THE



GARDENERS' CHRONICLE

A Weekly Illustrated Iournal

 \mathbf{oF}

HORTICULTURE AND ALLIED SUBJECTS.

(ESTABLISHED IN 1841.)

VOL. XXIII.-THIRD SERIES.

JANUARY TO JUNE, 1898.

LONDON:

41, WELLINGTON STREET, COVENT GARDEN, W.C. 1898.



THE

Gardeners' Chronicle.

SATURDAY, JANUARY 8, 1898.

OLD ORCHARDS.

OFFICIAL returns give a total exceeding 112,000 acres as devoted to orchards in the counties of Hereford shire, Devonshire, Somersetshire, Gloucestershire, and Worcestershire, this being considerably more than half the acreage occupied with orchards in the whole of England. At first sight this total looks very encouraging, for all who believe that no better Apples are grown than those produced on British soil; but unfortunately it is misleading, and, like many bare official statistics, requires investigation before a correct idea can be formed of the true meaning. A survey of the counties named gives a different aspect to the question, and I have no hesitation in saying that onehalf of the acreage recorded is occupied with worthless trees, or with those that are rapidly approaching this condition. This opinion is not the result of a cursory examination, but has been formed after some years of observation and repeated journeys through the chief districts of the five counties mentioned. The subject has been impressed upon my mind most forcibly by recent opportunities for studying the matter, and it seems to me of such importance that I have submitted this brief review of the subject to the Editor of the Gardeners' Chronicle, in the hope that he may be able to find space for it in its widely-read pages.

When the general extension of orchard planting in England took place, in the beginning and towards the middle of the seventeenth century, the principal object in view was the production of cider. It is recorded that Lord Scudamore, when ambassador in France during the reign of Charles I., obtained from Normandy large numbers of scions of the best cider Apples, which were introduced into Herefordshire and

distributed throughout the county.

When Dr. John Beale published his treatise on the Hereford orchards in 1657, he considered them "a pattern for the whole of England." and there is abundant evidence from his and other's writings that in these early days considerable and careful attention was given both to the selection of varieties and to general cultivation. But Herefordshire seems to have been well in advance, though, in later years, both Somersetshire and Devonshire became equally celebrated, and for a period, the last-named county was pre-eminent for its eider production. Certainly, when Hugh Stafford's Treatise on Cider Making appeared in 1729 it was an important industry there, and had been so for many years. In the course of the seventeenth century, many writers contributed greatly to the extension of Apple culture, and it must be said that the methods advocated in the majority of cases were very closely in accord with the best practice of modern times. The varieties were, however, all primarily selected for their qualities as ciderfruits, enormous quantities of this beverage were manufactured, and for a time the best b rands are said to have effectually taken the place of the French and German wines amongst the higher classes; while it was also the labourer's constant drink. In the latter case, after a time, fermented malt liquors gradually superseded the lighter cider, and to this end, probably, less careful methods of preparation had contributed. As the cider industry declined, so the interest in the orchards waned; and as large numbers of the trees were of varieties unfitted for other use, the fruit was of little value for sale, and the plantations were simply left to themselves.

What is too painfully evident in the majority of the old orchards at the present time is not the result of ten or twenty years' neglect, it is the effect of a decadence of interest which must in many instances date back to or beyond the beginning of the nineteenth century. It has been variously estimated that an Apple-tree will live to an age of 200 to 1,000 years, but there is little doubt the most profitable period in the life of a standard Apple-tree on the crab stock is from twenty to sixty or eighty years; at least so far as my experience and observation extend where the age of the trees is definitely known, this appears to be the time when the greatest crops are borne, though in regard to healthy trees the period may be prolonged to 100 years or more. This of course is assuming that the best cultivation has been consistently followed throughout, as even with neglect the Apple will "exist" for many years, but only occupying ground uselessly, serving as a harbour for insects innumerable, and the germs of diseases that may infect other trees. A very short time suffices for a tree to get into a bad state by neglect; it is astonishing how quickly the evil is done, and unless very promptly remedied by improved treatment the tree can never become a source of profit. The worst results are occasioned by neglect in the early stages of the tree's existence, because when once thoroughly stunted very little can be done to alter it, and the best treatment seems lost. By far the most serious neglect is in the want of attention to cultivating the soil over the roots and around the trees. The older writers generally agreed in advocating tillage for the soil in orchards, and the general experience of fruit growers is in favour of this at the present time, both here and in America; yet we find nearly the whole of the orchards in the counties named at the beginning of these notes, planted in grass. The chief arguments I have heard in support of this system are poor indeed, and one is in itself a proof of the careless methods adopted in gathering fruit. A farmer who has an extensive orchard of Apples on the borders of Devonshire, the trees in which are more remarkable for their clothing of cryptogamic plants than for their healthy appearance or crops of fruit, says the "Apples den't get mucked up with dirt when knocked or shook off the tree on to grass," The other reason is, that the grass affords a useful grazingground for stock. This has some force when the orchard is attached to a cottage or small holding where there is possibly no pasture; but on an ordinary farm, with the usual proportion of feeding-ground, it is not worth consideration in the face of the injury resulting to the trees. That permanent injury does result from growing

trees in grass, unless a space is kept clear round the stems, has been repeatedly proved, the continual competition between the roots of the grass and those of the trees for plant food and moisture in the soil is greatly to the disadvantage of the trees. Close cropping with all its risks of root injury is preferable to this, as can be seen in almost any of the market gardens around London, where fruits are grown in conjunction with vegetables or flowering plants.

Attempts have been made at times on the part of the land-owners or tenants to renovate some of the orchards, but it has generally been dene in such an unsystematic or half-hearted manner that little good has resulted. A few old trees have been felled, the roots partly removed from the soil, and the young trees planted in the same places. This in itself is bad enough; but to complete the mischief, the trees have often been left unprotected until seriously barked by hares or cattle, or tied so securely to stakes that in a year or two the bark has been as effectually "ringed" as if that operation had been the object of the planter. When the results have been seen at the end of five or ten years, it has been rightly assumed that money and labour had been thrown away in such "renewals," and so the neglect has gone on again unchecked,

It is a serious matter, for it represents in the five counties alone something like 50,000 acres of good land worth an average rent of at least £1 per acre if well cultivated, and capable of being made to yield at the lowest estimate a total profit of a quarter of a million sterling to the occupiers, which under present conditions is little better than waste land. Nothing but a thorough system of renovation will ever effect any permanent good, and this will necessitate a considerable expense. To restore the majority of existing trees to healthy fruitful condition is almost impossible; the simplest and most satisfactory way would be to destroy them and provide for new plantations. In some cases, the present orchards are in very unsuitable situations, and new sites are desirable; but apart from that, it is preferable in every way where practicable to select fresh ground. If this is not possible, the plan I practise and recommend, where a proportion of the trees afford some fruit, and it not wished to sacrifice the whole at once, is to grub up one half at a time, clear the ground thoroughly of roots, give a heavy dressing of manure, dig or plough it in, and crop with vegetables for a year, then plant with standard and dwarf Apple-trees, and at the end of five years serve the other half in the same way. But in an ordinary way, if the plan is adopted of including dwarf trees on the Paradise with the standards, the whole of a worthless orchard can be treated in this manner at once, as the dwarf trees in a short time will give the supplies needed for present use.

The great question here comes, who is to bear the expense of the work? and this has been the great obstacle to improvement, and is likely to continue so, unless some understanding is effected between landlord and tenant. Where land has depreciated so much in value, and income proportionately decreased, it is scarcely reasonable to expect the owner to bear it all. On the other hand, the tenants regard it as an improvement to the property, in the advantages of which they may have only a temporary share. Perhaps the best way is for the landlord to take the initiative, and endeavour to make an agreement that shall be equally fair

and satisfactory to both sides. This has been done in the following ways, and either of the first two might well be extended: 1st, the landlord finding all the trees, and the tenaut undertaking the labour of land-preparation, planting, and subsequent attention; 2nd, the tenant providing both trees and labour, but with an agreement that at the termination of his tenancy he shall receive compensation based on valuation from the incoming tenant or landlord; and 3rd, the tenant supplying trees and labour, but the former remaining his own property, to be disposed of as he may determine, but the land-owner not to be liable for compensation. The last is the least satisfactory, and has in some cases resulted in very harsh proceedings, for if a difference should arise between the landlord and tenant, the latter, unless he holds a lease, may be compelled to quit without realising any return for his labour and expense.

On the other hand, a careless tenant may allow his plantation to become a disgrace and danger to neighbouring orchards. In the other cases the landlord has some control over the cultivation, as it is part of the contract that the

trees shall be properly attended to.

Thoughtful men who are interested in horticultural or agricultural questions of the day cannot but recognise that with the enormous demand for Apples there is ample room for increasing our own supplies-but these must consist of good fruit only; and wherever planting is undertaken, proved varieties only should be selected. The poor and damaged fruits being constantly put on the markets from neglected orchards bring down the prices, injure the trade, and convey very erroneous ideas of the returns to be realised from good fruit. A Planter.

NEW OR NOTEWORTHY PLANTS.

CYPRIPEDIUM CRAWSHAWÆ, n. sp.

Some time ago, Messrs. J. Charlesworth & Co., of Heaton, Bradford, received from the Shan States a few plants of a quite new Cypripedium, which after the manner peculiar to many good things, did not readily bear travel. The plant which I have seen somewhat resembles C. Parishi in growth, but the leaf aud size of the plant are more those of C. Charlesworthii. The leaves are, however, much more fleshy than those of that species, and bright green above, and entirely greyish-green beneath, the plant in no part exhibiting the purple markings usually seen on C. Charlesworthii. The collector's letter and a fine dried flower have now been forwarded. The collector says: "It is an entirely new Cypripedium. The flower-stalk is pale green and hairy; the flower is shaped like Cypripedium Charlesworthii, but it is larger, and the purple markings are entirely absent. In this the upper sepal is pure white, with a pale greenish blotch at the base, and a very slight tingo of the same colour at the tip. The petals, lip, and lower sepal are entirely of a pale greenish-yollow colour—my natives describe this as "wa-pyan-byan"—a seft yellow. The whole flower is very glossy, and I consider it a much finer thing than C. Charlesworthii." The dried flower sent seems to bear out the collector's statement exactly. It may roughly be described as resembling C. insigne Sanderæ in colour, but with more of the form of C. Charlesworthii. In size, however, it is superior to both. Mr. Charlesworth wishes it to be dedicated to his sister. James O'Brien.

ORCHID NOTES AND GLEANINGS.

ODONTOGLOSSUM INSLEAYI.

This plant greatly resembles O. grande in its pseudo-bulbs and foliage, the leaves being longer. The scape rises from the base of the leaves, and is

erect. A plant now in flower, at the Botanic Garden, Edinburgh, is carrying fourteen flowers, the sepals and petals being pale yellow in colour, with chestnut-brown bletches and markings the lip of a bright yellow, with reddish spots, while the column bears the distinguishing pair of horns of reddish-chocelate celeur. It enjeys a position at the coel end of the Cattleva-house, and, flowering late in the season, is decidedly attractive. Several varieties of this species are in cultivation distinct from the type in their broader sepals and petals, or in their colour, the best known of which is perhaps O. Insleayi spleadens. It is a native of Mexico, and was first introduced by Mr. Barker in 1839. R. L. H.

LÆLIA ALBIDA.

This pretty winter-flowering Orchid seems to have been flowering with exceptional beauty this season, if we may judge by the fine examples sent by various correspondents. From Joseph Broome, Esq., of Llandudno, comes a graud inflorescence, the flewers of which were unusually large, the sepals and petals cream-white, the apex of the lip light rose, central keels orange colour. From Walter C. Walker, Esq., Winchmore Hill, the fine L. a. var. Stebartiaua, with the sepals and petals tipped with rose-purple; and L. a. var. Walkeri, a still finer flower in the same way. Another fine form, with rose-tinted sepals and petals, is sent by Mr. M. J. Watts of Clifton. L. albida is a very floriferous plant, and with proper management it may be grown in an ordinary greenhouse or conservatory.

THE ROSARY.

CLOTH OF GOLD ROSE.

"WILD ROSE" did well, in a recent issue, to call attention to this hitherto unexplained mystery once more. Before the advent of Rose Maréchal Niel, Cloth of Gold was comparatively common. I made many pilgrimages to see notable specimens in East Anglia, huge specimens, many of them covering gable-ends and sides of mansions, and other bare spaces. The variety was also met with at times in the open, as large bushes. Occasionally, too, it was allowed to climb up the stems of trees, or to form tangled thickets in warm nooks in woods. But whether as cause and effect, or by a mere coincidence, scarcely had the Maréchal Niel made his début in our gardens, than the planting of Cloth of Gold became less frequent, and now this Rose seems to be in danger of extinction. Certain it is that the climate of this country is unchanged, whilst all this curious and mysterious change was taking place, and our admiration for golden Roscs has not become less ardent, but the one has paled before the rising popularity of the other. And the probability is, that where the Cloth of Gold grew and bloomed in years long age it would do equally well to-day.

The old veteran Cloth of Gold Roses perished often through reckless slaughter, as pointed out by "Wild or through inadvertent cutting-back, severe pruning, or frost injury. Possibly your correspondent was in error in describing a Cloth of Gold Rose with a stem 15 inches in diameter. [Circumference was intended. Ep.] But a point should be made of the size and age of the Cloth of Gold or other golden or other Rese, as showing their capabilities of withstanding severe weather for many years. It is largely true that the bigger, the older a Rose-tree, and the hardier, and also the more floriferous. Hence, in many cases, no sooner was the veteran Cloth of Gold cut down, by design or accident, than then its glory departed, either by slow degrees or suddenly. The concentration of vital force into the few new growths sent the Rose shoets off into fishing-rod lengths, sappy, and full of pith, and these ripening imperfectly

would easily be injured by frost.

The stupid practice of cutting back old Toa or Noisette Roses almost to the ground-line is responsible for the loss of many a venerable plant; and even when that does not immediately follow, the plants are shorn of their beauty. On the heels of such a practice fellows a struggle for life, rather than a revival of health; and the younger and smaller shoots being more tender than the ancient stems that

were cut away, hence a general decline in vigour sets in. This useless destruction of the aged Roses left the more tender parts of the plants several feet nearer to the ground, thus probably reducing them to more degrees of cold than prevails 10 to 20 feet higher. Hence, after severe pruning, natural or artificial, it takes some of the tenderer Roses years to regain their normal degree of hardiness. This fact is evident by the lesses among Maréchal Niel as well as Cloth of Gold and other Roses. The effect, too, of altitude on the hardiness of Roses has not received the attention it deserves, for thousands of plants of Maréchal Niel have been killed to the ground line; while tall etandards, and those worked high on Dogroses, The Glory, Banksian, or climbing Roses on high walls or up trees, have escaped unhurt. D. T. F.

SEDUM SEMPERVIVUM.

This new introduction from Asia Miuor, found by Mr. Siehe of Mersina, is a pretty Sempervivum-like Sedum possessing cochiueal red flowers, which are produced in great abundance, see fig. 7, p. 19, which shows the plant of its natural size. It is a plant well adapted for carpet-bedding, and everyone who has seen it is surprised at the beauty of the plant. U. Dammer. [This can hardly be called new. It is described at length by the Editor in our volume for December 14, 1878, p. 750.]

NOVELTIES OF 1897.

(Continued from p. 2.)

Messrs. F. Sander & Co., St. Albans, out of their importations have flowered Eriopsis Helenæ, a pretty species with yellow and purple flowers; Luddemannia Sanderiana, a very distiuct novelty; Maxillaria elegantula, yellow and purple; M. dichroma; the singular looking Lycaste Mooreana, and the fine L. Skinneri pulcherrima, and L. S. rubella; also Leptotes nana, the singular white Dendrobium Gratrixianum, and the floriferous D. Baucroftianum, said by some to be a form of D. speciosum, but quite a slender plant. Of fine varieties of showy species, Messrs, Sander flowered Cattleya Mendeli fimbriata, C. Shroderæ "Queen Empress," C. Mossiæ "Empress of India," and C. M. rubens. Of their hybrids, the best are Cattleya × Dominiana "Empress," and L.-C. × "Our Queen," shown at the Royal Horticultural Society on June 15; and among their introductions to the Cypripediums are C. × Mrs. D. Solomon (Lathamianum aureum × Spicerianum); C. × Mrs. E. Uihlein (villosum aureum × Leeanum giganteum); C. × concovillosum, C. × Oakes Ames (Rothschildianum × ciliolare), C. × Clement Moore (Dauthieri × Lecanum), C. × Rodolfiana (Harrisianum x insigne Sanderæ), and a number of others. Also in Messrs. Sander's list for the year are Lælio-Cattleya × "Fire Queen," glossum grande var. Pittianum, Phaio-Calanthe × Brandtiæ, Sobralia Holfordi, Lælio-Cattleya × amœna, Gongora Sanderiana, Zygopetalum venustum, Warrea grandiflora, &c.

Messrs. Hugh Low & Co., Clapton, have been specially fortunate in flowering good novelties during the past year, the best of theirs being Odontoglossum × excellens Lowie, and O. crispum "Queen Victoria," two grand varieties. Cattleya Mossico, "In Memoriam Richard Curnow," perhaps the largest and best C. Mossiae of the year; C. Hardyana, Low's variety, very richly coloured; Cypripedium × Mrs. E. V. Low, a chaste novelty; Leelia pumila, Low's variety, lavonder-blue tinted; and Calanthe Veitchi alba.

Messrs. W. L. Lewis & Co., Southgate, have made a specially good mark this year through the number of grand varieties which have flowered out of their superb strain of