. Carstairs and Kelly, of Edinburgh. Several prizes were awarded; but we have only been furnished with a list of rewards, without the names of the flowers for which they were given.

Reviews.

Darwin's Journal of a Voyage round the World.
Parts II. and III. 12mo. Murray.

THE manner in which we introduced to our readers the 1st Part of this most interesting work (see p. 546), renders it unnecessary to do more on the present occasion than announce the appearance of the two last. Nevertheless, we are unwilling that our readers should not participate at once in the pleasure we have experienced in its perusal, and therefore we add a few short extracts:—

New Holland Scenery.—"The extreme uniformity of the vegetation is the most remarkable feature in the landscape of the greater part of New South Wales. Everywhere we have an open woodland, the ground being partially covered with a very thin pasture, with little appearance of verdure. The trees nearly all belong to one family, and mostly have their leaves placed in a vertical, instead of, as in Europe, in a nearly horizontal position: the foliage is scanty, and of a peculiar pale green tint, without any gloss. Hence the woods appear light and shadowless; this, although a loss of comfort to the traveller under the scorching rays of the summer, is of importance to the farmer, as it allows Grass to grow where it otherwise would not. The leaves are not shed periodically; this character appears common to the entire southern hemisphere, namely, South America, Australia, and the Cape of Good Hope. The inhabitants of this hemisphere, and of the intertropical regions, thus lose perhaps one of the most glorious, though to our eyes common, spectacles in the world—the first bursting into full foliage of the leafless tree."

Brazilian Scenery.—"Learned naturalists describe these scenes of the tropics by naming a multitude of objects, and mentioning some characteristic feature of each. To a learned traveller this possibly may communicate some definite ideas; but who else from seeing a plant in an herbarium can imagine its appearance when growing in its native soil? Who from seeing choice plants in a hothouse, can magnify some into the dimensions of forest trees, and crowd others into an entangled jungle? Who when examining in the cabinet of the entomologist the gay exotic butterflies, and singular cicadas, will associate with these lifeless objects, the ceaseless harsh music of the latter, and the lazy flight of the former—the sure accompaniments of the still glowing noonday of the tropics? It is when the sun has attained its greatest height that such scenes should be viewed; then the dense splendid foliage of the Mango hides the ground with its darkest shade, whilst the upper branches are rendered from the profusion of light of the most brilliant green. In the temperate zones the case is different—the vegetation there is not so dark or so rich, and hence the rays of the declining sun, tinged of a red, purple, or bright yellow colour, add most to the beauties of those climes."

Mangroves.—"The channel by which we went to and returned from Olinda, was bordered on each side by Mangroves, which sprang like a miniature forest out of the greasy mud banks. The bright green colour of these bushes always reminded me of the rank Grass in a churchyard; both are nourished by putrid exhalations; the one speaks of death past, and the other too often of death to come."

Tahitian Cookery.—"They then proceeded to make a fire, and cook our evening meal. A light was procured by rubbing a blunt-pointed stick in a groove made in another, as if with intention of deepening it, until by friction the dust became ignited. A peculiarly white and very light wood (the *Hibiscus tiliaceus*) is alone used for this purpose; it is the same which serves for poles to carry any burden, and for the floating outriggers to their canoes. The fire was produced in a few seconds, but to a person who does not understand the art it requires, as I found, the greatest exertion; but at last, to my great pride, I succeeded in igniting the dust. The Gaucho in the Pampas uses a different method; taking an elastic stick about 18 inches long, he presses one end on his breast and the other pointed end into a hole in a piece of wood, and then rapidly turns the curved part, like a carpenter's centre-bit. The Tahitians having made a small fire of sticks, placed a score of stones, about the size of cricket balls, on the burning wood. In about 10 minutes the sticks were consumed, and the stones hot. They had previously folded up in small parcels of leaves, pieces of beef, fish, ripe and unripe Bananas, and the tops of the wild Arum. These green parcels were laid in a layer between two layers of the hot stones, and the whole then covered up with earth, so that no smoke or steam could escape. In about a quarter of an hour, the whole was most deliciously cooked. The choice green parcels were now laid on a cloth of Banana leaves, and with a Cocoa-nut shell we drank the cool water of the running stream; and thus we enjoyed our rustic meal."