1. THOUGHTS ON SCHOOL GARDENING

AIMS AND PRINCIPLES

There are many so-called school garden books in the market, but the large majority of these confine their attention almost entirely to the cultivation and raising of crops. The connection of the garden with the school is usually omitted or only briefly touched upon. It is, therefore, the aim of the present work to treat the subject from an educational point of view. Gardening operations, as such, will not be described although much gardening information will be given.

Personally I find that fewer teachers fail from lack of horticultural knowledge than from the want of knowing how and in what ways that knowledge may and should be used as a means of education. The real value of school gardening is, as yet, hardly appreciated, chiefly perhaps because it is looked upon, not as an educational handwork subject, but as a means of imparting knowledge of a country pursuit. There are thousands of schools without much hope, under present conditions, of having woodwork or other manual classes, to which school gardening could be made to appeal, provided the subject was put upon a different footing and had a different outlook.

From experience in teaching both woodwork and school gardening I can, without hesitation, maintain that
school gardening may be made as valuable an educational subject as woodwork, and that, too, without much technical knowledge on the part of the teacher. As a matter of fact I find boys like gardening even better than woodwork. It is well, therefore, at the outset further to consider the aims and ideas that should underlie school gardening.

School gardening is not necessarily gardening, any more than cardboard work in school is box-making; or woodwork carpentering. Gardening should be a school subject, taken as far as possible on the lines of other school subjects, notably woodwork. The latest principles of teaching woodwork applied to school gardening would help to lift this subject into its fit and proper place. It is in itself a most interesting subject and of utilitarian value. So far, the latter idea has been the chief aim and object of the teaching. In some quarters, however, the subject has been made unduly to correlate with the work of all classes and in all sorts of subjects simply for the sake of showing correlation. While it is important to realise how much of the school work can be interwoven with the garden work, the subject must not be taught for the sake of correlation. Such an aim would be extreme, and should be deprecated. Often, too, less is thought of the educational value of the subject to the children, than of what “the man in the street” will say, if perchance he look over the garden wall and see a line out of the straight, a boy holding a tool wrongly, a few weeds growing on a plot, or the least thing amiss.

Much may be learnt through our mistakes and hence a few things out of the straight, or a crop of weeds in a particular spot, may have, if rightly used, an immense
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educational value. Hence I would urge that in dealing with school garden work all idea of pandering to the man in the street should be ignored—rather, get him to take a walk round the garden with yourself as guide and then quietly point out some of the things that are being done. Schoolmasters, it has been stated, should be masters on their own quarter-decks. This applies particularly to gardening. A schoolmaster should not mind if he is not an expert at gardening; he should be an expert at teaching, and it is the teaching that is the thing.

It has already been mentioned that the methods of teaching woodwork might advantageously be applied to the teaching of school gardening, and, therefore, I will first go briefly over the ground dealing with this matter. In handicraft work, except perhaps gardening, the work throughout has to be the scholar's own production—he is told practically nothing, but by means of clever and skilful questioning he is led to discover things for himself, and further to describe and explain things himself, which previously he had little or no idea of doing. In other words the successful teacher of to-day adopts a suggestive method in dealing with his school subjects. He expects the pupil to take up the suggestions, develop ideas, discover facts, form judgments, and so make these things part and parcel of himself. What then the pupil has done for himself and of himself, he is likely to make part of himself for use on future occasions. It is, however, not the exact reproduction of an exercise worked that is of importance, but the means of finding out things for himself concerning an exercise. A child thus trained can be relied upon in other situations to exercise his faculties and work for himself.
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There are occasions when telling must be resorted to, when facts are dealt with which the pupil has no acquaintance with or no means of finding out for himself. Personally I find that there are very few facts that a scholar cannot be made to discover for himself. If this attitude of making the scholar rely upon himself is adopted with all the school subjects, it will not only develop self-reliance, but a number of other good qualities as well, among which we may name, observation, perseverance, judgment, a trained reason, and a knowledge of how to acquire further information.

To some, such a method of teaching as has been outlined may seem a little absurd, but I would say, give it a fair trial before condemning it. At first it may prove difficult for a teacher to avoid telling or showing the children every new step or alteration needed—and what is more, it may mean at first more labour and more care on the part of the teacher—but if persisted in, it will later be much easier and pleasanter for him and the results achieved infinitely more pleasing. For instance, suppose a drawing lesson is proceeding dealing with a dandelion leaf. Some teachers at once make sketches on the blackboard, and give full, very full, instructions to the scholars as to what they will see and how they should proceed. The result of such a lesson is more often than not a matter of disappointment, for after all the explanation and instructions have been given a large proportion of the class make fundamental mistakes in their drawings because they have not really seen—it is the teacher who has seen. A method of teaching such as this is frequently employed lesson after lesson and in all sorts of subjects with the
consequence that the children learn to rely upon the teacher to a very large extent.

A much better plan is to let each child have a leaf and then go round the class, talk to one scholar here, another there, asking each in turn pertinent questions—“Why do you do this, that or the other thing?” “What does this part represent?” “Compare this line or part with the original.” “If this line on the object were continued, in which direction would it go?” “Does your line representing this go in a similar direction?” The scholar thus catechised is perforce obliged to look for himself and will thus often be led to see things which he never saw before. The teacher must not only make the scholar see things for himself but see also that he expresses them himself. The fact is that while the scholar is thus employed he is learning the habit of depending upon himself. It is said that “A bundle of habits makes the character.” If the teacher can get the scholar to form good habits, he is helping in the great work of moulding the scholar’s future welfare—a matter of supreme importance.

In taking a class by this method do not try to cover too much ground with each child at first, just give two or three suggestions and pass on to another child. This will enable the teacher to get round his class probably once or twice during the lesson. In a later part of the lesson, or on a future occasion, new steps may be added to the progress of each. What a scholar learns in this way he will be able to make use of himself in his next drawing lesson. In some schools marks are given for the finished drawing. These marks are usually awarded by the teacher. Where such is the case a change might be tried by making the scholars value their own work.
Thus suppose 10 marks to be the maximum for the drawing of the dandelion. A scholar is asked to say how many marks he considers his work worth, deducting, say, one mark for each pronounced fault or bit of bad work. The boy after some consideration thinks his effort is worth six marks. You then ask him for what he has taken off four marks and for this he must show his reason. If the teacher thinks the marks satisfactory, they are allowed. The value of this system lies in the fact that again the scholar has to depend upon himself, and further than that he learns to find out wherein lie his own weaknesses and faults, and these recognised there is hope of efforts being made to improve on future occasions. This method of marking should appeal especially to handicraft subjects, such as modelling, woodwork, etc.

A woodwork class may work somewhat as follows—after the first few lessons.—Before a scholar does any practical work he makes a drawing. This drawing should, in the case of ruler work, be to scale and English or Metric measurements may be employed. The drawing may be made in various ways so as to ensure a thorough understanding of drawings and their meanings. Thus, a model is given to a boy who measures it, draws a plan and elevations, etc. Isometric and oblique sketches or drawings may also be required of the model or of some part of it. Sometimes an oblique view of an object, dimensioned, is given to a scholar from which he is required to draw plan and elevation. At another time a sketch of plan with data of other measurements is given and an elevation asked for. The drawing completed, the amount and kind of material from which to make the object is written down. For some models
a rough sketch of how the wood to be used may be set out to best advantage may be asked for. While the boy is making the model the teacher may question him concerning the wood he is using, the tools employed, precautions to take, etc. The questions naturally would be such that the scholar could answer from his own store of knowledge or observation. For example, suppose a piece of American White Wood is being used. The boy could tell the colour, freedom from knots, width of plank, and therefore from these facts, approximate diameter of tree, few branches low down, hence grown in a forest; ease of working, nice finish, grain, annual rings. If the facts concerning the formation of annual rings are known, then by comparison with specimens of other woods such as yellow deal it can be seen that the annual rings are all about the same distance apart in width—unlike deal. This knowledge should show that American White Wood probably grew in a country where the amount of sunlight was about the same each year. A little questioning in geography would soon show that the wood is likely to be grown in America. Thus it will be seen that a very large part of the story of American White Wood has been developed from the boy’s own observational and reasoning powers. A scholar so taught is likely to try to find out from other sources more about this wood. Work of this nature must make a scholar think—and think to some purpose too, and doing this gives him what may be termed “an attitude of mind.” His judging as well as his observational faculties are well exercised. It is this attitude of mind that means so much in educating a scholar. The same principles can be applied with ease to school gardening, if only the work is undertaken with
the intent to make it educational and not for the purpose of producing gardeners. School gardening may succeed to some extent even if worked on these latter narrow lines, but how much more might it succeed if conducted on a sound educational basis? The gardens exist for the scholars, not the scholars for the gardens. I shall endeavour in the following pages to put forth a number of suggestions, which I hope will appeal strongly to teachers, and so lead to school gardening (where facilities exist for its adoption) taking its fit and proper place as one of our leading educational subjects. There is no question of boys liking it, they simply revel in it. It is a “live” subject in which they can see tangible results and, therefore, they are the more keenly interested. It forms a break from the ordinary school curriculum and is on that account very welcome. Teacher and taught meet in a different atmosphere (often in more than one sense) and on slightly different terms. This change is beneficial to master and pupil alike. There is not the need for the strict silence of the schoolroom. Further, gardening is a sort of mutual work appealing strongly to the taught. While thus the boy is gaining much educationally in connection with his garden work he should at the same time gain much useful and practical knowledge of new methods and aims in culture and garden practice, so that he may go home and describe to his father how we do it in the school garden, and the different results therein achieved, and hence by this means the gospel of the best ways of cultivation may be slowly but surely spread. The boy has an open mind, while that of his father is often narrow and fixed—for the father prefers to cultivate as his father before him cultivated—the boy by means of the school garden
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if properly worked will in course of time alter this state of affairs.

Another feature of school gardening is that it is likely to be an inducement to take up gardening as a hobby by many of the scholars in after school days, and if only a small proportion of the scholars follow up the subject in this spirit, it will have justified its existence as an integral part of the school curriculum. Too often, now-a-days, boys no sooner leave school than their whole minds are fastened upon sport—the watching and talking of the play of others. When this happens it is not long ere the boy deteriorates. The daily occupation of many scholars after leaving school is simply to attend to a machine, and thus in time they become narrow and mechanical: deterioration again. Nothing is better than to provide such youths with a healthy and profitable hobby such as gardening.

In the future development of small holdings school gardening may well take a useful place.

These then are some of the principles underlying this subject which it is well to bear in mind in connection with it.

The ideas and suggestions embodied in this book are not meant to be rigidly followed—they are intended to give lines of thought so that school gardening becomes a schoolmaster's subject rather than a gardener's subject.

"It is the spirit that giveth light, the letter which killeth."
2. “A BEGINNING”

The school garden should be situated as near the school as possible. It will thus be much more useful and valuable than if at a distance.

The size of the garden cannot always be regulated, but if possible it should contain sufficient land for plots for the scholars: also a Common Plot, an Experimental Plot, a Fruit Plot and a Flower Border. The main consideration of course will be the plots for the boys. These should be, as far as can be arranged, long and narrow, say 10 yards by 3 yards. This shape allows a larger number of rows than is possible with a piece of ground of shorter length and greater width. One or two boys may work each plot. If two boys work a plot, then a senior and a junior boy might well work together. Fourteen boys working on seven plots can be supervised better and with greater ease than the same number of boys working on separate plots.

A plan of a school garden as laid out under the direction of the writer is shown. This garden was measured, pegged out, paths made and edging put to the main pathways by the boys themselves. The work of laying out the ground would not often come in the life of the school, but when it does come I think the scholars should take their share in it—it thus becomes essentially “their garden.”

The Common Plot, as its name implies, is a piece of ground set apart for work in common or for practice work. It may be used for both purposes. For instance, celery and runner beans may not be grown by