on the comment of the farther. Consider the multitude of roots contained within a circumference of 100 yards, and presenting perhaps as large a surface to the soil as the leaves do to the air. We are told that the great lesson taught by the old-fashioned roofs should not be lost, and that lesson was, that a constant supply of fresh air is essential to the well-being of plants. I cannot see what/proof we have that ever this lesson was taught in such a forcible way. Would the plants and fruits of the old houses bear comparison with those of the present day? If the present success is attributed to superior skill, will the ablest horticulturist now say that he could grow better things in the old houses then present day? If the present success is attributed to superior skill, will the ablest horticulturist now say that be could grow better things in the old houses than he cand on the new one? I venture to say I think the most important lesson gardeners have learnt from a knowledge of the old lumbering timbers, small panes, and puttied laps, is, that light is more essential than air to the healthy development of the venetable kingdom. As Mr. Fish has referred to the highest organism in the animal kingdom in support of what he advances, I beg to suggest that he tries it practically; let him get a good breakfast to begin with, but let that be the last morsel of confort his mouth is to have for the next 24 hours; he may breathe with all his might the purest air he can find, nevertheless I expect before the end of his term he will be ready to admit that there was truth in the proverb—"Man cannot live upon the wind." I do not wish it to be thought that I ignore the necessity of ventilation, or that I feel ungrateful or unthankful to Mr. Fish for his advocacy of the subject, but I think it is riding a hobby over hard to say that plants derive ten times as much food through their leaves as they do through their roots. D. Buchanan, Dyrham Park. [Our correspondent doubtless remembers the famous contest "twixteyes and nose," and draws his inferences accordingly,—Eins. cordingly.—EDS.

Rose Stocks.—Will any of your readers give me

Rose Stocks.—Will any of your readers give me in-formation on the subject of cutting back newly budded standard Rose Stocks? I have followed the advice of Mr. Rivers, in his "Rose Guide," watching the newly budded stock in early spring until the middle of May, or the beginning of June, and then cutting off, as closely as possible, everything above the growing bud. I took the further trouble to apply the "Forsythic mortar" to the cut, but regretted to find, in a fortnight after, a black line of disease running downwards, which will surely underwine the growing bud and destrow mortar" to the cut, but regretted to find, in a forther alter, a black line of disease running downwards, which will surely undermine the growing bud, and destroy the stock in another season. Any advice how to make sure that the cut will cicatrise, or as to the safest time of year in which to cut back the Dog Rose stock will be thankfully received. Deconiensis. Wood of the Cedar of Lebanon.—Much difference of opinion appears to exist as to the durability of the wood of this Cedar. In Dr. Stanleys' "Sinai and Pedestine," chap. 14, p. 435 (2d edition), it is stated that the celling of the church of Helena, at Bethlehem,

than A. Schottii; and the individual flowers have more substance. I have been using it, and Dipladenia amabilis, carefully wired and mossed, ever since May last for Itable decoration; and I find them stand well, and prove very effective amongst other flowers. I send you flowers of A. Hendersoni taken from a plant struck last autumn, which commenced flowering in May last in a 6-inch pot, and has never been without from six to 12 flowers open fresh on the plant since. I am now drying the plant off, as you will see from the wood, which will account for the flowers being smaller than usual. W. Howard, Gardener to J. Brand, Esq. Bedford Hill. Batham.

Rhododendron Soil.—Perceiving a notice in your paper (see p. 873) as to the best soil for Rhododendrons, I would call the attention of your readers to the following facts, and would ask for a reason for them. There are Rhododendrons in this place (on the S.E. coast of Ireland) growing vigorously on a dry shingly bank with earneyl, any soil, facing due south, and without any preparation having been made for them; and have been so for some years; those on the bank are all the Rhododendron ponticum, those in the garden of various descriptions, including the R. ponticum. Many of the Rhododendrons bank been planted in a rich moist shady flat near a small river, and are now vigorous and thriving plants, but not much more so than those on the poor, hot, dry bank. C.

Viola corputa, and other Bedding Plants—Two years ago I planted four beds in our Italian garden with this Viola, which proved far beyond my expectation, both as regards beauty and compactness of habit. As it flowers freely, it likewise seeds freely. Having hit upon a plant so useful, and so easy of cultivation, I determined to give it larger trial. I therefore put in quantities of cuttings in a close frame, without bottom-beat, merely inserting the cuttings in sharp sand, in which they struck root freely. But my most successful plant of getting it up in quantity was raising it from seed. Having pathered a lot of

worth recording. Amongst 104 inter-crosses tried this year between several of the popular varieties of the common Pea, I have obtained 58 pods, which may be orango Pea, I have obtained as pols, which may be designated of 1929. Fall that obtained as pols, which may be designated of 1929. Sa Idad containing from the Peas; 32 Idad containing from the Peas; 32 Idad containing from the Peas; 32 Idad containing for the Peas; 32 Idad containing Idad containing the pease of the Peas; 32 Idad containing Idad Co latter cause of non-fertility the work of opening the flowers for artificial crossing renders them more readily liable. I have conducted these operations upon the Pea principally with a view of satisfying myself that a change of colour sometimes takes place in the seed obtained as the immediate result of crossing two varieties of different coloured seed. That such does at times occur I have furnished myself with ample evidence, but I have this year noticed some changes of colour of such a singular nature that I may perhaps be excussed for chronicling them. The effect of crossing the striped-seeded Sugar Pea as the seed-bearing parent with the Purple-pod Pea (which produces a greenish-buff coloured seed) as the pollen-bearing variety, has been to produce a pod, in colour partly purple and Partly buff coloured seed) as the pollent bearing variety, has been to buff or colour bard by purple and partly colour bard by the pollent bearing variety of the pollent buffer of the produce of these seeds as springing from parents different not only in colour of seed, but also in shape and substance of pod; the inner membrane of the pod being absent in the female (a characteristic of the Suzar or edible podded Peas); whilst the pod of the male parent is of the ordinary character of Peas, the seeds only of which are edible. In another cross between a bright Grass-green seeded variety as the seed-bearing parent and the Purple Pod as the pollent bearer. I have obtained a pod of the colour of the female parent, containing six Peas of a bright yellow

well-filled pods of nearly-ripened Peas in full quantity and From constant daily observations of this variety I am convinced that the early blossoms were all single. The second growth produced chiefly double blossoms, but where the offshoots were lengthened the upper flowers seemed to get more semi-double flowers were entirely single. The semi-double flowers were nisome cases forming pods apparently fertile. It was too late to obtain ripe seed this season; I have, however, marked and saved for seed some of the semi-double blossoms which appeared to be setting, and will report to you the result of their produce, if successful, on a future occasion. I have seen the same occurrence in two other instances. Since writing the above I have two other instances. Since writing the above I have examined another row of the same variety in another garden, and there I found the same tendency to double blossoms in the second growth. I have not double examined another row of the same variety in another carden, and there I found the same tendency to double blossoms in the second growth. I have also examined other varieties growing side by side under similar circumstances, and have observed a solitary instance only. I am inclined to believe that the cause suggested by Mr. Darwin—impaired fertility—has been at work here, as the first blooms were all single and fertile, and were all, at the time of the opening of the double blossoms, ripening their seed. It would seem as if, after the drought of July, the succeeding rains had started a second growth from the ripening stems, which had already expended their fertility, and that the organs of fructification had become abortive, and the flowers double from exhaustion of the plant. Themsee Lacton. Stamford.

Semi-double Verbenax.—I send you a bloom of a peculiar seedling Verbenax.—I send you a bloom of a peculiar seedling Verbenax.—I send you for the extra the send of t

with their own point, dinking that they may permals in the course of time produce a perfectly double Verbena. J. Wills, Huntroyde Gardens, near Burnley, Flouer Beds.—Among a great variety of bedding Pelargoniums grown here Stella has undoubtedly borne the palm, and I agree with Mr. Fish in placing Pelargoniums grown here Stella has undoubtedly borne the palm, and I agree with Mr. Fish in placing Cybister next in order of merit. Spread Eagle is only if for a small bed, and in this part of Ireland (Westmeath) where continual showers have been the order of the day for a long time, it does not display itself at all to advantage. I am glad to find that Mr. Fish reports Lord Palmerston to be a good bloomer. For size of truss, profusion of flower, and continuity of bloom it is unequalled by any I have seen. One bed here has been a sheet of colour since the week it was planted (towards the end of May) until it was cut into somewhat severely for cuttings a few days ago. Mrs. Pollock has grown as vigorously as Cloth of Gold; Christine, I think, still holds the first rank as a pink—follock has grown as vigorously as Cloth of Gold; Christine, I think, still holds the first rank as a pink—follock has grown as vigorously as the tot of cerastinual tomendestath, has clearly so good. A circular bed planted with Excellent (zonal Pelargonium) in the centre, and surrounded by a broad bett of Cerastinual tomendestath, has Cerastinual seens to the constant wet weather. Is this usual, or is there any remedy for the evil? Iresine Herbstii s looking very gay now, but it was rather ding early in the season; Coleus Verschaffeltii is only "so-so;" Amaranthus, after giving a good deal of trouble, is now very good. Alpha.

Camellia, Ladu Hume's Blush(see, 1, S;5) —This may.

Amazantha, after giving a good deal of trouble, is now ever good, Alpha, Alpha, Camelia, Alpha, Camelia, Lady Hume's Blush (see p. 875).—This may be wired without falling to pieces by any practical hand; and when put up even "A." himself shall not be able to tell whether it is wired or not. W. Howard. Iresine Herbstii.—Mr. Bennett, of Osberton, was one of the first to bring this really useful bedding plant into notice, and it is now beginning to be generally acknowledged that he spoke the truth and nothing more as regards its suitableness for out-door decoration. Last spring I planted several round beds of it, edging them with Cerastium tomentosum, and by all title trimming and pinching of the young shoots, they are the most compact, and, at present, the prettiest beds in our flower garden. Near the Iresine is a bed of Amazanthus melancholicus, edged with Golden Chain Pelargonium, which looks quite threadbare compared Iresine Herbstii.—Mr. Bennett, of Oeberton, was one of the first to bring this really useful bodding plant into notice, and it is now beginning to be generally acknowledged that he spoke the truth and nothing more as regards it is uitableness for out-door decoration. Last spring I planted several round beds of it, edging them with Cerastium tomentosum, and by all title trimming and pinching of the young shoots, they are the most compact, and, at present, the prettiest of the edging them with Cerastium tomentosum, and beds in our flower garden. Near the Iresine is a bed of Amaranthus melancholicus, edged with Golden Chain Pelargonium, which looks quite threadbare compared with that which contains the Iresine is a bed of Amaranthus melancholicus, edged with Golden Chain Pelargonium, which looks quite threadbare compared with that which contains the Iresine is a bed of Manaranthus melancholicus, edged with Golden Chain Pelargonium, which looks quite threadbare compared with that which contains the Iresine is a bed of Manaranthus melancholicus, edged with Golden Chain Pelargonium, which looks quite threadbare compared with that which contains the Iresine is a bed of Manaranthus melancholicus, edged with Golden Chain Pelargonium, which looks quite threadbare compared with that which contains the Iresine is a bed of Manaranthus melancholicus, edged with Golden Chain Pelargonium, which looks quite threadbare compared with that which contains the Iresine is a great deal to do with the growth of fine-foliaged plants. Here Iresine Herbstii is looking well, and has succeeded perfectly since the day in which it was planted as a great deal to do with the growth of fine-foliaged plants. Here Iresine Herbstii is looking well, and has succeeded perfectly since the day in which it was planted as good dressing of rotten manure from an old Melou bed; the plant is, in consequence, now 2 feet 6 inches in height; some of the leaves measure 3 inches across, and are excellent in colour. It is edged with variegated Honeysuckle. It did

colour. Although I have succeeded thus far with the Pari, he same quantum of success has not attended my experiments amongst other genera of the Papilion class; but probably to wide diversities of size class; but probably diversity of a hill, the sace to refer the Rev. W. Heberden, Great Bookham, Surgey, g. Tenders, g. Ten Great Bookkan, Sterrey,
Rhotodeadrons—On my invitation, you have given
me valuable information, and on your invitation
(p. 874). I offer my experience on the subject. My
stuation is on the declivity of a hill, the aspect northwest, open to the setting sun; on the south it is
bounded by hills higher than my grounds, and on the
east with many running three miles to the base of
Snowdon. There are ponds on the land, and a rivulet
running through. The soil on which grew my plants
was virgin soil—Heath and wild Gorse the product.
The Rhododeadrons planted along the rivulet and the
banks were most prolific, as also the Portugal Laurels
and the common Laurels in every direction—the
latter most abundant, and cropped down annually, the
leaves forming an excellent under-bedding in the horse
stalls, and adding to the farmyard compost. In reference to the soil it has no energy—it gives only a
locum standi. I believe that these evergreens draw
their nourishment from the air; and the condition
of a most suitable atmosphere, shaded, the south
wind prevailing, with the attraction of the mountain
moisture, provides the required conditions. As
to the soil ities[t], iw ill not grow a garden Turnip
without plenty of manure. The same of bog peat,
which has no energy, and is valuable only in the
powdered state for the growth of young tender roots in
cuttings of Laurels or layers of Rhododendrons. The
Irish Ivy, of which I send you a specimen leaf [very
large], grows here most luxuriantly on brick as well as
stone towers; and if the brick tower were raised
guano of sparrows clustering in it. The soil was only stone towers; and if the brick tower were raised, 500 feet, the Lyw would reach the summit, drawing its nourishment from a congenial atmosphere, and the guano of sparrows clustering in it. The soil was only the virgin earth, sufficient to give the Lyyroot, and was afterwards covered with gravel, on account of the walk. The Irish Yew also succeeds well. In Greek we find the expressive words which in our language read—"Know thyself." A man succeeds only in certain atmospheric conditions of climate. The food he takes will not otherwise satisfy the conditions of nature. His mouth, with that of other animals, stands instead of the roots of the vegetable nature. A cow is a pedestrian and a tourist, and like man travels the fields, whether by instinct or fashion, for the best nourishment and healthy air. The coat of an Alderney stares here frightfully, and craves for enignation. B. B. C.

Adiantum farlegense.—In your paper of Aug. 25 accurs a setter from Mr. Bray, in which he says that the report published by you at p. 730 concerning the abovenmentioned Fern, "certainly contains some truth, but not the whole truth." The report states that the plant exhibited at Kensington was introduced by Y. D. Hill, but not the whole truth." The report states that the plant exhibited at Kensington was introduced by Y. D. Hill,

mentioned Fern, "certainly contains some truth, but mentioned Fern," certainly contains some truth, but methicled Fern, "certainly contains some truth, but methicled at Kensington was introduced by T. D. Hill, Esq. (from whom the particulars published were derived), and was presented by him to Col. Miles. Mr. Bray admits this to be truth, but adds, "I st is also true that the plant was resuscitated, propagated, and sent out from here," a circumstance which in no way clashes with the original report, which I consider contains all the information that was really necessary to be known, namely, by whom the Fern was introduced, and from whence; its habit of growth, name, &c. Mr. Bray's letter would lead one to infer that the Fern was presented to Colonel Miles in the condition in which it was exhibited in 1865. Such however was not the case, for when sent here it was a small plant in a 5-inch power. When shown at Kensington it measured 3 feet in height and 2 feet 3 inches through; and the same plant at the International Exhibition measured 4-feet in height and 3 feet 9 inches through; I have now one large specture no lant and 12 feet through.

Eurougar, and the same plant at the International, Exhibition measured 4 feet in height and 3 feet 9 inches through. I have now one large specimen plant and 12 smaller ones grown from offsets. I believe this mode of propagating it to be the most certain way of getting them true. J. Green, Gardener to Colonel Miles, Barton Hill, Malmesbury, Wills.

Bulbocolumn vernum.—Is this plant, which Mr. Robinson mentioned last year (pp. 675 and 868), identical with Trichonema Columnae, noted in your pages by David Cameron only a short time before his death in 1848? And is the representation of the plant in flower in Sowerby's "English Botany" (Plate 2549) faithful and just? If it be so, it does not promise much in the way of beauty; nor do I understand why, as I find stated in a catalogue, it is "best known as the Red Crocus." Diss. [Bulbocodium is quite a different thing from the British Trichonema Columne, and much more resembles a Colchicum, to which genus, indeed, it is related. See the figure in "Botanical Mazazine," it. 153. EDS.]

Tom Thand Pelargronium.—Will some one of your Tom Thand Pelargronium.—Will some one of your Tom Thand Pelargronium.—Will some one of your

Marsh, gr. to W. Shove, Esq., Riverdale, Lewisham, From Mr. Standish came various Aucubas raised from the Standish of the Standish came various and the Standish came and

a the Society's garcies are Universe."

Berumm Horgreuman: Spir 12 at 12.—This we held as sual in the Royal Pavilion, in which the display of flowers and such in the Royal Pavilion, in which the display of flowers and reather was most unfavourable, rain falling heavily throughout he afternoon. Perhaps the strong point of the show was the rait, which was in abundance and exceedingly good. Pineples were large, and excellent. Grapes both for size of berry nd weight of bunches were very fine, particularly black Grapes. Scaches, Nectarices, Pears, Flums, Apples, Figs. &c., were it good and in shoundance, competition in some instances and the standard of the standard