PLANTING STREET TREES.

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THE VALUE OF STREET TREES.

THE presence of trees in the thoroughfares of towns and cities adds no less to the comfort of the inhabitants, by producing a certain amount of shade in the summer and protection during the winter, than to the adornment of the streets. In addition, they become, on account of the peculiarities of their plant economy, one of the purifying agencies of our cities during at least the summer months of the year. Under these various circumstances, tree planting in public streets is recognised as one of the duties incumbent upon all local authorities claiming to be up to date.

In the laying out of the ideal cities of the future, ample and proper provision will no doubt be made for the judicious use of trees in their streets, as well as in the roads leading to and from them. Unfortunately, from the haphazard manner in which streets have in the past been laid out in the majority of towns, there is hardly enough provision made for ordinary vehicular traffic, let alone for the planting of trees in the footways, and as a natural consequence trees do not take the place they ought in town ornamentation. When it comes to a question of æsthetics (which, after all is the most apparent point in favor of street trees) against public safety or even convenience, there can be no two opinions as to which must give way; hence, where streets or footpaths are narrow, trees will not be planted.

NECESSARY REGULATIONS.

Most local authorities have their own regulations as to the minimum width of streets and footpaths in which trees may be planted. In Cardiff no street in the residential quarters less than 45 ft. wide is allowed to be planted with trees, while in the business parts the footways are generally so narrow that, even where the streets are considerably wider than 45 ft., it has never been thought advisable to further impede foot-traffic by planting trees. Within the last ten or twelve years, several streets, originally made with private dwellings, have had these gradually converted into business premises, and in a great many instances the street trees have had to be removed at the request of the tradesmen, who considered that they interfered with their business. Had the footways between their premises and the carriageways been two or three times wider than they

were, the probability is that they would have regarded such trees more as an advantage than otherwise.

Even in the residential parts of a town it is not advisable to plant trees in the streets where there are no front gardens between the pavement and the dwellings, as very often the drawbacks arising from their presence under these conditions are much greater than the advantages.

The distance at which to plant tree from tree in public streets is often a matter which is decided by the individual taste of those officials responsible for carrying out this work. On the Continent it is, I understand, the rule to have them planted as closely together as possible, but in this country, where the heat and sunlight are not so intense during the summer and where shade is not such a desideratum, there is not the same necessity for close planting. It has long been the rule in Cardiff to plant the larger growing kinds of trees at 60 ft. apart and the fastigate forms at half that distance. When planted at these distances apart they should not be placed directly opposite each other on either side of the street, but alternated, as in this way the distance from tree to tree does not appear to be so great as it really is. Owing to the presence of gas and water pipes, and other impediments, it is impossible to keep the distance exactly uniform, but these distances are approximate.

CHOICE OF TREES SUITABLE FOR STREET PLANTING.

Judging from the paucity of species used in a great number of towns, there would appear to be but few kinds of trees suitable for street planting. This, however, is fortunately not the case, as there is in reality a great number of different species and varieties of trees most suitable for planting in towns, especially in the southern counties.

As a rule only deciduous trees are utilized, as they are better adapted for town work, on account of the yearly shedding of their leaves, than evergreens usually are. In towns where smoke is not one of the important factors to be taken into consideration there are a number of Conifers which would be found to be exceedingly useful for street planting where plenty of room could be given to them. In the Garden Cities recently laid out I understand these play a very important part in beautifying the streets and roads. On the other hand, as showing the pernicious effects of smoke upon this class of tree, it may be as well to point out that it is almost impossible to find a single specimen of any age growing in London. Where Pines and Cedars once flourished, in the vicinity of Chelsea, no trace of them is to be found to-day. I mention this to show that where other conditions may be favourable to Conifers it is useless attempting to grow them where smoke has to be contended against.

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While the question of soil and locality must always necessarily have a very considerable bearing upon the number of species from which a selection can be made, the greatest determining factor is probably the kind of youthful inhabitant which has to be reckoned with. There are a great many kinds of trees which, in addition to bearing good foliage, produce an abundance of beautiful flowers, and afterwards equally showy fruit. If these were only allowed to grow and develop without being wilfully damaged by youths and children, they would not only beautify our streets, but also add greatly to their interest. A great number of species of Thorns, Pyrus, and Prunus, as well as the flowering Ash, Horse Chestnut (white and scarlet), Catalpha, Laburnum, etc., come under this category, all of which would do well if planted in the suburban parts of towns.

Alas! notwithstanding our much vaunted educational systems, the great majority of our town youth are apparently lacking in the fundamental principle of all true education, reverence, and thereby fail to appreciate the efforts of city fathers in trying to beautify the streets with the rarer trees. In this country young people seem to regard flowers and fruits, when growing in public places, as something to plunder, or as so many targets to be thrown at!

Besides flowering trees there are a number of different species, such as the Liquidambar, Copper Beech, Prunus Pissardi, and several forms of Acer, which, bearing red or variegated foliage, produce striking colour effects. If such flowering and coloured-foliage trees are not likely to be damaged by children, then the extra cost will be amply repaid by the pleasing effects they ultimately produce.

RESTRICTING THE GROWTH OF TREES.

In planting trees in public streets, it must always be borne in mind that the conditions under which they are to be grown are perfectly unnatural, and that their treatment must be in keeping with their artificial surroundings. Instead of permitting them to develop into timber or spread out their branches as far as they can, it is the object of those who have care of them to restrict their growth and expansion, and so keep them within bounds. To carry out this (entailing an annual pruning) adds considerably to the upkeep of street trees, hence it is a wise economy to use fastigate forms wherever they are suitable.

A FEW PRACTICAL DETAILS.

There are some matters connected with this subject (apparently trivial in themselves) about which I feel it necessary to make a few brief remarks.

Trees bearing stunted growths (unless planted with a direct object)

should never be used, for the conditions under which they must necessarily be grown in streets is not conducive to their growing out of any such defects. Free growing, clean, healthy trees are the best to plant under all circumstances, but more especially is this so in the case of street planting.

Again, trees for this work should be planted as early as possible after the fall of the leaf, so that the soil immediately around their roots may be enabled to get the full benefit of the winter rains. When the soil on the site where a tree is about to be planted is not good, it is in the long run the best economy to clear it out and put in fresh loam. Whenever and wherever possible iron gratings should be used for covering over the soil above the roots in preference to paving stones or even gravel. The use of gratings enables moisture and air to reach the young roots, without which it is impossible for trees to flourish.

We never find it wise to plant any tree under 10 ft. in height, nor with less than 6 ft. of a clear stem.

In addition to providing newly planted trees with adequate support, it is invariably necessary to protect the stems from damage. It is the provision of this protection, together with the iron gratings just alluded to, which makes tree planting expensive.

In quiet county towns trees are sometimes sufficiently protected by means of three stout stakes placed at equal distances around and at about 18 in. from the base of the stem. These are joined together at about 5 ft. 6 in. from the ground, and the point of attachment used as the support to which the tree stem is securely fastened. Such a cheap form of protection cannot be used in many towns, hence the necessity for providing iron tree-guards, which cost from 15s. to 35s. apiece.

The last point in connection with this practical phase of the question which I wish to allude to is the necessity of never allowing a permanent branch to develop from the tree until there is at least a clear stem of 12 ft. If branches are allowed to grow out lower down the stem than this they are sure to interfere with ordinary vehicular traffic.

LIST OF SUITABLE TREES.

The following is a short list of, and a brief commentary upon, some of the trees generally used for street planting.

The Oriental Plane is without doubt the ideal town tree, as it is for many reasons better able to withstand the hard usage which trees growing in populous districts have invariably to put up with. It bears large glossy leaves, from which the dust and soot are washed off after every shower of rain, and it thus retains its freshness for a good period of the year. It sheds its bark every few years, and so gets rid of its soot-clogged

outer coat, for which it is all the healthier. The Plane bears any amount of pruning, a fact which stands it in good stead as a street tree.

While the typical English Elm is not suitable for planting in towns, owing to its being a shallow rooter, and its large branches being liable to snap off at their base without the slightest warning, even on a fine day, yet there are two or three varieties of it, and a nearly allied species (the Wych Elm) which are very well adapted for street work. These are the Cornish Elm, the Cork Elm, and the fastigate Wych. These trees do well in the vicinity of the sea, as may be noticed in this neighbourhood.

Where the soil is of a heavy, clayey nature, few trees do better than Poplars. A number of different species are inclined to make very strong growth, but as they stand pruning remarkably well this does not preclude their use in towns. The fastigate forms, however, are the best where they can be used, as they do not require pruning. The two most useful species are *Populus nigra* var. *fastigata*, the Lombardy, and *P. alba* *Bolleana*. These are well adapted for growing in a long, straight road, at the end of which there is a pile of fine buildings or other imposing background.

The Turkey Oak and the Scarlet Oak are suitable subjects for wide streets where they can get plenty of freedom. One point in favour of the latter species is the fact that in the colder, drier districts of this country its leaves take on a beautiful scarlet colour in the late autumn, which makes it a very beautiful object to look upon.

Among the Sycamores (*Acers*) there are a great variety of most useful trees admirably suited for street planting. Some of these have yellow, some variegated, and others copper and red foliage, and all are easy to grow. One word of warning regarding the pruning of these is needed. As the sap rises so early in the year in this genus, it is well, when they require any pruning, to put this work in hand immediately after the leaves have fallen; otherwise, if left later, the cut stems bleed very profusely.

The *Ailanthus* (the Tree of Heaven) is a very ornamental tree, which in suitable quarters attains a fairly good height. It bears very large leaves of the Ash type, and is well worth growing as a street tree.

The Birch we find useful in streets where we do not want very robust growing trees. Its drooping habit, together with its silver bark, give it a picturesque appearance, either during the time it is in leaf, or when denuded of foliage in the winter.

The Mop-headed *Acacia* is one of the best species for growing in places where only trees of the most restricted growth can be tolerated.

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