

Within these enclosures are specimens of birds and animals as in the Zoological Gardens, London. This is what in somewhat pompous language is here called the Garden of Acclimatation, in which all sorts of trees are to become hardy, and all sorts of birds, beasts, insects, and creeping things are to be inured to the climate of Paris—the grand conception of some brilliant visionary. Not having seen the *Journal de la Société*, if there be one, or its programme, I don't know the limits assigned to this great idea, nor have I succeeded in learning anything of it more definite than what I have stated. You must therefore be contented with hearing what I saw, so far as experiments in acclimating plants are concerned. Be it known, then, to all men that the Society recognises the necessity of learning experimentally whether *Pinus Sabiniana* is hardy, and if *Magnolia grandiflora* will live out in winter. You English will stare at this when you remember that the *Pinus* is among the hardiest of all trees, and how good M. Boursault used to grow the *Magnolia* a quarter of a century ago in his garden in Paris. Another object of experiment is the Hungarian White Linden (*Tilia alba*), of which a wretched gouty individual, grafted half standard high, is perishing under the hands of some acclimatizing executioner. I mention these as examples of the childish way in which horticultural experiments (!) are conducted here. The whole affair is in that respect absurd. To be sure there are specimens of *Araucaria Bidwilli* and *exelsa* in tubs; but I could not make out how keeping them in such a manner was likely to solve any problem in the art of acclimatizing. In like manner I was equally perplexed to discover how it is proposed to acclimatise other species by growing them in a great conservatory or stove, I am not sure which, with a beck winding through the middle of some handsome "specimen" plants, as our fellow countrymen call them. But of this enough; it is not worth dwelling on such a subject. The situation is admirable: airy, dry, nicely wooded, and the very place for well conducted trials; and all must regret that the Garden of Plants, with its staff of highly educated, experienced officers and most able professors, should be doomed to inaction on the skirts of the wine market and dirty Rue Copeau, instead of being transferred to the beautiful Bois de Boulogne, now the resort of the best classes, who will neither drive nor walk to the miserable place where all the treasures of Paris in Natural History are literally stowed away. One redeeming feature in this Jardin d'Acclimatation must not however be forgotten. It has a capital *Magnanerie* or gallery of Silkworms, a very pretty building in which the worms of the *Ailanthus*, the *Ricinus* and the White Mulberry have been diligently employed all the summer in exhibiting themselves to the public, hard at work on the leaves to each peculiar. When I saw them last the leaves of *Ailanthus* were alive with young worms, and some great green fellows were nearly full grown. This was by far the most interesting object in the Garden. The prettiest is a tiny cottage made of Cane-work, and fitted up with charming Cane furniture, of which you cannot boast the like in England. I have close by me (*Rue de la Paix*, No. 25) a shop-full of such articles which I recommend everybody who can afford a guinea apiece for garden chairs to go and see. *V., Rue Castiglione.*

Orchids, Fertilization of.—I have been endeavouring during several years to make out the many contrivances by which British Orchids are fertilised through insect agency. I am very anxious to examine a few exotic forms. Several gentlemen have kindly sent me specimens; but I have not seen one of Lindley's grand division of *Arethuseæ*, which includes the *Limodoridae*, *Vanillidae*, &c. If any one would have the kindness to send me a few flowers and buds of any member of the group, packed in a small tin canister, by post, addressed as below, he would confer a very great favour on me. Would you have the kindness to inform me, if in your power, whether the late Professor Morren has published anything (and where) on the fertilisation of Orchids by insect agency? *Charles Darwin, Down, Bromley, Kent.* [We are unable to answer this question, and must refer it to others. After searching through Morren's multitudes of pamphlets, we find nothing on Orchids except an academical dissertation on *Orchis latifolia*, and some remarks on the cause of the movements in the lip of *Megaclinium*.]

Manuring Conifers.—I was struck by the caution given to avoid manuring Conifers, as I can well remember seeing outside of Holt, in Norfolk, Cromerwards, two plantations of Spruce and Larch, one on each side the road, well fenced in, and with boards painted opposite each other, with words as near as I recollect as follows:—"These are planted in well manured ground," and date. The other had on it—"These were planted in unmanured ground," date the same as on the other board. The manured trees were at least twice as high, and had a far more robust and healthy appearance than those unmanured. It is more than 20 years ago, and the boards may yet exist. I may also mention that a few years since I planted three *Deodars*, and the most sickly one, which I hardly expected to get up, I placed immediately over the spot where I had recently buried my splendid old favourite setter. At first it made very slow progress; but for the last two or three years, when it may be supposed the roots had reached the dead carcass, the growth has become most vigorous, the colour of the foliage pecu-

liarily beautiful, and its branches far more stout than the other two; which, however, are very handsome. Hence I infer that manuring many of the Conifers may be safely and advantageously practised. *Thomas Ingle, M.D., Emsworth, Hants.*—In September, some eight or nine years ago, I had nearly the whole of my stock of Coniferous plants removed and heavily manured with half-rotten horse and cow dung. At the end of the same week the question was asked through your Paper whether or not the application of manure would injure an *Araucaria*. The reply was, "Yes, it is poison to the whole race." I thought if that is correct I have certainly committed a serious blunder, but I patiently waited and watched the result. Nothing could be more satisfactory than the growth and appearance of the plants the following season. Since then I have invariably applied manure whenever I removed plants of the kind in my own nursery, and always with the same satisfactory results. Therefore I have always recommended the application of manure whenever necessary, or an opportunity occurred for using it. As an illustration of what I have stated, I beg to say that about twelve months ago I sold a handsome specimen of *Picea Nordmanniana* to a lady in this neighbourhood, who always superintends and directs the transplantation of trees, &c., herself. A compost of manure and soil was prepared for this plant, including three barrow loads of the former. Nothing can exceed the healthful appearance of this tree just now; it has made sixteen inches of leader this season. *John Grier, Ambleside, Windermere.*—Would your Correspondent "J. Philpotts" inform me whether the "good barrowfull of stable-dung" which he applied to his "*Deodar* and *Picea Webbiana*" was fresh from the stable or rotten? because I am of opinion that a mulching of any kind would be beneficial, inasmuch as it would keep the roots uniformly moist, and also prevent the ground from cooling by evaporation. Conifers forming a prominent feature in the grounds under my care, I am anxious to possess correct data respecting them. *Crostonian.*

Calceolarias (see p. 809).—I hail with pleasure the hint thrown out respecting the merits of the two kinds of *Calceolarias*, viz., shrubby or perpetual, and the herbaceous or annual kinds. Some five or six years ago I was induced to commence growing *Calceolarias*, as I saw clearly that the herbaceous kinds must wear out. I therefore selected some of the most healthy of the shrubby kinds to commence on, more particularly *angustifolia*, and a variety called *Kayii*, having proved them both to be healthy parents, and the result of my first batch was General Havelock, Emperor, &c. My object always has been to get decided fixed character and colour. I have now by me two plants of the same seedlings that I raised in 1857, and they measured when in perfection last season 4 feet through, and I am in hopes of saving them for next season. I quite agree with your Correspondent respecting the duration of the *Calceolaria*. I well remember seeing handsome shrubby kinds shown at Chiswick 30 years ago, and they made a beautiful display, and why should they not now, as any one can have my strain of shrubby kinds in bloom from May to October. My sorts are equally valuable for the border or flower garden, which makes them doubly useful. I have them now beautifully spotted and blotched, equally as rich in colour as the herbaceous kinds. *James Burley, Limpsfield, Surrey.*

Vines in Pots.—I exhibited on Thursday last three Grape Vines in pots at Worksop exhibition; they were admitted to be very superior to any at the show, and averaged 13 bunches each. To my surprise on entering the tent, after the judges had made their awards, I found a card containing these words placed on my Vines—"Disqualified—grown in open border." Now I have scores of witnesses who could prove that they were grown in pots, and that they had never been plunged, although they had partly rooted from the bottom or crock hole into some old tan on which they stood. These Vines were taken to Worksop and back in an open van, remained there all night in a crowded tent, the exhibition not having closed until 11 o'clock, and they are now at this moment fresh and good and still fit to be exhibited again. I had a large trellis made to fix the Vines on in order that they might travel safely, and had also a large forked iron placed into the pots to steady them. This caused me in order to balance the Vines to drop them into larger pots; I then filled the cavity with Moss and water to keep them from drying, knowing that they had to remain until the second day. I believe that I have stated all particulars in full. The schedule states only these words—"For the best three Vines in pots." Mine were decidedly the best. Can they withhold the prize from me on the grounds stated in their card above alluded to?—I feel that they cannot. Had the Vines been plunged and rooted all over the top of the pot they might have objected, but as the Vines were fairly grown in pots, as per schedule, and so exhibited, I believe that I can claim the prize, can I not? *Edward Bennett, Osberton Hall, Worksop, Notts.* [Undoubtedly.]

Orchard Houses.—Allow me to make a few remarks in answer to your very indulgent notice of my little pamphlet. I know you will pardon my taking exception to what you have said on fertilisation of Peach blooms; believing it to be a matter of necessity in many cases, I feel jealous of anything being said which has a tendency to lessen the idea of its importance. I am aware that some kinds will, when well ripened, set their blooms

without assistance, but I have proved by experiment that it is unsafe to trust to others. The partially ripened state of the wood and almost total absence of bees, of course tend much to aggravate the consequences of neglect this season, but I have the most positive proof that manual fertilisation alone made the difference between a crop and a failure in several instances. There are four houses in this immediate neighbourhood which were all furnished from our nurseries with plants which had all been cultivated together. Two of these houses are under the care of good gardeners, and they are entire failures in point of fruit this season. These men acknowledged that they did not think it necessary to follow the advice they had received. The third house, erected by the same builder, and of the same size as the others, 60 x 20, is managed by a man who was a labourer a few years ago. Feeling in want of information he came over several times in the spring to have a talk with our foreman. His house has been full of very fine fruit, and his master says he has had to give much of it to his friends. The fourth case is still more striking; after nearly all our best plants were sold, and what were left were nearly in bloom, we had to fill an orchard house just built near Burton on Trent. Of course most of the trees were inferior to those supplied in the former cases. With the exception of being most tastefully painted and paved, this house was exactly built as the others, and by the same person. Being near the dwelling, and a new source of pleasure, the lady of the establishment took it into her own hands, and managed it entirely, and did not think it unnecessary to follow directions. Most of the plants fruited; some were full, and I will venture to say, for well ripened well grown trees, and perfectly clean foliage, she might challenge the country. In our own house we had not more than six or seven trees without fruit (though it had been crowded by sale trees the previous season); many bore from 30 to 50 Peaches of the finest quality, some few of which remain. From the 1st of August till the present date few have seen our house without tasting the fruit, and if you were to see the number of stones reserved for sowing and the seedlings of the two last years you would be more than ever convinced that Rivers' orchard houses are a great fact. One thing is certain—what has been done for years without a failure and at so little cost, others will be required to do. I could not help laughing when a nobleman's gardener came and offered 9s. a dozen for my Peaches only a few days ago. His Grapes are amongst the finest in England, but he has no Peaches this season nor any worth having last; and as the best walls are all occupied with Peach and Apricot trees, they are equally without fine Pears. When paying a visit last season to Mr. Ingram, at Belvoir Castle, and seeing the magnificent specimens of Pears grown on the walls, I could not help thinking how foolish it was to cover a south wall with glass for Peaches instead of building an orchard-house and planting the wall with Pears. *J. R. Pearson, Chilwell.*

Peas.—It may be important to many of your readers to know that Veitch's Perfection Pea will withstand drought and mildew better than most, perhaps any Pea, in cultivation. When other Peas can scarcely be kept alive with copious waterings it continues to produce abundance of tender Peas of excellent flavour. So convinced am I of its excellency that in future I will sow only it and Daniel O'Rourke, the latter for early gathering. *W. Crow, Westbury.*

Roses.—Will any of your readers give their experiences as to the two plagues which are now afflicting the Rose trees—mildew and thrips? The Roses have made excellent growth with me this year, and the show of buds for the autumnal bloom of Hybrid Perpetuals is most promising, but mildew attacks the new shoots, gets round the flower stalks and destroys the flowers. The Roses that escape this fate open for a day or two, and then go off as though they had been scorched, and are found to be infested with myriads of thrips. Does the same cause produce the two plagues, and are they to be attributed to the long drought we have had here? And what is the best remedy? I have dusted with flowers of sulphur all the mildewed parts of the trees, and in some cases have arrested the progress of the disease, but one class of Hybrid Perpetuals—the Géant, Lord Raglan, Cardinal Patrizzi, and General Jacqueminot—seems completely overpowered by the mildew. The thrips are a most grievous and provoking enemy. Yesterday I had a beautiful show of blooms just opening on Madame Laffay, Madame Vidot, and L'Enfant de Mont Carmel; this morning they are all destroyed. I shall be glad of any suggestions whether as to cause or remedy. The mildew does not seem to be due to any peculiarity of situation. My garden lies high, has pure air, and the plants out in the open are as much affected as those which are under the shrubby trees, and many kinds are not touched at all, while the next tree is covered with mildew. China Roses are freest, and then the climbers, but Gloire de Dijon is slightly affected and has been kept in good condition only by our constant attention. Would you advise cutting in the young shoot that are most affected? *Brennus* seems specially liable to mildew. *Coventry.*

Vincas.—A writer in your columns (p. 699) states that he caused *Vinca rosea* to seed at the Royal Gardens, Kew, by imitating the action of an insect in inserting its proboscis, as I had succeeded with the common *Periwinkle*. By implication it may be pre-

sumed that *V. rosea* had not previously seeded at Kew. But another writer, "F. A. P." (p. 736), states that his *Vinca* seed profusely. Mr. Horwood, gardener to G. H. Turnbull, Esq., of this place, has just been so kind as to bring me a small plant of *Vinca rosea* with nine flowers fertilised by the insertion of a horse-hair, and it now bears nine fine pods. Mr. Horwood says he has grown many plants for the last eight or nine years, and never before saw a pod. What can be the cause of the difference in the results obtained on the one hand by "F. A. P.," and on the other by the writer from Kew and Mr. Horwood? Will "F. A. P." have the kindness to state, if he sees this notice, whether his plants were in a greenhouse with the windows left open, so that the moths could get access at night? *Charles Darwin, Down, Bromley, Kent.*

Societies.

ROYAL HORTICULTURAL: Sept. 9.—(Election of Fellows.)—The following new Members were elected on this occasion:—

G. A. Ashby, W. Banting, E. Baring, J. Bulmer, Esqs.; Earl of Carnarvon, Rev. George Case, Mrs. C. Christie, A. Cox, J. Disraeli, G. Farsdon, Esqs.; Mr. Favier, Mr. G. Frost, Mr. G. Gandell, Miss Emily Hawkins, Major Jones, B. King, Esq.; W. L. Merry, Esq.; Right Hon. J. Moncrieff, G. Nelthropp, Esq.; Mrs. H. Norton, G. Paine, Esq.; Major Phibbs, P. Rolt, Esq.; Lieut.-Colonel Salkeld, W. Sterickel, Esq.; Sir G. Grant Suttie, Bart.; Mr. C. F. Taylor, W. Thomas, Esq.; Mrs. Thornton, Hon. Mrs. D. Ward, Colonel Wigram, and H. C. Wise, Esq.

Sept. 11: (Dahlia Show).—A great exhibition of Dahlias and other cut flowers took place in the Society's New Garden at South Kensington, on Wednesday last, and, notwithstanding the late dry weather and the destructive attacks of thrips, which have been more than usually prevalent this season, we never before remember to have seen a finer display of this favourite flower than that which graced the benches of the conservatory, to which the exhibition was confined. Nor were Asters much behind them in point of beauty; indeed the size of some of the reflexed French kinds was quite a matter of astonishment to all who had not been made acquainted with the rapid improvement which has taken place in this flower of late; the quilled kinds, too, were unrivalled for fine form and compactness; and we noticed some small Pompones and other varieties which, when more extensively grown, cannot fail to be favourites. Of Hollyhocks, Gladioli, Phloxes, and Roses there were likewise beautiful collections, and the side shelves were filled with plants in pots, which being tastefully arranged, and presenting great variety both of foliage and flower, gave additional interest to the exhibition, which was in every respect perfectly successful.

In the Nurserymen's Class of 48 Dahlias the best collection was furnished by Mr. Keynes of Salisbury, who sent magnificent blooms of Disraeli, Cherub, Col. Wyndham, Joy, Warrior, Golden Drop, Lord Palmerston, Mauve, Lilac Queen, Sir George Douglas, Kimberley's Queen, John Keynes, Earl of Shaftesbury, Lord Cardigan, Umpire, Sidney Herbert, Mrs. Church, Mr. Critchett, Hugh Miller, King of Sweden, Lollypop, Mrs. Dodds, George Elliott, Pioneer, Robert Bruce, Marquess of Beaumont, Mr. Boshell, Mrs. Trotter, Leopard, Oscar (a fine new reddish scarlet variety), Rosebud, Lady Douglas Pennant, Seedling Goldfinder, Imperial (a new mulberry-coloured sort), Rosa, Pandora, Chairman, Commander, Triomphe de Pecq, Jenny Austin, Lady Franklin, Andrew Dodds (a promising new dark purple kind), Goldfinder, Mrs. Bailhache, Juno, Perfection, and Mrs. Waters. The next collection in point of merit came from Mr. Harrison, of Darlington, who had, in addition to the varieties named in Mr. Keynes' stand, good examples of Heroine, Beauty of Slough, a very fine bloom of Fanny Keynes, Mrs. Wheeler, Incomparable, Duke of Roxburgh, Lady Bolton, Beauty of Helperton, Princess of Prussia, Bellona, Grandmaster, Midnight, Village Gem, Bell, John Harrison, Alice, John Dory, Ruby Queen, Mrs. Legge, Annie, Compacta, Mary Ann, Mrs. Pigott, Empress, Madge Wildfire, Lady Popham, Sir C. Campbell, Neville, Keynes, and Admiral Dundas. Other collections were contributed by Mr. Henry May, Bedale, Yorkshire; Mr. Kimberley, Stoke, near Coventry; and Mr. Legge, of Edmonton. In these stands we observed fine blooms of Pre-eminent, Criterion, Touchstone, Mrs. Wyatt, Conqueror, Peri, Lord Clyde, Brentford Hero, Mentor, Dinorah, Mr. Stocken, Regulator, Salvator Rosa, Miss Caroline, George Brown, Deutche, Monarch, Mrs. Keynes, Duke of Wellington, King, Eclipse, Lady Taunton, Lady Paxton, Rifleman, Lord Eversley, Yellow Beauty, Harbinger, Splendid, Duchess of Kent, Delicata, Strafford's Gem, and Flower of the Day.

In the class of 24 blooms (Nurserymen), Mr. Keynes again won the first prize with an excellent stand, which however did not contain anything different from varieties already mentioned. Messrs. Legge, May, Harrison, Downie, Laird & Laing, and Cattell also all showed in this class, and received prizes in the order in which their names stand. Of blooms from those exhibitors not already mentioned we observed Miss Watts, a good white kind; Norfolk Hero, Sir F. Bathurst, Magnificent, Marchioness of Abercorn, and Miss Vyse.

In the Amateurs' class of 24 blooms, the best came from the Rev. C. Fellows, Shottisham Rectory, Norwich, who furnished among others fine blooms of Madame Alboni, Majestic, Purple Standard, Bravo, and Clara

Novello. From Mr. Dodds, of Salisbury, who was placed second, came Emperor, Annie Rosa, and Mrs. Dodds; and Mr. Perry, Mr. Barnard, and others had beautiful examples of Model, Comet, Etonia, Primrose, Perfection, Miss Pressley, Standard Bearer, Miss Burdett Coutts, Enchantress, Beeswing, Lord Bathurst, Duchess of Northumberland, Brentford Hero, Masterpiece, Amazon, and Yellow Beauty.

In stands of 12 blooms (Amateurs), Mr. Barnard, of Darlington, had the best collection, in which were admirable specimens of Chancellor, Lilac Queen, Chairmar, Earl Shaftesbury, John Dory, Lady Popham, Jenny Austin, Duke of Roxburgh, Mrs. Bailhache, Mrs. Pigott, and Triomphe de Pecq. The Rev. C. Fellows was placed second, and there was a fine stand from Mr. Charlton, of Harborough, who probably would have gained the first prize in this class, had not two of his flowers, viz., Golden Drop and Triomphe de Pecq, been faulty in the centre; otherwise for size and quality they were unsurpassed. Messrs. Dodds and Perry also showed well in this class.

Stands of six blooms (Amateurs) were numerous and fine; among the varieties however we did not see anything different from what has already been reported on. The best were contributed by Mr. Pope, of Smith Street, Chelsea, and the second best by the Rev. C. Fellows, of Shottisham, near Norwich.

In the class of Fancy Dahlias, 18 blooms (Nurserymen), Mr. Keynes was first with beautiful examples of Harlequin, Pluto, Splendid, Queen Mab, Souter Johnny, Miss Jones, Starlight, Zebra, Conqueror, Baron Alderson, Garibaldi, Pauline, Impératrice Eugénie, Lady Paxton, Leopard, Confidence, Mary Lander, and Mark Antony. The next stand in point of merit came from Mr. Legge of Edmonton, who had in addition to the kinds just named, Invincible, Princess Charlotte, Charles Perry, Unique, Cleopatra, Favourite, and Topsy. Mr. Kimberley, who was third, sent Elegans, Triomphe de Robeaux, Pretty Polly, Lady Paxton, Honeycomb, Madame Sherrington, Miss Herbert, Leonard, Beauty of High Cross, Flirt, and Fairy Queen. From Messrs. Downie, Laird, & Laing, who contributed a 4th stand, came Norah Crena, Mrs. Charles Kean, Salamander, Ethel, Jessie, Wm. Corp, and Strafford's Gem, the last a dark rose, prettily tipped with yellow. In other collections to which no awards were made, we noticed good blooms of Fairy Queen, Emperor de Maroc, Rev. Joshua Dix, Oliver Twist, and Summertime.

In the class of 12 Fancy Dahlias (Amateurs) there were some nice stands, the best of which came from the Rev. C. Fellows, who contributed Harlequin, Elizabeth, Conqueror, Oliver Twist, Lady Paxton, Madame Alboni, Queen Mab, Flirt, Baron Alderson, Ethel, Pauline, and Summertime. In other collections, which were furnished by Messrs. Perry, Dodds, Corp, and others, were examples of Comus, Carnation, Blondin, Charles Perry, Butterfly, Countess of Bective, Wonderful, and Favourite, all in excellent condition, well selected as to colour, fresh and beautiful.

Messrs. E. G. Henderson showed a nice stand of Pompones varieties.

Of Hollyhocks, magnificent spikes were shown by Messrs. Downie, Laird, and Laing, whose sorts were Golden Fleece, Stansted Rival, Mrs. F. McKenzie, William Deans, Empress Eugénie, Dr. Canny, Excelsior, Monarch, David Fowles, William Blackwood, Memnon, Rosy Gem, and Lady Dacres. Mr. Chater also showed good spikes of Princess, Lady King, Mont Blanc, Mrs. Chater, Grandis, Excelsior, Regina (a brilliant carmine coloured seedling), Mary Ann, Senator, and Queen Victoria. Of single blooms Mr. Henry May showed a stand remarkable for their great size and beauty; some of them could not measure less than 5 inches in diameter, and although they had travelled all the way from Yorkshire they maintained their freshness well throughout the day. Their names were Mrs. Cochrane, crimson; Walden Masterpiece, fawn; Memnon, crimson; Empress Eugénie, fawn and white; Perfection, lilac; Lizzy Roberts, white; Ossian, crimson; Yellow Defiance; Mrs. Wardrop, crimson; Regina, pink; Lord Loughborough, crimson; and Lord Taunton, Mulberry. Messrs. Minchin also had good blooms, conspicuous; among which were Havelock, bright red; Jaune, yellow; and Cynthia, pink.

Asters, which were present in large numbers, were deservedly objects of great attraction. They consisted of what are called quilled German and tasselled French kinds; of the latter there are two classes, the incurved and reflexed, but we do not think they look well when mixed together in the same stand. These were of all shades of colour, and many of them were most beautifully striped. The quilled varieties from Mr. Betteridge, of Steventon, to whom the first prize was awarded, were in every way excellent, and showed what can be done with this flower under skilful treatment, and the stand of large kinds from Mr. Sandford, Walthamstow, were equally remarkable for beauty and fine growth. Nor must we overlook a collection sent all the way from Erfurt by Mr. F. W. Wendell, nurseryman there. In this what were called Crown Asters were particularly handsome. They had large white centres broadly bordered with purple and crimson. Some small growing Ranunculus flowered and Pompones sorts were also greatly admired, and notwithstanding the distance they had travelled they were in good condition, as were also new French kinds which appeared to be an improvement on the older varieties, both in size and doubleness. Asters in pots came from Mrs.

Conway of Brompton, and a fine collection of them, filling a circular table in the centre of the building, came from the Society's Garden at Chiswick.

Gladioli were shown in large quantities, but they have not been good this year; even the handsome *Brenchleyensis* itself is poor compared with what it was last season. The best came from Mr. Standish of Bagshot, in whose collection the following were the most remarkable, viz.:—Miss Ingram, a nice sort, with yellow throat and crimson feather; Lady Caroline Legge, clear white, with crimson lip, very large; Miss Graham, pure white, with bright crimson feather, very striking; Bridesmaid, large pure white; Miss Porter, white, with singular dark lip; Goldfinder, lemon and bright yellow; Juliet, lemon with pink feather; Lady Emilie Seymour, salmon pink, a fine bold flower; Mrs. Menzies, pink, beautifully marked with crimson; Mrs. Hole, creamy blush, carnation striped, clear and beautiful; Col. Hood, scarlet feathered with crimson; J. W. Lane, scarlet with white stripes, yellow throat and crimson feather—a fine bold flower; Mr. Duffield, reddish violet with crimson feathers; Achille, deep red shot with lake, throat yellow; Donald Beaton, pink striped and blotched with maroon on all the petals; Mr. Rucker, scarlet with white throat and crimson feather—a very large flower; Mowbray Morris, fine scarlet, shaded white throat and deep crimson feather; Prime Minister, scarlet with violet throat; Towardi, deep salmon, a fine bold flower; and Madame Vilmorin, deep rosy purple with crimson feather. From Messrs. Paul & Son also came some fine spikes; and Mr. Cattell, of Westerham, contributed a collection in pots.

Phloxes, which were exhibited in the shape of cut spikes, and in pots, were really beautiful; the best came from Mr. Standish, in whose stand were fine examples of Madame Lierval, brilliant crimson; M. Forest, equally good in colour, but smaller; M. Amazili, pink with crimson eye; M. Moisson, white with pink eye; George Washington, crimson; John Standish, white with pink eye; Madame Marseau, white with large bright rosy eye; and Madame Vilmorin, a large flesh-coloured sort, flushed with rose. Messrs. Cattell and Cutbush also showed some handsome varieties, the most striking among which were Triomphe de Twickle, pink striped with white; Dr. Josset and Madame Rougier, the last white with pink eye.

Of Verbenas the best stand was contributed by Mr. Perry, of Castle Bromwich, near Birmingham. The sorts were chiefly seedlings unnamed, all large and handsome. Messrs. Minchin and Dr. Cooper of Slough also showed some fine varieties, the best of which were Mrs. Moore and Garibaldi among violet sorts with white eye; Great Eastern, pink with yellow eye; Fairest of the Fair, white with pink eye; and, among Scarlets, Firefly and Géant des Batailles.

Cut Roses were shown by Messrs. Mitchell, Keynes, Laing, and Cutbush, and very pretty they were; but still not so fine as they ought to have been. Mildew has made sad havoc among many of them, and owing to the weather being so dry little growth has been made, and consequently few and comparatively poor blooms. Mr. Mitchell's were best; but in all the stands were fair flowers of most of the leading kinds. From our occasional correspondent, the Rev. W. Radclyffe, of Blandford, came a good collection, which was placed first among amateurs and was greatly admired. Among new kinds, Senator Vaise and Louis XIV. are gems which must long hold a first place among Roses, and we noticed some good examples of Lord Raglan and Gen. Jacqueminot, which seemed to have stood the drought well.

Miscellaneous subjects were numerous, and formed a prominent feature of the exhibition. First amongst them must be mentioned the fine *Lapageria rosea* from Mr. Uzzell, gr. to the Duchess Dowager of Northumberland, alluded to in another column. This had 30 expanded flowers on it and multitudes of buds, three of which occupied every flower stalk. It was growing in a pot in which it had always been kept, in damp peat mixed with a very little silver sand. No admixture of loam had been used, but plenty of drainage, and when growing and flowering a good supply of water. These, together with a cool greenhouse temperature, were the only agents employed to bring about the glorious result which it was the good fortune of those who attended the show to witness, and which do great credit to Mr. Uzzell's skilful management. Next in point of interest was a fine collection of miscellaneous plants from Messrs. Veitch, in which were some fine examples of the singular looking *Caladium Veitchi*, *Alocasia metallica*, and a variegated kind; various feathered *Amaranthus* from China, and others of dwarfer growth and more brilliant coloured leaves from Japan; also some Japanese *Conifers* described in former reports; fine basketfuls of *Oleander*, *glossum grande* and other plants, either remarkable for the beauty of their leaves or flowers. Messrs. Lee and Mr. Bull also showed collections of miscellaneous plants, in which were various Palms, Ferns, *Cordylines*, variegated *Yuccas*, *Theophrastas*, *Cyanophyllums*, *Caladiums*, among which the most striking was the white powdered leaved *C. Belleymeii*, *Alocasia metallica*, and the rich reddish brown-leaved *Coleus Verschaffeltii*. This last was shown by Mr. Bull. From Mr. Glendinning, of Turnham Green, came an interesting collection of hardy Conifers in pots, including *Wellingtonia*, *Taxus gigantea*, and other favourite sorts. Japan Lilies were shown in good condition by Messrs. Turner, Cutbush,

moral courage, and consummate ability with which Professor Henslow conducted the duties he volunteered for. It has been erroneously stated that he received the living of Hitcham as a reward for these services. Such however was far from the case; he was made aware, indeed, that he was considered entitled to Government patronage, but with conscientious disinterestedness he declined to avail himself of the offer. On the death of the previous rector of Hitcham he was recommended by the Bishop of Ely (formerly tutor to Lord Melbourne) as being the man who, in that prelate's opinion, was best calculated by his ability, activity, and common sense to reform that populous, remote and woefully neglected parish, where the duties of squire, magistrate and rector must all fall upon the latter.

Amongst the most remarkable instances of a direct benefit conferred upon agriculture through scientific knowledge was his discovery of the use of the phosphate nodules which abound in the tertiary formations of the Eastern counties. On the discovery of the nature and origin of those petrified animal remains, their value to the farmer was instantly apparent to Professor Henslow, who at once gave his discovery the widest circulation in the local papers, without reservation of any kind; claiming no credit, no reward, no consideration even as the discoverer. This was indeed heaping coals of fire on the farmers' heads, to whom this discovery continues to be a source of incalculable wealth, large areas of Norfolk, Suffolk, and other counties, being now honeycombed with phosphate pits; yet up to the day of Professor Henslow's death, no acknowledgment even was vouchsafed of his services. In the same liberal spirit he printed and circulated his volume of letters to the farmers of Suffolk, which pointed out and stimulated them to use methods which have largely increased the products of their holdings.

Though the professional career of Professor Henslow as the spiritual guide of his parishioners is a subject unsuited to our columns, yet it is right to state that his duties as pastor superseded all others in his estimation; and though they were eclipsed in public opinion by his more conspicuous labours, and though he had the greatest aversion to a parade of religion, he was ever assiduous in spiritual duties—so much so that for fifteen years he was not absent from Hitcham for a single Sunday.

But want of space forbids our going further into the philanthropic or scientific career of this most amiable, learned, and excellent man; a volume might be filled with the incidents of his ever busy and well spent life, during which he was incessantly occupied for others rather than for himself, and with anecdotes of his noble qualities of head and heart. We can only allude to his efforts, not completely successful until near the close of his life, to establish in Cambridge the scientific trips and degrees in science, and to develop the University Herbarium and Botanical Garden, with their Library and Museum, to which he for 30 years very largely contributed from his private means, and to which he gave all his own botanical collections. To the University his loss is as disastrous as it is irreparable; whether as a member conspicuous for his varied accomplishments and genial nature, or as a teacher, and most especially as not only the best, but the only man altogether qualified to direct the scientific, educational, and practical arrangement of its new museum.

During the last few years of Professor Henslow's life his health had become seriously impaired; incessant mental and manual labour, habitually protracted beyond midnight, and the want of proportionate daily exercise, gradually undermined his once robust constitution; though he was always abstemious and temperate in every respect. About five years ago he complained of considerable derangement of lungs or heart, which was attributed by his medical attendants to defective digestion. In March of the present year, though feeling far from well, he left home to pay some visits in the south of England, where he caught a violent cold, which was followed by bronchitis and congestion of the lungs and liver, which alarmingly aggravated his heart symptoms. He returned to Hitcham on the 24th, when he rapidly grew worse, and was soon confined to a bed of protracted suffering, which he never quitted till his death on the 16th of May.

Prof. Henslow desired to be interred in the churchyard at Hitcham, and that his funeral should be of the simplest description, and none but his parishioners employed; his wishes were strictly attended to, but a considerable concourse of strangers found their way to that remote village, and, together with a deputation from the town and corporation of Ipswich, paid their unobtrusive tribute to the memory of one whose rule of life was the motto of his family—"Quod videris esto."

THE GORILLA.

OUR African explorer says of this ape, that "his short and slender legs are not able firmly to sustain the vast body. They totter beneath the weight, and the walk is a sort of waddle, in which the long arms are used in a clumsy way to balance the body and keep the ill-sustained equilibrium." Page 434.

Let us turn to page 350, where he informs us that "no animal is so fatal in its attacks on man as this, for the reason that it meets him face to face, and uses its arms as weapons of defence, just as a man or prize-fighter would."

Say, how would the Gorilla, so weak, so tottering,

and so crippled, dare to meet a warrior-man face to face, when, according to our traveller's own statement, its legs are too weak to sustain the vast body without the assistance of the arms, which in that case would have other ample employment in sparring and fisticuffing? At page 58 he tells us that the "Gorilla is literally the king of the African forest." What a sorry sovereign! Moreover, he tells us that it performs other feats with its arms and hands, notwithstanding that without the aid of these arms and hands its short and slender legs cannot do their duty. Thus, this tottering cripple can break a gun-stock, bend the barrel, kill a man and tear out his bowels. In the meantime I ask, what becomes of the huge superimposed body, whilst the frail legs are giving way beneath the weight? Out upon such nursery fables.

Mr. Du Chaillu's admirers and supporters (so well known for their acquirements in orthodox zoology), ought to say to him, Good sir, place your Gorilla in a tree, and then you will see immediately that your crippled, and tottering, and waddling ape suddenly becomes a steady and an active animal amongst the branches, perfect at all points; and is no longer a "bungled composition of Nature," as the celebrated Buffon said of the sloth, when he viewed it on the ground, instead of looking at it whilst in a tree—its real and only place of abode, on account of its most extraordinary formation by the unerring hand of Nature. See my "Wanderings."

Satisfied in my own mind (after having paid attention to the monkey-family for upwards of half-a-century) that apes pass their lives in trees, I am astonished to learn that the veritable apes which Mr. Du Chaillu fell in with during his travels, should always have been roaming at large over the ground. I come to the conclusion that he must have been labouring under ocular delusion, and that he saw phantoms.

Be this as it may. I am borne out in my conjecture by the traveller himself; for at page 434 he says that the Gorilla which had been killed "was like a very devil."

If the book is to go into a second edition, I would advise the compilers of it to sweep away with unsparing hand nearly all those parts of natural history which have already appeared in the first. They are a disgrace to zoology.

Were I to hazard a conjecture, I would presume that by the descriptions and figures which Mr. Du Chaillu has given us of the Gorilla—he has never seen a live one. Charles Waterton, Walton Hall, June 8.

Home Correspondence.

Roasted Forest Trees.—Having cut down a considerable number of trees in the spring of 1860 on the sides of the drive to my house, for the purpose of making openings here and there, but leaving some in groups and many fine Beech, &c., I was very much provoked to find, upon looking at some of them, that the bark was full of cracks, and fell off when touched. The branches of those taken out were burned, but as the openings were sufficiently large no damage could have been done if the least care had been taken, but the forester, in order to save himself and others employed the trouble of removing the branches a few yards, set fire to them quite close to the growing trees, and hence the bark was scorched on one side and falls off by the slightest touch. What would you advise me to do in order if possible to hasten the growing on of the bark, or should the trees be taken out and replanted, as without bark they have a very unsightly appearance? Is not the forester deserving of punishment for such gross negligence? A. C. B. [If the liber or inner bark of these trees is really destroyed all round they cannot recover. If it is only the outer rind that has been roasted alive the trees will get over that. Wait and observe.]

Fertilisation of Vincas.—I do not know whether any exotic Vincas seed, or whether gardeners would wish them to seed, and so raise new varieties. Having never observed the large Periwinkle or Vinca major to produce seed, and having read that this never occurs in Germany, I was led to examine the flower. The pistil, as botanists know, is a curious object, consisting of a style, thickening upwards, with a horizontal wheel on the top; and this is surmounted by a beautiful brush of white filaments. The concave tire of the wheel is the stigmatic surface, as was very evident when pollen was placed on it, by the penetration of the pollen-tubes. The pollen is soon shed out of the anthers, and lies embedded in little alcoves in the white filamentous brush above the stigma. Hence it was clear that the pollen could not get on to the stigma without the aid of insects, which, as far as I have observed in England, never visit this flower. Accordingly, I took a fine bristle to represent the proboscis of a moth, and passed it down between the anthers, near the sides of the corolla; for I found that the pollen sticks to the bristle and is carried down to the viscid stigmatic surface. I took the additional precaution of passing it down first between the anthers of one flower and then of another, so as to give the flowers the advantage of a cross; and I passed it down between several of the anthers in each case. I thus acted on six flowers on two plants growing in pots; the germens of these swelled, and on four out of the six I have now got fine pods, above 1½ inch in length, with the seeds externally visible; whereas the flower stalks of the many

other flowers all shrank off. I wish any one who wishes to obtain seed of any other species that does not habitually seed would try this simple little experiment and report the result. I shall sow the seeds of my Vinca for the chance of a sport: for a plant which seeds so rarely might be expected to give way to some freak on so unusual and happy an occasion. Charles Darwin, Down, Bromley, Kent.

Diseased Oaks.—On coming to this part of the country ten days ago, I have observed in the hedges and find in the plantations the same result—that the Oak trees are to a great extent blighted, and in many cases the under branches are dead. It is not general, as you will find in the same plantation two or three with the leaves not on, and those beside them in good health and the sap flowing freely. I observe the last year's wood in a great many cases dead, owing to the sap not having been formed into a woody substance before the severe winter set in. A great many of the trees I find are beginning to send out small shoots from the boles of the trees within these few days. I observed it all up the east coast—in hedgerow timber along the east coast up to York. From Newcastle I notice also several Spanish Chesnuts are likely not to recover, as well as a few Ashes; and most of the Hollies, Portugal and Common Laurels are all killed at this place. The country lies rather low, and little outfall for water; of a light soil along the Derwent side to York. About here light soil or rather sandy moss, resting on sand and gravel in some parts. Six miles from Scarborough. Would you oblige by giving your opinion in next Paper. A Constant Reader, Wykeham, Sherborne, near York. [We are unable to suggest an explanation.]

Disa grandiflora.—In your notice of the Horticultural Exhibition at South Kensington, I do not see any mention of one plant exhibited there, which is equally rare and beautiful, and so difficult of cultivation that few even of the most skilful gardeners have ever seen its flowers. I refer to *Disa grandiflora*, a plant which I do not recollect ever to have seen exhibited before anywhere in the course of some 34 years' experience of horticultural exhibitions. In the Sertum Orchidaceum it is figured from a foreign specimen, and is there recorded as having only flowered once in England, viz., in 1825 with Mr. Griffin, of South Lambeth. From a figure in the Bot. Mag. it appears to have flowered at Kew in 1843. But except these two instances I know no record of its successful cultivation. So rare a triumph of horticultural skill ought to have received its due tribute of praise, especially when the opening fête at South Kensington was graced by its appearance. It is allowed on all hands to be the most gorgeous of all terrestrial, if not of all Orchids. You will perhaps correct my mistake if it has ever been exhibited before; I am under a strong impression that it has not. Unfortunately I did not note the name of the exhibitor, who ought at least to have the credit of his singular skill. J. R. [It has also flowered formerly with Mr. C. Leach, who now exhibited it again.]

Black Hamburgh Grapes.—I have a Vinery in which the Grapes are now nearly ripe, but there is no bloom upon them owing to a number of bright spots which appeared on the berries soon after they began to swell; before colouring in fact the bunches appeared as though they had been syringed with greasy water, but my gardener assures me they had not been syringed at all. The Vines (Black Hamburgh) are planted inside the house, and are young and healthy, with a fair crop, but having been disappointed in this way two seasons I should be much obliged would you, or any of your readers, give me their opinion as to the cause. An Old Subscriber.

Mercury.—May I beg to call your attention to an answer to correspondents in your last week's impression which states that "Mercury is *Chenopodium Bonus* Henricus, a very indifferent kind of Spinach." This does not appear to be quite correct, the plants popularly known as Mercury being *Mercurialis perennis* and annua; the first would indeed prove to be a very indifferent Spinach, as any one who might partake of it in that character would find to their cost; but *Chenopodium Bonus* Henricus is very generally known as Good King Henry and Fat Hen, and is frequently used by country folks as a Spinach. *Mercurialis perennis* occurs so frequently, and in such abundance near London and elsewhere, and at a season, too, when green vegetables are not always plentiful, that I have thought it worth while to call your attention to the matter, lest your Correspondent, or some other reader, should be tempted to try a dish of it; it is already upon record that a man, his wife and three children experienced highly deleterious effects from partaking of Mercury fried with bacon. J. Ray, Hammersmith. [The commonest name of *Chenopodium Bonus* Henricus is "Mercury." As for the poisonous *Mercurialis*, the vulgar name of that is "Dog's Mercury."]

Tree Supports.—Four years ago, when transplanting some trees of 15 and 20 years' growth, as supports above ground were very much objected to I fastened them underground by driving four posts deeply and firmly into the earth on the outside of the large ball of earth got up along with the roots, notching strong cross bars into them over the roots. Although planted in a very windy place they have never flinched, and have grown well. J. C.

Effects of last Winter's Frost.—Not only have Hollies of large size suffered from the effects of the