

BECK'S SEEDLING PELARGONIUMS, 1845.

The following varieties can be had, good plants in 4-inch pots, delivered free in London for pre-payment only, by Post-office orders on Brentford:—

Aurora	... £2 2 0	Resplendent	... £1 1 0
Competitor	... 1 11 6	Gigantic	... 0 10 6
Hebe's Lip	... 1 11 6		

Five good plants of Bacchus at 12. 11s. 6d., and a few of Sirius at the same price, but smaller.

VARIETIES OF 1844.

Arabella	... 15s. 0d.	Rosy Circle	... 15s. 0d.
Desdemona	... 15 0	Mustee	... 15 0
Isabella	... 15 0	Favorita	... 7 6

Usual Allowance to the Trade.

E. BECK'S Descriptive Catalogue of Seedling Pelargoniums, with directions for their cultivation, blooming, &c. E. B. finds he has about 40 copies of the above undistributed of, which may be had in exchange for four postage stamps.

HORTICULTURAL SOCIETY OF LONDON.

Notice is hereby given, that the EXHIBITION OF FLOWERS AND FRUIT, in the Society's Garden, in the ensuing season, will take place on the following Saturdays, viz., May 8; June 19; and July 17; and that Tuesday, April 20, is the last day on which the usual privileged Tickets are issued to Fellows of the Society.

The Gardeners' Chronicle.

SATURDAY, NOVEMBER 21, 1846.

MEETINGS FOR THE TWO FOLLOWING WEEKS.

SATURDAY,	Nov. 28—Royal Botanic	4 P.M.
MONDAY,	30—Botanical (Anniversary)	8 P.M.
TUESDAY,	Dec. 1—Horticultural	2 P.M.
	Linnean	8 P.M.
WEDNESDAY,	2—Society of Arts	8 P.M.

It is doubted by some Pine-growers whether the MEUDON PINES, to which we have lately directed attention, can be of the weight, and size, and beauty that has been stated. Peat, sand, and water, are thought to be incapable of producing such results. One learned correspondent, of whom we had hoped better things, doubts indeed everything; he doubts whether *Mirabile dictu* is a Pine grower at all; whether he knows anything about Pine-growing; whether he knows a "Queen" when he sees one; whether he has not been dreaming all this while, fancying Cayennes to be Queens! and so on. Reasonable men should be ashamed of such cavilling. However, for the satisfaction of our friends, we have procured one of these Pines from Meudon; the best that remained when our order reached Paris (the finest had been cut), and we shall leave it for a day or two in the office of this Paper for the inspection of the curious. It is a nice little Queen, which weighed about 8lbs. avoirdupois when first cut; and now that it has lost some of its weight, is far heavier than the finest Queen ever grown in this country.

At a Meeting of the HORTICULTURAL SOCIETY on Tuesday, November the 3d, Mr. MITCHELL, of Brighton, produced some BLACK HAMBURG GRAPES, for which a Silver Banksian Medal was awarded. They were not Grapes of wonderful size, either in the berry or the bunch; the latter, indeed, was small, as all bunches should be which are grown for market; but the berries were handsome, black, perfectly ripe, and excellent. Why, then, do we mention them thus? seeing that as fine Black Hamburg Grapes have this autumn been common as Blackberries. We mention them because of their history, which involves some curious as well as highly important facts.

Mr. MITCHELL'S Grapes were a part of a very heavy second crop, succeeding a fair crop which had ripened in the spring. It appears that he had intended to destroy a house of Vines, which were scrambling, out of condition, and more inclined to run to wood than to fruit; that for this purpose he began to force in the autumn of 1845, and managed to secure a ripe crop by the middle of February. By that time we may suppose that the Vines were sinking to rest. By the middle of March the crop was all gathered; the Vines were then allowed to remain undisturbed for six weeks, when, instead of throwing them away, Mr. M. determined, like a wise man, to endeavour first to get another crop out of his houses. He therefore on the 1st of May pruned them hard; the sap was rising, and the Vines bled excessively, so that the floor of the house was deluged. Notwithstanding this, however, the buds broke well; a fine show of fruit appeared, the crop was left, and finally ripened off in perfection in October, the Grapes above alluded to having formed part of the produce. What is more, the wood for next year is so hard, well ripened, and furnished with plump buds, that Mr. MITCHELL has changed his mind about destroying the Vines, and intends to force them again next year, but not early, nor more than once. The fact is, he has tamed their over-luxuriance, and the reason for their removal is withdrawn.

There are two circumstances in this experiment which more especially deserve consideration. The

first is that the Vines had not more than a six weeks or two months' rest, between the first and second forcing. It is clear, however, that the Vine could not have been much exhausted by its winter growth, for on the 1st of May the sap was in motion and followed every wound. The natural season for the growth of the Vine had in fact returned; the stimulus of long days and bright light, and a warmer soil, produced its customary effects, which the Vine obeyed notwithstanding the shortness of its previous slumbers. It may, therefore, seem that this plant does not demand so long a period of rest as is supposed; that its vitality is such as to render it indifferent to exertion; and that the "accumulated excitability" of which physiologists speak as so indispensable to all plants, and for which they regard winter as the natural provision, is a thing of imagination, not of reality. Such is not our opinion. It is to be remembered that these Vines were over-luxuriant, and demanded a check; it does not quite follow, because Mr. MITCHELL'S rampant Vines could be thus "run out" with impunity, that everybody's can be treated in the same way. Vines in their ordinary state might not bear it. We are, however, by no means sure that any very strong healthy Vines might not be forced to the same extent; a continuance of such treatment would kill a plant; but an occasional effort may be borne. A strong man will bear the loss of rest for a night without inconvenience; but keep him awake for several successive nights, and his nature will sink prostrate under the effort. So with the Vine. Mr. MITCHELL, it will be observed, has no intention of renewing the experiment immediately: he will now give his Vines a long winter's rest; but it is worth inquiry whether healthy Vines cannot be forced to bear three crops in two years as a matter of course. Those who have the means would do well to make the attempt and report the result.

The second point is the little injury sustained in this experiment from excessive bleeding. The pruning was necessarily performed when the sap was flowing freely; it was May-day; all the agencies that excite vegetable life were in full activity. The loss of sap was enormous; yet an ample and excellent crop was obtained. Are we to ascribe this result to the over-luxuriance of the Vines already alluded to? or is the bleeding of the Vine, in truth, an event of so little importance? For ourselves, we believe that both propositions may be assented to, with a limitation. Had the Vines been less luxuriant and scrambling, the bleeding to such an extent would have been dangerous; yet the bleeding of the Vine in spring is not so serious an event as is generally believed. The latter is well known to be the opinion of practical men, and they are certainly right; for the rising sap of the Vine consists mainly of water, carbonic acid and ammonia, all derived from the soil, and therefore from a source of inexhaustible supply. If no other matters were present the Vine would be of the nature of a slender water-pipe, through which this fluid passes in its way to the leaves; but it is not so. On the contrary, the rising sap also dissolves in its passage all soluble matters with which it is brought into contact, among which are, especially sugar and gum, the organisable matters out of which the future leaves and fruit must be prepared. Now, a plant cannot obtain these substances from the soil; they lie in its own tissues and there only, and it is obvious that if they are all washed out by the passage of an enormous quantity of watery matter through the plant, most of which is wasted, there can be no formation of leaves, flowers, and fruit. Theoretically, therefore, bleeding is a dangerous circumstance, and may be fatal.

But in truth Nature is so prodigal of all means or materials required for the security of life that exhaustion is by no means easy. Infinitely more of everything is provided than is really required, on purpose to compensate for accidents. A tree is loaded with countless flowers; a hundredth part of them, when changed to fruit, is more than the plant can bear; they, therefore, drop off by thousands and strew the ground to the alarm of the inexperienced gardener, who is afterwards surprised at the appearance of an abundant crop. Strike a Fir tree in the spring, and forthwith the air is filled with myriads of millions of pollen grains, provided for the fertilisation of a few dozen Fir cones; some hundreds of seeds receive the influence, the rest of the pollen grains fly to waste. A calculation proving this is to be found in the "Botanical Register," where the editor shows that 27,000,000,000 pollen grains were provided on one plant of *Glycine sinensis*, in order to ensure the fertilisation of 4,050,000 seeds, or about 7000 pollen grains to each seed.* And so it is with everything. The starch,

* The number of bunches was about 9000, and of flowers 675,000. Each flower consisting of five petals, the number of those parts was 3,375,000. Each flower contained 10 stamens,

gum, or sugar lodged in a plant is no exception. Some of those substances must be present: but they are provided in such prodigal abundance in the teeming bosom of Nature that common accidents can hardly exhaust them.

We would not, however, advise gardeners with weak Vines to disregard their bleeding; an ailing old man will perish from what a stout boy would laugh at.

CHINESE METHOD OF DWARFING TREES.

ON the termination of the late Chinese war, our neighbours, the French, who shared in the interest so generally excited by the event, sent a mission to China, to form, if possible, a treaty of commerce with the Celestial Government. Confident hopes were entertained of the success of this mission; the finest silks and choicest wines formed part of the cargo of serious argument provided by these delegates of commerce. I believe Messieurs les Chinois were inaccessible to the above mentioned reasonings. *La mode Parisienne* only excited their merriment, and the wine their unequivocal dislike. However, it is not my present purpose to speculate on the commercial possibilities of this mission. In a short history of the voyage, by one of the party, I have found an amusing account of the method pursued in dwarfing trees, which perhaps may be more interesting to horticultural readers.

Immediately preceding the details of the dwarfing system, is an account of a fête day in Canton; that part which introduces and suggests the history of the dwarf trees, may, perhaps, without impropriety, be added here.

The *attachés* of the mission were very much astonished one morning to find the appearance of the two principal streets of Canton completely changed. Before each house was set a kind of stand or altar, of considerable size; upon the different steps of these stands were placed figures in porcelain and cardboard; by the side of these they remarked vases planted with fruit trees, scarcely a foot in height, the branches of which, twisted and distorted, bent under the weight of their fruit, which was of their natural size.

The figures of cardboard and porcelain, the most eccentric the brain of a Chinaman could invent, were in continual movement. Here a Mandarin, of the first class, rolled his haggard eyes, and gesticulated his arms, there a soldier sabred nothing right and left, further on a Chinese lady raised tenderly her languishing eyes, and fanned a large-headed man, who each moment hung out an immense tongue. Time after time the fantastic images stopped as if fatigued with their exercise, but then the proprietors of the stands gave them some strokes with a whip, and immediately the pantomime recommenced with renewed activity. There was enough in this to astonish the curious spirit of the French travellers. What caused these images to march to the tune of the whip? And these little trees, so contemptible in appearance—the height of a foot!—carrying, each Orange-tree, 20 enormous Oranges? And each Apple-tree, 20 or 30 large Apples? For the images the explanation was not difficult to find. The Chinese had introduced into the interior of them one or two mice, which, on being stirred, struck some wires, and communicated thus the movement to the limbs expressly jointed to produce this effect. When the mice slept, a cut of the whip aroused and affrighted them, and so redoubled the vivacity of the gestures of the images. As for the dwarf trees, there was in that a mystery of horticulture, or rather sylviculture, to divine. M. Renard had noticed, on visiting the apartments of the Mandarins, similar little trees of the height of some few inches, pitiful to look at, unhealthy, distorted, and covered with excoriations without number, and a thing which astonished him,—the little foliage which ornamented the extremity of the branches, belonged to kinds that ordinarily attain an enormous size, such as the Elm, the Bamboo, and the Cypress. M. R. arrived at the following solution of these eccentricities:—That for the Chinese nothing is beautiful but that which is hideous; that a stunted shrub without leaves is a wonder that is worth all the forests in the universe; and so the principal occupation of the Chinese nurserymen is to combat Nature in everything that is beautiful and rich.

The cultivation of the dwarf trees is divided into two parts—that of the fruit and forest trees. That of the fruit trees rests upon a process already partly known in Europe; but of which the application is different. At the moment when a tree is in flower, the Chinese cultivator chooses a branch. It is well understood that he selects that which presents the most fantastic forms; he makes two circular notches, in a manner to raise a ring of bark of the length of about an inch; upon the part uncovered he applies fresh earth, that is held to it by means of a piece of cloth; each day he moistens the earth; soon the bark at the incision throws out roots, the branch becomes a tree, its fruit swells and ripens. Then the gardener cuts the branch at the end of the packet of earth, and plants it in a pot to send to the market. It is rare that this

or the whole mass of flowers 6,750,000. Each ovary contained about seven ovules, so that preparation was made for the production of 4,050,000 seeds, for the purpose of fertilising which the anthers, if perfect, would have contained about 27,000,000,000 pollen grains. Had all the petals been placed end to end they would have extended to the distance of more than 34 miles.—*Botanical Register*, 1840, *misc.* p. 42.