

Salvia splendens.—My plan of growing this and other autumn flowering plants, including Chrysanthemums, is as follows: The cuttings are struck with the bedding out plants in spring, and receive similar treatment till planting out time, when those plants intended for decorating the conservatory in autumn and winter are planted in rows 3 feet apart, in a piece of fresh dug ground in the kitchen-garden that has not been very lately manured; they are watered and stopped as occasion requires until September, when they are carefully lifted and potted, and kept close for a few days in a pit, after which they are ready to take their places in the greenhouse or conservatory. H. H.

A Warning to all who have Aviaries; showing the Extreme Voracity and Astute Cunning of the English Rat.—I have very frequently read in your columns remarks on the best and most effectual means of getting rid of these atrocious vermin; but as I have not myself been personally interested at the time in their destruction, I have only become theoretically acquainted with the subject in its general bearings. I am now about to crave the kind aid and advice of yourself and correspondents on a matter, to me, of vital import, and shall then be prepared to combine practice with theory; the result shall assuredly be made known *pro bono publico*. But to my grievance. For the last 20 years I have been an amateur or "fancier" of song birds; and many little anecdotes connected with their personal history have appeared in your Paper during the last few years. I built my birds, at starting, a large commodious aviary, and fitted it up in a style worthy of its inhabitants, the *agrémens* of well polished looking and toilet-glasses, everlasting fountains and leafy foliage not being wanting to render their house an "ornithological palace." My collection has been noted as one of the most select of its kind extant, comprising nightingales and other foreign song birds, and including specimens of nearly every chorister of the English woods and forests. The extreme number of birds my aviary has contained at one and the same time has been 366; it having been my "weak point" to boast of having more birds in my possession "than there were days in a year." (Alas! I cannot say so now!) Built as it is on a most picturesque spot, and arched over by a number of lofty fir trees, growing immediately in its rear (in Ravenscourt Park), Nature and Art have vied with each other to render the *personnel* of my aviary unexceptionably beautiful. I have been thus explicit, with the view to place my yet unexplained grievance in a strong light. I say grievance, for the aviary is now completely dismantled, my birds are reduced to the number of 11 only, (what a descent from poetry to prose!) and these, confined in wire cages, are kept simply as mementoes of what they once were. "*Troja fuit!*" Now I trace all my misery to an army of rats, which, since the heavy rains of autumn, have quitted their usual haunts, and unceremoniously "billeted" themselves upon me. These murderers first made their appearance at night, through holes eaten in various parts of the floor, and every morning I as carefully nailed over the said holes flattened pieces of zinc; this, for a night or two, kept the marauders at bay. However they very soon reappeared, until at last my flooring was almost completely "tessellated" with zinc. Not imagining for some time that they came to prey upon the birds, I placed poisoned food in their runs; also "Harrison's Pills," &c., as strongly recommended by your correspondents. All these, however, remained untouched, and the frightful diminution of my feathered friends, now apparent day by day, soon convinced me of the awful extent of my misfortune. The climax is soon reached. On opening the aviary door one morning, about a fortnight since, a scene of devastation presented itself which I will not, indeed cannot, attempt to describe. Suffice it to say, my eye fell instinctively on a large hole in the centre of the floor, which had been gnawed through an immensely thick protective piece of wood, and on counting the number of inmates I found them just 11! To remove these, and in a fit of desperation to convert their late habitation into a greenhouse was the work of a short half hour; and thus "my tale is told." The cunning of these rats has been immense. They must have carried on their operations of gnawing while mounted one on the back of another (a system of theirs I have before now heard of), for the flooring is laid on wooden sleepers, and the distance from the ground below to the flooring above is at least 8 inches. To exterminate these monsters is my full determination, and I shall anxiously look for instructions from you as to my best mode of procedure; the more especially, when I add that I have in the immediate vicinity of the aviary nearly 100 head of poultry, many of them the choicest gold-spangled bantam breed of the late Sir John Sebright, and the finest specimens of the gold-spangled Hamburgs. I am told by a knowing neighbour, by way of comfort, that I may fully expect some morning to find the entrails of some of these torn out by the rats. What a prospect! Wm. Kidd, Sanders' Cottage, New-road, Hammersmith, Jan. 1.

Wooden Shutters v. Garden Mats.—I have often thought that wooden shutters on frames would form

* The cunning of the animal is more remarkably seen in the fact of his disappearing with his prey bodily through the aperture in the floor, thus leaving no feathers behind him, but commencing his meal in a neighbouring garden, wherein I have just heard that wings and feathers have been repeatedly found. The rats, no doubt, mounted the poles and caught the poor birds while sleeping in imagined happy security on their perches. This proves that the flooring of all aviaries should be under-cased with zinc.

better protectors than mats, and I have reasoned in this way—Why should not wooden frames do as well as glass? for many, nay the majority of things that only want protection from frost, or excessive wet, are best wholly exposed, when there is no frost; and when there is, I judge light is not wanted. I have had a fire burning for three weeks to start my earlier Vines, and now, in the fourth week, the buds are just breaking. Why should not the house be covered with wooden frames till there is some appearance of the buds breaking? What a saving of fuel and labour, by day and night, would these shutters occasion! In the case of heavy rain, too, they could be pulled down over the border. Considering the many uses they might be put to—where, as the day lengthens, they might interfere with the early dawn of light, I think they will be found both invaluable and cheap. J. L., Deptford.

Harmony of Colours: Paint for Inside of Greenhouses.—I have read with much interest your observations on the effect of contrasted colours, to which I would suggest a practical corollary—viz: that the appearance of plants in a greenhouse or conservatory is greatly enhanced by a judicious tinting of the woodwork. I was led to this conclusion some time since by observing that almost all flowers appeared to peculiar advantage in a room whose walls are painted a very light yellow-green; and, acting upon this suggestion, I have had the interior of my greenhouse painted, as nearly as possible, the same colour, with excellent effect. The colour in question is a few shades greener than the yellow-green of the Primrose flower; in fact, a colour midway between the fresh leaf of the Primrose and its flower, is about the right tint. I find that the yellow generally used by painters fades so that a slight excess of yellow at first is not objectionable. It is important that the tint should be a warm yellow-green, not grey or blue-green, which last is very objectionable. If the outside of the house be painted black, the effect from without also is improved. It is curious to notice on removing a plant (say for example *Leschenaultia formosa*) from a house tinted stone-colour to one tinted green, how much more brilliant its colours appear; so much so, as really to give an appearance of improved health to the plant. Should any of your readers adopt my suggestion, I recommend them to see that the green is not deadened with black, a favourite practice with painters. The green and the yellow must both be pure colours, mixed with white-lead only; and allowance should be made for a tendency in the yellow to fade. J. R., Sevenoaks.

Sulphured Rags v. Hares.—I have proved that the plan recommended by "S." of keeping hares from barking trees is utterly useless, and it is possible that he, having had an additional "few days' experience," has discovered the same thing. Many of the washes recommended for this purpose are also failures. I wish you could prevail upon those who recommend the adoption of any principle, system, or plan, to state their failures when they have found that they have too hastily formed opinions, and arrived at conclusions which were not warranted by their further experience. I do not allude particularly to this case, or to any other case, but I speak in a general way. Henry C. Ogle, gardener to the Earl of Abergavenny, Tunbridge Wells.

Destruction of Vermin.—My gardener has just given me an account of the vermin he destroyed in my garden in the year 1849, which is as follows: Birds shot—12 bullfinches, 331 sparrows, 99 blackbirds and thrushes. Caught in Traps—233 tom-tits, 62 mice. Picked up and destroyed—23,802 snails. Caught in a Net, Dec. 11, 1849—46 green linnetts, 44 sparrows, 10 pied-finches, 2 blackbirds; total, 102. A. A. [A fine time the insects will have of it now.]

Societies.

CALEDONIAN HORTICULTURAL (Annual winter meeting.)—On this occasion the office-bearers for 1850 were elected, and seven new members added to the roll. A report from the Committee of Prizes was received and approved of. For the best three sorts of Pears, fit for dessert, and exclusive of Marie Louise, there were three competitors. A 1st prize was awarded to Mr. Morrison, gr. to R. Ainslie, Esq., for Chaumontelle, Gansell's Bergamot, and Crassane; and a second premium to Mr. Baxter, gr. to Sir J. G. Craig, Bart., for Beurré Rance, Easter Beurré, and Winter Nelis. For the best four Marie Louise Pears the prize was awarded to Mr. Morrison. For the best six kinds of table Apples there were four competitors. A 1st prize was assigned to Mr. Calder, gr. to Lady Harris, for Seaciff Apple, Gravenstein, Borsdorffer, Ribston Pippin, King of Pippins, and Old Nonpareil; a second Premium was voted to Mr. Morrison, for Cellini, scarlet Nonpareil, Paradise Pippin, Ribston Pippin, Melville Pippin, and Cephalonia; and a third to Mr. McDonald, gr., Drummond Castle. For the 12 finest flowered single clusters of Chinese Chrysanthemums, there were four competitors. A 1st. prize was awarded to Mr. Young, gr. to Mrs. H. N. Ferguson, the kinds being Minerva, Duc de Nemours, General Moreau, Salter's Annie, Queen of Yellows, Princess Maria, Clustered Yellow, Marquess, Queen Victoria, Bicolor, Queen, and Comte de Rutzen. A second premium was voted to Mr. Mitchell, gr. to Lady Keith, for Queen, Temple of Solomon, Plaratum, Celestial, Manama, Victoria, Salter's Annie, Etilla, Frigene, Princess Maria, Antoinette, and Nancy de Lirmet. [We print these names as we received them; but they seem most barbarous and unlike reality.] For the four most dwarf and finest-flowered plants of Chinese Chrysanthemums, the prize was awarded to Mr. Sleight, gr. to the Lord Advocate, the kinds being Bicolor, Queen, Mirabile, and David.

For the best two heads of German Greens there were eight competitors. A 1st prize was awarded to Mr. Mitchell, for Alder's fine dwarf; and a 2d to Mr. Johnston, market gardener, Braidburn. For the premium offered for the best four Leeks, there were no fewer than 12 competitors, all of whom produced large and well blanched specimens. The 1st prize was gained by Mr. Blair, gr. to J. C. Renton, Esq., M.P., the kind being Scotch Flag; and a 2d premium was voted to Mr. Pousty, gr. to W. M. Innes, Esq. For the best four stalks of solid Celery, two red and two white, there were eight competitors. A 1st prize was awarded to Mr. Sinclair, gr., Tullichewan Castle, for Seymour's Matchless Red and Seymour's Superb White; and a 2d premium to Mr. Henderson, gr. to C. K. Sivewright, Esq., the kinds being Sutton's Superb White, and Cole's Dwarf Red. For the best three sorts of Onions there were seven competitors, the bulbs being in general large and fine in quality. A 1st prize was awarded to Mr. Morrison for Deptford, James' Keeping, and Blood-red; a 2d premium was voted to Mr. Allan, gr., Seapark, for James' Keeping, Reading, and Strasburgh (raised by him at Duffus House); and a 3d was assigned to Mr. Pousty. For the best four specimens of Red Beet there were eight competitors. A 1st prize was awarded to Mr. King, gr. to A. Campbell, Esq., for Wyatt's variety; and a 2d premium was voted to Mr. Reid, Edmonston Gardens. For the prize of Two Guineas, offered by Messrs. Lawson and Son, for the best collection of Dried Specimens of Hardy Perennial Herbaceous Plants, two collections were sent. The prize was awarded to Mr. J. Jeffrey, Royal Botanic Garden, Edinburgh, his collection containing 1692 species and varieties, arranged according to the Natural System of De Candolle. The silver medal was voted by the Society, as 2d prize, to Mr. A. Jaffrey, Experimental Garden, whose collection consisted of 1045 species and varieties, likewise arranged according to the Natural System. It also contained several sheets of carefully executed dissections of the parts of the flower. In competition for the silver medal, offered by the Society, for the best collection of British plants, including Filices, four competitors appeared. The medal was awarded to Mr. M'Hattie, Royal Botanic Garden, whose hortus siccus included 570 species, correctly named, and arranged according to the Natural System. A 2d prize, with certificate of merit, was voted to Mr. Pender, Barnton, for a collection containing 363 species, arranged according to the system of Linnæus. An additional award, with certificate of merit, was granted to Mr. Syme, Blairhill, who produced a collection consisting of 102 species correctly named. Amongst articles for exhibition only were a collection of fruits from Dalkeith Palace Garden, including two Pine-apples, and 50 varieties of Apples proved and named at Dalkeith, for which the Society's silver medal was voted to Mr. M'Intosh; from Mr. Baxter, Riccarton, four fine bunches of retarded Grapes, one of which, named Abercainey Seedling, was particularly pointed out as a good winter Grape, also Beurré Rance Pears from root-pruned trees; from Mr. Addison, Gosford, three fine seedling Chinese Primulas, for one of which, a cross between the rose and white varieties, a certificate of merit was granted; from Mr. Young, Archerfield, a box of fine named Chrysanthemum flowers; a beautiful bouquet from Canaan House; Chrysanthemums from Mr. Reid, Edmonston House; fine Alfriston Apples (from a standard tree) from Mr. Lauder, Goshen; a dish of very fine Mushrooms from Mr. Pender, More-dun; and from Mr. Lyall, gr., Pinkie House, fine forced Rhubarb stalks. J. Mitchell, Esq., Leith, exhibited specimens of a free fruiting variety of Bryonia dioica, grown by him in the open air at Mayville, from seeds collected by him at Ribe, on the west coast of Schleswig. The specimens were covered with beautiful berries, in various states of maturity, red, orange, yellow, and green; and it was stated that the plant grows rapidly, and proves highly ornamental for trellises or verandahs. Mr. Blair, Mordington House, exhibited six varieties of seedling Potatoes raised from American seeds, and these were ordered to be tried in the Society's garden. Mr. Anderson, Linkfield, exhibited some fine Carrots from a field near Aberlady, and stated that the produce was equal to 32 tons per acre.

Reviews.

The Physical Atlas of Natural Phenomena. By Alex. Keith Johnston, F.R.G.S. (Reduced from the edition in imperial folio.) 4to. Blackwood. 1850.

THIS admirable work is thus spoken of in the last edition of Mrs. Somerville's "Physical Geography:—

"The author avails herself, with much pleasure, of an opportunity of expressing her admiration of the accuracy, extent, and execution of Mr. Keith Johnston's 'Physical Atlas,' and of the valuable information contained in the letter-press which accompanies it, which has afforded her the greatest assistance. It was the author's wish, and her publisher's intention, that the present edition should be accompanied by a series of maps to illustrate the more important questions of physical geography treated of in it; but Mr. A. Keith Johnston having announced the publication of a new edition of his 'Physical Atlas,' in a reduced size at a low price—the first two numbers of which have already appeared—the project was relinquished, in the belief that Mr. A. K. Johnston's smaller Atlas will furnish suitable illustrations to this work."

That belief has not been belied. The work alluded to is now before us, and proves to be one deserving of the