



Not wholly in the busy world, nor quite
Beyond it, blooms the garden that I love
Tennyson

AMATEUR GARDENCRAFT

A BOOK FOR THE HOME-MAKER
AND GARDEN LOVER

BY

EBEN E. REXFORD

WITH 34 ILLUSTRATIONS

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FOREWORD

The home that affords the most pleasure to its owner is the one which is largely the result of personal effort in the development of its possibilities. The "ready-made home," if I may be allowed the expression, may be equally as comfortable, from the standpoint of convenience,—and possibly a great deal more so,—but it invariably lacks the charm which invests the place that has developed under our own management, by slow and easy stages, until it seems to have become part of ourselves.

Home-making is a process of evolution. We take up the work when everything connected with it is in a more or less chaotic condition, probably without any definite plan in mind. The initial act in the direction of development, whatever it may be, suggests almost immediately something else that can be done to advantage, and in this way we go on doing little things from day to day, until the time comes when we suddenly discover what wonderful things have been accomplished by our patient and persistent efforts, and we are surprised and delighted at the result. Were we to plan it all out before beginning it, very likely the undertaking would seem so formidable that it would discourage us. But the evolutionary process takes place so gradually, as we work hand in hand with that most delightful of all companions, Nature, that work becomes play, and we get more enjoyment out of it, as it goes along, than it is possible to secure in any other way if we are lovers of the beauty that belongs about the ideal home. The man or woman who sees little or nothing to admire in tree, or shrub, or flower, can have no conception of the pleasure that grows out of planting these about the home—*our* home—and watching them develop from tiny plant, or seed to the fruition of full maturity. The place casts off the bareness which characterizes the beginning of most homes, by almost imperceptible degrees, until it becomes a thing of beauty that seems to have been almost a creation of our own, because every nook and corner of it is vital with the essence of ourselves. Whatever of labor is connected with the undertaking is that of love which carries with it a most delightful gratification as it progresses. In proportion as we infuse into it a desire to make the most of any and everything that will attract, and please, and beautify, we reap the reward of our efforts. Happy is the man who can point his friends to a lovely home and say—"I have done what I could to make it what it is. *I* have done it—not the professional who goes about the country making what he *calls* homes at so much a day, or by the job." The home that somebody has made for us never appeals to us as does the one into which we *have put ourselves*. Bear that in mind, and be wise, O friend of mine, and be your own home-maker.

Few of us could plan out the Home Beautiful, at the beginning, if we were to undertake to do so. There may be a mind-picture of it as we think we would like it to be, but we lack the knowledge by which such results as we have in mind are to be secured. Therefore we must be content to begin in a humble way, and let the work we undertake show us what to do next, as it progresses. We may never attain to the degree of knowledge that would

make us successful if we were to set ourselves up as professional gardeners, but it doesn't matter much about that, since that is not what we have in mind when we begin the work of home-making. We are simply working by slow and easy steps toward an ideal which we may never realize, but the ideal is constantly before us to urge us on, and the home-instinct actuates us in all our efforts to make the place in which we live so beautiful that it will have for those we love, and those who may come after us, a charm that no other place on earth will ever have until the time comes when *they* take up the work of home-making *for themselves*.



PILLAR-TRAINED VINES

The man or woman who begins the improvement and the beautifying of the home as a sort of recreation, as so many do, will soon feel the thrill of the delightful occupation, and be inspired to greater undertakings than he dreamed of at the beginning. One of the charms of home-making is that it grows upon you, and before you are aware of it that which was begun without a definite purpose in view becomes so delightfully absorbing that you find yourself thinking about it in the intervals of other work, and are impatient to get out among "the green things growing," and dig, and plant, and prune, and train. You feel, I fancy, something of the enthusiasm that Adam must have felt when he looked over Eden, and saw what great things were waiting to be done in it. I am quite satisfied he saw chances for improvement on every hand. God had placed there the material for the first gardener to work with, but He had wisely left it for the other to do with it what he thought best, when actuated by the primal instinct which makes gardeners of so many, if not the most, of us when the opportunity to do so comes our way.

I do not advocate the development of the æsthetic features of the home from the

standpoint of dollars and cents. I urge it because I believe it is the *duty* of the home-owner to make it as pleasant as it can well be made, and because I believe in the gospel of beauty as much as I believe in the gospel of the Bible. It is the religion that appeals to the finer instincts, and calls out and develops the better impulses of our nature. It is the religion that sees back of every tree, and shrub, and flower, the God that makes all things—the God that plans—the God that expects us to make the most and the best of all the elements of the good and the beautiful which He has given into our care.

In the preparation of this book I have had in mind the fact that comparatively few home-owners who set about the improvement of the home-grounds know what to do, and what to make use of. For the benefit of such persons I have tried to give clear and definite instructions that will enable them to work intelligently. I have written from personal experience in the various phases of gardening upon which I have touched in this book. I am quite confident that the information given will stand the test of most thorough trial. What I have done with the various plants I speak of, others can do if they set about it in the right way, and with the determination of succeeding. The will will find the way to success. I would not be understood as intending to convey the impression that I consider my way as *the* way. By no means. Others have accomplished the same results by different methods. I simply tell what I have done, and how I have done it, and leave it to the home-maker to be governed by the results of my experience or that of others who have worked toward the same end. We may differ in methods, but the outcome is, in most instances, the same. I have written from the standpoint of the amateur, for other amateurs who would make the improvement of the home-grounds a pleasure and a means of relaxation rather than a source of profit in a financial sense, believing that what I have to say will commend itself to the non-professional gardener as sensible, practical, and helpful, and strictly in line with the things he needs to know when he gets down to actual work.

I have also tried to make it plain that much of which goes to the making of the home is not out of reach of the man of humble means—that it is possible for the laboring man to have a home as truly beautiful in the best sense of the term as the man can have who has any amount of money to spend—that it is not the money that we put into it that counts so much as *the love for it* and the desire to take advantage of every chance for improvement. Home, for home's sake, is the idea that should govern. Money can hire the work done, but it cannot infuse into the result the satisfaction that comes to the man who is his own home-maker.

But not every person who reads this book will be a home-maker in the sense spoken of above. It will come into the hands of those who have homes about which improvements have already been made by themselves or others, but who take delight in the cultivation of shrubs and plants because of love for them. Many of these persons get a great deal of pleasure out of experimenting with them. Others do not care to spend time in experiments, but would be glad to find a short cut to success. To such this book will make a strong appeal, for I feel confident it will help them to achieve success in gardening operations that are new to them if they follow the instruction to be found in its pages. I have not attempted to tell all about gardening, for there is much about it that I have yet to learn. I expect to keep on learning as long as I live, for there is always more and more for us to find out about it. That's one of its charms. But I have sought to impart the fundamental principles of it as I have arrived at a knowledge of them, from many years of labor among trees, and shrubs, and flowers—a labor of love—and it is with a sincere hope that I have not failed in my purpose that I give this book to

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THE LAWN: HOW TO MAKE IT AND HOW TO TAKE CARE OF IT

THE owner of the average small home seldom goes to the expense of employing the



professional gardener to do the work of lawn-making. Sometimes he cannot afford to do so. Sometimes skilled labor is not obtainable. The consequence is, in the majority of cases, the lawn,—or what, by courtesy, is called by that name,—is a sort of evolution which is an improvement on the original conditions surrounding the home, but which never reaches a satisfactory stage. We see such lawns everywhere—rough, uneven, bare in spots, anything but attractive in a general way, and but little better than the yard which has been given no attention, were it not for the shrubs and plants that have been set out in them. The probabilities are that if you ask the owner of such a place why he has no lawn worth the name, he will give one or the other of the reasons I have made mention of above as his excuse for the existing condition of things about the home. If you ask him why he has not undertaken the work himself, he will most likely answer that he lacks the knowledge necessary to the making of a fine lawn, and rather than experiment with it he has chosen to let it alone.

Now the fact is—lawn-making has nothing mysterious about it, as so many seem to think. It does not call for skilled labor. It need not be an expensive undertaking. Any man who owns a home that he desires to make the most of can make himself a lawn that will be quite as satisfactory, in nearly every instance, as the one made by the professional gardener—more so, in fact, since what we make for ourselves we appreciate much more than that which we hire made for us. The object of this paper is to assist home-makers in doing just this kind of work. I shall endeavor to make it so plain and practical that anyone so inclined can do all that needs doing in a satisfactory manner. It may not have that nicety of finish, when completed, that characterizes the work of the professional, but it will harmonize with its surroundings more perfectly, perhaps, and will afford us quite as much pleasure as the work of the expert.

If the house has just been built, very likely everything about it is in a more or less chaotic condition. Odds and ends of lumber, mortar, brick, and all kinds of miscellaneous building material scattered all over the place, the ground uneven, treeless, shrubless, and utterly lacking in all the elements that go to make a place pleasing and attractive. Out of this chaos order must be evolved, and the evolution may be satisfactory in every way—if we only begin right.

The first thing to do is to clear away all the rubbish that clutters up the place. Do not make the mistake of dumping bits of wood into hollows with the idea that you are making a good foundation for a lawn-surface. This wood will decay in a year or two, and there will be a depression there. Fill into the low places only such matter as will retain its original proportions, like brick and stone. Make kindling-wood of the rubbish from lumber, or burn it. Get rid of it in some way before you begin operations. What you want, at this stage of the proceedings, is a ground entirely free from anything that will interfere with grading the surface of it.

If the lot upon which the house stands is a comparatively level one—or rather, was, before the house was built—it is generally easy to secure a slope from the house on all sides, by filling in about the building with the soil thrown up from the cellar or in making excavation for the walls. If no excavation of any kind has been made—and quite often, nowadays, foundation walls are built *on* the ground instead of starting a foot or two below the surface,—a method never to be advised because of the risk of injury to the building from the action of frost in the soil,—it may be necessary to make the lot evenly

level, unless one goes to the expense of filling in. A slight slope away from the house-walls is always desirable, as it adds vastly to the general effect. Enough soil to secure this slope will not cost a great deal, if it does not happen to be at hand, and one will never regret the outlay.

If the ground is very uneven, it is well to have it ploughed, and afterward harrowed to pulverize the soil and secure a comparatively level surface. Do not be satisfied with one harrowing. Go over it again and again until not a lump or clod remains in it. The finer the soil is before seed is sown the better will be the sward you grow on it.

If the surface of the yard is *not* uneven, all the grading necessary can be done by spading up the soil to the depth of a foot, and then working it over thoroughly with, first, a heavy hoe to break apart the lumps, and then an iron rake to pulverize it.

I say nothing about drainage because not one lot-owner in a hundred can be prevailed on to go to the trouble and expense of arranging for it. If I were to devote a dozen pages to this phase of the work, urging that it be given careful attention, my advice would be ignored. The matter of drainage frightens the home-maker out of undertaking the improvement of the yard, nine times out of ten, if you urge its importance upon him. If the location is a rather low one, however, it is a matter that ought not to be overlooked, but it is not so important if the lot is high enough for water to run off speedily after a shower. If any system of drainage *is* arranged for, I would advise turning the work over to the professionals, who thoroughly understand what ought to be done and how to do it. This is a matter in which the amateur must work to a disadvantage when he undertakes to do it for himself.

If there are hollows and depressions, fill them by levelling little hummocks which may be found on other parts of the ground, or by having soil drawn in from outside. In filling low places, beat the soil down solidly as you add it. Unless this is done—and done well—the soil you add will settle, after a little, and the result will be a depression—not as deep as the original one, of course, but still a depression that will make a low place that will be very noticeable. But by packing and pounding down the earth as you fill it in, it can be made as solid as the soil surrounding it, and in this way all present and future unevenness of the soil can be done away with. It is attention to such details as these that makes a success of the work, and I would urge upon the amateur lawn-maker the absolute necessity of working slowly and carefully, and slighting nothing. Undue haste and the lack of thoroughness will result in a slovenly job that you will be ashamed of, before it is done, and so disgusted with, on completion, that you will not feel like doing the work over again for fear another effort may be more unsatisfactory than the first one. Therefore do good work in every respect as you go along, and the work you do will be its own reward when done.

It is impossible to put too much work on the soil. That is—you cannot make it too fine and mellow. The finer it is the finer the sward will be. A coarse, lumpy soil will always make an unsatisfactory lawn-surface.

Most soils will need the addition of considerable manure, and poor ones will need a good deal. To secure a strong, luxuriant stand of grass it is very essential that it should be fed well. While grass will grow almost anywhere, it is only on rich soils that you see it in perfection, and the ideal lawn demands a sward as nearly perfect as possible.

But I would not advise the use of barnyard manure, for this reason: It contains the seeds of the very weeds you must keep out of your lawn if you would have it what it ought to

be,—weeds that will eventually ruin everything if not got rid of, like Dandelion, Burdock, and Thistle, to say nothing of the smaller plants that are harder to fight than those I have made mention of. We cannot be too careful in guarding against these trespassers which can be *kept* out much easier than they can be put to rout after they have secured a foothold. Therefore I would urge the substitution of a commercial fertilizer for barnyard manure in every instance. Scatter it liberally over the soil as soon as spaded, or ploughed, and work it in with the harrow or the hoe or rake, when you are doing the work of pulverization.

If you do not understand just what kind of fertilizer to make use of, tell the dealer as nearly as you can the nature of the soil you propose to use it on, and he will doubtless be able to supply you with the article you require. It is always safe to trust to the judgment of the man who knows just what a fertilizer will do, as to the kind and quantity to make use of. Soils differ so widely that it is not possible to advise a fertilizer that will give satisfaction everywhere. This being the case, I advise you to consult local authorities who understand the adaptation of fertilizers to soils before making a choice.

April is a good month in which to seed the lawn. So is May, for that matter, but the sooner the grass gets a start the better, for early starting will put it in better condition to withstand the effects of midsummer heat because it will have more and stronger roots than later-sown grass can have by the time a demand is made upon its vitality.

Sowing lawn-grass seed evenly is an undertaking that most amateurs fail in. The seed is light as chaff, and every puff of wind, no matter how light, will carry it far and wide. Choose a still day, if possible, for sowing, and cross-sow. That is—sow from north to south, and then from east to west. In this way you will probably be able to get the seed quite evenly distributed. Hold the hand close to the ground, filled with seed, and then, as you make a circular motion from right to left, and back again, let the seed slip from between your fingers as evenly as possible. A little experimenting along this line will enable you to do quite satisfactory work. You may use up a good deal of seed in experimenting, but that will not matter. One common mistake in lawn-making is to use too little seed. A thinly-seeded lawn will not give you a good sward the first season, but a thickly-seeded one will. In fact, it will have that velvety look which is one of the chief charms of any lawn, after its first mowing. I would advise you to tell the dealer of whom you purchase seed the size of your lot, and let him decide on the quantity of seed required to make a good job of it.

In buying seed get only the very best on the market. But only of reliable dealers. By "reliable dealers" I mean such firms as have established a reputation for honesty and fair dealing all along the line. Such dealers have to live up to their reputations, and they will not work off upon you an inferior article as the dealer who has, as yet, no reputation to live up to may, and often does, charging you for it a price equal to, or beyond, that which the honest dealer would ask for his superior grade of seed. In order to have a fine sward it is absolutely necessary that you must have good seed. Cheap seed—and that means *poor* seed, *always*—does not contain the varieties of grasses necessary to the making of a rich, deep, velvety sward, and it almost always *does* contain the seeds of noxious weeds which will make your lawn a failure. Therefore patronize the dealers in whose honesty you have ample reason to have entire confidence, and buy the very best seed they have in stock.

After sowing, roll the surface of the lawn to imbed the seed in the soil, and make the ground firm enough about it to retain sufficient moisture to insure germination. In three or four days the tiny blades ought to begin to show. In a week the surface will seem covered with a green mist, and in a fortnight's time you will be able to see, with a little

exercise of the imagination, the kind of lawn you are going to have. If the season is a dry one it may be well to sprinkle the soil every day, after sundown. Use water liberally, and keep on doing so until rain comes or the plants have taken hold of the moister soil below with their delicate feeding-roots.

I would not advise mowing until the grass is at least three inches high. Then clip lightly with a sharp-bladed mower. Just cut away the top of the grass. To mow close, while the grass is getting a start, is the worst thing you can do. When it begins to thicken up by stooling out, then, and not *till* then, will you be warranted in setting the mower so that it will cut closely. But never *shear* the sward, as some do. You will never have a turf like velvet if you do that. Let there be an inch and a half or two inches of the grass-blade left.

The importance of having good tools to work with, in taking care of the lawn, ought not to be overlooked. A mower whose blades are dull will *tear* the grass off, and make it look ragged, as if gnawed away by animals feeding on it, while the mower whose blades are of the proper sharpness will cut it as evenly and as neatly as if a razor had been applied to it. You cannot appreciate the difference until you have seen a specimen of each, and compared them.

Some persons advocate raking the lawn after each mowing. Others advise leaving the clippings to act as a sort of mulch. If the clippings are allowed to remain, they wilt, and this will detract from the appearance of the sward for a short time, but by the next day they will not be noticeable. Raking as soon as mowed makes the lawn more immediately presentable. I have never been able to see any great deal of difference in the two methods, except as to appearance, therefore I would advise the lawn-owner to try both methods and adopt the one that pleases him most. If a rake is used, let it be one with blunt teeth that will not tear the sward. There is such a rake on the market, its teeth being made of bent wire. On no account use a sharp-toothed iron rake. That is sure to injure the sward.

Be regular in your attention to the lawn. Do not let the grass get so tall that the mower will not do a good job in cutting it. This necessitates mowing at regular intervals. If you mow only once a week, I would advise the use of the rake, as long grass-clippings are always unsightly because they remain on top of the sward, while short clippings from frequent mowing sink into it, and are soon out of sight.

In case the lawn is neglected for a week or more, once going over it with the mower will not make it very presentable. Mow, and then rake, and then go over it again, cutting *across* the first swaths. The second cutting will result in an even surface, but it will not be as satisfactory as that secured by *regular* mowings, at intervals of two or three days.

It is a most excellent plan to scatter bonemeal over the surface of the lawn in midsummer, and again in fall. Use the fine meal, as the coarse article is not readily assimilated by the soil. There is little danger of using enough to injure the sward. Injury generally results from not using any.

Many lawn-owners, with a mistaken idea of neatness, rake up the leaves that scatter themselves over the sward in fall, thus removing the protection that Nature has provided for the grass. Do not do this. Allow them to remain all winter. They will be entirely hidden by the snow, if any falls, and if there is none they are not unsightly, when you cease to think of them as litter. You will appreciate the difference between a fall-raked lawn and one on which leaves have been allowed to remain over winter, when spring comes. The lawn without protection will have a brown, scorched look, while the other will begin to show varying tints of green as soon as the snow melts. Grass is hardy, and

requires no protection to prevent winter-killing, but a covering, though slight, saves enough of its vitality to make it well worth while to provide it.

The ideal lawn is one in which no weeds are found. But I have never seen such a lawn, and never expect to. It is possible to keep weeds from showing much if one has a thick, fine sward, but keen eyes will discover them without much trouble. Regular and careful mowings will keep them within bounds, and when the leaves of large-foliaged plants like the Burdock and Thistle are not allowed to develop they do not do a great deal of harm except in the drain they make upon the soil. Generally, after repeated discouragements of their efforts to assert themselves, they pine away and finally disappear. But there will be others always coming to take their places, especially in the country, and their kindred growing in the pastures and by the roadside will ripen seed each season to be scattered broadcast by the wind. This being the case, the impossibility of entirely freeing a lawn from weeds by uprooting them or cutting them off will be readily apparent. One would have to spend all his time in warfare against them, on even a small lawn, if he were to set out to keep them from growing there. Therefore about all one can do to prevent large weeds from becoming unsightly is to constantly curb their aspirations by mowing them down as soon as they reach a given height.

The Dandelion and the Plantain are probably the worst pests of all, because their seeds fill the air when they ripen, and settle here, there, and everywhere, and wherever they come in contact with the ground they germinate, and a colony of young plants establishes itself. Because the Burdock and Thistle attempt to develop an up-reaching top it is an easy matter to keep them down by mowing, but the Dandelion and Plantain hug the soil so closely that the mower slips over them without coming in contact with their crowns, and so they live on, and on, and spread by a multiplication of their roots until they often gain entire possession of the soil, in spots. When this happens, the best thing to do is to spade up the patch, and rake every weed-root out of it, and then reseed it. If this is done early in spring the newly-seeded place will not be noticeable by midsummer.

We frequently see weed-killers advertised in the catalogues of the florist. Most, if not all, of them will do all that is claimed for them, but—they will do just as deadly work on the grass, if they get to it, as they do on the weed, therefore they are of no practical use, as it is impossible to apply them to weeds without their coming in contact with the sward.

Ants often do great damage to the lawn by burrowing under the sward and throwing up great hummocks of loose soil, thus killing out large patches of grass where they come to the surface. It is a somewhat difficult matter to dislodge them, but it can sometimes be done by covering the places where they work with powdered borax to the depth of half an inch, and then applying water to carry it down into the soil. Repeat the operation if necessary. Florists advertise liquids which are claimed to do this work effectively, but I have had no occasion to test them, as the borax application has never failed to rout the ant on my lawn, and when I find a remedy that does its work well I depend upon it, rather than experiment with something of whose merits I know nothing. "Prove all things and hold fast to that which is good."

Fighting the ant is an easier matter than exterminating weeds, as ant-hills are generally localized, and it is possible to get at them without injuring a large amount of sward as one cannot help doing when he applies liquids to weeds. The probabilities are, however, that ants cannot be entirely driven away from the lawn after they have taken possession of it. They will shift their quarters and begin again elsewhere. But you can keep them on the run by repeated applications of whatever proves obnoxious to them, and in this way you can prevent their doing a great deal of harm. To be successful in this you will have to be

constantly on the lookout for them, and so prompt in the use of the weapons you employ against them that they are prevented from becoming thoroughly established in new quarters.

PLANTING THE LAWN



WHEN the lawn is made we begin to puzzle over the planting of trees and shrubbery.

What shall we have?

Where shall we have it?

One of the commonest mistakes made by the man who is his own gardener is that of over-planting the home-grounds with trees and shrubs. This mistake is made because he does not look ahead and see, with the mind's eye, what the result will be, a few years from now, of the work he does to-day.



IVY, CLIMBING ROSES, AND COLORADO BLUE SPRUCE

The sapling of to-day will in a short time become a tree of good size, and the bush that seems hardly worth considering at present will develop into a shrub three, four, perhaps six feet across. If we plant closely, as we are all inclined to because of the small size of the material we use at planting time, we will soon have a thicket, and it will be necessary to sacrifice most of the shrubs in order to give the few we leave sufficient room to develop in. Therefore do not think, when you set out plants, of their *present* size, but of the size they will have attained to five or six years from now. Do not aim at immediate effect, as most of us do in our impatience for results. Be content to *plant*—and *wait*. I shall give no diagrams for lawn-planting for two reasons. The first one is—no two places are exactly alike, and a diagram prepared for one would have to be so modified in order to adapt it to the needs of the other that it would be of little value, save in the way of suggestion, and I think suggestions of a general character *without the diagram* will be found most satisfactory. The second reason is—few persons would care to duplicate the grounds of his neighbor, and this he would be obliged to do if diagrams were depended on. Therefore I advise each home-owner to plant his lawn after plans of his own preparation, after having given careful consideration to the matter. Look about you. Visit the lawns your neighbors have made, and discover wherein they have made mistakes.

Note wherein they have been successful. And then profit by their experience, be it that of success or failure.

Do not make the mistake of planting trees and shrubs in front of the house, or between it and the street. Place them somewhere to the side, or the rear, and leave a clear, open sweep of lawn in front of the dwelling. Enough unbroken space should be left there to give the sense of breadth which will act as a division between the public and the private. Scatter shrubs and flower-beds over the lawn and you destroy that impression of distance which is given by even a small lawn when there is nothing on it to interfere with the vision, as we look across it.

Relegate shrubs to the sides of the lot, if you can conveniently do so, being careful to give the larger ones locations at the point farthest from the street, graduating them toward the front of the lot according to their habit of growth. Aim to secure a background by keeping the big fellows where they cannot interfere with the outlook of the little ones.

If paths are to be made, think well before deciding where they shall be. Some persons prefer a straight path from the street to the house. This saves steps, but it gives the place a prim and formal look that is never pleasing. It divides the yard into two sections of equal importance, where it is advisable to have but one if we would make the most of things. In other words, it halves things, thus weakening the general effect greatly. A straight path is never a graceful one. A curving path will make you a few more steps, but so much will be gained by it, in beauty, that I feel sure you will congratulate yourself on having chosen it, after you have compared it with the straight path of your neighbor. It will allow you to leave the greater share of the small lawn intact, thus securing the impression of breadth that is so necessary to the best effect.



A BIT OF INFORMAL BORDER

I have spoken of planting shrubs at the sides of the home-lot. If this is done, we secure a sort of frame for the home-picture that will be extremely pleasing. If the shrubs near the street are small and low, and those beyond them increase in breadth and height as they approach the rear of the lot, with evergreens or trees as a background for the dwelling, the effect will be delightful. Such a general plan of planting the home-grounds is easily carried out. The most important feature of it to keep in mind is that of locating your plants in positions that will give each one a chance to display its charms to the best effect, and this you can easily do if you read the catalogues and familiarize yourself with the heights and habits of them.

If your lot adjoins that of a neighbor who has not yet improved his home-grounds, I would advise consulting with him, and forming a partnership in improvement-work, if possible. If you proceed after a plan of your own on your side of the fence, and he does the same on his side, there may be a sad lack of harmony in the result. But *if* you talk the matter over together the chances are that you can formulate a plan that will be entirely satisfactory to both parties, and result in that harmony which is absolutely necessary to effective work. Because, you see, both will be working together toward a definite design,

while without such a partnership of interests each would be working independently, and your ideas of the fitness of things might be sadly at variance with those of your neighbor.

Never set your plants in rows. Nature never does that, and she doesn't make any mistakes. If you want an object-lesson in arrangement, go into the fields and pastures, and along the road, and note how she has arranged the shrubs she has planted there. Here a group, there a group, in a manner that seems to have had no plan back of it, and yet I feel quite sure she planned out very carefully every one of these clumps and combinations. The closer you study Nature's methods and pattern after them the nearer you will come to success.

Avoid formality as you would the plague if you want your garden to afford you all the pleasure you can get out of it. Nature's methods are always restful in effect because they are so simple and direct. They never seem premeditated. Her plants "just grow," like the Topsy of Mrs. Stowe's book, and no one seems to have given any thought to the matter. But in order to successfully imitate Nature it is absolutely necessary that we familiarize ourselves, as I have said, with her ways of doing things, and we can only do this by studying from her books as she opens them for us in every field, and by the roadside, and the woodland nook. The secret of success, in a word, lies in getting so close to the heart of Nature that she will take us into her confidence and tell us some of her secrets.

One of the best trees for the small lawn is the Cut-Leaved Birch. It grows rapidly, is always attractive, and does not outgrow the limit of the ordinary lot. Its habit is grace itself. Its white-barked trunk, slender, pendant branches, and finely-cut foliage never fail to challenge admiration. In fall it takes on a coloring of pale gold, and is more attractive than ever. In winter its delicate branches show against a background of blue sky with all the delicacy and distinctness of an etching. No tree that I know of is hardier.

The Mountain Ash deserves a place on all lawns, large or small. Its foliage is very attractive, as are its great clusters of white flowers in spring. When its fruit ripens, the tree is as showy as anything can well be. And, like the Cut-Leaved Birch, it is ironclad in its hardness. It is an almost ideal tree for small places.

The Japanese Maples are beautiful trees, of medium size, very graceful in habit, and rapid growers. While not as desirable for a street tree as our native Maple, they will give better satisfaction on the lawn.

The Purple-Leaved Beech is exceedingly showy, and deserves a place on every lawn, large or small. In spring its foliage is a deep purple. In summer it takes on a crimson tinge, and in fall it colors up like bronze. Its branches close to the ground, and should never be pruned to form a head several feet from the ground, like most other trees. Such treatment will mar, if not spoil, the attractiveness of it.

Betchel's Crab, which grows to be of medium size, is one of the loveliest things imaginable when in bloom. Its flowers, which are double, are of a delicate pink, with a most delicious fragrance.

The White-Flowering Dogwood (*Cornus florida*) will give excellent results wherever planted. Its white blossoms are produced in great abundance early in spring—before its leaves are out, in fact—and last for a long time. Its foliage is a gray-green, glossy and handsome in summer, and in fall a deep, rich red, making it a wonderfully attractive object at that season.

The Judas Tree (Redbud) never grows to be large. Its lovely pink blossoms appear in spring before its heart-shaped leaves are developed. Very desirable.

Salisburia (Maiden-Hair). This is an elegant little tree from Japan. Its foliage is almost fern-like in its delicacy. It is a free grower, and in every respect desirable.

Among our larger trees that are well adapted to use about the house, the Elm is the most graceful. It is the poet of the forest, with its wide-spreading, drooping branches, its beautiful foliage, and grace in every aspect of its stately form.

As a street-tree the Maple is unexcelled. It is of rapid growth, entirely hardy anywhere at the north, requires very little attention in the way of pruning, is never troubled by insects, and has the merit of great cleanliness. It is equally valuable for the lawn. In fall, it changes its summer-green for purest gold, and is a thing of beauty until it loses its last leaf.

The Laurel-Leaved Willow is very desirable where quick results are wanted. Its branches frequently make a growth of five and six feet in a season. Its leaves are shaped like those of the European Laurel,—hence its specific name,—with a glossy, dark-green surface. It is probably the most rapid grower of all desirable lawn trees. Planted along the roadside it will be found far more satisfactory than the Lombardy Poplar which is grown so extensively, but which is never pleasing after the first few years of its life, because of its habit of dying off at the top.

The Box Elder (Ash-Leaved Maple) is another tree of very rapid growth. It has handsome light-green foliage, and a head of spreading and irregular shape when left to its own devices, but it can be made into quite a dignified tree with a little attention in the way of pruning. I like it best, however, when allowed to train itself, though this would not be satisfactory where the tree is planted along the street. It will grow anywhere, is hardy enough to stand the severest climate, and is of such rapid development that the first thing you know the little sapling you set out is large enough to bear seed.

I like the idea of giving each home a background of evergreens. This for two reasons—to bring out the distinctive features of the place more effectively than it is possible to without such a background, and to serve as a wind-break. If planted at the rear of the house, they answer an excellent purpose in shutting away the view of buildings that are seldom sightly. The best variety for home-use, all things considered, is the Norway Spruce. This grows to be a stately tree of pyramidal habit, perfect in form, with heavy, slightly pendulous branches from the ground up. Never touch it with the pruning-shears unless you want to spoil it. The Colorado Blue Spruce is another excellent variety for general planting, with rich, blue-green foliage. It is a free-grower, and perfectly hardy. The Douglas Spruce has foliage somewhat resembling that of the Hemlock. Its habit of growth is that of a cone, with light and graceful spreading branches that give it a much more open and airy effect than is found in other Spruces. The Hemlock Spruce is a most desirable variety for lawn use where a single specimen is wanted. Give it plenty of room in which to stretch out its slender, graceful branches and I think it will please you more than any other evergreen you can select.

It must not be inferred that the list of trees of which mention has been made includes *all* that are desirable for planting about the home. There are others of great merit, and many might prefer them to the kinds I have spoken of. I have made special mention of these because I know they will prove satisfactory under such conditions as ordinarily prevail about the home, therefore they are the kinds I would advise the amateur gardener to select in order to attain the highest degree of success. Give them good soil to grow in, and they will ask very little from you in the way of attention. They are trees that anybody can grow, therefore trees for everybody.

In planting a tree care must be taken to get it as deep in the ground as it was before it was taken from the nursery. If a little deeper no harm will be done.

Make the hole in which it is to be planted so large that all its roots can be spread out evenly and naturally.

Before putting it in place, go over its roots and cut off the ends of all that were severed in taking it up. Use a sharp knife in doing this, and make a clean, smooth cut. A callus will form readily if this is done, but not if the ends of the large roots are left in a ragged, mutilated condition.



SHRUBS ALONG THE DRIVEWAY

When the trees are received from the nursery they will be wrapped in moss and straw, with burlap about the roots. Do not unpack them until you are ready to plant them. If you cannot do this as soon as they are received, put them in the cellar or some other cool, shady place, and pour a pailful of water over the wrapping about the roots. Never unpack them and leave their roots exposed to the air for any length of time. If they must be unpacked before planting, cover their roots with damp moss, wet burlap, old carpet, or blankets,—anything that will protect them from the air and from drying out. But—get them into the ground as soon as possible.

When the tree is in the hole made for it, cover the roots with fine soil, and then settle this down among the roots by jarring the trunk, or by churning the tree up and down carefully. After doing this, and securing a covering for all the roots, apply a pailful or two of water to firm the soil well. I find this more effective than firming the soil with the foot, as it prevents the possibility of loose planting.

Then fill the hole with soil, and apply three or four inches of coarse manure from the barnyard to serve as a mulch. This keeps the soil moist, which is an important item, especially if the season happens to be a dry one. If barnyard manure is not obtainable, use leaves, or grass-clippings—anything that will shade the soil and retain moisture well.

Where shall we plant our trees?

This question is one that we often find it difficult to answer, because we are not familiar enough with them to know much about the effect they will give after a few years' development. Before deciding on a location for them I would advise the home-maker to look about him until he finds places where the kinds he proposes to use are growing. Then study the effect that is given by them under conditions similar to those which prevail on your own grounds. Make a mental transfer of them to the place in which you intend to use them. This you can do with the exercise of a little imagination. When you see them growing on your own grounds, as you can with the mind's eye, you can tell pretty nearly where they ought to be planted. You will get more benefit from object-lessons of this kind than from books.

On small grounds I would advise keeping them well to the sides of the house. If any are planted in front of the house they will be more satisfactory if placed nearer the street than the house. They should never be near enough to the dwelling to shade it. Sunshine about the house is necessary to health as well as cheerfulness.

Trees back of the dwelling are always pleasing. Under no circumstances plant them in prim rows, or just so many feet apart. This applies to all grounds, large or small, immediately about the house. But if the place is large enough to admit of a driveway, a row of evergreens on each side of it can be made an attractive feature.

The reader will understand from what I have said that no hard-and-fast rules as to where to plant one's trees can be laid down, because of the wide difference of conditions under which the planting must be made. Each home-owner must decide this matter for himself, but I would urge that no decision be made without first familiarizing yourself with the effect of whatever trees you select as you can see them growing on the grounds of your neighbors.

Do not make the mistake of planting so thickly that a jungle will result after a few years. In order to do itself justice, each tree must have space enough about it, on all sides, to enable it to display its charms fully. This no tree can do when crowded in among others. One or two fine large trees with plenty of elbow-room about them will afford vastly more satisfaction than a dozen trees that dispute the space with each other. Here again is proof of what I have said many times in this book, that quality is what pleases rather than quantity.

If any trees are planted in front of the house, choose kinds having a high head, so that there will be no obstruction of the outlook from the dwelling.

SHRUBS

VERY yard ought to have its quota of shrubs. They give to it a charm which nothing else in the plant-line can supply, because they have a greater dignity than the perennial and the



annual plant, on account of size, and the fact that they are good for many years, with very little care, recommends them to the home-maker who cannot give a great deal of attention to the garden and the home-grounds. It hardly seems necessary to say anything about their beauty. That is one of the things that "goes without saying," among those who see, each spring, the glory of the Lilacs and the Spireas, and other shrubs which find a place in "everybody's garden." On very small ground the larger-growing shrubs take the place of trees quite satisfactorily. Indeed, they are preferable

there, because they are not likely to outgrow the limits assigned them, as trees will in time, and they do not make shade enough to bring about the unsanitary conditions which are almost always found to exist in small places where trees, planted too thickly at first, have made a strong development. Shade is a pleasing feature of a place in summer, but there is such a thing as having too much of it. We frequently see places in which the dwelling is almost entirely hidden by a thicket of trees, and examination will be pretty sure to show that the house is damp, and the occupants of it unhealthy. Look at the roof and you will be quite sure to find the shingles covered with green moss. The only remedy for such a condition of things is the thinning out or removal of some of the trees, and the admission of sunlight. Shrubs can never be charged with producing such a state of things, hence my preference for them on lots where there is not much room. Vines can be used upon the walls of the dwelling and about the verandas and porches in such a way as to give all the shade that is needed, and, with a few really fine specimens of shrubs scattered about the grounds, trees will not be likely to be missed much.

I would not be understood as discouraging the planting of trees on grounds where there is ample space for their development. A fine tree is one of the most beautiful things in the world, but it must be given a good deal of room, and that is just what cannot be done on the small city or village lot. Another argument in favor of shrubs is—they will be in their prime a few years after planting, while a tree must have years to grow in. And a shrub generally affords considerable pleasure from the start, as it will bloom when very small. Many of them bloom the first season.

In locating shrubs do not make the mistake of putting them between the house and the street, unless for the express purpose of shutting out something unsightly either of buildings or thoroughfare. A small lawn loses its dignity when broken up by trees, shrubs, or flower-beds. Left to itself it imparts a sense of breadth and distance which will make it seem larger than it really is. Plant things all over it and this effect is destroyed. I have said this same thing in other chapters of this book, and I repeat it with a desire to so impress the fact upon the mind of the home-maker that he cannot forget it, and make the common mistake of locating his shrubbery or his flower-gardens in the front yard.

The best location for shrubs on small lots is that which I have advised for hardy plants—along the sides of the lot, or at the rear of it, far enough away from the dwelling, if space will permit, to serve as a background for it. Of course no hard-and-fast rule can be laid down, because lots differ so widely in size and shape, and the houses we build on them are seldom found twice in the same place. I am simply advising in a general way, and the advice will have to be modified to suit the conditions which exist about each home.

Do not set your shrubs out after any formal fashion—just so far apart, and in straight rows—as so many do. Formality should be avoided whenever possible.

I think you will find the majority of them most satisfactory when grouped. That is, several of a kind—or at least of kinds that harmonize in general effect—planted so close together that, when well developed, they form one large mass of branches and foliage. I do not mean, by this, that they should be crowded. Give each one ample space to develop in, but let them be near enough to touch, after a little.

If it is proposed to use different kinds in groups, one must make sure that he understand the habit of each, or results will be likely to be most unsatisfactory. The larger-growing kinds must be given the centre or the rear of the group, with smaller kinds at the sides, or in front. The season of flowering and the peculiarities of branch and foliage should also be given due consideration. If we were to plant a Lilac with its stiff and rather formal habit among a lot of Spireas, all slender grace and delicate foliage, the effect would be far from pleasing. The two shrubs have nothing in common, except beauty, and that is so dissimilar that it cannot be made to harmonize. There must be a general harmony. This does not mean that there may not be plenty of contrast. Contrast and harmony are not contradictory terms, as some may think.

Therefore read up in the catalogues about the shrubs you propose to make use of before you give them a permanent place in the yard.

Also, take a look ahead.

The plant you procure from the nursery will be small. So small, indeed, that if you leave eight or ten feet between it and the next one you set out, it will look so lonesome that it excites your pity, and you may be induced to plant another in the unfilled space to keep it company. But in doing this you will be making a great mistake. Three or four years from now the bushes will have run together to such an extent that each plant has lost its individuality. There will be a thicket of branches which will constantly interfere with each other's well being, and prevent healthy development. If you take the look ahead which I have advised, you will anticipate the development of the shrub, and plant for the future rather than the immediate present. Be content to let the grounds look rather naked for a time. Three or four years will remedy that defect. You can plant perennials and annuals between them, temporarily, if you want the space filled. It will be understood that what has been said in this paragraph applies to *different kinds* of shrubs set as single specimens, and not to those planted on the "grouping" system.

In planting shrubs, the rule given for trees applies quite fully. Have the hole for them large enough to admit of spreading out their roots naturally. You can tell about this by setting the shrub down upon the ground after unwrapping it, and watching the way in which it disposes of its roots. They will spread out on all sides as they did before the plant was taken from the ground. This is what they should be allowed to do in their new quarters. Many persons dig what resembles a post-hole more than anything else, and crowd the roots of the shrub into it, without making any effort to loosen or straighten them out, dump in some lumpy soil, trample it down roughly, and call the work done. Done it is, after a fashion, but those who love the plants they set out—those who want fine shrubs and expect them to grow well from the beginning—never plant in that way. Spread the roots out on all sides, cover them with fine, mellow soil, settle this into compactness with a liberal application of water, then fill up the hole, and cover the surface with a mulch of some kind. Treated in this way not one shrub in a hundred will fail to grow, if it has good roots. What was said about cutting off the ends on injured roots, in the chapter on planting trees, applies with equal pertinence here. Also, about keeping the roots covered until you are ready to put the plant into the ground. A shrub is a tree on a small scale, and should receive the same kind of treatment so far as planting

goes. These instructions may seem trifling, but they are really matters of great importance, as every amateur will find after a little experience. A large measure of one's success depends on how closely we follow out the little hints and suggestions along these lines in the cultivation of all kinds of plants.

Among our best large shrubs, suitable for planting at the rear of the lot, or in the back row of a group, is the Lilac. The leading varieties will grow to a height of ten or twelve feet, and can be made to take on bush form if desired, or can be trained as a small tree. If the bush form is preferred, cut off the top of the plant, when small, and allow several branches to start from its base. If you prefer a tree, keep the plant to one straight stem until it reaches the height where you want the head to form. Then cut off its top. Branches will start below. Leave only those near the top of the stem. These will develop and form the head you want. I consider the Lilac one of our very best shrubs, because of its entire hardiness, its rapid development, its early flowering habit, its beauty, its fragrance, and the little attention needed by it. Keep the soil about it rich, and mow off the suckers that will spring up about the parent plant in great numbers each season, and it will ask no more of you. The chief objection urged against it is its tendency to sucker so freely. If let alone, it will soon become a nuisance, but with a little attention this disagreeable habit can be overcome. I keep the ground about my plants free from suckers by the use of the lawn-mower. They can be cut as easily as grass when young and small.



SNOWBALL

If there is a more beautiful shrub than the white Lilac I do not know what it is. For cut-flower work it is as desirable as the Lily of the Valley, which is the only flower I can compare it with in delicate beauty, purity, and sweetness.

The Persian is very pleasing for front positions, because of its compact, spreading habit, and its slender, graceful manner of branching close to the ground. It is a very free bloomer, and a bush five or six feet high, and as many feet across, will often have hundreds of plume-like tufts of bloom, of a dark purple showing a decided violet tint.

The double varieties are lovely beyond description. At a little distance the difference between the doubles and singles will not be very noticeable, but at close range the beauty of the former will be apparent. Their extra petals give them an airy grace, a feathery lightness, which the shorter-spiked kinds do not have. By all means have a rosy-purple double variety, and a double white. No garden that lives up to its privileges will be without them. If I could have but one shrub, I think my choice would be a white Lilac.

Another shrub of tall and stately habit is the old Snowball. When well grown, few shrubs can surpass it in beauty. Its great balls of bloom are composed of scores of individually small flowers, and they are borne in such profusion that the branches often bend beneath their weight. Of late years there has been widespread complaint of failure with this plant, because of the attack of aphides. These little green plant-lice locate themselves on the underside of the tender foliage, before it is fully developed, and cause it to curl in an unsightly way. The harm is done by these pests sucking the juices from the leaf. I have had no difficulty in preventing them from injuring my bushes since I began the use of the insecticide sold by the florists under the name of Nicotidine. If this is applied as directed on the can in which it is put up, two or three applications will entirely rid the plant of the insects, and they will not return after being driven away by anything as disagreeable to them as a nicotine extract. Great care must be taken to see that the application gets to the underside of the foliage where the pests will establish themselves. This is a matter of the greatest importance, for, in order to rout them, it is absolutely necessary that you get the nicotine *where they are*. Simply sprinkling it over the bush will do very little good.

The Spirea is one of the loveliest of all shrubs. Its flowers are exquisite in their daintiness, and so freely produced that the bush is literally covered with them. And the habit of the bush is grace itself, and this without any attention whatever from you in the way of training. In fact, attempt to train a Spirea and the chances are that you will spoil it. Let it do its own training, and the result will be all that you or any one else could ask for. There are several varieties, as you will see when you consult the dealers' catalogues. Some are double, some single, some white, some pink. Among the most desirable for general culture I would name *Van Houttei*, a veritable fountain of pure white blossoms in May and June, *Prunifolia*, better known as "Bridal Wreath," with double white flowers, *Billardi*, pink, and *Fortunei*, delicate, bright rose-color.

The Spireas are excellent shrubs for grouping, especially when the white and pink varieties are used together. This shrub is very hardy, and of the easiest culture, and I can recommend it to the amateur, feeling confident that it will never fail to please.

Quite as popular as the Spirea is the Deutzia, throughout the middle section of the northern states. Farther north it is likely to winter-kill badly. That is, many of its branches will be injured to such an extent that they will have to be cut away to within a foot or two of the ground, thus interfering with a free production of flowers. The blossoms of this shrub are of a tasselly bell-shape, produced thickly all along the slender branches, in June. *Candidissima* is a double white, very striking and desirable. *Gracilis* is the most daintily beautiful member of the family, all things considered. *Discolor grandiflora* is a variety with large double blossoms, tinted with pink on the reverse of the petals.

The Weigelia is a lovely shrub. There are white, pink, and carmine varieties. The flowers,

which are trumpet-shaped, are borne in spikes in which bloom and foliage are so delightfully mixed that the result is a spray of great beauty. A strong plant will be a solid mass of color for weeks.

An excellent, low-growing, early flowering shrub is *Pyrus Japonica*, better known as Japan Quince. It is one of our earliest bloomers. Its flowers are of the most intense, fiery scarlet. This is one of our best plants for front rows in the shrubbery, and is often used as a low hedge.



AMERICAN IVY AND GERANIUMS

One of our loveliest little shrubs is *Daphne Cneorum*, oftener known as the "Garland Flower." Its blossoms are borne in small clusters at the extremity of the stalks. They are a soft pink, and very sweet. The habit of the plant is low and spreading. While this is not as showy as many of our shrubs, it is one that will win your friendship, because of its modest beauty, and will keep a place in your garden indefinitely after it has once been given a place there.

Berberis—the "Barberry" of "Grandmother's garden"—is a most satisfactory shrub, for several reasons: It is hardy everywhere. The white, yellow, and orange flowers of the different varieties are showy in spring; in fall the foliage colors finely; and through the greater part of winter the scarlet, blue and black berries are extremely pleasing. *Thunbergii* is a dwarf variety, with yellow flowers, followed by vivid scarlet fruit. In autumn, the foliage changes to scarlet and gold, and makes the bush as attractive as if covered with flowers. This is an excellent variety for a low hedge.

Exochorda grandiflora, better known as "Pearl Bush," is one of the most distinctively

ornamental shrubs in cultivation. It grows to a height of seven to ten feet, and can be pruned to almost any desirable shape. The buds, which come early in the season, look like pearls strung on fine green threads—hence the popular name of the plant—and these open into flowers of the purest white. A fine shrub for the background of a border.

Forsythia is a splendid old shrub growing to a height of eight to ten feet. Its flowers appear before its leaves are out, and are of such a rich, shining yellow that they light up the garden like a bonfire. The flowers are bell-shaped, hence the popular name of the plant, "Golden Bell."

Hydrangea paniculata grandiflora is a very general favorite because of its great hardiness, profusion of flowers, ease of cultivation, and habit of late blooming. It is too well known to need description.

Robinia hispida, sometimes called Rose Acacia, is a native species of the Locust. It has long, drooping, very lovely clusters of pea-shaped flowers of a soft pink color. It will grow in the poorest soil and stand more neglect than any other shrub I have knowledge of. But because it *can* do this is no reason why it should be asked to do it. Give it good treatment and it will do so much better for you than it possibly can under neglect, that it will seem like a new variety of an old plant.

The Flowering Currant is a delightful shrub, and one that anyone can grow, and one that will flourish anywhere. It is very pleasing in habit, without any attention in the way of training. Its branches spread gracefully in all directions from the centre of the bush, and grow to a length of six or seven feet. Early in the season they are covered with bright yellow flowers of a spicy and delicious fragrance. In fall the bush takes on a rich coloring of crimson and gold, and is really much showier then than when in bloom, in spring.

Sambucus aurea—the Golden Elder—is one of the showiest shrubs in cultivation, and its showy feature is its foliage. Let alone, it grows to be a very large bush, but judicious pruning keeps it within bounds, for small grounds. It makes an excellent background for such brilliantly colored flowers as the Dahlia, *Salvia splendens*, or scarlet Geraniums. It deserves a place in all collections. Our native Cut-Leaved Elder is one of the most beautiful ornaments any place can have. It bears enormous cymes of delicate, lace-like, fragrant flowers in June and July. These are followed by purple berries, which make the bush as attractive as when in bloom.

The Syringa, or Mock Orange, is one of our favorites. It grows to a height of eight and ten feet and is therefore well adapted to places in the back row, or in the rear of the garden. Its flowers, which are borne in great profusion, are a creamy white, and very sweet-scented.

The double-flowered Plum is a most lovely shrub. It blooms early in spring, before its leaves are out. Its flowers are very double, and of a delicate pink, and are produced in such profusion that the entire plant seems under a pink cloud.

Another early bloomer, somewhat similar to the Plum, is the Flowering Almond, an old favorite. This, however, is of slender habit, and should be given a place in the front row. Its lovely pink-and-white flowers are borne all along the gracefully arching stalks, making them look like wreaths of bloom that Nature had not finished by fastening them together in chaplet form.

It is not to be understood that the list given above includes all the desirable varieties of shrubs suited to amateur culture. It does, however, include the cream of the list for

general-purpose gardening. There are many other kinds that are well worth a place in any garden, but some of them are inclined to be rather too tender for use at the north, without protection, and others require a treatment which they will not be likely to get from the amateur gardener, therefore I would not advise the beginner in shrub-growing to undertake their culture.

Many an amateur gardener labors under the impression that all shrubs must be given an annual pruning. He doesn't know just how he got this impression, but—he has it. He looks his shrubs over, and sees no actual necessity for the use of the knife, but—pruning must be done, and he cuts here, and there, and everywhere, without any definite aim in view, simply because he feels that something of the kind is demanded of him. This is where a great mistake is made. So long as a shrub is healthy and pleasing in shape let it alone. It is not necessary that it should present the same appearance from all points of view. That would be to make it formal, prim—anything but graceful. Go into the fields and forests and take lessons from Nature, the one gardener who makes no mistakes. Her shrubs are seldom regular in outline, but they are beautiful, all the same, and graceful, every one of them, with a grace that is the result of informality and naturalness. Therefore never prune a shrub unless it really needs it, and let the need be determined by something more than mere lack of uniformity in its development. Much of the charm of Nature's workmanship is the result of irregularity which never does violence to the laws of symmetry and grace. Study the wayside shrub until you discover the secret of it, and apply the knowledge thus gained to the management of your home garden.

Shrubs can be set in fall or spring. Some persons will tell you that spring planting is preferable, and give you good reasons for their preference. Others will advance what seem to be equally good reasons for preferring to plant in fall. So far as my experience goes, I see but little difference in results.

By planting in spring, you get your shrub into the ground before it begins to grow.

By planting in fall, you get it into the ground after it has completed its annual growth.

You will have to be governed by circumstances, and do the best you can under them, and you will find, I feel quite sure, that good results will come from planting at either season.

If you plant in spring, do not defer the work until after your plants have begun growing. Do it as soon as the frost is out of the ground.

If in fall, do it as soon as possible after the plant has fully completed the growth of the season, and "ripened off," as we say. In other words, is in that dormant condition which follows the completion of its yearly work. This will be shown by the falling of its leaves.

Never starve a shrub while it is small and young, under the impression that, because it is small, it doesn't make much difference how you use it. It makes all the difference in the world. Much of its future usefulness depends on the treatment it receives at this period. What you want to do is to give it a good start. And after it gets well started, keep it going steadily ahead. Allow no grass or weeds to grow close to it and force it to dispute with them for its share of nutriment in the soil about its roots.

It is a good plan to spread a bushel or more of coarse litter about each shrub in fall. Not because it needs protection in the sense that a tender plant needs it, but because a mulch keeps the frost from working harm at its roots, and saves to the plant that amount of vital force which it would be obliged to expend upon itself if it were left to take care of itself. For it is true that even our hardiest plants suffer a good deal in the fight with cold, though

they may not seem to be much injured by it. Mulch some of them, and leave some of them without a mulch, and notice the difference between the two when spring comes. If you do this, I feel sure you will give *all* of them the mulch-treatment every season thereafter.

VINES



HOME without vines is like a home without children—it lacks the very thing that ought to be there to make it most delightful and home-like.

A good vine—and we have many such—soon becomes "like one of the family." Year after year it continues to develop, covering unsightly places with its beauty of leaf and bloom, and hiding defects that can be hidden satisfactorily in no other way. All of us have seen houses that were positively ugly in appearance before vines were planted about them, that became pleasant and attractive as soon as the vines had a chance to show what they could do in the way of covering up ugliness.

There are few among our really good vines that will not continue to give satisfaction for an indefinite period if given a small amount of attention each season. I can think of none that are not better when ten or twelve years old than they are two and three years after planting—healthier, stronger, like a person who has "got his growth" and arrived at that period when all the elements of manhood are fully developed. Young vines may be as pleasing as old ones, as far as they go, but—the objection is that they do not go far enough. The value of a vine depends largely on size, and size depends largely on age. During the early stage of a vine's existence it is making promise of future grace and beauty, and we must give it plenty of time in which to make that promise good. We must also give such care as will make it not only possible but easy to fulfil this promise to the fullest extent.

While many vines will live on indefinitely under neglect, they cannot do themselves justice under such conditions, as any one will find who plants one and leaves it to look out for itself. But be kind to it, show it that you care for it and have its welfare at heart, and it will surprise and delight you with its rapidity of growth, and the beauty it is capable of imparting to everything with which it comes in contact. For it seems impossible for a vine to grow anywhere without making everything it touches beautiful. It is possessor of the magic which transforms plain things into loveliness.

If I were obliged to choose between vines and shrubs—and I am very glad that I do not have to do so—I am quite sure I would choose the former. I can hardly explain how it is, but we seem to get on more intimate terms with a vine than we do with a shrub. Probably it is because it grows so close to the dwelling, as a general thing, that we come to think of it as a part of the home.

Vines planted close to the house walls often fail to do well, because they do not have a good soil to spread their roots in. The soil thrown out from the cellar, or in making an excavation for the foundation walls, is almost always hard, and deficient in nutriment. In order to make it fit for use a liberal amount of sand and loam ought to be added to it, and

mixed with it so thoroughly that it becomes a practically new soil. At the same time manure should be given in generous quantity. If this is done, a poor soil can be made over into one that will give most excellent results. One application of manure, however, will not be sufficient. In one season, a strong, healthy vine will use up all the elements of plant-growth, and more should be supplied to meet the demands of the following year. In other words, vines should be manured each season if they are expected to keep in good health and continue to develop. If barnyard manure cannot be obtained, use bonemeal of which I so often speak in this book. I consider it the best substitute for barnyard fertilizer that I have ever used, for all kinds of plants.

The best, all-round vine for general use, allowing me to be judge, is *Ampelopsis*, better known throughout the country as American Ivy, or Virginia Creeper. It is of exceedingly rapid growth, often sending out branches twenty feet in length in a season, after it has become well established. It clings to stone, wood, or brick, with equal facility, and does not often require any support except such as it secures for itself. There are two varieties. One has flat, sucker-like discs, which hold themselves tightly against whatever surface they come in contact with, on the principle of suction. The other has tendrils which clasp themselves about anything they can grasp, or force themselves into cracks and crevices in such a manner as to furnish all the support the vine needs. So far as foliage and general habit goes, there is not much difference between these two varieties, but the variety with disc-supports colors up most beautifully in fall. The foliage of both is very luxuriant. When the green of summer gives way to the scarlet and maroon of autumn, the entire plant seems to have changed its leaves for flowers, so brilliant is its coloring. There is but one objection to be urged against this plant, and that is—its tendency to rampant growth. Let it have its way and it will cover windows as well as walls, and fling its festoons across doorway and porch. This will have to be prevented by clipping away all branches that show an inclination to run riot, and take possession of places where no vines are needed. When you discover a branch starting out in the wrong direction, cut it off at once. A little attention of this kind during the growing period will save the trouble of a general pruning later on.

Vines, like children, should be trained while growing if you would have them afford satisfaction when grown.

The *Ampelopsis* will climb to the roof of a two-story house in a short time, and throw out its branches freely as it makes its upward growth, and this without any training or pruning. Because of its ability to take care of itself in these respects, as well as because of its great beauty, I do not hesitate to call it the best of all vines for general use. It will grow in all soils except clear sand, it is as hardy as it is possible for a vine to be, and so far as my experience with it goes—and I have grown it for the last twenty years—it has no diseases.



HONEYSUCKLE

For verandas and porches the Honeysuckles will probably afford better satisfaction because of their less rampant habit. Also because of the beauty and the fragrance of their flowers. Many varieties are all-summer bloomers. The best of these are Scarlet Trumpet and *Halleana*. The vines can be trained over trellises, or large-meshed wire netting, or tacked to posts, as suits the taste of the owner. In whatever manner you train them they lend grace and beauty to a porch without shutting off the outlook wholly, as their foliage is less plentiful than that of most vines. This vine is of rapid development, and so hardy that it requires very little attention in the way of protection in winter. The variety called Scarlet Trumpet has scarlet and orange flowers. *Halleana* has almost evergreen foliage and cream-white flowers of most delightful fragrance. Both can be trained up together with very pleasing effect. There are other good sorts, but I consider that these two combine all the best features of the entire list, therefore I would advise the amateur gardener to concentrate his attention on them instead of spreading it out over inferior kinds.

Every lover of flowers who sees the hybrid varieties of Clematis in bloom is sure to want to grow them. They are very beautiful, it is true, and few plants are more satisfactory

when well grown. But—there's the rub—to grow them well.

The variety known as *Jackmani*, with dark purple-blue flowers, is most likely to succeed under amateur culture, but of late years it has been quite unsatisfactory. Plants of it grow well during the early part of the season, but all at once blight strikes them, and they wither in a day, as if something had attacked the root, and in a short time they are dead. This has discouraged the would-be growers of the large-flowered varieties—for all of them seem to be subject to the same disease. What this disease is no one seems able to say, and, so far, no remedy for it has been advanced.

But in *Clematis paniculata*, we have a variety that I consider superior in every respect to the large-flowered kinds, and to date no one has reported any trouble with it. It is of strong and healthy growth, and rampant in its habit, thus making it useful where the large-flowered kinds have proved defective, as none of them are of what may be called free growth. They grow to a height of seven or eight feet—sometimes ten,—but have few branches, and sparse foliage. *Paniculata*, on the contrary, makes a very vigorous growth—often twenty feet in a season—and its foliage, unlike that of the other varieties, is attractive enough in itself to make the plant well worth growing. It is a rich, glossy green, and so freely produced that it furnishes a dense shade. Late in the season, after most other plants are in "the sere and yellow leaf" it is literally covered with great panicles of starry white flowers which have a delightful fragrance. While this variety lacks the rich color of such varieties as *Jackmani* and others of the hybrid class, it is really far more beautiful. Indeed, I know of no flowering vine that can equal it in this respect. Its late-flowering habit adds greatly to its value. It is not only healthy, but hardy—a quality no one can afford to overlook when planting vines about the house. Like *Clematis flammula*, a summer-blooming relative of great value both for its beauty and because it is a native, it is likely to die pretty nearly to the ground in winter, but, because of rapid growth, this is not much of an objection. By the time the flowers of either variety are likely to come in for a fair share of appreciation, the vines will have grown to good size.

For the middle and southern sections of the northern states the *Wistaria* is a most desirable vine, but at the north it cannot be depended on to survive the winter in a condition that will enable it to give a satisfactory crop of flowers. Its roots will live, but most of its branches will be killed each season.

Ampelopsis Veitchii, more commonly known as Boston or Japan Ivy, is a charming vine to train over brick and stone walls in localities where it is hardy, because of its dense habit of growth. Its foliage is smaller than that of the native *Ampelopsis*, and it is far less rampant in growth, though a free grower. It will completely cover the walls of a building with its dark green foliage, every shoot clinging so closely that a person seeing the plant for the first time would get the idea that it had been shorn of all its branches except those adhering to the wall. All its branches attach themselves to the wall-surface, thus giving an even, uniform effect quite unlike that of other vines which throw out branches in all directions, regardless of wall or trellis. In autumn this variety takes on a rich coloring that must be seen to be fully appreciated.



JAPAN IVY GROWING ON WALL

Our native *Celastrus*, popularly known as Bittersweet, is a very desirable vine if it can be given something to twine itself about. It has neither tendril nor disc, and supports itself by twisting its new growth about trees over which it clammers, branches—anything that it can wind about. If no other support is to be found it will twist about itself in such a manner as to form a great rope of branches. It has attractive foliage, but the chief beauty of the vine is its clusters of pendant fruit, which hang to the plant well into winter. This fruit is a berry of bright crimson, enclosed in an orange shell which cracks open, in three pieces, and becomes reflexed, thus disclosing the berry within. As these berries grow in clusters of good size, and are very freely produced, the effect of a large plant can be imagined. In fall the foliage turns to a pure gold, and forms a most pleasing background for the scarlet and orange clusters to display themselves against. The plant is of extremely rapid growth. It has a habit of spreading rapidly, and widely, by sending out underground shoots which come to the surface many feet away from the parent plant. These must be kept mowed down or they will become a nuisance.

Flower-loving people are often impatient of results, and I am often asked what annual I would advise one to make use of, for immediate effect, or while the hardy vines are getting a start. I know of nothing better, all things considered, than the Morning Glory, of which mention will be found elsewhere.

The Flowering Bean is a pretty vine for training up about verandas, but does not grow to a sufficient height to make it of much value elsewhere. It is fine for covering low trellises or a fence.

The "climbing" *Nasturtiums* are not really climbers. Rather plants with such long and slender branches that they must be given some support to keep them from straggling all over the ground. They are very pleasing when used to cover fences, low screens, and trellises, or when trained along the railing of the veranda.

The Kudzu Vine is of wonderful rapidity of growth, and will be found a good substitute for a hardy vine about piazzas and porches.

Aristolochia, or Dutchman's Pipe, is a hardy vine of more than ordinary merit. It has large, overlapping leaves that furnish a dense shade, and very peculiar flowers—more peculiar, in fact, than beautiful.

Bignonia will give satisfaction south of Chicago, in most localities. Where it stands the winter it is a favorite on account of its great profusion of orange-scarlet flowers and its pretty, finely-cut foliage. Farther north it will live on indefinitely, like the Wistaria, but its branches will nearly always be badly killed in winter.

It is a mistake to make use of strips of cloth in fastening vines to walls, as so many are in the habit of doing, because the cloth will soon rot, and when a strong wind comes along, or after a heavy rain, the vines will be torn from their places, and generally it will be found impossible to replace them satisfactorily. Cloth and twine may answer well enough for annual vines, with the exception of the Morning Glory, but vines of heavy growth should be fastened with strips of leather passed about the main stalks and nailed to the wall securely. Do not use a small tack, as the weight of the vines will often tear it loose from the wood. Do not make the leather so tight that it will interfere with the circulation of sap in the plant. Allow space for future growth. Some persons use iron staples, but I would not advise them as they are sure to chafe the branches they are used to support.

The question is often asked if vines are not harmful to the walls over which they are trained. I have never found them so. On the contrary, I have found walls that had been covered with vines for years in a better state of preservation than walls on which no vines had ever been trained. The explanation is a simple one: The leaves of the vines act in the capacity of shingles, and shed rain, thus keeping it from getting to the walls of the building.

But I would not advise training vines over the roof, unless it is constructed of slate or some material not injured by dampness, because the moisture will get below the foliage, where the sun cannot get at it, and long-continued dampness will soon bring on decay.

On account of the difficulty of getting at them, vines are never pruned to any great extent, but it would be for the betterment of them if they were gone over every year, and all the oldest branches cut away, or thinned out enough to admit of a free circulation of air. If this were done, the vine would be constantly renewing itself, and most kinds would be good for a lifetime. It really is not such a difficult undertaking as most people imagine, for by the use of an ordinary ladder one can get at most parts of a building, and reach such portions of the vines as need attention most.

THE HARDY BORDER



THE most satisfactory garden of flowering plants for small places, all things considered, is one composed of hardy herbaceous perennials and biennials.

This for several reasons:

1st.—Once thoroughly established they are good for an indefinite period.

2d.—It is not necessary to "make garden" annually, as is the case where annuals are depended on.

3d.—They require less care than any other class of plants.

4th.—Requiring less care than other plants, they are admirably adapted to the needs of those who can devote only a limited amount of time to gardening.

5th.—They include some of the most beautiful plants we have.

6th.—By a judicious selection of kinds it is possible to have flowers from them from early in spring till late in fall.

I have no disposition to say disparaging things about the garden of annuals. Annuals are very desirable. Some of them are absolutely indispensable. But they call for a great deal of labor. It is hard work to spade the ground, and make the beds, and sow the seed, and keep the weeds down. This work must be done year after year. But with hardy plants this is not the case. Considerable labor may be called for, the first year, in preparing the ground and setting out the plants, but the most of the work done among them, after that, can be done with the hoe, and it will take so little time to do it that you will wonder how you ever came to think annuals the only plants for the flower-garden of busy people. That this *is* what a great many persons think is true, but it is because they have not had sufficient experience with hardy plants to fully understand their merits, and the small amount of care they require. A season's experience will convince them of their mistake.



SHRUBS AND PERENNIALS COMBINED IN BORDER

In preparing the ground for the reception of these plants, spade it up to the depth of a foot and a half, at least, and work into it a liberal amount of good manure, or some commercial fertilizer that will take the place of manure from the barnyard or cow-stable. Most perennials and herbaceous plants will do fairly well in a soil of only moderate richness, but they cannot do themselves justice in it. They ought not to be expected to. To secure the best results from them—and you ought to be satisfied with nothing less—feed them well. Give them a good start, at the time of planting, and keep them up to a high standard of vitality by liberal feeding, and they will surprise and delight you with the profusion and beauty of their bloom.

Perennials will not bloom till the second year from seed. Therefore, if you want flowers from them the first season, it will be necessary for you to purchase last season's seedlings from the florist.

In most neighborhoods one can secure enough material to stock the border from friends who have old plants that need to be divided, or by exchanging varieties.

But if you want plants of any particular color, or of a certain variety, you will do well to

give your order to a dealer. In most gardens five or six years old the original varieties will either have died out or so deteriorated that the stock you obtain there will be inferior in many respects, therefore not at all satisfactory to one who is inclined to be satisfied with nothing but the best. The "best" is what the dealer will send you if you patronize one who has established a reputation for honesty.

The impression prevails, to a great extent, that perennials bloom only for a very short time in the early part of the season. This is a mistake. If you select your plants with a view to the prolongation of the flowering period, you can have flowers throughout the season from this class of plants. Of course not all of them will bloom at the same time. I would not be understood as meaning that. But what I do mean is—that by choosing for a succession of bloom it is possible to secure kinds whose flowering periods will meet and overlap each other in such a manner that some of them will be in bloom most of the time. Many kinds bloom long before the earliest annuals are ready to begin the work of the season. Others are in their prime at midsummer, and later ones will give flowers until frost comes. If you read up the catalogues and familiarize yourself with the habits of the plants which the dealer offers for sale, you can make a selection that will keep the garden gay from May to November.

On the ordinary home-lot there is not much choice allowed as to the location of the border. It must go to the sides of the lot if it starts in front of the house, or it may be located at the rear of the dwelling. On most grounds it will, after a little, occupy both of these positions, for it will outgrow its early limitations in a few years. You will be constantly adding to it, and thus it comes about that the border that *begins* on each side of the lot will overflow to the rear.

I would never advise locating it in front of the dwelling. Leave the lawn unbroken there. While there is not much opportunity for "effect" on small grounds, a departure from straight lines can always be made, and formality and primness be avoided to a considerable degree. Let the inner edge of the border curve, as shown in the illustration accompanying this chapter, and the result will be a hundredfold more pleasing than it would be if it were a straight line. Curves are always graceful, and indentations here and there enable you to secure new points of view that add vastly to the general effect. They make the border seem larger than it really is because only a portion of it is seen at the same time, as would not be the case if it were made up of straight rows of plants, with the same width throughout.

By planting low-growing kinds in front, and backing them up with kinds of a taller growth, with the very tallest growers in the rear, the effect of a bank of flowers and foliage can be secured. This the illustration clearly shows.

Shrubbery can be used in connection with perennials with most satisfactory results. This, as the reader will see, was done on the grounds from which the picture was taken. Here we have a combination which cannot fail to afford pleasure. I would not advise any home-maker to confine his border to plants of one class. Use shrubs and perennials together, and scatter annuals here and there, and have bulbs all along the border's edge.

I want to call particular attention to one thing which the picture under consideration emphasizes very forcibly, and that is—the unstudied informality of it. It seems to have planned itself. It is like one of Nature's fence-corner bits of gardening.

For use in the background we have several most excellent plants. The Delphinium—Larkspur—grows to a height of seven or eight feet, in rich soil, sending up a score or

more of stout stalks from each strong clump of roots. Two or three feet of the upper part of these stalks will be solid with a mass of flowers of the richest, most intense blue imaginable. I know of no other flower of so deep and striking a shade of this rather rare color in the garden. In order to guard against injury from strong winds, stout stakes should be set about each clump, and wound with wire or substantial cord to prevent the flowering stalks from being broken down. There is a white variety, *Chinensis*, that is most effective when used in combination with the blue, which you will find catalogued as *Delphinium formosum*. If several strong clumps are grouped together, the effect will be magnificent when the plants are in full bloom. By cutting away the old stalks as soon as they have developed all their flowers, new ones can be coaxed to grow, and under this treatment the plants can be kept in bloom for many weeks.

"Golden Glow" *Rudbeckia* is quite as strong a grower as the *Delphinium*, and a more prolific bloomer does not exist. It will literally cover itself with flowers of the richest golden yellow, resembling in shape and size those of the "decorative" type of *Dahlia*. This plant is a very strong grower, and so aggressive that it will dispute possession with any plant near it, and on this account it should never be given a place where it can interfere with choice varieties. Let it have its own way and it will crowd out even the grass of the lawn. Its proper place is in the extreme background, well to the rear, where distance will lend enchantment to the view. It must not be inferred from this that it is too coarse a flower to give a front place to. It belongs to the rear simply because of its aggressive qualities, and the intense effect of its strong, all-pervading color. You do not want a flower in the front row that, being given an inch, will straightway insist upon taking an ell. This the *Rudbeckia* will do, every time, if not promptly checked. It is an exceedingly valuable plant to cut from, as its flowers last for days, and light up a room like a great burst of strong sunshine.

Hollyhocks must have a place in every border. Their stately habit, profusion of bloom, wonderful range and richness of color, and long-continued flowering period make them indispensable and favorites everywhere. They are most effective when grown in large masses or groups. If they are prevented from ripening seed, they will bloom throughout the greater part of the season. The single varieties are of the tallest, stateliest growth, therefore admirably adapted to back rows in the border. The double kinds work in well in front of them. These are the showiest members of the family because their flowers are so thickly set along the stalk that a stronger color-effect is given, but they are really no finer than the single sorts, so far as general effect is concerned. Indeed, I think I prefer the single kinds because the rich and peculiar markings of the individual flower show to much better advantage in them than in the doubles, whose multiplicity of petals hides this very pleasing variegation. But I would not care to go without either kind.



OLD-FASHIONED HOLLYHOCKS

Coreopsis lanceolata is a very charming plant for front rows, especially if it can have a place where it is given the benefit of contrast with a white flower, like the Daisy. In such a location its rich golden yellow comes out brilliantly, and makes a most effective point of color in the border.

Perennial Phlox, all things considered, deserves a place very near to the head of the list of our very best hardy plants. Perhaps if a vote were taken, it would be elected as leader of its class in point of merit. It is so entirely hardy, so sturdy and self-reliant, so wonderfully floriferous, and so rich and varied in color that it is almost an ideal plant for border-use. It varies greatly in habit. Some varieties attain a height of five feet or more. Others are low growers,—almost dwarfs, in fact,—therefore well adapted to places in the very front row, and close to the path. The majority are of medium habit, fitting into the middle rows most effectively. With a little care in the selection of varieties—depending on the florists' catalogues to give us the height of each—it is an easy matter to arrange the various sorts in such a way as to form a bank which will be an almost solid mass of flowers for weeks. Some varieties have flowers of the purest white, and the colors of others range through many shades of pink, carmine, scarlet, and crimson, to lilac, mauve, and magenta. The three colors last named must never be planted alongside or near to the other colors, with the exception of white, as there can be no harmony between them. They make a color-discord so intense as to be positively painful to the eye that has keen color-sense. But combine them with the white kinds and they are among the loveliest of the lot. This Phlox ought always to be grouped, to be most effective, and white varieties should be used liberally to serve as a foil to the more brilliant colors and bring out their beauty most strikingly.



THE PEONY AT ITS BEST

Peonies are superb flowers, and no border can afford to be without them. The varieties are almost endless, but you cannot have too many of them. Use them everywhere. The chances are that you will wish you had room for more. They bloom early, are magnificent in color and form, and are so prolific that old plants often bear a hundred or more flowers each season, and their profusion of bloom increases with age, as the plant gains in size. Many varieties are as fragrant as a Rose, and all of them are as hardy as a plant can well be. What more need be said in their favor?

In order to attain the highest degree of success with the Peony, it should be given a rather heavy soil, and manure should be used with great liberality. In fact it is hardly possible to make the soil too rich to suit it. Disturb the roots as little as possible. The plant is very sensitive to any treatment that affects the root, and taking away a "toe" for a neighbor will often result in its failure to bloom next season. Keep the grass from crowding it. Year after year it will spread its branches farther and wider, and there will be more of them, and its flowers will be larger and finer each season, if the soil is kept rich. I know of old clumps that have a spread of six feet or more, sending up hundreds of stalks from matted roots that have not been disturbed for no one knows how long, on which blossoms can be counted by the hundreds every spring.

Dicentra, better known as "Bleeding Heart," because of its pendulous, heart-shaped flowers, is a most lovely early bloomer. It is an excellent plant for the front row of the border. It sends up a great number of flowering stalks, two and three feet in length, all curving gracefully outward from the crown of the plant. These bear beautiful foliage—indeed, the plant would be well worth growing for this alone—and each stalk is terminated with a raceme of pink and white blossoms. It is difficult to imagine anything lovelier or more graceful than this plant, when in full bloom.

The *Aquilegia* ought to be given a place in all collections. It comes in blue, white, yellow, and red. Some varieties are single, others double, and all beautiful. This is one of our early bloomers. It should be grown in clumps, near the front row.



A BIT OF THE BORDER OF PERENNIAL PLANTS

The Iris is to the garden what the Orchid is to the greenhouse. Its colors are of the richest—blue, purple, violet, yellow, white, and gray. It blooms in great profusion, for weeks during the early part of summer. It is a magnificent flower. It will be found most effective when grouped, but it can be scattered about the border in such a way as to produce charming results if one is careful to plant it among plants whose flowers harmonize with the different varieties in color. Color-harmony is as important in the hardy border as in any other part of the garden, and no plant should be put out until you are sure of the effect it will produce upon other plants in its immediate neighborhood. Find the proper place for it before you give it a permanent location. The term, "proper place," has as much reference to color as to size. A plant that introduces color-discord is as much out of place as is the plant whose size makes it a candidate for a position in the rear when it is given a place in the immediate foreground.

Pyrethrum uliginosum is a wonderfully free bloomer, growing to a height of three or four feet, therefore well adapted to the middle rows of the border. It blooms during the latter part of summer. It is often called the "Giant Daisy," and the name is very appropriate, as it is the common Daisy, to all intents and purposes, on a large scale.

The small white Daisy, of lower growth, is equally desirable for front-row locations. It is a most excellent plant, blooming early in the season, and throughout the greater part of

summer, and well into autumn if the old flower-stalks are cut away in September, to encourage new growth. It is a stand-by for cut flowers for bouquet work. Because of its compact habit it is a very desirable plant for edging the border.

It is difficult to imagine anything more daintily charming than the herbaceous Spireas. *Alba*, white, and *rosea*, soft pink, produce large, feathery tufts of bloom on stalks six and seven feet tall. The flowers of these varieties are exceedingly graceful in an airy, cloud-like way, and never fail to attract the attention of those who pass ordinary plants by without seeing them.

The florists have taken our native Asters in hand, and we now have several varieties that make themselves perfectly at home in the border. Some of them grow to a height of eight feet. Others are low growers. The rosy-violet kinds and the pale lavender-blues are indescribably lovely. Nearly all of them bloom very late in the season. Their long branches will be a mass of flowers with fringy petals and a yellow centre. These plants have captured the charm of the Indian Summer and brought it into the garden, where they keep it prisoner during the last days of the season. By all means give them a place in your collection. And it will add to the effect if you plant alongside them a few clumps of their sturdy, faithful old companion of the roadside and pasture, the Golden Rod.

It hardly seems necessary for me to give a detailed description of all the plants deserving a place in the border. The list would be too long if I were to attempt to do so. You will find all the really desirable kinds quite fully described in the catalogues of the leading dealers in plants. Information as to color, size, and time of flowering is given there, and you can select to suit your taste, feeling confident that you will be well satisfied with the result.

Just a few words of advice, in conclusion:

Don't crowd your plants.

Allow for development.

Don't try to have a little of everything.

Don't overlook the old-fashioned kinds simply because they happen to be old. That proves that they have merit.

Keep the ground between them clean and open.

Manure well each spring.

Stir the soil occasionally during the season.

Prevent the formation of seed.

Once in three or four years divide the old clumps, and discard all but the strongest, healthiest portions of the roots. Reset in rich, mellow soil. Do this while the plants are at a standstill, early in spring, or in fall, after the work of the season is over.

THE GARDEN OF ANNUALS

In preparing the garden for annuals, the first thing to do is to spade up the soil. This can



be done shortly after the frost is out of the ground. This is about all that can be done to advantage, at this time, as the ground must be allowed to remain as it comes from the spade until the combined effect of sun and air has put it into a condition that will make it an easy matter to reduce it to proper mellowness with the hoe or iron rake.

Right here let me say: Most of us, in the enthusiasm which takes possession of us when spring comes, are inclined to rush matters. We spade up the soil, and immediately attempt to pulverize it, and of course fail in the attempt, because it is not in a proper condition to pulverize. We may succeed in breaking it up into little clods, but that is not what needs doing. It must be made fine, and mellow,—not a lump left in it,—and this can only be done well after the elements have had an opportunity to do their work on it. When one comes to think about it, there is no need of hurry, for it is not safe to sow seed in the ground at the north until the weather becomes warm and settled, and that will not be before the first of May, in a very favorable season, and generally not earlier than the middle of the month. This being the case, be content to leave the soil to the mellowing influences of the weather until seed-sowing time is at hand. *Then* go to work and get your garden ready.

If the soil is not rich, apply manure from the barnyard or its substitute in the shape of some reliable fertilizer.

Do this before you set about the pulverization of the soil. Then go to work with hoe and rake, and reduce it to the last possible degree of fineness, working the fertilizer you make use of into it in such a manner that both are perfectly blended.

There is no danger of overdoing matters in this part of garden-work. The finer the soil is the surer you may be of the germination of the seed you put into it. Fine seed often fails to grow in a coarse and lumpy soil.

In sowing seed, make a distinction between the very fine and that of ordinary size. Fine seed should be scattered on the surface, and no attempt made to cover it. Simply press down the soil upon which you have scattered it with a smooth board. This will make it firm enough to retain the moisture required to bring about germination.

Larger seed can be sown on the surface, and afterward covered by sifting a slight covering of fine soil over it. Then press with the board to make it firm.

Large seed, like that of the Sweet Pea, Four-o'-Clock, and Ricinus, should be covered to the depth of half an inch.

I always advise sowing seed in the beds where the plants are to grow, instead of starting it in pots and boxes, in the house, early in the season, under the impression that by so doing you are going to "get the start of the season." In ninety-nine cases out of a hundred, plants from seed sown in the house will be so weak in vital force that they cannot stand the change which comes when they are transplanted to the open ground. In the majority of cases, there will be none to transplant, for seedlings grown under living-room conditions generally die before the time comes when it is safe to put them out of doors. Should there be any to put out, they will be so weak that plants from seed sown in the beds, at that time, will invariably get the start of them, and these are sure to make the best plants. A person must be an expert in order to make a success of plant-growing from seed, in the house, in spring. There will be too much heat, too little fresh air, too great a lack of

moisture in the atmosphere, and often a lack of proper attention in the way of watering, and unless these matters can be properly regulated it is useless to expect success. Knowing what the result is almost sure to be, I discourage the amateur gardener from attempting to grow his own seedlings under these conditions. If early plants are desired, buy them of the florists whose facilities for growing them are such that they can send out strong and healthy stock.

Do not sow the seeds of tender plants until you are quite sure that the danger from cold nights is over. It is hardly safe to put any kind of seed into the ground before the middle of May, at the north.

If we wait until all conditions are favorable, the young plants will get a good start and go steadily ahead, and distance those from seed sown before the soil had become warm or the weather settled. Haste often makes waste. If the soil is cold and damp seed often fails to germinate in it, and this obliges you to buy more seed, and all your labor goes for naught.

To the method and time of planting advised above, there is one exception—that of the Sweet Pea. This should go into the ground as soon as possible in spring. For this reason: This plant likes to get a good root-growth before the warm weather of summer comes. With such a growth it is ready for flowering early in the season, and no time is wasted. Dig a V-shaped trench six inches deep. Sow the seed thickly. It ought not to be more than an inch apart, and if closer no harm will be done. Cover to the depth of an inch, at time of sowing, tramping the soil down firmly. When the young plants have grown to be two or three inches tall, draw in more of the soil, and keep on doing this from time to time, as the seedlings reach up, until all the soil from the trench has been returned to it. This method gives us plants with roots deep enough in the soil to make sure of sufficient moisture in a dry season. It also insures coolness at the root, a condition quite necessary to the successful culture of this favorite flower.

Weeds will generally put in an appearance before the flowering plants do. As soon as you can tell "which is which" the work of weeding must begin. At this stage, hand-pulling will have to be depended on. But a little later, when the flowering plants have made an inch or two of growth, weeding by hand should be abandoned. Provide yourself with a weeding-hook—a little tool with claw-shaped teeth—with which you can uproot more weeds in an hour than you can in all day by hand, and the work will be done in a superior manner as the teeth of the little tool stir the surface of the soil just enough to keep it light and open—a condition that is highly favorable to the healthy development of young plants. I have never yet seen a person who liked to pull weeds by hand. Gardens are often neglected because of the dislike of their owners for this disagreeable task. The use of the weeding-hook does away with the drudgery, and makes really pleasant work of the fight with weeds.

If seedlings are to be transplanted, do it after sundown or on a cloudy day. Lift the tender plants as carefully as possible, and aim to not expose their delicate roots. Get the place in which you propose to plant them ready before you lift them, and then set them out immediately. Make a hole as deep as their roots are long, drop the plants into it, and press the soil firmly about them with thumb and finger. It may be well to water them if the season is a dry one. Shade them next day, and continue to do so until they show that they have made new feeding roots by beginning to grow. I make use of a "shader" that I have "evolved from my inner consciousness" that gives better satisfaction than anything else I have ever tried. I cut thick brown paper into circular shape, eight inches across. Then I cut out a quarter of it, and bring the edges of this cut together, and run a stick or wire

through them to hold them together. This stick or wire should be about ten inches long, as the lower end of it must go into the soil. When my "shader" is ready for use it has some resemblance to a paper umbrella with a handle at one side instead of in the middle. This handle is inserted in the soil close to the plant, and the "umbrella" shades it most effectively, and does this without interfering with a free circulation of air, which is a matter of great importance.

If thorough work in the way of weeding is done at the beginning of the season, it will be an easy matter to keep the upper hand of the enemy later on. But if you allow the weeds to get the start of you, you will have to do some hard fighting to gain the supremacy which ought never to have been relinquished. After a little, the hoe can be used to advantage. If the season happens to be a dry one, do not allow the soil to become hard, and caked on the surface, under the impression that it will not be safe to stir it because of the drouth. A soil that is kept light and open will absorb all the moisture there is in the air, while one whose surface is crusted over cannot do this, therefore plants growing in it suffer far more than those do in the soil that is stirred constantly. Aim to get all possible benefit from dews and slight showers by keeping the soil in such a sponge-like condition that it can take advantage of them.

It is a good plan to use the grass-clippings from the lawn as a mulch about your plants in hot, dry weather.

Do not begin to water plants in a dry season unless you can keep up the practice. Better let them take the chances of pulling through without the application than to give it for a short time and then abandon it because of the magnitude of the task.

Furnish racks and trellises for such plants as need them as soon as they are needed. Many a good plant is spoiled by neglecting to give attention to its requirements at the proper time.

Make it a rule to go over the garden at least twice a week, after the flowering season sets in, and cut away all faded flowers. If this is done, no seed will come to development, and the strength of the plants will be expended in the production of other flowers. By keeping up this practice through the season, it is possible to keep most of them blossoming until late in the summer, as they will endeavor to perpetuate themselves by the production of seed, and the first step in this process is the production of flowers.

What flowers would you advise us to grow? many readers of this chapter will be sure to ask, after having read what I have said above about the garden of annuals.

In answering this question here, it will be necessary, in a measure, to repeat what has been, or will be, said in other chapters, where various phases of gardening are treated. But the question is one that should be answered in this connection, at the risk of repetition, in order to fully cover the subject now under consideration.

There are so many kinds of flowers offered by the seedsmen that it is a difficult matter to decide between them, when all are so good. But no one garden is large enough to contain them all. Were one to attempt the cultivation of all he would be obliged to put in all his time at the work, and the services of an assistant would be needed, besides. Even then the chances are that the work would be done in a superficial fashion. Therefore I shall mention only such kinds as I consider the very best of the lot for general use, adding this advice:

Don't attempt too much. A few good kinds, well grown, will afford a great deal more

pleasure than a great many kinds only half grown.

This list is made up of such kinds as can properly be classed as "stand-bys," kinds which any amateur gardener can be reasonably sure of success with if the instructions given in this chapter are carefully followed.

Alyssum.—Commonly called Sweet Alyssum, because of its pleasing fragrance. Of low growth. Very effective as an edging. Most profuse and constant bloomer.

Aster.—This annual disputes popularity with the Sweet Pea. Very many persons would prefer it to any other because of its sturdy habit, ease of culture, profusion of bloom, and great variety of color. It is one of the indispensables.

Antirrhinum (Snapdragon).—Plant of profuse flowering habit. Flowers of peculiar shape, mostly in rich colors. Very satisfactory for autumn.



A BED OF ASTERS

Balsam.—Splendid plant for summer flowering, coming in many colors, some of these exceedingly delicate and beautiful. Flowers like small Roses, very double, and set so thickly along the stalks that each branch seems like a wreath of bloom. It is often necessary to trim off many of the leaves in order to give the blossoms a chance to display themselves. Some varieties are charmingly variegated. Being quite tender it should not be sown until one is sure of warm weather.

Calliopsis (Coreopsis).—A very showy plant, with rich yellow flowers, marked with brown, maroon and scarlet at the base of the petal. A most excellent plant where great masses of color are desired. Fine for combining with scarlet and other strong-toned flowers. An all-the-season bloomer.

Candytuft.—A free and constant bloomer, of low habit. Very useful for edging beds and

borders. Comes in pure white and purplish red.

Celosia (Cockscomb).—A plant with most peculiar flowers. What we *call* the flower is really a collection of hundreds of tiny individual blossoms set so close together that they seem to compose one large blossom. The prevailing color is a bright scarlet, but we have some varieties in pink and pale yellow. Sure to please.

Cosmos.—A plant of wonderfully free flowering habit. Flowers mostly pink, white, and lilac. A tall grower, branching freely, therefore well adapted to back rows, or massing. Foliage fine and feathery. Excellent for cutting. One of our most desirable fall bloomers. We have an early *Cosmos* of rather dwarf habit, but the large-growing late varieties are far more satisfactory. It may be necessary to cover the plants at night when the frosts of middle and late September are due, as they will be severely injured by even the slightest touch of frost. Well worth all the care required.

Four-o'-Clock (Marvel of Peru—*Mirabilis*).—A good, old-fashioned flower that has the peculiarity of opening its trumpet-shaped blossoms late in the afternoon. Bushy, well branched, and adapted to border use as a "filler."

Escholtzia (California Poppy).—One of the showiest flowers in the entire list. A bed of it will be a sheet of richest golden yellow for many weeks.

Gaillardia (Blanket-flower).—A profuse and constant bloomer, of rich and striking color-combinations. Yellow, brown, crimson, and maroon. Most effective when massed.

Gypsophila (Baby's Breath).—A plant of great daintiness, both in foliage and flowers. Always in demand for cut-flower work. White and pink.

Kochia (Burning Bush—Mexican Fire-plant).—A very desirable plant, of symmetrical, compact habit. Rich green throughout the summer, but turning to dark red in fall. Fine for low hedges and for scattering through the border wherever there happens to be a vacancy.

Larkspur.—Another old-fashioned flower of decided merit.

Marigold.—An old favorite that richly deserves a place in all gardens because of its rich colors, free blooming qualities and ease of culture.

Nasturtium.—Too well known to need description here. Everybody ought to grow it. Unsurpassed in garden decoration and equally as valuable for cutting. Blooms throughout the entire season. Does well in a rather poor soil. In a very rich soil it makes a great growth of branches at the expense of blossoms.

Pansy.—Not an annual, but generally treated as such. A universal favorite that almost everybody grows. If flowers of a particular color are desired I would advise buying blooming seedlings from the florist, as one can never tell what he is going to get if he depends on seed of his own sowing. The flowers will be as fine as those from selected varieties, but there will be such a medley of colors that one sometimes tires of the effect. I have always received the most pleasure from planting distinct colors, like the yellows, the blues, the whites, and the purples, and the only way in which I can make sure of getting just the colors I want is to tell the florist about them, and instruct him to send me those colors when his seedlings come into bloom.

Petunia.—Another of the "stand-bys." A plant that can always be depended on. Very free bloomer, very profuse, and very showy. If the old plants that have blossomed through the summer begin to look ragged and unsightly, cut away the entire top. In a short time new

shoots will be sent out from the stump of the old plant, and almost before you know it the plant will have renewed itself, and be blooming as freely as when it was young. Fine for massing.

Phlox Drummondii.—One of our most satisfactory annuals. Any one can grow it. It begins to bloom when small, and improves with age. Comes in a wide range of colors, some brilliant, others delicate—all beautiful. Charming effects are easily secured by planting the pale rose, pure white, and soft yellow varieties together, either in rows or circles. The contrast will be fine, and the harmony perfect. Other colors are desirable, but they do not all combine well. It is a good plan to use white varieties freely, as these heighten the effect of the strong colors. I always buy seed in which each color is by itself, as a mixture of red, crimson, lilac, and violet in the same bed is never pleasing to me.

Poppy.—Brilliant and beautiful. Unrivalled for midsummer show. As this plant is of little value after its early flowering period is over, other annuals can be planted in the bed with it, to take its place. Set these plants about the middle of July, and when they begin to bloom pull up the Poppies. The Shirley strain includes some of the loveliest colors imaginable. Its flowers have petals that seem cut from satin. The large-flowered varieties are quite as ornamental as Peonies, as long as they last.

Portulacca.—Low grower, spreading until the surface of the bed is covered with the dark green carpet of its peculiar foliage. Flowers both single and double, of a great variety of colors. Does well in hot locations, and in poor soil. Of the easiest culture.

Scabiosa.—Very fine. Especially for cutting. Colors dark purple, maroon, and white.

Salpiglossis.—A free-blooming plant, of very brilliant coloring and striking variegation. Really freakish in its peculiar markings.

Stock (Gillyflower).—A plant of great merit. Flowers of the double varieties are like miniature Roses, in spikes. Very fragrant. Fine for cutting. Blooms until frost comes. Red, pink, purple, white, and pale yellow. The single varieties are not desirable, and as soon as a seedling plant shows single flowers, pull it up.

Sweet Pea.—This grand flower needs no description. It is one of the plants we *must* have.

Verbena.—Old, but none the worse for that. A free and constant bloomer, of rich and varied coloring. Habit low and spreading. One of the best plants we have for low beds, under the sitting-room windows. Keep the faded flowers cut off, and at midsummer cut away most of the old branches, and allow the plant to renew itself, as advised in the case of the Petunia.

Wallflower.—Not as much grown as it ought to be. Delightfully fragrant. Color rich brown and tawny yellow. General habit similar to that of Stock, of which it is a near relative. Late bloomer. Give it one season's trial and you will be delighted with it. Not as showy as most flowers, but quite as beautiful, and the peer of any of them in sweetness.

Zinnia.—A robust plant of the easiest possible culture. Any one can grow it, and it will do well anywhere. Grows to a height of three feet or more, branches freely, and close to the ground, and forms a dense, compact bush. On this account very useful for hedge purposes. Exceedingly profuse in its production of flowers. Blooms till frost comes. Comes in almost all the colors of the rainbow.

Because I have advised the amateur gardener to make his selection from the above list, it must not be understood that those of which I have not made mention, but which will be

found described in the catalogues of the florist, are not desirable. Many of them might please the reader quite as well, and possibly more, than any of the kinds I have spoken of. But most of them will require a treatment which the beginner in gardening will not be able to give them, and, on that account, I do not include them in my list. After a year or two's experience in gardening, the amateur will be justified in attempting their culture—which, after all, is not difficult if one has time to give them special attention and a sufficient amount of care. The kinds I have advised are such as virtually take care of themselves, after they get well under way, if weeds are kept away from them. They are the kinds for "everybody's garden."

Let me add, in concluding this chapter, that it is wisdom on the part of the amateur to select not more than a dozen of the kinds that appeal most forcibly to him, and concentrate his attention on them. Aim to grow them to perfection by giving them the best of care. A garden of well-grown plants, though limited in variety, will afford a hundredfold more pleasure to the owner of it than a garden containing a little of everything, and nothing well grown.

In purchasing seed, patronize a dealer whose reputation for honesty and reliability is such that he would not dare to send out anything inferior if he were inclined to do so. There are many firms that advertise the best of seed at very low prices. Look out for them. I happen to know that our old and most reputable seedsmen make only a reasonable profit on the seed they sell. Other dealers who cut under in price can only afford to do so because they do not exercise the care and attention which the reliable seedsman does in growing his stock, hence their expenses are less. Cheap seed will be found cheap in all senses of the term.

I want to lay special emphasis on the advisability of purchasing seed in which each color is by itself. The objection is often urged that one person seldom cares to use as many plants of one color as can be grown from a package of seed. This difficulty is easily disposed of. Club with your neighbors, and divide the seed between you when it comes. In this way you will secure the most satisfactory results and pay no more for your seed than you would if you were to buy "mixed" packages. Grow colors separately for a season and I am quite sure you will never go back to mixed seed.

THE BULB GARDEN



VERY lover of flowers should have a garden of bulbs, for three reasons: First, they bloom so early in the season that one can have flowers at least six weeks longer than it is possible to have them if only perennial and annual plants are depended on. Some bulbs come into bloom as soon as the snow is gone, at the north, to be followed by those of later habit, and a constant succession of bloom can be secured by a judicious selection of varieties, thus completely tiding over the usually flowerless period between the going of winter and the coming of the earlier spring flowers. Second, they require but little care, much less than the ordinary plant. Give them a good soil to grow in, and keep weeds and grass from encroaching on them, and they will ask no other attention from you, except when, because of a multiplication of bulbs, they need to be

separated and reset, which will be about every third year. The work required in doing this is no more than that involved in spading up a bed for annual flowers. Third, they are so hardy, even at the extreme north, that one can be sure of bloom from them if they are given a good covering in fall, which is a very easy matter to do.

For richness and variety of color this class of plants stands unrivalled. The bulb garden is more brilliant than the garden of annuals which succeeds it.

September is the proper month in which to make the bulb garden.

As a general thing, persons fail to plant their bulbs until October and often November, thinking the time of planting makes very little difference so long as they are put into the ground before winter sets in. Here is where a serious mistake is made. Early planting should always be the rule,—for this reason: Bulbs make their annual growth immediately after flowering, and ripen off by midsummer. After this, they remain dormant until fall, when new root-growth takes place, and the plant gets ready for the work that will be demanded of it as soon as spring opens. It is made during the months of October and November, if cold weather does not set in earlier, and should be fully completed before the ground freezes. If incomplete—as is always the case when late planting is done—the plants are obliged to do—or attempt to do—double duty in spring. That is, the completion of the work left undone in fall and the production of flowers must go on at the same time, and this is asking too much of the plant. It cannot produce fine, perfect flowers with a poorly-developed root-system to supply the strength and nutriment needed for such a task, therefore the plants are not in a condition to do themselves justice. Often late-planted bulbs fail to produce any flowers, and, in most instances, the few flowers they do give are small and inferior in all respects.

With early-planted bulbs it is quite different, because they had all the late fall-season to complete root-growth in, and when winter closed in it found them ready for the work of spring.

Therefore, do not neglect the making of your bulb garden until winter is at hand under the impression that if the bulbs are planted any time before snow comes, all is well. This is the worst mistake you could possibly make.

The catalogues of the bulb-dealers will be sent out about the first of September. Send in your order for the kinds you decide on planting at once, and as soon as your order has gone, set about preparing the place in which you propose to plant them. Have everything in readiness for them when they arrive, and put them into the ground as soon after they are received as possible.

The soil in which bulbs should be planted cannot be too carefully prepared, as much of one's success with these plants depends upon this most important item. It must be rich, and it must be fine and mellow.

The best soil in which to set bulbs is a sandy loam.

The best fertilizer is old, thoroughly rotted cow-manure. On no account should fresh manure be used. Make use, if possible, of that which is black from decomposition, and will crumble readily under the application of the hoe, or iron rake. One-third in bulk of this material is not too much. Bulbs are great eaters, and unless they are well fed you cannot expect large crops of fine flowers from them. And they must be well supplied with nutritious food each year, because the crop of next season depends largely upon the nutriment stored up this season.

If barnyard manure is not obtainable, substitute bonemeal. Use the fine meal, in the proportion of a pound to each yard square of surface. More, if the soil happens to be a poor one. If the soil is heavy with clay, add sand enough to lighten it, if possible.

The ideal location for bulbs is one that is naturally well drained, and has a slope to the south.

Unless drainage is good success cannot be expected, as nothing injures a bulb more than water about its roots. Therefore, if you do not have a place suitable for them so far as natural drainage is concerned, see to it that artificial drainage supplies what is lacking. Spade up the bed to the depth of a foot and a half. That is—throw the soil out of it to that depth,—and put into the bottom of the excavation at least four inches of material that will not decay readily, like broken brick, pottery, clinkers from the coal-stove, coarse gravel—anything that will be permanent and allow water to run off through the cracks and crevices in it, thus securing a system of drainage that will answer all purposes perfectly. It is of the utmost importance that this should be done on all heavy soils. Unless the water from melting snows and early spring rains drains away from the bulbs readily you need not expect flowers from them.

After having arranged for drainage, work over the soil thrown out of the bed until it is as fine and mellow as it can possibly be made. Mix whatever fertilizer you make use of with it, when you do this, that the two may be thoroughly incorporated. Then return it to the bed. There will be more than enough to fill the bed, because some space is given up to drainage material, but this will be an advantage because it will enable you to so round up the surface that water will run off before it has time to soak into the soil to much depth.

I do not think it advisable to say much about plans for bulb-beds, because comparatively few persons seem inclined to follow instructions along this line. The less formal a bed of this kind is the better satisfaction it will give, as a general thing. It is the flower that is in the bed that should be depended on to give pleasure rather than the shape of the bed containing it.

I would advise locating bulb-beds near the house where they can be easily seen from the living-room windows. These beds can be utilized later on for annuals, which can be sown or planted above the bulbs without interfering with them in any respect.

I would never advise mixing bulbs. By that, I mean, planting Tulips, Hyacinths, Daffodils, and other kinds in the same bed. They will not harmonize in color or habit. Each kind will be found vastly more pleasing when kept by itself.

I would also advise keeping each color by itself, unless you are sure that harmony will result from a mixture or combination of colors. Pink and white, blue and white, and red and white Hyacinths look well when planted together, but a jumble of pinks, blues, and reds is never as pleasing as the same colors would be separately, or where each color is relieved by white.

The same rule applies to Tulips, with equal force.

We often see pleasing effects that have been secured by planting reds and blues in rows, alternating with rows of white. This method keeps the quarrelsome colors apart, and affords sufficient contrast to heighten the general effect. Still, there is a formality about it which is not entirely satisfactory to the person who believes that the flower is of first importance, and the shape of the bed, or the arrangement of the flowers in the bed, is a matter of secondary consideration.

Bulbs should be put into the ground as soon as possible after being taken from the package in which they are sent out by the florist. If exposed to the light and air for any length of time they part rapidly with the moisture contained in their scales, and that means a loss of vitality. If it is not convenient to plant them at once, leave them in the package, or put them in some cool, dark place until you are ready to use them.

As a rule Hyacinths, Tulips, and Narcissus should be planted about five inches deep, and about six inches apart.

The smaller bulbs should be put from three to four inches below the surface and about the same distance apart.

In planting, make a hole with a blunt stick of the depth desired, and drop the bulb into it. Then cover, and press the soil down firmly.

Just before the ground is likely to freeze, cover the bed with a coarse litter from the barnyard, if obtainable, to a depth of eight or ten inches. If this litter is not to be had, hay or straw will answer very well, if packed down somewhat. Leaves make an excellent covering if one can get enough of them. If they are used, four inches in depth of them will be sufficient. Put evergreen boughs or wire netting over them to prevent their being blown away.

I frequently receive letters from inexperienced bulb-growers, in which the writers express considerable scepticism about the value of such a covering as I have advised above, because, they say, it is not deep enough to keep out the frost, therefore it might as well be dispensed with. Keeping out the frost is not what is aimed at. We expect the soil about the bulbs to freeze. But such a covering as has been advised will prevent the sun from thawing out the frost after it gets into the soil, and this is exactly what we desire. For if the frost can be kept in, after it has taken possession, there will not be that frequent alternation between freezing and thawing which does the harm to the plant. For it is not freezing, understand, that is responsible for the mischief, but the *alternation of conditions*. These cause a rupture of plant-cells, and that is what does the harm. Keep a comparatively tender plant frozen all winter and allow the frost to be drawn out of it gradually in spring, and it will survive a season of unusual cold. The same plant will be sure to die in a mild season if left exposed to the action of the elements, because of frequent and rapid changes between heat and cold.

Whatever covering is given should be left on the beds as long as possible in spring, because of the severely cold weather we frequently have at the north after we think all danger is over. However, as soon as the plants begin to make much growth, this covering will have to be removed. If a cold night comes along after this has been done spread blankets or carpeting over the beds. Keep them from resting on the tender growth of the plants by driving pegs into the soil a short distance apart, all over the bed. The young plants may not be killed by quite a severe freeze, but they will be injured by it, and injury of any kind should be guarded against at this season, if you want fine flowers.



BED OF WHITE HYACINTHS BORDERED WITH PANSIES

Holland Hyacinths should receive first consideration, because they are less likely to disappoint than any other hardy bulb. There are single and double kinds, both desirable. Personally I prefer the single sorts, as they are less prim and formal than the double varieties, whose flowers are so thickly set along the stalk that individuality of bloom is almost wholly lost sight of. They are, in this respect, like the double Geraniums we use in summer bedding, whose trusses of bloom resemble a ball of color more than anything else, at a little distance, the suggestion of individual bloom being so slight that it seldom receives consideration. However, they do good service where color-effects are considered of more importance than anything else. Single Hyacinths have their flowers more loosely arranged along the stalk, and are therefore more graceful than the double varieties, and their colors are quite as fine. These range from pure white through pale pink and rose, red, scarlet, crimson, blue and charming yellows to dark purple.

Roman Hyacinths are too tender for outdoor culture at the north.

There are several quite distinct varieties of the Tulip. There is an early sort, a medium one, a late one, and the Parrot, which is prized more for its striking combinations of brilliant colors than for its beauty of form or habit. We have single and double varieties in all the classes, all coming in a wide range of both rich and delicate colors. Scarlets, crimsons, and yellows predominate, but the pure whites, the pale rose-colors, and the rich purples are general favorites. Some of the variegated varieties are exceedingly brilliant in their striking color-combinations.

The Narcissus is one of the loveliest flowers we have. It deserves a place very near, if not quite at, the head of the list of our best spring-blooming plants. Nothing can be richer in color than the large double sorts, like *Horsfieldii*, and *Empress*, with their petals of

burnished gold. There are many other varieties equally as fine, but with a little difference in the way of color—just enough to make one want to have all of them. The good old-fashioned Daffodil is an honored member of the family that should be found in every garden. When you see the Dandelion's gleam of gold in the grass by the wayside you get a good idea of the brilliant display a fine collection of Narcissus is capable of making, for in richness of color these two flowers are almost identical.

Among the smaller bulbs that deserve special mention are the Crocus, the Snow Drop, the Scilla, and the Musk or Grape Hyacinth. These should be planted in groups, to be most effective, and set close together. They must be used in large quantities to produce much of a show. They are very cheap, and a good-sized collection can be had for a small amount of money.

Those who have a liking for special colors will do well to make their selections from the named varieties listed in the catalogues. You can depend on getting just the color you want, if you order in this way. But in no other way. Mixed collection will give you some of all colors, but there is no way of telling "which is which" until they come into bloom.

But in mixed collections you will get just as fine bulbs and just as fine colors as you will if you select from the list of named varieties. Only—you won't know what you are getting. Named sorts will cost considerable more than the mixtures.

THE ROSE: ITS GENERAL CARE AND CULTURE



THE owner of every garden tries to grow roses in it, but where one succeeds, ten fail. Perhaps I would be safe in saying that ninety-nine out of every hundred fail, for a few inferior blossoms from a plant, each season, do not constitute success, but that is what the majority of amateur Rose-growers have to be satisfied with, the country over, and so great is their admiration for this most beautiful of all flowers that these few blossoms encourage them to keep on, season after season, hoping for better things, and consoling themselves with the thought that, though results fall short of expectation, they are doing about as well as their neighbors in this particular phase of gardening.

One does not have to seek far for the causes of failure. The Rose, while it is common everywhere, and has been in cultivation for centuries, is not understood by the rank and file of those who attempt to grow it, therefore it is not given the treatment it deserves, *and which it must have*, in order to achieve success in its culture. When we come to know its requirements, and give it proper care, we can grow fine Roses, but not till then. Those who form an opinion of the possibilities of the plant from the specimens which they see growing in the average garden have yet to find out what a really fine Rose is.

The Rose is the flower of romance and sentiment throughout the lands in which it grows, but, for all that, it is not a sentimental flower in many respects. It is a vegetable epicure. It likes rich food, and great quantities of it. Unless it can be gratified in this respect it will refuse to give you the large, fine flowers which every Rose-grower, professional or amateur, is constantly striving after. But feed it according to its liking and it will give you perfect flowers in great quantities, season after season, and *then* you will understand what

this plant can do when given an opportunity to do itself justice.

The Rose will live on indefinitely in almost any soil, and under almost any conditions. I have frequently found it growing in old, deserted gardens, almost choked out of existence by weeds and other aggressive plants, but still holding to life with a persistency that seemed wonderful in a plant of its kind. I have removed some of these plants to my own garden, and given them good care, and time after time I have been as surprised as delighted at the result. The poor little bushes, that had held so tenaciously to life against great odds, seemed to have stored up more vitality in their starved roots than any others in the garden were possessors of, and as soon as they were given good soil and proper care they sent up strong, rank shoots, and thanked me for my kindness to them in wonderful crops of flowers, and really put the old residents of the place to shame. All through the years of neglect they had no doubt been yearning to bud and bloom, but were unable to do so because of unfavorable conditions, but when the opportunity to assert themselves came they made haste to take advantage of it in a way that proves how responsive flowers are to the right kind of treatment.

The Rose will only do its best in a soil that is rather heavy with clay, or a tenacious loam. It likes to feel the earth firm about its roots. In light, loose soils it never does well, though it frequently makes a vigorous growth of branches in them, but it is from a more compact soil that we get the most and finest flowers.



HYBRID PERPETUAL ROSE

Some varieties do well in a soil of clay containing considerable gravel. Such a soil provides for the roots the firmness of which I have spoken, while the gravel insures perfect drainage,—a matter of great importance in Rose-culture. Success cannot be expected in a soil unduly retentive of moisture. Very heavy soils can be lightened by the addition of coarse, sharp sand, old mortar, and cinders. If the location chosen does not furnish perfect drainage, naturally, artificial drainage must be resorted to. Make an excavation at least a foot and a half in depth, and fill in, at the bottom, with bits of broken brick, crockery, coarse gravel, fine stone—anything that will not readily decay—and thus secure a stratum of porous material through which the superfluous moisture in the soil will readily drain away. This is an item in Rose-culture that one cannot afford to ignore, if he desires fine Roses.

A rich soil must be provided for the plants in order to secure good results. This, also, is a matter of the greatest importance. The ideal fertilizer is old, well-rotted cow-manure—so old that it is black, and so rotten that it will crumble at the touch of the hoe. On no account should fresh manure be used. If old manure cannot be obtained, substitute finely-ground bonemeal, in the proportion of a pound to as much soil as you think would fill a bushel-basket, on a rough estimate. But by all means use the cow-manure if it can possibly be procured, as nothing else suits the Rose so well. It will be safe to use it in the proportion of a third to the bulk of earth in which you plant your Roses. Whatever

fertilizer is used should be thoroughly worked into the soil before the plants are set out. See that all lumps are pulverized. If this is not done, there is danger of looseness about some of the roots at planting-time, and this is a thing to guard against, especially with young plants.

Location should be taken into consideration, always. Choose, if possible, one that has an exposure to the sunshine of the morning and the middle of the day. A western exposure is a great deal better than none, but the heat of it is generally so intense that few Roses can long retain their freshness in it. Something can be done, however, to temper the extreme heat of it by planting shrubs where they will shade the plants from noon till three o'clock.

Care must be taken, in the choice of a location, to guard against drafts. If Roses are planted where a cold wind from the east or north can blow over the bed, look out for trouble. Plan for a screen of evergreens, if the bed is to be a permanent one. If temporary only, set up some boards to protect the plants from getting chilled until quick-growing annuals can be made to take their place. I have found that mildew on Rose-bushes is traceable, nine times out of ten, to exposure to cold drafts, and that few varieties are strong enough to withstand the effects of repeated attacks of it. The harm done by it can be mitigated, to some extent, by applications of flowers of sulphur, dusted over the entire plant while moist with dew, but it will not do to depend on this remedy. Remove the cause of trouble and there will be no need of any application.

Because the Rose is so beautiful, when in full bloom, quite naturally we like to plant it where its beauty can be seen to the best advantage. But I would not advise giving it a place on the lawn, or in the front yard. When plants are in bloom, people will look only at their flowers, and whatever drawbacks there are about the bush will not be noticed. But after the flowering period is over, the bushes will come in for inspection, and then it will be discovered that a Rose-bush without blossoms is not half as attractive as most other shrubs are. We prune it back sharply in our efforts to get the finest possible flowers from it, thus making it impossible to have luxuriance of branch or foliage. We thin it until there is not enough left of it to give it the dignity of a shrub. In short, as ornamental shrubs, Roses are failures with the exception of a few varieties, and these are not kinds in general cultivation. This being the case, it is advisable to locate the Rose-bed where it will not be greatly in evidence after the flowering season is ended. But try to have it where its glories can be enjoyed by the occupants of the home. Not under, or close to, the living-room windows, for that space should be reserved for summer flowers, but where it will be in full view, if possible, from the kitchen as well as the parlor. The flowering period of the Rose is so short that we must contrive to get the greatest possible amount of pleasure out of it, and in order to do that we want it where we can see it at all times.

Very few of our best Roses are really hardy, though most of the florists' catalogues speak of them as being so. Many kinds lose the greater share of their branches during the winter, unless given good protection. Their roots, however, are seldom injured so severely that they will not send up a stout growth of new branches during the season, but this is not what we want. We want *Roses*,—lots of them,—and in order to have them we must contrive, in some way, to save as many of the last year's branches as possible. Fortunately, this can be done without a great deal of trouble.

Here is my method of winter protection: Late in fall—generally about the first of November, or whenever there are indications that winter is about to close in upon us—I bend the bushes to the ground, and cover them with dry earth, leaves, litter from the barn, or evergreen branches. In doing this I am not aiming to keep the frost away from the plants, as might be supposed, but rather to prevent the sun from getting at the soil and

thawing the frost that has taken possession of it. Scientific investigation has proven that a plant, though comparatively tender, is not seriously injured by freezing, if it can be *kept frozen* until the frost is extracted from it *naturally*,—that is, gradually and according to natural processes. It is the frequent alternation of freezing and thawing that does the harm. Therefore, if you have a tender Rose that you want to carry over winter in the open ground, give it ample protection as soon as the frost has got at it—before it has a chance to thaw out—and you can be reasonably sure of its coming through in spring in good condition. What I mean by the term "ample protection" is—a covering of one kind or another that will *shade* the plant and counteract the influence of the sun upon the frozen soil—not, as most amateurs seem to think, for the purpose of keeping the soil warm. I have already made mention of this scientific fact, and may do it again because it is a matter little understood, but is one of the greatest importance, hence my frequent reference to it.

If earth is used as a covering, it should be dry, and after it is put on, boards, or something that will turn rain and water should be put over it. Old oil-cloth is excellent for this purpose. Canvas that has been given a coating of paint is good. Tarred sheathing-paper answers the purpose very well. Almost anything will do that prevents the earth from getting saturated with water, which, if allowed to stand among the branches, will prove quite as harmful as exposure to the fluctuations of winter weather. If leaves are used,—and these make an ideal covering if you can get enough of them,—they can be kept in place by laying coarse wire netting over them. Or evergreen branches can be used to keep the wind from blowing them away. These branches alone will be sufficient protection for the hardier kinds, such as Harrison's Yellow, Provence, Cabbage, and the Mosses, anywhere south of New York. North of that latitude I would not advise depending on so slight a protection. Earth-covering is preferable for the northern section of the United States.



ROSE TRELLIS

It is no easy matter to get sturdy Rose-bushes ready for winter. Their canes are stiff and brittle. Their thorns are formidable. One person, working alone, cannot do the entire work to advantage. It needs one to bend the bushes down and hold them in that position while the other applies the covering. In bending the bush, great care must be taken to prevent its being broken, or cracked, close to the ground. Provide yourself with gloves of substantial leather or thick canvas before you tackle them. Then take hold of the cane close to the ground, with the left hand, holding it firmly, grasp the upper part of it with the right hand, and proceed gently and cautiously with the work until you have it flat on the ground. If your left-hand grasp is a firm one, you can feel the bush yielding by degrees, and this is what you should be governed by. On no account work so rapidly that you do not feel the resistance of the branch giving way in a manner that assures you that it is adjusting itself safely to the force that is being applied to it. When you have it on the ground, you will have to hold it there until it is covered with earth, unless you prefer to weight it down with something heavy enough to keep it in place while you cover it. Omit the weights, or relax your grip upon it, and the elastic branches will immediately spring back to their normal position. Sometimes, when a bush is stubbornly stiff, and refuses to yield without danger of injury, it is well to heap a pailful or two of earth against it, on the side toward which it is to be bent, thus enabling you to *curve* it over the heaped-up soil in such a manner as to avoid a sharp bend. Never hurry with this work. Take your time for it, and do it thoroughly, and thoroughness means carefulness, always. As a general thing, six or eight inches of dry soil will be sufficient covering for Roses at the north. If litter is used, the covering can be eight or ten inches deep.

Do not apply any covering early in the season, as so many do for the sake of "getting the work out of the way." Wait until you are reasonably sure that cold weather is setting in.

Teas, and the Bourbon and Bengal sections of the so-called ever-bloomers, are most

satisfactorily wintered in the open ground by making a pen of boards about them, at least ten inches deep, and filling it with leaves, packing them firmly over the laid-down plants. Then cover with something to shed rain. These very tender sorts cannot always be depended on to come through the winter safely at the north, even when given the best of protection, but where one has a bed of them that has afforded pleasure throughout the entire summer, quite naturally he dislikes to lose them if there is a possibility of saving them, and he will be willing to make an effort to carry them through the winter. If only part of them are saved, he will feel amply repaid for all his trouble. Generally all the old top will have to be cut away, but that does not matter with Roses of this class, as vigorous shoots will be sent up, early in the season, if the roots are alive, therefore little or no harm is done by the entire removal of the old growth.

The best Roses to plant are those grown by reliable dealers who understand how to grow vigorous stock, and who are too honest to give a plant a wrong name. Some unscrupulous dealers, whose supply of plants is limited to a few of the kinds easiest to grow, will fill any order you send them, and your plants will come to you labelled to correspond with your order. But when they come into bloom, you may find that you have got kinds that you did not order, and did not care for. The honest dealer never plays this trick on his customers. If he hasn't the kinds you order, he will tell you so. Therefore, before ordering, try to find out who the honest dealers are, and give no order to any firm not well recommended by persons in whose opinion you have entire confidence. There are scores of such firms, but they do not advertise as extensively as the newer ones, because they have many old customers who do their advertising for them by "speaking good words" in their favor to friends who need anything in their line.

I would advise purchasing two-year-old plants, always. They have much stronger roots than those of the one-year-old class, and will give a fairly good crop of flowers the first season, as a general thing. And when one sets out a new Rose, he is always in a hurry to see "what it looks like."

Be sure to buy plants on their own roots. It is claimed by many growers that many varieties of the Rose do better when grafted on vigorous stock than they do on their own roots, and this is doubtless true. But it is also true that the stock of these kinds can be increased more rapidly by grafting than from cuttings, and, because of this, many dealers resort to this method of securing a supply of salable plants. It is money in their pockets to do so. But it is an objectionable plan, because the scion of a choice variety grafted to a root of an inferior kind is quite likely to die off, and when this happens you have a worthless plant. Strong and vigorous branches may be sent up from the root, but from them you will get no flowers, because the root from which they spring is that of a non-flowering sort. Many persons cannot understand why it is that plants so luxuriant in growth fail to bloom, but when they discover that this growth comes from the root *below where the graft was inserted*, the mystery is explained to them. When grafted plants are used, care must be taken to remove every shoot that appears about the plant *unless it is sent out above the graft*. If the shoots that are sent up from *below* the graft are allowed to remain, the grafted portion will soon die off, because these shoots from the root of the variety upon which it was "worked" will speedily rob it of vitality and render it worthless. All this risk is avoided by planting only kinds which are grown upon their own roots.

In planting Roses, make the hole in which they are to be set large enough to admit of spreading out their roots evenly and naturally. Let it be deep enough to bring the roots about the same distance below the surface as the plant shows them to have been before it was taken from the nursery row. When the roots are properly straightened out, fill in

about them with fine soil, and firm it down well, and then add two or three inches more of soil, after which at least a pailful of water should be applied to each plant, to thoroughly settle the soil between and about the roots. Avoid loose planting if you want your plants to get a good start, and do well. When all the soil has been returned to the hole, add a mulch of coarse manure to prevent too rapid evaporation of moisture while the plants are putting forth new feeding roots.

If large-rooted plants are procured from the nursery, quite likely some of the larger roots will be injured by the spade in lifting them from the row. Look over these roots carefully, and cut off the ends of all that have been bruised, before planting. A smooth cut will heal readily, but a ragged one will not.

We have several classes or divisions of Roses adapted to culture at the north. The June Roses are those which give a bountiful crop of flowers at the beginning of summer, but none thereafter. This class includes the Provence, the Mosses, the Scotch and Austrian kinds, Harrison's Yellow, Madame Plantier, and the climbers.



RAMBLER ROSES

The Hybrid Perpetuals bloom profusely in early summer, and sparingly thereafter, at intervals, until the coming of cold weather. These are, in many respects, the most beautiful of all Roses.

The ever-bloomers are made up of Bengal, Bourbon, Tea and Noisette varieties. These are small in habit of growth, but exquisitely beautiful in form and color, and most kinds are so delightfully fragrant, and flower so freely from June to the coming of cold weather, that no garden should be without a bed of them.

The Rugosa Roses are more valuable as shrubs than as flowering plants, though their large, bright, single flowers are extremely attractive. Their chief attraction is their beautifully crinkled foliage, of a rich green, and their bright crimson fruit which is retained throughout the season. This class gives flowers, at intervals, from June to October.

Hybrid Perpetuals must be given special treatment in order to secure flowers from them throughout the season. Their blossoms are always produced on new growth, therefore, if you would keep them producing flowers, you must keep them growing. This is done by feeding the plant liberally, and cutting back the branches upon which flowers have been produced to a strong bud from which a new branch can be developed. In this way we keep the plant constantly renewing itself, and in the process of renewal we are likely to get a good many flowers where we would get few, or none, if we were to let the plant take care of itself. The term "perpetual" is, however, a misleading one, as it suggests a constant production of flowers. Most varieties of this class, as has been said, will bloom occasionally, after the first generous crop of the season, but never very freely, and often not at all unless the treatment outlined above is carefully followed. But so beautiful are the Roses of this class that one fine flower is worth a score of ordinary blossoms, and the lover of the Rose will willingly devote a good deal of time and labor to the production of it.



**DOROTHY PERKINS ROSE—THE BEST OF THE
RAMBLERS**

The Ramblers, now so popular, constitute a class by themselves, in many respects. They are of wonderfully vigorous habit, have a score or more of flowers where others have but one bloom early in the season, and give a wonderful show of color. The individual blossoms are too small to please the critical Rose-grower, but there are so many in each cluster, and these clusters are so numerous, that the general effect is most charming.

Crimson Rambler is too well known to need description. The variety that deserves a place at the very head of the list, allowing me to be judge, is Dorothy Perkins. This variety is of slenderer growth than Crimson Rambler, therefore of more vine-like habit, and, on this account, better adapted to use about porches and verandas, where it can be trained along the cornice in a graceful fashion that the stiff-branched Crimson Rambler will not admit of. Its foliage is not so large as that of the other variety named, but it is much more attractive, being finely cut, and having a glossy surface that adds much to the beauty of the plant. But the chief charm of the plant is its soft pink flowers, dainty and delicate in the extreme. These are produced in long, loose sprays instead of crowded clusters, thus making the effect of a plant in full bloom vastly more graceful than that of any of the others of the class.

Roses have their enemies, and it would seem as if there must be some sort of understanding among them as to the date of attack, because nearly all of them put in an appearance at about the same time. The aphid I find no difficulty in keeping down by the use of Nicotidine—a very strongly concentrated extract of the nicotine principle of tobacco. This should be diluted with water, as directed on the cans or bottles in which it is put up, and applied to all parts of the bush with a sprayer. Do not wait for the aphid to appear before beginning warfare against him. You can count on his coming, therefore it is well to act on the offensive, instead of the defensive, for it is an easier matter to keep him away altogether than it is to get rid of him after he has taken possession of your bushes. If he finds the tang of Nicotidine clinging to the foliage on his arrival, he will speedily conclude that it will be made extremely uncomfortable for him, if he decides to locate, and he will look for more congenial quarters elsewhere.

For the worm that does so much injury to our plants at the time when they are just getting ready to bloom, I use an emulsion made by adding two quarts kerosene to one part of laundry soap. The soap should be reduced to a liquid, and allowed to become very hot, before the oil is added. Then agitate the two rapidly and forcibly until they unite in a jelly-like substance. The easiest and quickest way to secure an emulsion is by using a brass syringe such as florists sprinkle their plants with. Insert it in the vessel containing the oil and soap, and draw into it as much of the liquids as it will contain, and then expel them with as much force as possible, and continue to do this until the desired union has taken place. Use one part of the emulsion to eight or ten parts water, and make sure it reaches every portion of the bush.

In Rose-culture, as in every branch of floriculture, the price of success is constant vigilance. If you do not get the start of insect enemies, and keep them under control, they will almost invariably ruin your crop of flowers, and often the bushes themselves. Therefore be thorough and persistent in the warfare waged against the common enemy, and do not relax your efforts until he is routed.

In making a selection of Hybrid Perpetuals for home planting, the amateur finds it difficult to choose from the long lists sent out by many dealers. He wants the best and most representative of the class, but he doesn't know which these are. If I were asked to select a dozen kinds, my choice would be the following:

Alfred Colomb. Bright crimson. Fragrant.

Anna de Diesbach. Carmine. Fragrant.

Baroness Rothschild. Soft pink.

Captain Hayward. Deep rose. Perfect in form.

Frau Carl Druschki. Pure white.

General Jacqueminot. Brilliant crimson. Very sweet.

Jules Margottin. Rosy crimson.

Mabel Morrison. White, delicately shaded with blush.

Magna Charta. Glowing carmine. A lovely flower.

Madame Gabriel de Luizet. Delicate pink. Exquisite.

Mrs. John Laing. Soft pink. Very fragrant.

Ulrich Brunner. Bright cherry red.

To increase the above list would be to duplicate colors, for nearly all the other kinds included in the dealers' lists are variations of the distinctive qualities of the above. The twelve named will give you more pleasure than a larger number of less distinctive kinds would, for in each merit stands out pre-eminent, and all the best qualities of the best Roses are represented in the list.

THE ROSE AS A SUMMER BEDDER



THE amateur gardener may enjoy Roses from June to November if he is willing to take a little trouble for them. Not, however, with the material treated of in the chapter on "The Rose"—though what is said in it relative to the culture of the Hybrid Perpetual class applies with considerable pertinence to the classes of which I shall make special mention in this chapter—but with the summer-blooming sorts, such as the Teas, the Bengals, the Bourbons, and the Noisettes. These are classed in the catalogues as ever-bloomers, and the term is much more appropriate to them than the term Hybrid Perpetual is to that section of the great Rose family, for all of the four classes named above *are* really ever-bloomers if given the right kind of treatment—that is, bloomers throughout the summer season. In them we find material from which it is easy to secure a constant supply of flowers from the beginning of summer to the closing in of winter.

In order to grow this class of Roses well, one must understand something of their habits. They send out strong branches from the base of the plant, shortly after planting, and these branches will generally bear from five to eight blossoms. When all the buds on the branch have developed into flowers, nothing more can be expected from that branch in the way of bloom, unless it can be coaxed to send out other branches. This it can be prevailed on to do by close pruning. Cut the old branch back to some point along its length—preferably near its base—where there is a strong "eye" or bud. If the soil is rich—and it can hardly be *too rich*, for these Roses, like those of the kinds treated of in the foregoing chapter, require strong food and a great deal of it in order to do themselves justice—this bud will soon develop into a vigorous branch which, like the original one, will bear a cluster of flowers. In order to keep a succession of bloom it is absolutely necessary to keep the plant producing new branches, as flowers are only borne on new growth. It will

be noticed that the treatment required by these Roses is almost identical, so far, with that advised for the Hybrid Perpetuals. Indeed, the latter are summer ever-bloomers of a stronger habit than the class I am now speaking about. That is about all the difference there is between them, up to this point, except as regards the flowering habit. The Hybrid Perpetual blooms profusely in June and July, but sparingly thereafter, while the ever-bloomers bloom freely all the season after they get a good start.

Fertilizer should be applied at least once a month. Not in large quantities, each time, but enough to stimulate a strong and healthy growth. The plants should be kept going ahead constantly. Let them get a check, and you will find it a difficult matter to get many flowers from them after that, the same season. Give them the treatment that results in continuous growth and you will have Roses in abundance up to the coming of cold weather. Of course plants so treated are not to be expected to attain much size. But who cares for large bushes if he can have fine flowers and plenty of them?

The blossoms from the Teas and their kindred are never as large as those of the June and the Hybrid Perpetual classes, and, as a general thing, are not as brilliant in color. Some are delightfully fragrant, while some have no fragrance at all.

La France,—which is classed as a Hybrid Tea, because it is the result of hybridizing one of the hardier varieties with a pure-blooded Tea variety,—is one of the finest Roses ever grown. It is large, and fine in form, rich, though not brilliant, in color, is a very free bloomer, and its fragrance is indescribably sweet. Indeed, all the sweetness of the entire Rose family seems concentrated in its peculiar, powerful, but, at the same time, delicate odor. Color, pale pink.

Duchess de Brabant is an old variety, popular years and years ago, but all the better for that, for its long-continued popularity proves it the possessor of exceptional merit. It is of very free development, and bears large quantities of flowers of silvery pink.

Viscountess Folkestone is, like La France, a Hybrid Tea. It is an excellent bloomer. Its color is a soft pink, shaded with cream, with reflexed petals. It has a rich, June-Rose fragrance.

Maman Cochet is, all things considered, one of the best of its class. It blooms in wonderful profusion. It is a strong grower. Its color is a bright pink, overlaid with silvery lustre. It is very double, and quite as lovely in bud as in the expanded flower.



TEA ROSE

Hermosa is an old favorite. It is always in bloom when well cared for. Its rich carmine-rose flowers are very double, and are produced in prodigal profusion. But it lacks the charm of fragrance.

Caprice is a very peculiar variety. Its thick, waxen petals of rosy carmine are heavily blotched and striped with dark red, shading to crimson. It is most pleasing when the flower begins to expand.

Perle des Jardins is a most lovely Rose, of almost as rich a color as the famous Marechal Neil,—a deep, glowing yellow,—lovely beyond description. It is a very free bloomer, and should be given a place in all collections.

Sunset—another good bloomer—is a tawny yellow in color, flamed with fawn and coppery tints. It is an exquisite Rose.

Clothilde Soupert does not properly belong to either of the four classes mentioned above, though of course closely related. It is catalogued as a Polyantha. Its habit is peculiar. It bears enormous quantities of flowers, with the greatest freedom of any Rose I have ever grown, but its blossoms are small, and are produced in clusters quite unlike those of the other members of the ever-blooming class. Indeed, its habit of growth and flowering is quite like that of the Rambler varieties, on a small scale. But, unlike the Ramblers, its

flowers are very double. They are produced at the extremity of the new branches, in clusters of fifteen to twenty and thirty. So many are there to each branch that you will find it advisable to thin out half of them if you want perfect flowers. In color it is a delicate pink on first opening, fading to almost white. At the centre of the flower it is a bright carmine. Give this variety a trial and you will be delighted with it.

It must not be understood that the above list includes all the desirable sorts adapted to general culture. It is simply a list of the most distinct varieties that respond satisfactorily to the treatment outlined, and from which the amateur gardener can expect the best results. There are scores of other varieties possessing exceptional merit, but many of them require the attention of the professional in order to give satisfaction, and are not what I feel warranted in recommending the amateur to undertake the culture of if large quantities of flowers are what he has in mind. Every one on the list given is a standard variety, and you will find that you have made no mistake in confining your selection to it.

I would advise the purchase of two-year-old plants. Younger plants seldom bloom with much profusion the first season.

Order your plants in April. Get them into the ground about the middle of May. Mulch the soil about them well. This will do away with the necessity of watering if the season happens to prove a dry one. In planting, be governed by the directions given in the chapter on "The Rose."

Try a bed of these ever-bloomers for a season and you will never afterward be without them. Other flowers will rival them in brilliance, perhaps, and may require less attention, but—they will not be Roses! One fine Rose affords more pleasure to the lover of the best among flowers than a whole garden full of ordinary blossoms can, and this is why I urge all flower-loving people to undertake the culture of the ever-blooming class of Roses, for I know they will give greater satisfaction than anything else you can grow.

In fall, the plants can be taken up, packed away in boxes of earth, and kept in the cellar over winter. Cut away almost the entire top when the plants are lifted. All that one cares to carry through the winter is the root of the plant.

THE DAHLIA



THIRTY or forty years ago the Dahlia was one of our popular flowers. That is, popular among those who aspired to "keep up with the times," and grow all the new plants that had real merit in them. At that time but one form of it was considered worth growing, and that was the very double, globular type of flower. The single varieties were looked upon as worthless.

After a time the popularity of the flower waned for some reason hard to account for, except on the theory that there are fashions in flowers as in clothes. I presume that the true explanation is that we Americans are prone to run to extremes, and when we take up a plant and it becomes a favorite we overdo matters and tire of it because we see so much of it. Then we relegate it to the background for a time, and after awhile we drag it out of the obscurity to which we temporarily consigned it as a penalty for its popularity, and

straightway it comes into greater prominence than ever, precisely as does the cut of a sleeve or the style of hair-dressing. This explanation may not be very complimentary to American good sense or taste, but I think it goes to the root of the matter. It is sincerely to be hoped that the time will come when our flower-growing will have no trace of the fad about it, and that whatever we cultivate will grow into favor solely because of real merit, and that its popularity will be permanent. I am encouraged to think that such may be the case, for some of the favorite flowers of the day have held their own against all newcomers for a considerable period, and seem to be growing in favor every year. This is as it should be.

It used to be thought that the Dahlia could not be grown successfully at the north if it were not started into growth in the house, or greenhouse, very early in the season. Nine times out of ten the result was a weak, spindling plant by the time it was safe to put it into the ground—which was not until all danger from frost was over. Generally such plants were not strong enough to bloom until about the time frost came in fall, for it took them the greater part of the season to recover from the effect of early forcing, in which the vitality of the plant suffered almost to the point of extinction, and to which was added the ordeal of the change from in- to out-door conditions. "Our seasons are too short for it," was the universal verdict. "At the south it may do well, but there's no use in trying to do anything with it at the north unless one has a greenhouse, and understands the peculiarities of the plant better than the rank and file of flower-loving people can expect to." So it came about that its cultivation was given up by small gardeners, and it was seen only on the grounds of the wealthier people, who could afford the services of the professional gardener.

We have learned, of late years, that our treatment of the plant was almost the opposite of what was required.

Some eight or ten years ago, I ordered a collection of choice varieties of the Dahlia. I ordered them early in the season, expecting to start them into growth in pots as usual. For some reason they did not come until the last day of May. It was then too late to start them in the usual way, and I planted them in the garden, expecting they would amount to nothing.

The result was, to me, a most surprising one.

The place in which I planted them was one whose soil was very rich and mellow. It was near a pump, from which a great deal of water was thrown out every day.

In less than a week after planting, the tubers threw up strong shoots, and these grew very rapidly under the combined effects of rich soil, warmth, and plenty of moisture at the roots. Indeed, they went ahead so rapidly that I considered their growth a discouraging feature, as I felt sure it must be a weak one.

The result was that when the State Horticultural Society held its summer meeting in the village in which I resided, on the twenty-eighth of August, I placed on exhibition some of the finest specimens of Dahlia blossoms the members of the Society had ever seen, and carried off eight first premiums.

Since then I have never attempted to start my Dahlias in the house. I give them an extremely rich soil, spaded up to the depth of at least a foot and a half, and made so mellow that the new roots find it an easy matter to work their way through it. Water is applied freely during the season. I consider this an item of great importance, as I find that the plant fails to make satisfactory development when located in a dry place. A pailful of

water a day is not too much to apply to each plant in a dry season.

The soil must be rich. In a poor soil development will be on a par with that of plants which have been given a dry place.

Because of the peculiar brittleness of the stalks of the Dahlia it is quite necessary to furnish them with good support. My plan is to set a stout stake by each plant, at planting-time. This should be at least five feet tall. I put it in place at the time of planting the tuber, because then I know just where the root of the future plant is, and can set the stake without injuring it. But if stake-setting is left until later in the season one runs a risk of breaking off some of the new tubers that have formed about the old one. I tie the main stalk of the plant to the stake with a strip of cloth instead of a string, as the latter will cut into the soft wood. Sometimes, if the plant sends up a good many stalks, it will be necessary to furnish additional support. Unless some kind of support is given we are likely to get up some morning after a heavy rain, or a sudden wind, and find our plants broken down, and in attempting to save them we are pretty sure to complete the wreck, as a slight twist or turn in the wrong direction will snap the stalk off at its junction with the root.

The Dahlia will be found one of our very best plants for use in the border where something is needed for a filler. It is very effective as a hedge, and can be used to great advantage to hide a fence. Single specimens are fine for prominent locations on the grounds about the house. In fact, it is a plant that can be made useful anywhere.



CACTUS DAHLIA

In fall, when our early frosts come, it will be necessary to protect it on cool nights, as it is extremely tender. This can be easily done by setting some stout sticks about the plant and covering it with a sheet. If tided over the frosty weather that usually comes for two or three nights about the middle of September, it will bloom profusely during the weeks of pleasant weather that almost always follow the early frosts, and then is when it will be enjoyed most.

When the frost has killed its stalks, it should be dug and got ready for winter. Lift the great mass of roots that will have grown from the little tuber planted at the beginning of the season, and do this without breaking them apart, if possible. Spread them out in the

sun. At night cover with a blanket, and next day expose them to sunshine again. Do this for several days in succession until the soil that is lifted with them will crumble away easily. Exposure to sunshine has the effect of relieving them of a good deal of moisture which they contain in great quantity when first dug, and which ought to be got rid of, in a large degree, before they are stored in the cellar.

The tubers should never be placed on the cellar-bottom, because of the dampness that is generally found there. I spread mine out on shelves of wire netting, suspended four or five feet from the floor. If they show signs of mould I know they are too damp, and elevate the shelves still more, in order to get the tubers into a dryer stratum of air. If they seem to be shrivelling too much, I lower the shelves a little. Cellars differ so much that one can only tell where the right place is by experimenting. Watch your tubers carefully. A little neglect will often result in failure, as mould, once given a chance to secure a foothold, is rapid in its action, and your tubers may be beyond help before you discover that there is anything the matter with them. As soon as you find a mouldy root, throw it out. If left it will speedily communicate its disease to every plant with which it comes in contact. Some persons tell me that they succeed in wintering their Dahlia tubers best by packing them in boxes of perfectly dry sand. If this is done, be sure to elevate the box from the floor of the cellar.

Quite naturally persons have an idea that the best results will be secured by planting out the whole bunch of tubers, in spring. This is a mistake. One good tuber, with an "eye," or growing point, will make a much better plant than the whole bunch set out together.

To sum up the treatment I advise in the cultivation of the Dahlia:

Have the ground very rich.

Have it worked deeply.

Plant single tubers about the first of June.

Furnish a good support.

See that the ground is well supplied with moisture.

There has been a great change of opinion with regard to the Dahlia. We no longer confine ourselves to one type of it. The single varieties, which were despised of old, are now prime favorites—preferred by many to any other kind. The old very double "show" and "fancy" varieties are largely grown, but they share public favor with the "decoratives," the pompones, and the cactus, and, as I have said, the single forms. Which of these forms is most popular it would be hard to say. All of them have enthusiastic champions, and the best thing to do is to try them all.

"Show" Dahlias are those with large and very double flowers of a single color, and those in which the ground color is of a lighter shade than the edges or tips of the petals. The outer petals recurve, as the flower develops, until they meet at the stem, thus giving us a ball-like blossom.

"Fancy" Dahlias are those having striped petals, and those in which the ground color is darker than the edges or tips of the petals. This class, as a rule, is very variable, and a plant will often have flowers showing but one color. Sometimes half the flower will be one color, half another.

The Pomponé or Liliputian class is a miniature edition of the show and fancy sorts, quite

as rich in color and perfect in form as either, but of a dwarf habit of growth. This class is well adapted to bedding out in summer.

The Cactus Dahlia has long pointed or twisted petals. Most varieties are single, but some are semi-double. This is the class that will be likely to find favor with those who admire the ragged Japanese Chrysanthemums.

Decorative Dahlias have broad, flat petals, somewhat loosely arranged, and much less formal than those of the show, fancy, or pomponé sorts. Their flowers seldom have more than two rows of petals, and are flat, showing a yellow disc at the centre. As a general thing they are produced on long stalk, a flower to a stalk. This makes them very useful for cutting. They are the most graceful members of the entire Dahlia family, allowing me to be judge.

The single type has but one row of petals. Plants of this class are very strong growers, and can be used to advantage in the back rows of the border.

No flower in cultivation to-day has a wider range of color than the Dahlia, and nearly all the colors represented in it are wonderfully rich in tone. From the purest white to the richest crimson, the deepest scarlet, delicate pink and carmine, rich yellow, dark purple, orange and palest primrose,—surely all tastes can find something to please them.

THE GLADIOLUS



ONE of the most popular flowers of the day is the Gladiolus. All things considered, it is our best summer bloomer. Nothing in the floral world exceeds it in variety and range of color. This color is in some varieties dark and rich in scarlets, crimsons, and purples, in others dainty and delicate in pink, pearly flesh, almost pure white, and softest rose, while the midway sorts are in brilliant carmines, cherry-reds, lilacs, and intermediate tones too numerous to mention. Nearly all varieties show most magnificent combinations of color that baffle description. Comparatively few varieties are one color throughout.

Most plants in which such a bewildering variety of color is found have a tendency to coarseness, but this objection cannot be urged against the Gladiolus. It has all the delicacy of the Orchid. Its habit of growth fits it admirably for use in the border. Its ease of cultivation makes it a favorite with the amateur who has only a limited amount of time to spend among the flowers. It is a plant that any one can grow, and it is a plant that will grow almost anywhere. It is one of the few plants that seem almost able to take care of themselves. Beyond putting the corms in the ground, in spring, and an occasional weeding as the plant develops, very little attention is required.

To secure the best effect from it, the Gladiolus should be planted in masses. Single specimens are far less satisfactory. One must see fifty or a hundred plants in a bed ten or fifteen feet long to fully appreciate what it is capable of doing.

The time to plant it is in May, after the soil has become warm. Nothing is gained by earlier planting.

The bed should be spaded to the depth of a foot, at least. Then the soil should be worked over until it is fine and light. A liberal quantity of some good fertilizer should be added to it. Commercial fertilizers seem to suit it well, but the use of barnyard manure gives excellent results, and I would prefer it, if obtainable.

The corms should be put about four inches below the surface, care being exercised at the time of planting to see that they are right side up. It is often difficult to decide this matter before sprouting begins, but a little careful examination of the corm will soon enable you to tell where the sprouts will start from, and this will prevent you from getting it wrong-side up. As soon as the plants send up a stalk, some provision should be made for future support. If you prefer to stake the beds, set the stakes in rows about two feet apart. Wire or cord need not be stretched on them until the stalks are half grown. The reason for setting the stakes early in the season is—you know just where the corm is then, but later on you will not be able to tell where the new corms are, and in setting the stakes at random you are quite likely to injure them. When you apply the cord or wire to the stakes, run it lengthwise of the bed, and then across it in order to furnish a sufficient support without obliging the stalks to lean from the perpendicular to get the benefit of it.

For several seasons past, I have made use of a coarse-meshed wire netting, placed over the bed, and fastened to stakes about eighteen inches high. The stalks find no difficulty in making their way through the large meshes of the netting, and with a support of this kind they dispose themselves in a natural manner that is far more satisfactory than tying them to stakes, as we often see done. Some kind of a support must be given if we would guard against injury caused by strong winds. When the flower-stalk is once prostrated it is a difficult matter to get it back in place without breaking it.

If netting is used it need not be placed over the bed before the middle of July. By that time most of the weeds which require attention during the early part of the season will have been disposed of. Putting on the netting at an earlier period would greatly interfere with the proper cultivation of the bed. The soil should be kept light and open until the flower-stalks begin to show their buds.

The flowering-period covers several weeks, beginning in August, and lasting all through September.

The *Gladiolus* is extremely effective for interior decorative work. It lasts for days after being cut. Indeed, if cut when the first flowers at the base of the spike open, it will continue to develop the buds above until all have become flowers, if the water in which the stalks are placed is changed daily, and a bit of the end of the stalk is cut off each time. For church use no flower excels it except the Lily, and that we can have for only a short time, and quite often not at all.

In late October the plants should be lifted, and spread out in the sunshine to ripen. Do not cut the stalks away until you are ready to store the corms. Then cut off each stalk about two inches from its junction with the corm. When the roots seem well dried out, put them in paper bags containing perfectly dry sawdust or buckwheat shells, and hang them in a dry place where the frost will not get at them. I would not advise storing them in the cellar, as they generally mould or mildew there.

Most varieties increase quite rapidly. You will find several new corms in fall, taking the place of the old one planted in spring. Often there will be scores of little fellows the size of a pea, clustered about the larger corms. These should be saved, and planted out next spring. Sow them close together in rows, as you would wheat. The following year they

will bloom.

So extensively is the Gladiolus grown at the present time that enough to fill a good-sized bed can be bought for a small sum. And in no other way can you invest a little money and be sure of such generous returns. What the Geranium is to the window-garden that the Gladiolus is to the outdoor garden, and one is of as easy culture as the other.



A GARDEN GLIMPSE

Some of the choicest varieties are sold at a high price. One reason for this is—the finest varieties are slow to increase, and it takes a long time to get much of a stock together. This is why they are so rare, and so expensive. But many of them are well worth all that is asked for them.

You may have a mixed collection of a thousand plants and fail to find a worthless variety among them. Indeed, some of the very finest flowers I have ever had have been grown from collections that cost so little that one hardly expected to find anything but the commonest flowers among them.

LILIES



THE Rose, like the Lily, is a general favorite. It has more than once disputed the claim of its rival to the title of Queen of Flowers, and though it has never succeeded in taking the place of the latter in the estimation of the average flower-lover, it occupies a position in the floral world that no other flower dare aspire to.

This plant does well only in soils that have the best of drainage. Water, if allowed to stand about its roots in spring, will soon be the death of it.

Therefore, in planting it be sure to choose a location that is naturally well drained, or provide artificial drainage that will make up for the lack of natural drainage. This is an item you cannot afford to overlook if you want to grow the finest varieties of Lilies in your garden. Some of our native Lilies grow on low lands, and do well there, but none of the choicer kinds would long survive under such conditions. The probabilities are that if we planted them there we would never see anything more of them.

The ideal soil for the Lily seems to be a fine loam. I have grown good ones, however, in a soil containing considerable clay and gravel. This was on a sidehill where drainage was perfect. Had the location been lower, or a level one, very likely the plants would not have done so well.

The bulbs should be put into the ground as early in September as possible.

On no account allow the bulbs to be exposed to the air. If you do, they will rapidly part with the moisture stored up in their scales, and this is their life-blood.

It is a good plan to put a handful of clean, coarse sand about each bulb at planting-time.

If barnyard manure is used,—and there is nothing better in the way of fertilizer for any bulb,—be sure that it is old and well rotted. On no account should fresh manure be allowed to come in contact with a Lily. If barnyard manure is not to be had, use bonemeal. Mix it well with the soil before putting the bulbs into it.

Bulbs of ordinary size should be planted about eight inches below the surface. If in groups, about a foot apart.

The best place for Lilies, so far as show goes, is among shrubbery, or in the border.

Below I give a list of the best varieties for general cultivation, with a brief description of each:

Auratum (the Gold-Banded Lily).—Probably the most popular member of the family, though by no means the most beautiful. Flowers white, dotted with crimson, with a gold band running through each petal.

Speciosum album.—A beautiful pure-white variety. Deliciously fragrant.

Speciosum rubrum (the Crimson-Banded Lily).—Flowers white with a red band down each petal.

Brownsii.—A splendid variety. Flowers very large, and trumpet-shaped. Chocolate-purple outside, pure white within, with dark brown stamens that contrast finely with the whiteness of the inner part of the petals.

Tigrinum (Tiger Lily).—One of the hardiest of all Lilies. Flowers orange-red, spotted with brownish-black. This will succeed where none of the others will. Should be given a place in all gardens.

Superbum.—The finest of all our native Lilies. Orange flowers, spotted with purple. Often grows to a height of eight feet, therefore is well adapted to prominent positions in the border.



AURATUM LILY

While the Lily of the Valley is, strictly speaking, *not* a Lily, it deserves mention here. It is one of the most beautiful flowers we grow, of the purest white, and with the most delightful fragrance, and foliage that admirably sets off the exquisite loveliness of its flowers. No garden that "lives up to its privileges" will be without it. It does best in a shady place. Almost any soil seems to suit it. It is very hardy. It spreads rapidly, sending up a flower-stalk from every "pip." When the ground becomes completely matted with it, it is well to go over the bed and cut out portions here and there. The roots thus cut away can be broken apart and used in the formation of new beds, of which there can hardly be too many. The roots of the old plants will soon fill the places from which these were taken, and the old bed will be all the better for its thinning-out. Coming so early in spring, we appreciate this most beautiful plant more than we do any flower of the later season. And no flower of any time can excel it in daintiness, purity, and sweetness.

PLANTS FOR SPECIAL PURPOSES



MATEUR gardeners are always wanting plants for some special purpose, and, for their benefit, I propose to devote this chapter to "special-purpose" information.

"What shall we grow to shade doors and windows? We want something that will grow rapidly. If a flowering vine, all the better, but shade is the all-important consideration."

The best large-growing vine for this purpose, all things considered, is the Wild Cucumber. No other annual vine exceeds it in rapidity of growth. It will grow twenty or twenty-five feet in a season, if given something to support it to that height, therefore it is very useful about the second-story windows, which height few of our annual vines attain. It has very bright-green, pretty foliage, somewhat resembling that of the native Grape, though not so large. About midsummer it comes into bloom. Its flowers are white,—delicate, fringy little things, in spikes, with a very agreeable fragrance, especially in the morning when wet with dew,—and there are so many of them that the vine looks as if drifted over with a fall of snow. The plant has tendrils by which it attaches itself to anything with which it comes in contact, consequently strings, latticework, or wire netting answer equally well for its support. Its tendency is to go straight up, if whatever support is given encourages it to do so, but if you think advisable to divert it from its upward course all you have to do is to stretch strings in whatever direction you want it to grow, and it will follow them. Its flowers are followed by balloon-shaped fruit, covered with prickly spines—little ball-shaped cucumbers, hence the popular name of the plant. When the seeds ripen, the ball or pod bursts open, and the black seeds are shot out with considerable force, often to a distance of twenty feet or more. In this way the plant soon spreads itself all over the garden, and next spring you will have seedling plants by the hundred. It soon becomes a wild plant, and is often seen growing all along the roadside, and never quite so much "at home" as when it finds a thicket of bushes to clamber over. It has one drawback, however, which will be especially noticeable when the plant is domesticated: Its early leaves ripen and fall off while those farther up the vine are in their prime, and remain so until frost comes. But this defect can easily be remedied by growing some tall plant at the base of the vines to hide their nakedness.

Another most excellent vine is the good old Morning Glory, with its blue, purple, violet, pink, carmine, and white flowers produced in such profusion that they literally cover its upper branches during the early part of the day. This is a very satisfactory vine to train about door and window. Do not give it ordinary twine as a support, as the weight of the vines, when well developed, is almost sure to break it down. Stout cord, such as is used in binding grain, is the best thing I know of, as it is rather rough, thus enabling the vine to take hold of it with good effect. This is a rapid grower, and a wonderfully free bloomer, and it will give you flowers throughout the season. It is much showier than the Wild Cucumber, but its foliage lacks the delicacy which characterizes that plant.

Another good vine for covering porches, verandas, and summer-houses, is the Japan Hop. This plant—it is an annual, like the other two of which mention has been made—has foliage of a rich, dark green, broadly and irregularly blotched and marbled with creamy white and pale yellow. It grows rapidly, and gives a dense shade.

"I would like a sort of hedge, or screen, between the flower and the vegetable garden. What plants would you advise for this purpose?"

The Zinnia is an excellent plant where a low hedge is desired. It averages a height of three feet. It is compact and symmetrical in habit, branching quite close to the ground. It is a rapid grower, and of the very easiest culture. It comes into bloom in July, and continues to produce great quantities of flowers, shaped like miniature Dahlias, in red, scarlet, pink, yellow, orange, and white, until frost comes. It makes a most gorgeous show.

Kochia, more commonly known as "Burning Bush" or "Mexican Fire-Plant," is a charming thing all through the season. In summer it is a pleasing green. In fall it turns to a brilliant red, hence its popular names, as given above. Its habit is very compact, and one of great symmetry. If the plants are set about a foot apart, and in two rows,—these rows a foot apart,—you will have a low hedge that will be as smooth as one of Arbor Vitæ after the gardener has given it its annual shearing. When the bush takes on its autumnal coloring it is as showy as a plant can well be, and is always sure of attracting attention, and being greatly admired.

Amaranthus is another very pleasing plant for hedge purposes. It grows to a height of about four feet. Some varieties have a dark, bronze-green foliage, others foliage of a dull, rich Indian-red, while some are yellow-green—quite rare among plants of this class. The flowers, which are small, individually, are thickly set along pendant stems, and give the effect of ropes of chenille. In color they are a dull red, not at all showy in the sense of brilliance, but really charming when seen dropping in great profusion against the richly colored foliage. Our grandmothers grew the original varieties of this plant under the name of "Prince's Plume," "Prince's Feather," or "Love Lies Bleeding." But since the florists have taken it in hand, and greatly improved it, it no longer retains the good old names which always meant something. To secure the best results with this plant, when grown as a hedge or screen, set it in rows about a foot apart, each way, and use some of the dwarf sorts for the front row. Or a flowering plant of contrasting color—like the Nasturtium, or the double yellow Marigold, or the velvety African variety, with flowers of a dark maroon shading to blackish-brown—can be grown at its base, with fine effect.



THE ODDS AND ENDS CORNER

Sweet Peas make a good screen if given proper support, and planted thickly.

"I would like a large group or bed of ornamental foliaged plants on the lawn, but have grown rather tired of Cannas and Caladiums. What would you suggest? I don't want anything hard to grow."

If very large plants are wanted, I would advise, as best of all, *Ricinus*, better known, perhaps, as Castor Bean, or Castor Plant. This is an annual of wonderfully vigorous growth. It often reaches a height of ten feet, in good soil, with a corresponding spread of branches. Its leaves are often a yard across, of a dark coppery bronze, with a purplish metallic lustre that makes the plant very striking. The best effect is secured by growing four or five plants in a group. None of the tropical plants that have come into prominence in gardening, during the past ten or twelve years, are nearly as effective as this easily-grown annual, whose seeds sell at five cents a package. For a very prominent location on the lawn or anywhere about the home-grounds no better plant could be selected.

The *Amaranthus* advised for hedge use makes a very showy circular bed on the lawn when grown in large masses, in the centre, surrounded with flowering plants of a strongly contrasting but harmonious color. The *Calliopsis*, rich golden-yellow marked with brown, combines charmingly with the dull, deep, rich reds which characterize the foliage and flowers of the most desirable varieties of this too much neglected annual. There are new varieties advertised of rather dwarf habit, with golden-green foliage, that could be used about the red-leaved kinds with fine effect.

"I would like a bed of very brilliant flowers for the front yard. Can't have many, for I haven't time to take care of them, so want those which will give the most show for the

least trouble. Would like something so bright that it will *compel* people to stop and look at it. What shall I get?"

An exceedingly brilliant combination can be made by the use of scarlet Salvia, as the centre of a bed six or eight feet across, with Calliopsis surrounding it. The scarlet and yellow of these two flowers will make the place fairly blaze with color, and they will continue to bloom until frost comes. They require next to no care.

The annual Phlox makes a fine show if proper care is taken in the arrangement of the various colors with a view to contrast. The pale rose variety combines beautifully with the pure whites and pale yellows. A bed of these three colors alone will be found much more satisfactory than one in which a larger number of colors are used. Set each color in a row by itself. Such a bed will "compel" persons to stop and admire it, but they will do it for the sake of its beauty rather than its great brilliance.

Petunias are excellent plants for large beds where a strong show of color is desired. They bloom early, continue through the season, and require very little care.

The Shirley Poppy makes a brave show about the last of July, but after that it soon dies. If it were an all-season bloomer it would be one of our most popular plants for producing a brilliant effect. I would advise using it, and filling the bed in which it grew with other plants, after its flowering period was over. Its rich colors and satiny texture make it a plant that always attracts attention.

Scarlet Geraniums are used a great deal where a strong color-show is desired, but they are not as satisfactory as many other plants because of their ragged look, after a little, unless constantly given care. The first flowers in truss will fade, and their discolored petals will spoil the effect of the flowers that come after them if they are allowed to remain. It is not much of a task to go over the plants and pull out these faded flowers every, day, but we are not likely to do this. I prefer single Geraniums to double ones for garden use, because they drop their old petals, and never take on the ragged appearance which characterizes the ordinary bedding Geranium.

"I would like a low bed—that is, a bed near the path where it will be looked down upon. Tall plants would be out of place there. Tell me of a few of the best kinds for such a location."

The Portulacca is well adapted to such use, as it never grows to be more than three or four inches in height, but spreads in a manner to make it look like a green carpet, upon which it displays its flowers of red, rose, scarlet, yellow and white with very vivid effect. This plant might well be called a vegetable salamander, as it flourishes in dry, hot locations where other plants would utterly fail. It fairly revels in the hot sunshine of midsummer.

The good old Verbena is another very desirable plant for a low bed. It is of spreading habit, blooms profusely and constantly, and comes in a wide range of beautiful colors.

The Ageratum is a lovely plant for a low bed, with its great masses of soft lavender flowers. Fine effects are secured by using dark yellow Coleus or golden Pansies as an edging, these colors contrasting exquisitely with the dainty lavender-blue of the Ageratum.

"What flowers shall we grow to cut from? Would like something that is not coarse, and something that will bloom for a long time, and has long stems."

At the head of the list I would place the Sweet Pea. This is a favorite, everywhere, for cutting. The most useful varieties are the delicate rose and white ones, the pure whites, the pale pinks, the dainty lavenders, and the soft primrose yellows.

The Nasturtium is an old favorite for cutting, and a corner of every garden ought to be given up to a few plants of it for the special purpose of furnishing cut flowers.

The Aster is a magnificent flower,—it seems to be growing better and better each year, if such a thing is possible,—and nothing else among the annuals compares with it in lasting quality, when cut. If the water in which it is placed is changed daily, it will last for two weeks, and seem as fresh at the end of that time as when first cut. The most useful variety for cutting is the "Branching Aster," with stems a foot or more in length. This makes the flowers of this class particularly useful for vases. I would advise growing three colors, when it is wanted solely for cutting—white, pale rose, and delicate lavender.

The newer varieties of Dahlia—especially the "decorative" section—are superb for cutting. Their flowers are not formal like those of the old double kinds, and being borne on long stalks, they can be arranged very gracefully. Like the Aster, they last well. They will be found among the most useful of our late flowers for large vases, and where striking and brilliant effects of color are desired.

The Gladiolus is also well adapted to cutting, and is very effective when used in tall vases, the entire stalk being taken.

Scabiosa, often known as "Mourning Bride," is an excellent plant for vase-use, and deserves more attention than it has heretofore enjoyed. Its flowers are quite unlike most other annuals in color, and will be appreciated on that account. The dark purple varieties combine delightfully with those of a lighter tone in yellow, and with pure whites. As the blossoms are produced on long stems, they dispose themselves very gracefully when used in rather deep vases.

Every garden should have several plants of Mignonette in it, grown for the especial purpose of cutting from. This is one of the most fragrant flowers we have among the annuals.

For small vases—little vases for the breakfast table, or the desk, and for gifts to friends—one ought to grow quantities of Heliotropes, Tea Roses, and Pansies.

To cut from, early in spring, nothing is lovelier than the Lily of the Valley.

For larger vases, the Dicentra is always pleasing, coming close after the Lily of the Valley. Cut it with a good deal of foliage, and be careful to give each stalk ample room in which to adjust itself. A vase with a flaring top is what this flower ought to have, as its stalks have just the curve that fits the flare. A straight vase obliges it to stand up so primly that half the charm of the flower is destroyed.

For late fall cutting, there is no other flower quite equal to the Cosmos. The pink and white varieties are lovely when cut by the branch, and used in large vases. They seem especially adapted to church decoration.

"We want some flowers that will bloom late in the season. Are there any that can be depended on after early frosts?"

Yes. First on the list I would name the Aster. This sturdy annual is seldom at its best before the first frosts, and can be considered in its prime during the first half of October.

And it will last until cold weather sets in.

Ten Week Stock—the "Gillyflower" of grandmother's garden—is a late bloomer. The snows of November often find it full of flowers, and are powerless to injure it. It is delightfully fragrant, and particularly adapted to cutting, because of its long spikes of bloom. It comes in white, rosy-purple, red, and sulphur-yellow.

The Marguerite Carnation deserves a place in every garden because of its great beauty, and its late-flowering habit. While not all the plants grown from seed will give double flowers, a large share of them will be so, and in form, size, and color they will compare very favorably with the greenhouse varieties of this favorite flower. Most of them will have the true Carnation fragrance. For choice little bouquets, for home use, or to give your especial friends nothing can be more satisfactory. You can expect a dozen flowers from each plant where you would get but one from the greenhouse sorts.

ARBORS, SUMMER-HOUSES, PERGOLAS, AND OTHER GARDEN FEATURES



EW persons who daily pass attractive homes in the suburban districts of our large cities and the outlying country, realize that much of their charm is due to effects which require a comparatively small outlay in dollars and cents. Good taste, combined with a degree of skill that is within reach of most of us, represent the chief part of the investment. And yet—these little, inexpensive things are the very ones that produce the pleasing effects we are all striving after in our efforts to make home attractive. Most of them convey an impression of being made for use, not show. They are in a class with the broad-seated, wide-armed "old hickory" rockers with which we make our modern verandas comfortable nowadays, and the hammock swung in shady places, wherein one may lie and take his ease, and forget everything but the fact that it is sometimes a pleasant thing to be lazy—frankly, unblushingly lazy. It is a healthy indication in our American life when so many persons go in for getting all the comfort they can from outdoors in summer. Every home whose grounds are large enough to accommodate them ought to have benches here and there, made for comfort, rather than looks, garden-seats, summer-houses—all suggestive of rest and relaxation. In this chapter I propose to briefly describe a few such home-made features, hoping that the man or boy who has the "knack" of using tools to advantage, actuated by a desire to make home-environments pleasant, may be led to copy some of them.

Let me say, right here, that the work demanded in the construction of rustic features about the home is just the kind of work I would encourage boys to undertake. It will be found so enjoyable that it will seem more like play than labor. There is the pleasure of planning it—the sense of responsibility and importance which comes to the lad who sets out to do something "all by himself," and the delightful consciousness that what is done may result in making home more home-like, and add to the comfort and pleasure of those whose love and companionship go to make home the best place on earth.



SUMMER HOUSE

In constructing summer-houses, bridges, and other rustic work, there should be a careful plan made before the work is begun. Never work "by guess." Go at the undertaking precisely as the mechanic sets about the construction of a house. Draw a diagram of what the structure is to be. A rough diagram will answer quite as well as any, provided it covers all particulars.

Figure out just how much material the plan calls for. Get this on the ground before anything else is done. The material required will be poles of different sizes and lengths, large and substantial nails, a few planks for floors and benches—possibly tables—and shingles for covering such structures as need roofing in, unless bark is used for this purpose. Of course bark gives more of a "rustic" look to a roof, but it is not an easy matter to obtain a good quality of it, and shingles, stained a mossy-green or dark brown, will harmonize charmingly with the rest of the building, and furnish a much more substantial roof than it is possible to secure with even the best kind of bark.

If possible, use cedar poles in preference to any other, for several reasons: First of all, they are more ornamental, because of their bark, which is more permanent than that of any other wood. They are light, and easy to handle, and take a nail as readily as pine. And then—their aromatic odor makes it a constant delight to work among them to those who like sweet, fresh, wild-woody smells. But all kinds of poles can be substituted for cedar if that is not obtainable. The kind of wood used in the construction of rustic work is not a matter of prime importance, though it may be, and is, largely a matter of taste. But when we cannot do as we would like to we must do the best we can.

Provide yourself with a good saw, a hammer, a square, and a mitre-box. These will be all the tools you will be likely to need. Use spikes to fasten the larger timbers together, and smaller nails for the braces and ornamental work of the design. Speaking of ornamental work reminds me to say that the more crooked, gnarled, and twisted limbs and branches you can secure, the better will be the effect, as a general thing, for formality must be

avoided as far as possible. We are not working according to a plan of Nature's but we are using Nature's material, and we must use it as it comes from Nature's hand in order to make it most effective.

Take pains in making joints. If everything is cut to the proper length and angle, it will fit together neatly, and only a neat job will be satisfactory.

Let me advise the reader who concludes to try his hand at the construction of rustic work to confine his selection of design to something not very elaborate. Leave that for wealthy people who can afford to have whatever their taste inclines them to, without regard to cost, and who give the work over to the skilled workman. I am considering matters from the standpoint of the home-maker, who believes we get more real pleasure out of what we make with our own hands than from that which we hire some one to make for us.

In one of the illustrations accompanying this chapter is shown a combination summer-house and arbor that is very easily made, and that will cost but little. The picture gives so clear an idea of framework and general detail that a description does not seem necessary. As a considerable weight will have to be supported by the roof, when vines have been trained over it, it will be necessary to use stout poles for uprights, and to run substantial braces from them to the cross-poles overhead. The built-in seats on each side add greatly to the comfort of the structure, and invite us to "little halts by the wayside," in which to "talk things over," or to quiet hours with a book that would lose half its charm if read indoors, as a companion. The original of this picture is built over a path that is sometimes used as a driveway, and is known as "the outdoor parlor" by the family on whose grounds it stands. You will find some member of the family there on every pleasant day, throughout the entire season, for it is fitted out with hammocks and swinging seats, and a table large enough to serve as tea-table, on occasion, with a cover that lifts and discloses a snug box inside in which books and magazines can be left without fear of injury in case of shower or damp weather. Tea served in such surroundings takes on a flavor that it never has indoors. The general design of this summer-house, as will readily be seen by the illustration, is simplicity itself, and can very easily be copied by the amateur workman.

It often happens that there are ravines or small depressions on the home-grounds over which a rustic bridge could be thrown with pleasing effect, from the ornamental standpoint, and prove a great convenience from the standpoint of practicality. If there is a brook there, all the better, but few of us, however, are fortunate enough to be owners of grounds possessing so charming a feature, and our bridges must be more ornamental in themselves than would be necessary if there was water to add its attraction to the spot.



A PERGOLA SUGGESTION

One of the most delightful summer-houses I have ever seen was largely the result of an accident. An old tree standing near a path was broken down in a storm, some years ago, and a portion of its trunk was made use of as a support for one side of the roof. On the opposite side, rustic arches were used. The roof was shingled, and stained a dark green, thus bringing it into color-harmony with its surroundings. Over the roof a Wistaria was trained, and this has grown to such size that but few of the shingles are to be seen through its branches. About this spot the home-life of the family centres from April to late October. "We would miss it more than any part of the dwelling," its owner and builder said to me, when I asked permission to photograph it. I could readily understand the regard of the family for so beautiful a place, which, I have no doubt, cost less than one of the great flower-beds that we see on the grounds of wealthy people, and see without admiring, so formal and artificial are they, and so suggestive of professional work duplicated in other gardens until the very monotony of them becomes an offence to the eye of the man or woman who believes in individuality and originality.

Rustic fences between lots are great improvements on the ordinary boundary fence, especially if vines are trained over them. They need not be elaborate in design to be attractive. If made of poles from which the bark has been taken, they should be stained a dark green or brown to bring them into harmony with their surroundings.

Screen-frames of rustic work, as a support for vines, to hide unsightly outbuildings, are far preferable to the usual one of wood with wire netting stretched over it. They will cost no more than one of lattice, and will be vastly more pleasing, in every respect.

Gateways can be made exceedingly pleasing by setting posts at each side of the gate, and fashioning an arch to connect them, at the top. Train a vine, like *Ampelopsis*, over the upper part of the framework, and you make even the simplest gateway attractive.

A garden-seat, with a canopy of vines to shade it, may not be any more comfortable, *as a seat*, than any wooden bench, but the touch of beauty and grace imparted by the vine that

roofs it makes it far more enjoyable than an expensive seat without the vine would be to the person who has a taste for pleasing and attractive things, simply because it pleases the eye by its outlines, thus appealing to the sense of the beautiful. Beauty is cheap, when looked at from the right standpoint, which is never one of dollars and cents. It is just these little things about a place that do so much to make it home-like, as you will readily see if, when you find a place that pleases you, you take the trouble to analyze the secret of its attractiveness.

The pergola has not been much in evidence among us until of late. A rapidly increasing taste for the attractive features of old-world, outdoor life in sunny countries where much of the time is spent outside the dwelling, and the introduction of the "Italian garden" idea, have given it a popularity in America that makes it a rival of the arbor or summer-house, and bids fair to make it a thing of permanence among us.

The question is frequently asked by those who have read about pergolas, but have never seen one, as to wherein they differ from the ordinary arbor. The difference is more in location, material, and manner of construction than anything else. They are generally built of timber that can be given a coating of paint, with more or less ornamental pillars or supports and rafters, and are constructed along definite architectural lines. They are, in fact, ornamental structures over which vines are to be trained loosely with a view to tempering the sunshine rather than excluding it. The framework of the arbor, as a general thing, is considered secondary to the effect produced by it when the vines we plant about it are developed. But, unlike the Americanized pergola, the arbor is almost always located in a retired or inconspicuous part of the home-grounds, and is seldom found connected with the dwelling. To get the benefit of the arbor, or the summer-house we evolve from it, we must go to it, while the pergola, as adapted by most of us, brings the attractive features of out-door life to the house, thus combining out- and in-door life more intimately than heretofore. One of the illustrations accompanying this chapter shows a very simple pergola framework—one that can be built cheaply, and by any man or boy who is at all "handy with tools," and can be used as a plan to work from by anyone who desires to attach a modification of the pergola proper to the dwelling, for the purpose of furnishing shade to portions of it not provided with verandas. It will require the exercise of but little imagination to enable one to see what a charming feature of the home such a structure will be when vines have been trained over it. There are many homes that would be wonderfully improved by the addition of something of this kind, with very little trouble and expense. It is to be hoped that many a housewife can prevail on the "men-folks" to interest themselves on pergola-building on a small scale, as indicated in the illustration, for practical as well as ornamental reasons. Anything that will take the occupants of the dwelling out of doors is to be encouraged. Especially would the women of the household enjoy a vine-shaded addition of this kind, during the intervals of leisure that come during the day, and the head of the family would find it an ideal place in which to smoke his evening pipe. In several respects it can be made much more satisfactory than a veranda. It can be made larger—roomier, and there will be more of an out-door atmosphere about it because of its airiness, and the play of light and shade through the vines that clamber overhead. Pergolas of elaborate design need not be described here, as they properly belong to homes not made attractive by the individual efforts of the home owner. They are better adapted to the grounds of wealthy people, who are not obliged to consider expense, and who are not actively interested in the development of the home by themselves.



A SIMPLE PERGOLA FRAMEWORK

What vines would I advise for use about arbors, summer-houses, and pergolas?

The Wild Grape, though not much used, is one of our best native vines. It has the merit of rapid growth, entire hardiness, luxuriant foliage and delightful habit, and when in bloom it has a fragrance that is as exquisite as it is indescribable—one of those vague, elusive, and yet powerful odors so characteristic of spring flowers. You will smell it—the air will be full of it—and yet it will puzzle you to locate it. The wind will blow from you and it will be gone. Then a breeze will blow your way, and the air will suddenly be overpoweringly sweet with the scent shaken free from blossoms so small as to be hardly noticeable unless one makes a careful search for them. Then, too, the fruit is not only attractive to the eye in fall, but pleasant to the taste of those who delight in the flavor of wild things, among whom we must class the robins, who will linger about the vine until the last berry is gone.



GARDENER'S TOOL-HOUSE

Another most excellent vine for covering these structures is our native *Ampelopsis*, better known as American Ivy, or Virginia Creeper. This vine is of exceedingly rapid growth, and will accomplish more in one season than most other vines do in two or three years. Its foliage is beautiful at all times, but especially so in late autumn when it takes on a brilliance that makes it a rival of the flower. In fact, every leaf of it seems all at once to become a flower, glowing with scarlet and maroon of varying shades, with here and there a touch of bronze to afford contrast and heighten the intensity of the other colors. This vine is perhaps the best of all vines for use on rustic structures, because it takes hold of rough poles and posts with stout little tendrils or sucker-like discs which ask for no assistance from us in the way of support.

Another most charming vine is *Clematis paniculata*. This is a variety of the *Clematis* family of comparatively recent introduction, quite unlike the large-flowering class. It has white flowers, small individually, but produced in such enormous quantities that the upper portions of the vine seem to be covered with foam, or a light fall of snow. They will entirely hide the foliage with their dainty, airy grace, and you will declare, when you first see the plant in full bloom, that it is the most beautiful thing you ever saw in the way

of a vine. And not the least of its merits is its habit of flowering at a time when most vines have passed into the sere-and-yellow-leaf period. September and October see it in its prime. Its foliage, of dark, rich, glossy green, furnishes a most pleasing background against which its countless panicles of white bloom stand out with most striking and delightful effect. I have no knowledge of a more floriferous vine, and I know of no more beautiful one. As a covering for the pergola attached to the house it is unrivalled.

In the southern belt of our northern states, where the Wistaria is hardy enough to withstand the winter, no more satisfactory flowering vine can be chosen for a pergola covering. Its habit of growth and flowering seems perfectly in harmony with the primary idea of the pergola. It will furnish all the shade that is needed without shutting out the sunshine entirely, and its pendant clusters of lavender-blue flowers are never more pleasing than when seen hanging between the cross-bars of the pergola.

If the person who builds a summer-house or a pergola is impatient for results it will be well to make use of annual vines for covering it the first season, though something of a more permanent nature should always be planned for. One of our best annuals, so far as rapidity of growth is concerned, is the Wild Cucumber, of which mention was made in the preceding chapter. Because of its rapid development, the usefulness of the plant for immediate effects will be readily understood. But it is valuable only as a substitute for something more substantial and should not be depended on after the first season. It lacks the dignity and strength of a permanent vine.

The Morning Glory will be found very effective for a first-season covering. This vine is prodigal in its production of flowers. Every sunny day, throughout the season, it will be covered with blossoms, so many in number that they make a veritable "glory" of the forenoon hours.

Another excellent annual is the Japan Hop. This will perhaps afford better satisfaction than the Wild Cucumber or the Morning Glory, because its foliage bears some resemblance to that of the hardy vines of which I have spoken. In other words, it has more substance and dignity, and therefore seems more in harmony with the structure over which it is trained. Its leaves have a variegation of creamy white on a dark green ground. This makes it as ornamental as if it were a flowering plant.

Every home ought to have its "playhouse" for children. If fitted with screens to keep out mosquitoes, the younger members of the family, especially the girls, will literally "live in it" for six months of the year. I would suggest fitting it with canvas curtains to shut out wind and rain. I would also advise making it of good size, for the children will take delight in entertaining visitors in it, and a tiny structure is not convenient for the entertainment of "company." Such a building can be made as ornamental as any arbor or pergola at slight cost, when vines are used to hide the shortcomings of its material and construction. Be sure it will be appreciated by the little folks, and quite likely some of the "children of a larger growth" will dispute its occupancy with them, at times, if there is no other building of its kind about the place.

CARPET-BEDDING

ARPET-BEDDING is not the most artistic phase of gardening, by any means, but it has a great attraction for many persons who admire masses of harmonious and contrasting



colors more than the individual beauty of a flower. Therefore a chapter on this subject will no doubt be gladly welcomed by those who have seen the striking effects secured by the use of plants having ornamental or richly colored foliage, in our large public parks, and on the grounds of the wealthy.

Let me say, just here, that the person who attempts what, for want of a better name, might be called pictorial gardening, is wise if he selects a rather simple pattern, especially at the outset of his career in this phase of garden-work. Intricate and elaborate designs call for more skill in their successful working out than the amateur is likely to be master of, and they demand a larger amount of time and labor than the average amateur florist will be likely to expend upon them. And the fact should never be lost sight of that failure to give all the care needed brings about most discouraging results. This being the case, select a design in which the effect aimed at can be secured by broad masses of color, depending almost wholly on color-contrast for pleasing results. Bear in mind that this "school" of pictorial art belongs to the "impressionistic" rather than the "pre-Raphaelite," about which we hear so much nowadays, and leave the fine work to the professional gardener, or wait until you feel quite sure of your ability to attempt it with a reasonably good show of success.

Some persons are under the impression that flowering plants can be used to good effect in carpet-bedding. This is not the case, however. In order to bring out a pattern or design fully and clearly, it is absolutely necessary that we make use of plants which are capable of giving a solid color-effect. This we obtain from foliage, but very few flowering plants are prolific enough of bloom to give the desired result. The effect will be thin and spotty, so never depend on them. Quite often they can be used in combination with plants having ornamental foliage in such a manner as to secure pleasing results, but they always play a secondary part in this phase of gardening.

The best plants to use in carpet-bedding are the following:

Coleus, in various shades of red, maroon, and scarlet, light and dark yellow, green and white, and varieties in which colors and shades of color are picturesquely blended.

Achyranthes, low-growing plants in mixtures of red, pink, yellow and green.

Alternantheras, similar to *Achyranthes* in habit, but with red as a predominating color. Both are excellent for working out the finer details of a design.

Pyrethrum—"Golden Feather"—with feathery foliage of a tawny yellow.

Centaurea gymnocarpa,—"Dusty Miller,"—with finely-cut foliage of a cool gray.

Geranium Madame Salleri—with pale green and white foliage. This is a most excellent plant for use in carpet-bedding because of its close, compact habit of growth, and its very symmetrical shape which is retained throughout the entire season without shearing or pruning.

It must be borne in mind by the amateur florist that success in carpet-bedding depends nearly as much on the care given as on the material used. In order to bring out a design sharply, it is necessary to go over the bed at least twice a week and cut away all branches that show a tendency to straggle across the boundary line of the various colors. Run your pruning shears along this line and ruthlessly cut away everything that is not where it belongs. If this is not done, your "pattern" will soon become blurred and indistinct. If any

intermingling of colors "from across the line" is allowed, all sharpness of outline will be destroyed.

The plants must be clipped frequently to keep them dwarf and compact. Make it a point to keep the larger-growing kinds, such as Coleus, Pyrethrum and Centaurea, under six inches in height rather than over it. Alternatheras and Achyranthes will need very little shearing, as to top, because of their habit of low growth.

In setting these plants in the bed, be governed by the habit of each plant. Achyranthes and Alternatheras, being the smallest, should be put about four inches apart. Give the Coleus about six inches of lee-way, also the Centaurea. Allow eight inches for Madame Salleroi Geranium and Pyrethrum. These will soon meet in the row and form a solid line or mass of foliage.

So many persons have asked for designs for carpet-bedding, that I will accompany this chapter with several original with myself which have proved very satisfactory. Some of them may seem rather complicated, but when one gets down to the business of laying them out, the seeming complications will vanish.

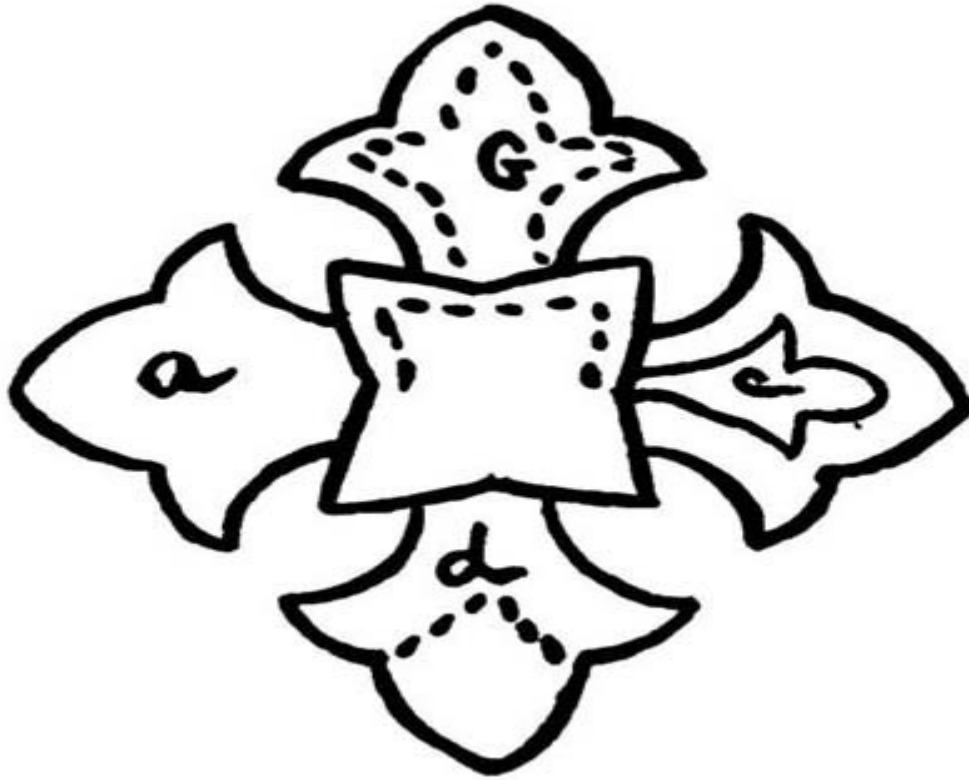
In laying out all but the star-shaped and circular beds, it is well to depend upon a square as the basis to work from. Decide on the size of bed you propose to have, and then stake out a square as shown by the dotted lines in design No. 1, and work inside this square in filling in the details. If this is done, the work will not be a difficult one.



No. 1.

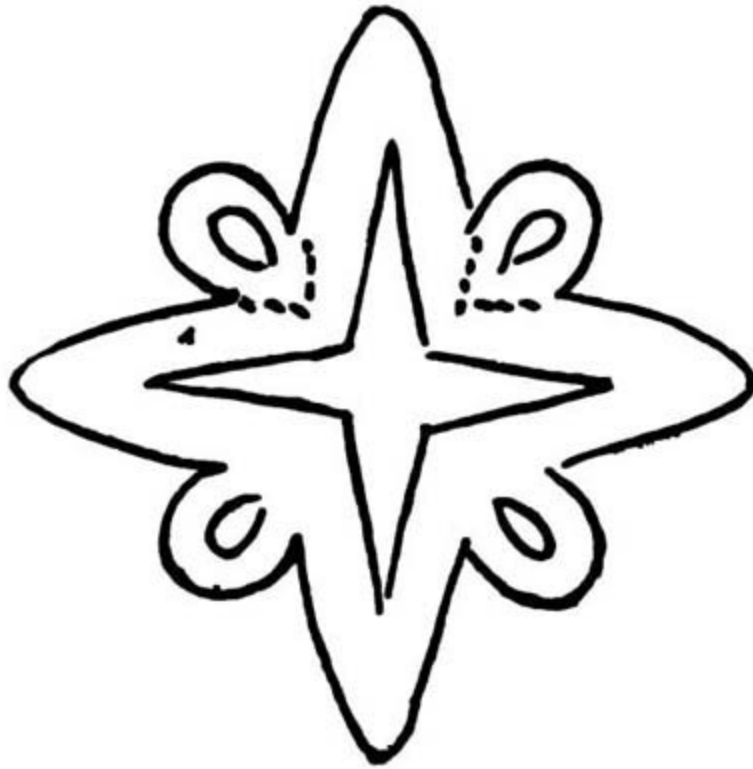
Design No. 1 will be found easy to make and admits of many pleasing combinations and modifications. Each gardener who sees fit to adopt any of these designs should study out a color-scheme of his own. Knowing the colors of the material he has to work with it will not be difficult to arrange these colors to suit individual taste. I think this will be more

satisfactory than to give any arbitrary arrangement of colors, for half the pleasure of gardening consists in originating things of this kind, rather than copying what some one else has originated, or of following instructions given by others. This does not apply so much to designs for beds as it does to the colors we make use of in them.



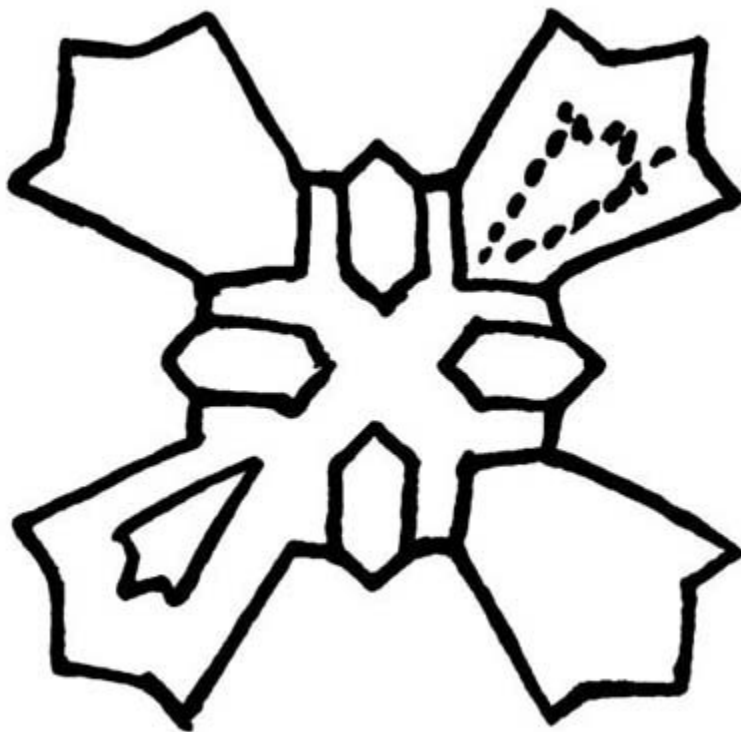
No. 2.

In the designs accompanying this chapter it will be seen that simple plans are made capable of producing more elaborate effects by making use of the dotted lines. Indeed, one can make these designs quite intricate by dividing the different spaces as outlined in No. 2. A plain centre with a plain point, as shown in *a*, shows the bed in its very simplest form. In *g*, *c*, and *d*, we see these points with three different arrangements suggested, and the dotted line in the central portion indicates a change that can be made there that will add considerably to the effectiveness of the design. A little study of other designs will, I think, make them so plain that they can be worked out with but little trouble.



No. 3.

I would suggest that before deciding on any color-combinations, a rough diagram be made of whatever bed you select and that this be colored to correspond with the material you have to work with. Seeing these colors side by side on paper will give you a better idea of the general effect that will result from any of your proposed combinations than you can get in any other way, and to test them in this manner may prevent you from making some serious mistakes.



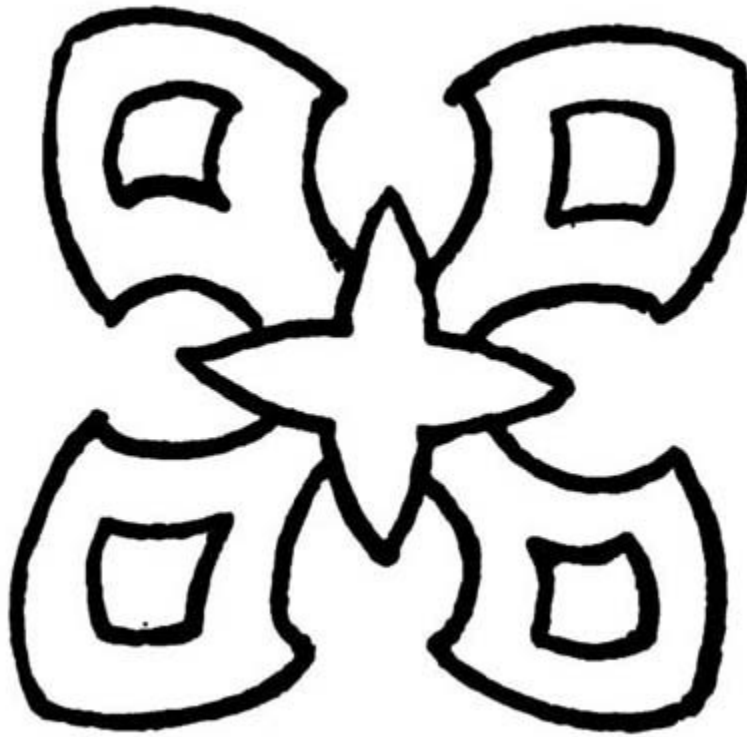
No. 4.

It will be necessary to go over the beds every day or two and remove all dead or dying leaves. Neatness is an item of the greatest importance in this phase of gardening, or any other, for that matter.



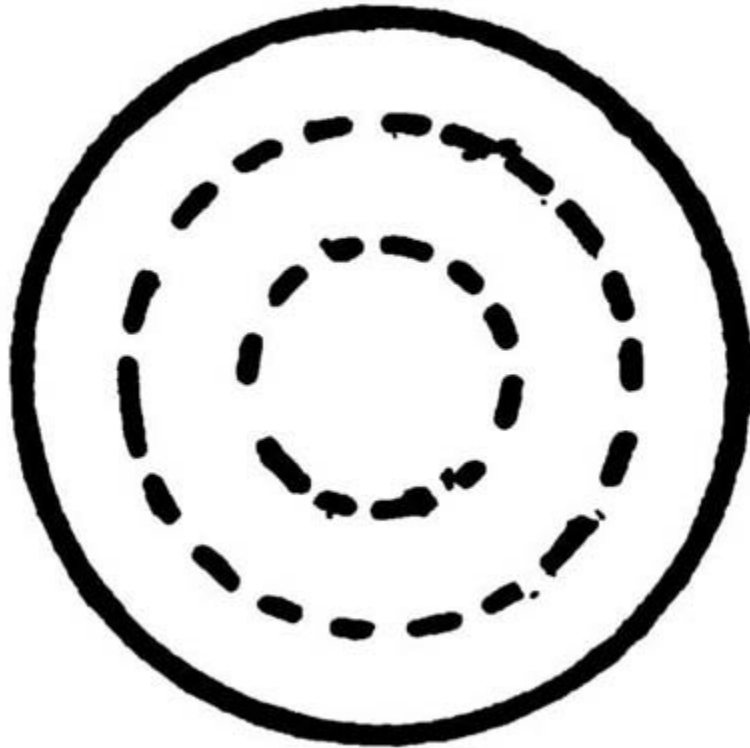
No. 5.

Large plants can be used in the centre of any of these designs, if one cares to do so, with very good effect. For this purpose we have few plants that will give greater satisfaction than the Dahlia. Scarlet Salvia would be very effective if yellow Coleus were used about it, but it would not please if surrounded with red Coleus, as the red of the plant and the red of the flower would not harmonize. A Canna of rich, dark green would make a fine centre plant for a bed in which red Coleus served as a background. One of the dark copper-colored varieties would show to fine effect if surrounded with either yellow Pyrethrum or gray Centaurea.



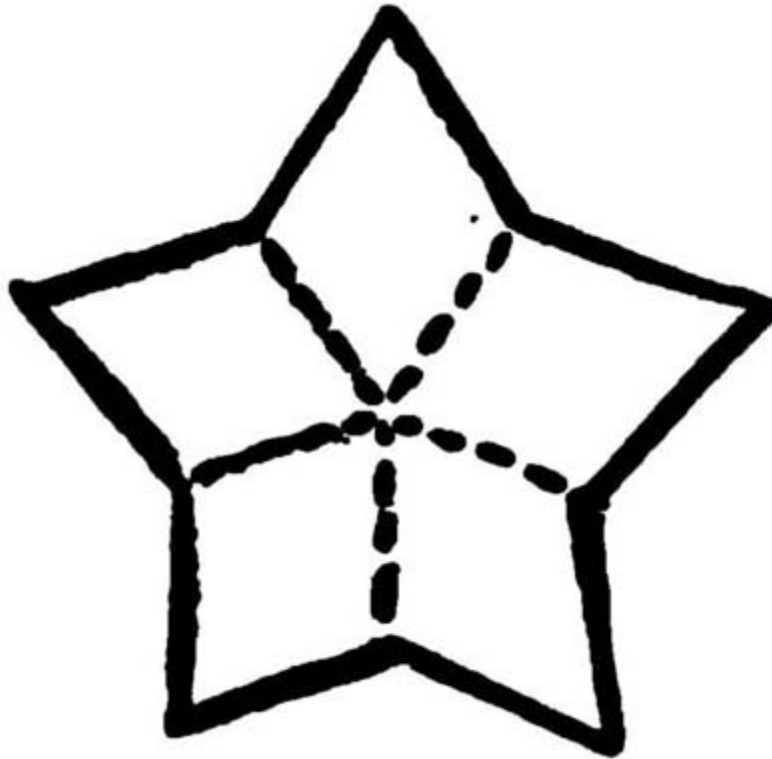
No. 6.

Ageratum, with its delicate lavender-blue flowers, can be made extremely attractive in combination with yellow Coleus. A pink Geranium surrounded with gray Centaurea would be delightful in the harmony that would result from a combination of these colors.



No. 7.

Nos. 7 and 8 illustrate the simplest possible form of bed. No. 7 is designed for plants to be set in rows. In a bed of this kind flowering plants can be used more effectively than in any of the others. Pink, white, and pale yellow Phlox would be very pretty in such a combination. No. 8 would be quite effective if each of the five sections were of a different color of Coleus. Or the whole star might be of a solid color, with a border of contrasting color. Red Coleus with Madame Salleroi Geranium as a border would look well. So would yellow Coleus edged with Centaurea.



No. 8.

FLOWERING AND FOLIAGE PLANTS FOR EDGING BEDS AND WALKS



E do not lay as much stress on edging beds and walks with flowering plants as formerly, but the practice is a most pleasing one, and ought not to be neglected. It is one of the phases of gardening that has been allowed to fall into disuse, to a considerable extent, but there are already signs that show it is coming back to its old popularity, along with the old-fashioned flowers that are now more in favor than ever before. This is as it should be.

A bed without a pretty border or edging always seems incomplete to me. It is as if the owner of it ran short of material before it was finished. The bit of lace or ribbon that is to add the last touch of grace and beauty to the gown is lacking.

Especially is a border of flowering plants satisfactory if kinds are selected which bloom throughout the greater part of the season. The plants we make use of in the centre of the bed are not always attractive before they come into bloom, neither are they that after they have passed their prime, but a pretty edging of flowers draws attention from their shortcomings, and always pleases.

One of our best flowering plants for edging purposes is Candytuft. It comes into bloom early in the season, and blooms in great profusion until the coming of frost. Keep it from developing seed and it will literally cover itself with bloom. I would advise going over it

twice a week and clipping off every cluster of faded blossoms. This answers two purposes—that of preventing the formation of seed, and of removing what would be a disfigurement to the plant if it were allowed to remain.

There are two varieties of Candytuft in cultivation—one white, the other a dull red. The white variety is the one most persons will select, as it harmonizes with all other plants. But the red sort is very pleasing when used with harmonious colors. I last year saw a bed of *Nasturtium* bordered with it, and the effect was delightful. Its dull color blended well with the richer, stronger tones of the *Nasturtium* flowers, and gave them an emphasis that was suggestive of the effect of dull, rich colors used in old rugs in heightening and bringing out, by contrast, the brighter colors.

In using Candytuft for edging, set the plants about a foot apart. I would advise two rows of them, placing the plants in such a manner that they alternate in the rows. Do not attempt to train them. Let them do that for themselves. One of their most attractive features is their lack of formality when allowed to grow to suit themselves. Very pleasing results are secured by using the white and red varieties together, the colors alternating. If the centre of the bed is filled with "Golden Feather" *Pyrethrum* and these two Candytufts are used as an edging, the effect will be very fine as the dull red admirably supplements the greenish-yellow color of the *Pyrethrum*, while the white relieves what, without it, would be too sombre a color-scheme.

Sweet Alyssum is excellent for edging purposes. Its general effect is quite similar to that of the white Candytuft, but it has greater delicacy of both bloom and foliage, and the additional merit of a delightful fragrance.

Ageratum is lovely for edging beds of pink *Geraniums*, its soft lavender tones being in perfect harmony with their color. It is equally satisfactory when used with pale rose *Phlox Drummondii*, or the soft yellow shades of that flower. Combine the three colors in a bed and you will have something unusually dainty and delightful. One of the prettiest beds I saw last summer was filled with Sweet Alyssum, and edged with *Ageratum*. If there was any unfavorable criticism to be made, it was that a touch of some brighter, stronger color was needed to relieve its white and lavender. A free-flowering rose-colored *Geranium* in its centre, or a pink *Verbena*, would have added much to the general effect, I fancy. As it was, it was suggestive of old blue-and-white Delft, and the collector of that ware would have gone into raptures over it.

For a permanent edging, for beds, paths, and the border, *Bellis perennis*, whose popular name is English Daisy, is one of the best of all plants. It is entirely hardy. It blooms early in the season. It is wonderfully generous in its production of flowers. These are small, and very double, some pink, some almost white, produced on short stems which keep them close to the ground and prevent them from straggling. Its thick, bright green foliage furnishes a charming background against which the blossoms display themselves effectively. It is a plant that does well everywhere, and is always on good terms with everything else in the garden, as will be seen by the illustration that shows it in full bloom, along with Pansies and Hyacinths. Because of its compact, non-straggling habit it is especially useful for bordering paths and the border, permitting the use of the lawn-mower or the rake with perfect freedom. Plants should be set about eight inches apart. If you have but few plants of it and desire more, pull the old plants apart in spring and make a new one out of each bit that comes away with a piece of root attached. By fall the young plants will have grown together and formed a solid mass of foliage, with a great many "crowns" from which flowers will be produced the following season. Florists can generally furnish seedling plants in spring, from which immediate effects can be secured

by close planting.



A BORDER OF CREEPING PHLOX

One of the best—if not *the* best—plants for all-around use in edging is Madame Salleroy Geranium. It is quite unlike any other Geranium of which I have any knowledge, in general habit. It forms a bushy, compact plant, and bears a solid mass of foliage. No attention whatever is required in the way of pruning. The plant trains itself. The ordinary flowering Geranium must be pinched back, and pruned constantly to prevent it from becoming "leggy," but there is no trouble of this kind with Madame Salleroy. Its branches, of which there will often be fifty or more from a plant, are all sent up from the crown of the plant, and seldom grow to be more than five or six inches in length. Each branch may have a score of leaves, borne on stems about four inches long. These leaves are smaller than those of any other Geranium. Their ground color is a pale green, and every leaf is bordered with creamy white. This combination of color makes the plant as attractive as a flowering one. It is a favorite plant for house-culture in winter, and those who have a specimen that has been carried over can pull it apart in May and plant each bit of cutting in the ground where it is to grow during summer, feeling sure that not one slip out of twenty will fail to grow if its base is inserted about an inch deep in soil which should be pinched firmly about it to hold it in place while roots are forming. Set the cuttings about ten inches apart. By midsummer the young plants will touch each other, and from that time on to the coming of frost your border will be a thing of beauty, and one of the delightful things about it will be—it will require no attention whatever from you. Never a branch will have to be shortened to keep it within bounds. No support will be needed. The plants will take care of themselves. I have never had a plant that is easier to grow. It harmonizes with everything. Seen against the green of the lawn it is charming. All things

considered, it is an ideal plant for edging. In combination with scarlet and yellow Coleus it is exceedingly effective, because of its strong color-contrast.

Most amateur gardeners are familiar with the various merits of Coleus, Alternantheras, Achyranthes, "Golden Feather" Pyrethrum, and Centaurea *maritima*, better known as "Dusty Miller" because of its gray foliage. These are all good, when properly cared for, when used for edging beds and borders. Especially so when used with Cannas, Caladiums, and other plants of striking foliage, where their rich colors take the place of flowers.

Phlox *decussata*, commonly known as "Moss Pink" because of its fine foliage and bright pink flowers, is a most excellent plant for the hardy border, because it stands our winters quite as well as the hardiest perennials. Early in spring it will cover itself with charming blossoms that are as cheerful to look at as the song of the robin or the blue bird is to hear. It is a lovable little thing, and has but one rival among early-flowering plants for edging, and that rival is the English Daisy.

PLANNING THE GARDEN



THE flower garden not being one of the necessities of life, in the usual sense of the term, people are likely to consider the making of it of so little importance that it is hardly worth while to give the matter much consideration. Consequently they simply dig up a bed here and there, sow whatever seed they happen to have, and call the thing done.

A haphazard garden of that sort is never satisfactory. In order to make even the smallest garden what it ought to be it should be carefully planned, and every detail of it well thought out before the opening of the season.

To insure thoroughness in this part of the work I would advise the garden-maker to make a diagram of it as he thinks he would like to have it. Sketch it out, no matter how roughly. When you have a map of it on paper you will be able to get a much clearer idea of it than you can obtain from any merely mental plan.

After locating your beds, decide what kind of flower you will have in each one. But before you locate your plants study your catalogue carefully, and make yourself familiar with the heights and habits of them. Quite likely this will lead to a revision of your mental diagram, for you may find that you have proposed to put low-growing kinds in the rear of tall-growing sorts, and tall-growing kinds where they would seriously interfere with the general effect.

Bear in mind that there is always a proper place for each plant you make use of—if you can find it. The making of a working diagram and the study of the leading characteristics of the plants you propose to use will help you to avoid mistakes that might seriously interfere with the effectiveness of your garden.

Do not attempt more than you are sure of your ability to carry through well. Many persons allow the enthusiasm of the spring season to get the better of their judgment, and

lead them into undertaking to do so much that after a little the magnitude of the work discourages them, and, as a natural result, the garden suffers seriously, and often proves a sad failure. Bear in mind that a few really good plants will give a hundredfold more pleasure than a great many mediocre ones. Therefore concentrate your work, and aim at quality rather than quantity. Never set out to have so large a garden that the amount of labor you have to expend on it will be likely to prove a burden rather than a pleasurable recreation.



IN SUMMER



IN WINTER

Do not attempt anything elaborate in a small garden. Leave fancy beds and striking designs to those who have a sufficient amount of room at their disposal to make them effective.

I would advise keeping each kind of plant by itself, as far as possible. Beds in which all colors are mixed promiscuously are seldom pleasing because there are sure to be colors there that are out of harmony with others, and without color-harmony a garden of most

expensive plants must prove a failure to the person of good taste.

I would not, therefore, advise the purchase of "mixed" seed, in which most persons invest, because it is cheaper than that in which each color is by itself. This may cost more, but it is well worth the additional expense. Take Phlox Drummondii as an illustration of the idea governing this advice: If mixed seed is used, you will have red, pink, mauve, scarlet, crimson, violet, and lilac in the same bed,—a jumble of colors which can never be made to harmonize and the effect of which will be very unpleasant. On the other hand, by planning your bed in advance of making it, with color-harmony in mind, you can so select and arrange your colors that they will not only harmonize, but afford a contrast that will heighten the general effect greatly. For instance, you can use rose-color, white and pale yellow varieties together, or scarlet and white, or carmine and pale yellow, and these combinations will be in excellent harmony, and give entire satisfaction. The mauves, lilacs, and violets, to be satisfactory, should only be used in combination with white varieties. I am speaking of the Phlox, but the rule which applies to this plant applies with equal force to all plants in which similar colors are to be found.

If there are unsightly places anywhere about the grounds aim to hide them under a growth of pretty vines. An old fence can be made into a thing of beauty when covered with Morning Glories or Nasturtiums. By the use of a trellis covered with Sweet Peas, or a hedge of Zinnia, or of Cosmos, we can shut off the view of objectionable features which may exist in connection with the garden. Outhouses can be completely hidden in midsummer by planting groups of Ricinus about them, and filling in with Hollyhocks, and Delphinium, and Golden Glow, and other tall-growing plants. In planning your garden, study how to bring about these desirable results.

Keep in mind the fact that if you go about garden-making in a haphazard way, and happen to get plants where they do not belong, as you are quite likely to do unless you know them well, you have made a mistake which cannot be rectified until another season. This being the case, guard against such mistakes by making sure that you know just what plant to use to produce the effect you have in mind.

Plan to have a selection of plants that will give flowers throughout the entire season. The majority of annuals bloom most profusely in June and July, but the prevention of seed-development will force them into bloom during the later months.

Plan to have a few plants in reserve, to take the places of those which may fail. Something is liable to happen to a plant, at any time, and unless you have material at hand with which to make good the loss, there will be a bare spot in your beds that will be an eye-sore all the rest of the season.

Plan to have the lowest growers near the path, or under the sitting-room windows where you can look down upon them.

Plan to have a back-yard garden in which to give the plants not needed in the main garden a place. There will always be seedlings to thin out, and these ought not to be thrown away. If planted in some out-of-the-way place they will furnish you with plenty of material for cutting, and this will leave the plants in the main garden undisturbed.

THE BACK-YARD GARDEN



GREAT deal is written about the flower-garden that fronts the street, or is so located that it will attract the passer-by, but it is seldom that we see any mention made of the garden in the back-yard. One would naturally get the idea that the only garden worth having is the one that will attract the attention of the stranger, or the casual visitor.

I believe in a flower-garden that will give more pleasure to the home and its inmates than to anyone else, and where can such a garden be located with better promise of pleasurable results than by the kitchen door, where the busy housewife can blend the brightness of it with her daily work, and breathe in the sweetness of it while about her indoor tasks? It doesn't matter if its existence is unknown to the stranger within the gates, or that the passer-by does not get a glimpse of it. It works out its mission and ministry of cheer and brightness and beauty in a way that makes it the one garden most worth having. Ask the busy woman who catches fleeting glimpses of the beauty in it as she goes about her work, and she will tell you that it is an inspiration to her, and that the sight of it rests her when most weary, and that its nearness makes it a companion that seems to enter into all her moods.

Last year I came across such a garden, and it pleased me so much that I have often looked back to it with a delightful memory of its homeliness, its utter lack of formality, and wished that it were possible for me to let others see it as I saw it, for, were they to do so, I feel quite sure every home would have one like it.

"I never take any pains with it," the woman of the home said to me, half apologetically. "That is, I don't try to make it like other folks' gardens. I don't believe I'd enjoy it so much if I were to. You see, it hasn't anything of the company air about it. It's more like the neighbor that 'just drops in' to sit a little while, and chat about neighborhood happenings that we don't dare to speak about when some one comes to make a formal call. I love flowers so much that it seemed as if I must have a few where I could see them, while I was busy in the kitchen. You know, a woman who does her own housework can't stop every time she'd like to to run out to the front-yard garden. So I began to plant hardy things here, and I've kept on ever since, till I've quite a collection, as you see. Just odds and ends of the plants that seem most like folks, you know. It doesn't amount to much as a garden, I suppose most folks would think, but you've no idea of the pleasure I get out of it. Sometimes when I get all fagged out over housework I go out and pull weeds in it, and hoe a little, and train up the vines, and the first I know I'm ready to go back to work, with the tired feeling all gone. And do you know—the plants seem to enjoy it as much as I do? They seem to grow better here than I could ever coax them to do in the front yard. But that's probably because they get the slops from the kitchen, and the soap-suds, every wash-day. It doesn't seem as if I worked among them at all. It's just play. The fresh air of outdoors does me more good, I'm sure, than all the doctors' tonics. And I'm not the only one in the family that enjoys them. The children take a good deal of pride in 'mother's garden,' and my husband took time, one day, in the busiest part of the season, to put up that frame by the door, to train Morning Glories over."

In this ideal home-garden were old-fashioned Madonna Lilies, such as I had not seen for years, and Bouncing Bets, ragged and saucy as ever, and Southernwood, that gave off spicy odors every time one touched it, and Aquilegias in blue and white and red, Life Everlasting, and Moss Pink, and that most delicious of all old-fashioned garden flowers, the Spice Pink, with its fringed petals marked with maroon, as if some wayside artist had touched each one with a brush dipped in that color for the simple mischief of the thing,

and Hollyhocks, Rockets—almost all the old "stand-bys." There was not one "new" flower there. If it had been, it would have seemed out of place. The Morning Glories were just getting well under way, and were only half-way up the door-frame, but I could see, with my mind's eye, what a beautiful awning they would make a little later. I could imagine them peering into the kitchen, like saucy, fun-loving children, and laughing good-morning to the woman who "loved flowers so well she couldn't get along without a few."

You see, she was successful with them because she loved them. Because of that, the labor she bestowed upon them was play, not work. They were friends of hers, and friendship never begrudges anything that gives proof of its existence in a practical way. And the flowers, grateful for the friendship which manifested itself in so many helpful ways, repaid her generously in beauty and brightness and cheer by making themselves a part of her daily life.

By all means, have a back-yard garden.

THE WILD GARDEN

A PLEA FOR OUR NATIVE PLANTS



ANY persons, I find, are under the impression that we have few, if any, native flowering plants and shrubs that are worthy a place in the home-garden. They have been accustomed to consider them as "wild things," and "weeds," forgetting or overlooking the fact that all plants are wild things and weeds somewhere. So unfamiliar are they with many of our commonest plants that they fail to recognize them when they meet them outside their native haunts. Some years ago I transplanted a *Solidago*,—better known as a "Golden Rod,"—from a fence-corner of the pasture, and gave it a place in the home-garden. There it grew luxuriantly, and soon became a great plant that sent up scores of stalks each season as high as a man's head, every one of them crowned with a plume of brilliant yellow flowers. The effect was simply magnificent.

One day an old neighbor came along, and stopped to chat with me as I worked among my plants.

"That's a beauty," he said as he leaned across the fence near the Golden Rod. "I don't know's I ever saw anything like it before. I reckon, now, you paid a good deal of money for that plant."

"How much do you think it cost me?" I asked.

"Oh, I don't know," he answered, looking at the plant admiringly, and then at some of foreign origin, near-by. He knew something about the value of these, as he had one of them growing in his garden. He seemed to be making a mental calculation, based on the relative beauty of the plants, and presently he said:

"I ain't much of a judge of such things, but I wouldn't wonder if you paid as much as

three—mebby four—an' like's not five dollars for it."

"The plant cost me nothing but the labor of bringing it from the pasture," I answered. "Don't you know what it is? There's any quantity of it back of your barn, I notice."

"You don't mean to say that's yaller-weed," exclaimed the old gentleman, with a disgusted look on his face. "I wouldn't have it in *my* yard. We've got weeds enough 'thout settin' 'em out". He went away with a look on his face that made me think he felt as if he had been imposed on.

While it is true, in many instances, that "familiarity breeds contempt," it is equally true that familiarity without prejudice would open our eyes to the fact that beauty exists all about us—in lane, and field, and roadside, and forest. We are not aware of the prevalence of it until we go in search of it. When we go out with "the seeing eye," we find it everywhere. Nothing is so plentiful or so cheap as beauty to the lover of the beautiful. It may be had for the taking. We have fallen into the habit of looking to foreign lands for plants with which to beautify our gardens, thus neglecting and ignoring the beauty at our own doors. A shrub with a long name and a good big price attached will win our admiration, while a native plant, vastly more desirable, will be wholly overlooked. It ought not to be so. "Home first, the world afterward" is the motto of many patriotic men and women, and it ought to be the motto of the lover of the beautiful in plant-life when he is seeking for something with which to ornament the home-grounds.

Many persons have, however, become greatly interested in our native plants, and it is apparent that the interest of the masses in whatever is beautiful is steadily increasing. The people are being educated to a keener appreciation of beauty than ever before. It is encouraging to know that a demand has sprung up for shrubs and plants of American origin—a demand so large, already, that many nurserymen advertise collections of native plants, some of them quite extensive. Appreciation of true beauty is putting a value into things which have heretofore had no idea of value connected with them.

The dominant idea I had in mind, when this chapter was planned, was that of enlisting the boys and girls in the work of making a collection of native plants. I would have them make what might properly be called a wild garden. But I would not confine the undertaking to the boys and girls. I would interest the man or woman who has a home to make beautiful in the material that is to be found on every hand, waiting to be utilized. Such a garden can be made of great educational value, and, at the same time, quite as ornamental as the garden that contains nothing but foreign plants. It can be made to assist in the development of patriotic as well as æsthetic ideas. It can be made to stimulate a healthy rivalry among the boys and girls, as well as the "children of a larger growth," as to whose collection shall be most complete. In the care and culture of these plants a skill and knowledge may be attained that will be of much benefit to them in the future, and possibly to the world. Who knows? We may have among us a young Linnæus, or a Humboldt, and the making of a wild garden may tend to the discovery and development of a talent which coming years may make us proud to do honor to the possessor of.

I would suggest the formation of a wild-garden society in each country village and neighborhood. Organize expeditions into the surrounding country in search of shrubs and plants. Such excursions can be made as delightful as a picnic. Take with you a good-sized basket, to contain the plants you gather, and some kind of a tool to dig the plants with—and your dinner. Lift the plants very carefully, with enough earth about them to keep their roots moist. On no account should their roots be allowed to get dry. If this happens you might as well throw them away, at once, as no amount of after-attention will undo the

damage that is done by neglect to carry out this advice.



PORCH BOX

The search for plants should begin early in the season if they are to be transplanted in spring, for it would not be safe to attempt their removal after they have begun to make active growth. April is a good time to look up your plants, and May a good time to bring them home. Later on, when you come across a plant that seems a desirable addition to your collection, mark the place where it grows, and transplant to the home grounds in fall, after its leaves have ripened.

In transplanting shrubs and herbaceous plants, study carefully the conditions under which they have grown, and aim to make the conditions under which they *are to grow* as similar to the original ones as possible. Of course you will be able to do this only approximately, in most instances, but come as near it as you can, for much of your success depends on this. You can give your plants a soil similar to that in which they have been growing, and generally, by a little planning, you can arrange for exposure to sunshine, or a shaded location, according to the nature of the plants you make use of. Very often it is possible to

so locate moisture-loving plants that they can have the damp soil so many of them need, by planting them in low places or depressions where water stands for some time after a rain, while those which prefer a dry soil can be given places on knolls and stony places from which water runs off readily. In order to do this part of the work well it will be necessary to study your plants carefully before removing them from their home in the wood or field. Aim to make the change as easy as possible for them. This can only be done by imitating natural conditions—in other words, the conditions under which they have been growing up to the time when you undertake their domestication.

Not knowing, at the start, the kind of plants our collection will contain, as it grows, we can have no definite plan to work to. Consequently there will be a certain unavoidable lack of system in the arrangement of the wild garden. But this may possibly be one of the chief charms of it, after a little. A garden formed on this plan—or lack of plan—will seem to have evolved itself, and the utter absence of all formality will make it a more cunning imitation of Nature's methods than it would ever be if we began it with the intention of imitating her.

Among our early-flowering native plants worthy a place in any garden will be found the Dogwoods, the Plums, the Crab-apple, and the wild Rose. Smaller plants, like the Trillium, the Houstonia, the Bloodroot, the Claytonia and the Hepatica, will work in charmingly in the foreground. Between them can be used many varieties of Fern, if the location is shaded somewhat, as it should be to suit the flowering plants I have named.

Among the summer-flowering sorts we have Aquilegia, Daisy, Coreopsis, Cranesbill, Eupatorium, Meadow Sweet, Lily, Helianthus, Enothera, Rudbeckia, Vervain, Veronia, Lobelia and many others that grow here and there, but are not found in all parts of the country, as those I have named are, for the most part.

Among the shrubs are Elder, Spirea, Clethra, Sumach, Dogwood, and others equally as desirable.

Among the late bloomers are the Solidagos (Golden Rod), Asters, Helenium, Ironweed, and others which continue to bloom until cold weather is at hand.

Among the desirable vines are the Ampelopsis, which vies with the Sumach in richness of color in fall, the Bittersweet, with its profusion of fruitage as brilliant as flowers, and the Clematis, beautiful in bloom, and quite as attractive later, when its seeds take on their peculiar feathery appendages that make the plant look as if a gray plume had been torn apart and scattered over the plant, portions of it adhering to every branch in the most airy, graceful manner imaginable.

Though I have named only our most familiar wild plants, it will be observed that the list is quite a long one. No one need be afraid of not being able to obtain plants enough to stock a good-sized garden. The trouble will be, in most instances, to find room for all the plants you would like to have represented in your collection, after you become thoroughly interested in the delightful work of making it. The attraction of it will increase as the collection increases, and as you discover what a wealth of material for garden-making we have at our very doors, without ever having dreamed of its existence, you will be tempted to exceed the limitations of the place because of the embarrassment of riches which makes a decision between desirable plants difficult. You can have but few of them, but you would like all.

THE WINTER GARDEN



OST persons who are the owners of gardens seem to be under the impression that we must close the summer volume of Nature's book at the end of the season, and that it must remain closed until the spring of another year invites us to a re-perusal of its attractive pages. In other words, that we are not expected to derive much pleasure from the garden for six months of the year.

There is no good reason why the home-grounds should not be attractive the year round if we plant for winter as well as summer effect.

True, we cannot have flowers in winter, but we can secure color-effects with but little trouble that will make good, to a considerable extent, the lack of floral color. Without these the winter landscape is cold, though beautiful, and to most persons it will seem dreary and monotonous in its chill whiteness. But to those who have "the seeing eye," there are always elements of wonderful beauty in it, and there is ample material at hand with which to give it the touches of brightness that can make it almost as attractive as it is in June.

If the reader will carefully study the two illustrations accompanying this chapter, he will have to admit that the winter garden has many attractive features that the summer garden cannot boast of. These illustrations are summer and winter views of the same spot, taken from one of our public parks. The summer view shows a wealth of foliage and bloom, and is one of Nature's beauty-spots that we never tire of. But the winter view has in it a suggestion of breadth and distance that adds wonderfully to the charm of the scene, brought out as it is by the naked branches against the sky, and glimpses of delightful vistas farther on, which are entirely hidden by the foliage that interferes with the outlook in the summer picture. Note how the evergreens stand out sharply against the background, and how clearly every shrub—every branch—is outlined by the snow. It is one of Nature's etchings. Whatever color there is in the landscape is heightened and emphasized by strong, vivid contrast. There are little touches of exquisite beauty in this picture that cannot be found in the other.

Most of us plant a few evergreens about our homes. Sometimes we are fortunate enough to locate them where they will prove effective. Oftener we put them where they have no chance to display their charms to good effect. They do not belong near the house—least of all in the "front yard." They must be admired at a distance which will soften their coarseness of habit. You must be far enough away from them to be able to take in their charms of form and color at a glance, to observe the graceful sweep of their branches against the snow, and to fully bring out the strength and richness of color, none of which things can be done at close range. Looked at from a proper and respectful distance, every good specimen of evergreen will afford a great deal of pleasure. But it might be made to afford a great deal more if we were to set about it in the right way. Why not make our evergreens serve as backgrounds against which to bring out colors that rival, to some extent, the flowers of summer?

Have you never taken a tramp along the edge of the woodland in winter, and come suddenly upon a group of Alders? What brightness seemed to radiate from their spikes of scarlet berries! The effect is something like that of a flame, so intense is it. It seems to radiate through the winter air with a thrill of positive warmth. So strong an impression do

they make upon the eye that you see them long after you have passed them. They photograph themselves there. Why should we not transplant this bit of woodland glory to the garden, and heighten the effect of it by giving it an evergreen as a background? Its scarlet fire, seen against the dark greenery of Spruce or Arbor Vitæ, would make the winter garden fairly glow with color.

I have seen the red-branched Willow planted near an evergreen, and the contrast of color brought out every branch so keenly that it seemed chiselled from coral. The effect was exquisite.

Train *Celastrus scandens*, better known as Bittersweet, where its pendant clusters of red and orange can show against evergreens, and you produce an effect that can be equalled by few flowers.

The Berberry is an exceedingly useful shrub with which to work up vivid color-effects in winter. It shows attractively among other shrubs, is charming when seen against a drift of snow, but is never quite so effective as when its richness of coloring is emphasized by contrast by the sombre green of a Spruce or Balsam.

Our native Cranberry—*Viburnum opulus*—is one of our best berry-bearing shrubs. It holds its crimson fruit well in winter. Planted among—not against—evergreens, it is wonderfully effective because of its tall and stately habit.

Bayberry (*Myrica cerifera*) is another showy-fruited shrub. Its grayish-white berries are thickly studded along its brown branches, and are retained through the winter. If this is planted side by side with the Alder, the effect will be found very pleasing.

The Snowberry (*Symphoricarpus racemosus*) has been cultivated for nearly a hundred years in our gardens, and probably stands at the head of the list of white-fruited shrubs. If this is planted in front of evergreens the purity of its color is brought out charmingly. Group it with the red-barked Willow, the Alder, or the Berberry, and you secure a contrast that makes the effect strikingly delightful—a symphony in green, scarlet, and white. If to this combination you add the blue of a winter sky or the glow of a winter sunset, who can say there is not plenty of color in a winter landscape?

The value of the Mountain Ash in winter decoration is just beginning to be understood. If it retained its fruit throughout the entire season it would be one of our most valuable plants, but the birds claim its crimson fruit as their especial property, and it is generally without a berry by Christmas in localities where robins and other berry-eating birds linger late in the season. Up to that time it is exceedingly attractive, especially if it is planted where it can have the benefit of strong contrast to bring out the rich color of its great clusters. Because of its tall and stately habit it will be found very effective when planted between evergreens, with other bright-colored shrubs in the foreground.

There are many shrubs whose berries are blue, and purple, and black. While these are not as showy as those of scarlet and white, they are very attractive, and can be made extremely useful in the winter garden. They should not be neglected, because they widen the range of color to such an extent that the charge of monotony of tone in the winter landscape is ineffective.

The Ramanas Rose (*R. lucida*) has very brilliant clusters of crimson fruit which retains its beauty long after the holidays. This shrub is really more attractive in winter than in summer.

It will be understood, from what I said at the beginning of this chapter, that I put high

value on the decorative effect of leafless shrubs. Their branches, whether traced against a background of sky or snow, make an embroidery that has about it a charm that summer cannot equal in delicacy. A Bittersweet, clambering over bush or tree, and displaying its many clusters of red and orange against a background of leafless branches, with the intense blue of winter sky showing through them, makes a picture that is brilliant in the extreme, when you consider the relative values of the colors composing it. Then you will discover that the charm is not confined to the color of the fruit, but to the delicate tracery of branch and twig, as well.

WINDOW AND VERANDA BOXES



OMEbody had a bright thought when the window-box came into existence. The only wonder is that persons who were obliged to forego the pleasure of a garden did not think it out long ago. It is one of the "institutions" that have come to stay. We see more of them every year. Those who have gardens—or could have them, if they wanted them—seem to have a decided preference for the window-box substitute.

There is a good reason for this: The window-box brings the garden to one's room, while the garden obliges one to make it a visit in order to enjoy the beauty in it. With the window-box the upstairs room can be made as pleasant as those below, and the woman in the kitchen can enjoy the companionship of flowers while she busies herself with her housewifely duties, if she does not care to make herself a back-yard garden such as I have spoken of in a preceding chapter. And the humble home that has no room for flowers outside its walls, the homes in the congested city, away up, up, up above the soil in which a few flowers might possibly be coaxed to grow, if man thought less of gain and more of beauty, can be made more like what home ought to be, with but little trouble and expense, by giving these boxes a chance to do their good work at their windows. Blessed be the window-box!

Many persons, however, fail to attain success in the cultivation of plants in boxes at the window-sill, and their failures have given rise to the impression in the minds of those who have watched their undertaking, that success with them is very problematical. "It *looks* easy," said a woman to me last season, "when you see somebody else's box just running over with vines, but when you come to make the attempt for yourself you wake up to the fact that there's a knack to it that most of us fail to discover. I've tried my best, for the last three years, to have such boxes as my neighbor has, and I haven't found out what's wrong yet. I invest in the plants that are told me to be best adapted to window-box culture. I plant them, and then I coax them and coddle them. I fertilize them and I shower them, but they stubbornly refuse to do well. They *start off* all right, but by the time they ought to be doing great things they begin to look rusty, and it isn't long before they look so sickly and forlorn that I feel like putting them out of their misery by dumping them in the ash-heap."

Now this woman's experience is the experience of many other women. She thinks,—and they think,—that they lack the "gift" that enables some persons to grow flowers successfully while others fail utterly with them. They haven't "the knack." Now, as I have said elsewhere in this book, there's no such thing as "a knack" in flower-growing. Instead

of "a knack" it's a "know-how." Ninety-nine times out of a hundred failure with window-boxes is due to just one thing: They let their plants die simply because they do not give them water enough.

Liberal watering is the "know-how" that a person must have to make a success of growing; good plants in window and veranda boxes. Simply that, and nothing more.

The average woman isn't given to "studying into things" as much as the average man is, so she often fails to get at the whys and wherefores of many happenings. She sees the plants in her boxes dying slowly, but she fails to take note of the fact that evaporation from these boxes is very rapid. It could not be otherwise because of their exposure to wind and air on all sides. She applies water in quantities only sufficient to wet the surface of the soil, and because that looks moist she concludes there must be sufficient moisture below and lets it go at that. Examination would show her that an inch below the surface the soil in the box is very, very dry,—so dry, in fact, that no roots could find sustenance in it. This explains why plants "start off" well. While young and small their roots are close to the surface, and as long as they remain in that condition they grow well enough, but as soon as they attempt to send their roots down—as all plants do, after the earlier stages of growth—they find no moisture, and in a short time they die.

If, instead of applying a basinful of water, a pailful were used, daily, all the soil in a box of ordinary size would be made moist all through, and so long as a supply of water is kept up there is no reason why just as fine plants cannot be grown in boxes as in pots, or the garden beds. There is no danger of overwatering, for all surplus water will run off through the holes in the box, provided for drainage. Therefore make it a rule to apply to your window-box, every day, throughout the season, enough water to thoroughly saturate all the soil in it. If this is done, you will come to the conclusion that at last you have discovered the "knack" upon which success depends.

I am often asked what kind of boxes I consider best. To which I reply: "The kind that comes handiest." It isn't the box that your plants grow in that counts for much. It's the care you give. Of course the soil ought to be fairly rich, though a soil of ordinary fertility can be made to answer all purposes if a good dose of plant food is given occasionally. Care should be taken, however, not to make too frequent use of it, as it is an easy matter to force a growth that will be weak because of its rapidity, and from which there may be a disastrous reaction after a little. The result to aim at is a healthy growth, and when you secure that, be satisfied with it.

The idea prevails to a considerable extent that one must make use of plants specially adapted to window-box culture. Now the fact is—almost any kind of plant can be grown in these boxes, there being no "special adaption" to this purpose, except as to profusion of bloom and habit of growth. Drooping plants are desirable to trail over the sides of the box, and add that touch of grace which is characteristic of all vines. Plants that bloom freely throughout the season should be chosen in preference to shy and short-season bloomers. Geraniums, Petunias, Verbenas, Fuchsias, Salvias, Heliotropes, Paris Daisies—all these are excellent.



PORCH BOX.

If one cares to depend on foliage for color, most pleasing results can be secured by making use of the plants of which mention has been made in the chapter on Carpet-Bedding.

Vines that will give satisfaction are *Glechoma*, green, with yellow variegation—*Vinca Harrisonii*, also green and yellow, Moneywort, German Ivy, *Tradescantia*, *Thunbergia*, and *Othonna*. A combination of plants with richly-colored foliage is especially desirable for boxes on the porch or veranda, where showiness seems to be considered as more important than delicacy of tint or refinement of quality. In these boxes larger plants can be used than one would care to give place to at the window. Here is where Cannas and *Caladiums* will be found very effective.

Ferns, like the Boston and Pierson varieties, are excellent for not too sunny window-boxes because of their graceful drooping and spreading habit. They combine well with pink-and-white Fuchsias, rose-colored Ivy Geraniums, and the white Paris Daisy. Petunias—the single sorts only—are very satisfactory, because they bloom so freely and constantly, and have enough of the droop in them to make them as useful in covering the sides of the box as they are in spreading over its surface. If pink and white varieties are used to the exclusion of the mottled and variegated kinds the effect will be found vastly more pleasing than where there is an indiscriminate jumbling of colors.

A foot in width, a foot in depth, and the length of the window frame to which it is to be attached is a good size for the average window-box. Great care must be taken to see that it is securely fastened to the frame, and that it is given a strong support, for the amount of earth it will contain will be of considerable weight when well saturated with water.

Veranda boxes, in which larger plants are to be used, should be considerably deeper and wider than the ordinary window-box. Any box of the size desired that is substantial enough to hold a sufficient amount of soil will answer all purposes, therefore it is not necessary to invest in expensive goods unless you have so much money that economy is no object to you. If your plants grow as they ought to no one can tell, by midsummer, whether your box cost ten dollars or ten cents. If it is of wood, give it a coat of some neutral-colored paint before you fill it.

SPRING WORK IN THE GARDEN



NOT much actual work can be done in the garden, at the north, before the middle of April. But a good deal can be done toward getting ready for active work as soon as conditions become favorable.

Right here let me say that it is a most excellent plan to do all that can be done to advantage as early in the season as possible, for the reason that when the weather becomes warm, work will come with a rush, and in the hurry of it quite likely some of it will be slighted. Always aim to keep ahead of your work.

I believe, as I have several times said, in planning things. Your garden may be small—so small that you do not think it worth while to give much consideration to it in the way of making plans for it—but it will pay you to think over the arrangement of it in advance. "Making garden" doesn't consist simply in spading up a bed, and putting seed into the ground. Thought should be given to the location and arrangement of each kind of flower you make use of. The haphazard location of any plant is likely to do it injustice, and the whole garden suffers in consequence.

Make a mental picture of your garden as you would like to have it, and then take an inventory of the material you have to work with, and see how near you can come to the garden you have in mind. Try to find the proper place for every flower. Study up on habit, and color, and season of bloom, and you will not be likely to get things into the wrong place as you will be almost sure to do if you do not give considerable thought to this matter. There should be orderliness and system in the garden as well as in the house, and this can only come by knowing your plants, and so locating them that each one of them will have the opportunity of making the most of itself.

Beds can be spaded as soon as the frost is out of the ground, as advised in the chapter on The Garden of Annuals, but, as was said in that chapter, it is not advisable to do more with them at that time. If the ground is worked over when wet, the only result is that you get a good many small clods to take the place of large ones. Nothing is gained by being in a hurry with this part of the work. Pulverization of the soil can only be accomplished successfully after it has parted with the excessive moisture consequent on melting snows and spring rains. Therefore let it lie as thrown up by the spade until it is in a condition to crumble readily under the application of hoe or rake.

Shrubs can be reset as soon as frost is out of the ground. Remove all defective roots when this is done. Make the soil in which you plant them quite rich, and follow the instruction given in the chapter on Shrubs as carefully as possible, in the work of resetting.

If any changes are to be made in the border, plan for them now. Decide just what you want to do. Don't allow any guesswork about it. If you "think out" these things the home grounds will improve year by year, and you will have a place to be proud of. But the planless system which so many follow never gives satisfactory results. It gives one the impression of something that started for somewhere but never arrived at its destination.

Old border plants which have received little or no attention for years will be greatly benefited by transplanting at this season. Cut away all the older roots, and make use of none that are not strong and healthy. Give them a rich soil. Most of them will have renewed themselves by midsummer.

If you do not care to take up the old plants, cut about them with a sharp knife, and remove as many of the old roots as possible. This is often almost as effective as transplanting, and it does not involve as much labor.

The lawn should be given attention at this season. Rake off all unsightly refuse that may have collected on it during winter. Give it an application of some good fertilizer. It is quite important that this should be done early in the season, as grass begins to grow almost as soon as frost is out of the ground, and the sward should have something to feed on as soon as it is ready for work.

Go over all the shrubs and see if any need attention in the way of pruning. But don't touch them with the pruning knife unless they really need it. Cut out old wood and weak branches, if there are any, and thin, if too thick, but leave the bush to train itself. It knows more about this than you do!

Get racks and trellises ready for summer use. These are generally made on the spur of the moment, out of whatever material comes handiest at the time they are needed. Such hurriedly constructed things are pretty sure to prove eyesores. The gardener who takes pride in his work and his garden will not be satisfied with makeshifts, but will see that whatever is needed, along this line, is well made, and looks so well that he has no reason to be ashamed of it. It should be painted a dark green or some other neutral color.

Rake the mulch away from the plants that were given protection in fall as soon as the weather gets warm enough to start them to growing. Or it can be dug into the soil about them to act as a fertilizer. Get it out of sight, for it always gives the garden an untidy effect if left about the plants.

Go over the border plants and uproot all grass that has secured a foothold there. A space of a foot should be left about all shrubs and perennials in which nothing should be allowed to grow.

If any plants seem out of place, take them up and put them where they belong. If you cannot find a place where they seem to fit in, discard them. The garden will be better off without them, no matter how desirable they are, than with them if their presence creates color-discord.

Peonies can be moved to advantage now. If you cut about the old clump and lift a good deal of earth with it, and do not interfere with its roots, no harm will be done. But if you mutilate its roots, or expose them, you need not expect any flowers from the plant for a season or two.

Get stakes ready for the Dahlias. These should be painted some unobtrusive color. If this is done, and they are taken proper care of in fall, they will last for years. This is true of racks and trellises.

Provide yourself with a hoe, an iron-toothed rake, a weeding-hook, a trowel for transplanting, a wheel-barrow, a spade, and a watering-pot. See that the latter is made from galvanized iron if you want it to last. Tin pots will rust out in a short time.

Take your watering-pot to the tinsmith and have him fit it out with an extension spout—one that can be slipped on to the end of the spout that comes with the pot. Let this be at least two feet in length. This will enable you to apply water to the roots of plants standing well back in the border, or across beds, and get it just where it will do the most good, but a short-spouted plant will not do this unless you take a good many unnecessary steps in making the application.

Be sure to send in your orders for seed and plants early in the season. Have everything on hand, ready for putting into the ground when the proper time comes to do this.

SUMMER WORK IN THE GARDEN



If weeds are kept down through the early part of the season, there will not be a great deal of weeding to do in midsummer. Still, we cannot afford to take it for granted that they require no attention, for they are most aggressive things, and so persistent are they that they will take advantage of every opportunity for perpetuating themselves. Therefore be on the lookout for them, and as soon as you discover one that has thought to escape your notice by hiding behind some flowering plant, uproot it. One weed will furnish seed enough to fill the entire garden with plants next year if let alone.

If the season happens to be very dry, some of your plants—Dahlias, for instance,—will have to be watered if you want them to amount to anything. These must have moisture at their roots in order to flower well.

Other plants may be able to get along with a mulch of grass-clippings from the lawn. Most of our annuals will stand quite a drouth.

If one is connected with a system of waterworks it is an easy matter to tide a garden over a drouth. But where there is nothing but the pump to depend on for a supply of water, I would not advise beginning artificial watering except in rare cases, like that of the Dahlia. We always find that so much work is required in supplying our plants from the pump that after a little we abandon the undertaking, and the result is that the plants we set out to be kind to are left in a worse condition, when we give up our spasmodic attention, than they would have been in if we had not begun it.

It is well to use the hoe constantly if the season is a dry one. Keep the surface of the soil open that it may take in all the moisture possible. On no account allow it to become crusted over.

Seed of perennials can be sown now to furnish plants for flowering next season.

Look to the Dahlias, and make sure they are properly staked.

Be on the lookout for black beetle on Aster and Chrysanthemum. As soon as one is

discovered apply Nicotice, and apply it thoroughly, all over the plant. Promptness is demanded in fighting this voracious pest.

During the latter part of summer, when the extreme hot weather that we have at the north sets in, cut away nearly all the top of the Pansy-plants. This will give the plants a chance to rest during the season when they are not equal to the task of flowering, because of the hot, dry weather which is so trying to them. Along in September, when the weather becomes cooler, they will take a fresh start and give us fine flowers all through the fall.

Look over the perennials and satisfy yourself that there is color-harmony everywhere. If you find a discord anywhere, mark the plant that makes it for removal later on.

Be sure to keep all seed from developing on the Sweet Peas. This you *must* do if you would have a good crop of flowers during the fall months.

If any plants seem too thick, sacrifice some of them promptly. No plant can develop itself satisfactorily if it is crowded.

Poor plants will find their way into all collections. If you find one in yours, remove it at once. There are so many good ones at our disposal that we cannot afford to give place, even for a season, to an inferior kind.

Let neatness prevail everywhere. Gather up dead leaves and fallen flowers, cut away the stalks of plants upon which no more flowers can be expected, and keep the walks looking as if you expected visitors at any time, and were determined not to be caught in untidy garments.

While the good gardener can always find something to do in the garden, he will not have as much work on his hands at this season as at any other, therefore it is the time in which he can get the greatest amount of pleasure from his flowers, and in proportion to his care of them earlier in the season will be the pleasure they afford now.

FALL WORK IN THE GARDEN



BECAUSE the growth of grass on the lawn is not as luxuriant and rapid in fall as it is in midsummer, is no reason why the lawn should be neglected after summer is over. It should be mowed whenever the grass gets too tall to look well, clear up to the end of the season. The neat and attractive appearance of the home-grounds depends more upon the lawn than anything else about them. It is a good plan to fertilize it well in fall, thus enabling the roots of the sward to store up nutriment for the coming season. Fine bonemeal is as good for this purpose as anything I know of except barnyard manure, and it is superior to that in one respect—it does not contain the seeds of weeds.

Go over the garden before the end of the season and gather up all plants that have completed their work. If we neglect to give attention to the beds now that the flowering-period is over, a general appearance of untidiness will soon dominate everything. Much of the depressing effect of late fall is due to this lack of attention. The prompt removal of all unsightly objects will keep the grounds looking *clean* after the season has passed its

prime, and we all know what the Good Book's estimate of cleanliness is.

Seedlings of such perennials as Hollyhock, Delphinium, and other plants of similar character, ought to be transplanted to the places they are to occupy next season by the last of September. If care is taken not to disturb their roots when you lift them they will receive no check.

If you give your Hybrid Perpetual Roses a good, sharp cutting-back early in September, and manure the soil about them well, you may reasonably expect a few fine flowers from them later on. And what is more delightful than a perfect Rose gathered from your own garden just at the edge of winter?

Perennials can be divided and reset, if necessary, immediately after they have ripened off the growth of the present year. If this work is done now, there will be just so much less to do in spring.

Before the coming of cold weather all tools used in gardening operations should be gathered up and stored under cover. If any repairs are needed, make note of them, and see that the work is done in winter, so that everything needed in spring may be in readiness for use. It is a good plan to give all wood-work a coat of paint at the time it is stored away, and to go over the metal part of every tool with a wash of vaseline to prevent rust.

Have a general house-cleaning before winter sets in. Cut away the stalks of the perennials. Pull up all annuals. Rake up the leaves, and add everything of this kind to the compost heap. All garden refuse should find its way there, to be transmuted by the alchemy of sun and rain, and the disintegrating forces of nature into that most valuable of soil constituents—humus. Let nothing that has any value in it be wasted.

After hard frosts have killed the tops of Dahlias, Cannas, Caladiums and Gladioluses, their roots should be dug, on some warm and sunny day, and prepared for storage in the cellar or closet. Spread them out in the sunshine, and leave them there until the soil that was dug with them is dry enough to crumble away from them. At night cover with something to keep out the cold, and expose them to the curative effects of the sun next day. It may be necessary to do this several days in succession. The great amount of moisture which they contain when first dug should be given a chance to evaporate to a considerable extent before it will be safe to put them away for the winter. Cut off the old stalks close to the root before storing.

While clearing the beds of dead plants and leaves be on the lookout for insects of various kinds. The cut-worm may still be in evidence, and may be found among the rubbish which you gather up. And if found, destroy it on the spot. This precaution will go far toward safeguarding plants in spring, many of which are annually injured by the depredations of this pest.

When you are sure that cold weather is at hand, cover the bulb-bed with coarse manure or litter, hay, or straw, as advised in the chapter on The Bulb Garden. And give your Roses the protection advised in the chapter on The Rose.

Cover Pansies lightly with leaves or evergreen branches. If you have mulch enough, apply some to your hardy plants, and next spring note the difference between them and the plants which were not given any protection.

BY WAY OF POSTSCRIPT

A CHAPTER OF AFTERTHOUGHTS WHICH THE READER CANNOT AFFORD TO MISS



PLANTING TO HIDE FOUNDATION WALLS



THINK things out for yourself. Do not try to copy anybody else's garden, as so many attempt to do. Be original. What you see on your neighbor's home grounds may suggest something similar for your own grounds, but be content with the idea suggested. He may not have a patent on his own working-out of the idea—indeed, the idea may not have been one of his originating—but the manner in which he has expressed it is his own and you should respect his right to it. Imitation of what others have done, or are doing, is likely to spoil

everything. If the best you can do is to copy your neighbor's work servilely in all its details, turn your attention to something else. If all the flower-gardens in the neighborhood were simply duplicates of each other in material and arrangement, the uniformity of them would be so monotonous in effect that it would be a relief to find a place that was without a garden.

Never imitate anything that you see on the grounds of wealthy people with cheap and inferior material. The result will be a sham that will deceive no one, and you will soon tire of it, and the sooner the better. Be honest. If you have only cheap material to work with, be satisfied with unambitious undertakings. Let them be in keeping with what you have to work with—simple, unpretentious, and without any attempt in the way of deception. The humblest home can be made attractive by holding fast to the principle of honesty in everything that is done about it. It is not necessary to imitate in order to make it attractive. Think out things for yourself, and endeavor to do the best you can with the material at hand, and under the conditions that prevail, and be content with that. The result will afford you vastly more satisfaction, even if it does not measure up to what you would like, than you can possibly realize by imitating another's work. There is a deal of pleasure in being able to say about one's home or garden, "It may not be as fine as my neighbor's, but, such as it is, it is all mine. I have put myself into it. It may be plain and humble, but—there's honesty in it." And that is a feature you have a right to be proud of.

Never make the mistake of neglecting good old plants for the sake of something new, simply because it is new. Old plants—plants that have held their own against all newcomers—are the ones to depend on. The fact that they *have* held their own is sufficient proof of their merits. Had they been inferior in any respect they would have dropped from notice long ago, like the "novelties" that aspired to take their places. Old plants are like old friends, old wine—all the better because of their age. There's something substantial about them. We do not tire of them. We know what to expect of them, and they never disappoint us.

Never make the mistake of thinking the shape of a bed deserves more consideration than what you put into the bed. It's the flower that deserves attention,—not the bed it grows in. It isn't treating a flower with proper respect to give it secondary place.

Many an amateur gardener tries to have a little of everything, and the result is that he has nothing worth speaking of, because quality has been sacrificed to quantity. Grow only as many flowers as you can grow well, and be wise in selecting only such kinds as do best under the conditions in which they must be grown. Depend upon kinds that have been tried and not found wanting unless you have a fondness for experimenting.

No really artistic results can be secured by the use of seeds in which all colors are mixed. If you desire harmonious effects, you will have to purchase seed in which each color is by itself. A few varieties in which there is perfect color-harmony will please you far more than a collection in which all the colors of the rainbow are represented. Take the Sweet Pea as an illustration of this idea: From a package of mixed seed you will get a score of different colors or shades, and many of these, though beautiful in themselves, will produce positive discord when grown side by side. The eye of the person who has fine color-sense will be pained by the lack of harmony. But confine your selection to the soft pinks, the delicate lavenders, and the pure whites, and the result will be something to delight the artistic eye—restful, harmonious, and as pleasing as a strain of exquisite poetry—in fact, a poem in color. What is true of the Sweet Pea, in this respect, is equally true of all plants which range through a great variety of colors. Bear this in mind when you select seeds for your garden of annuals.

Don't throw away any plants that are worth growing. If you have no use for them some of your neighbors will doubtless be glad to get them. Give them to the poor children of your neighborhood, and tell them how to care for them, and you will not only be doing a kind deed but you will be putting into the life that needs uplifting and refining influences a means of help and education that you little guess the power of for good. For every plant is a teacher, and a preacher of the gospel of beauty, and its mission is to brighten and broaden every life that comes under its influence. All that it asks is an opportunity to fulfill that mission.

If no one cares for the plants you have no use for, give them a place in out-of-the-way nooks and corners—in the roadside, even, if there is no other place for them. A stock of this kind, to draw upon in case any of your old plants fail in winter, will save expense and trouble, and prevent bare spots from detracting from the appearance of the home grounds. It is always well to have a few plants in reserve for just such emergencies as this. Very frequently the odds-and-ends corner of the garden is the most attractive feature in it.

Many a place is all but spoiled because its owner finds it difficult to confine his selection of plants for it to the number it will conveniently accommodate. There are so many desirable ones to choose from that it is no easy matter to determine which you will have, because—you want them all! But one must be governed by the conditions that cannot be changed. Unfortunately the home-lot is not elastic. Small grounds necessitate small collections if we would avoid cluttering up the place in a manner that makes it impossible to grow anything well. Shrubs must have elbow-room in order to display their attractions to the best advantage. Keep this in mind, and set out only as many as there will be room for when they have fully developed. It may cost you a pang to discard an old favorite, but often it has to be done out of regard for the future welfare of the kinds you feel you *must have*. If you overstock your garden, it will give you many pangs to see how the plants in it suffer from the effect of crowding. If you cannot have *all* the good things, have the very best of the list, and try to grow them so well that they will make up in quality for the lack

in quantity. I know of a little garden in which but three plants grow, but the owner of them gives them such care that these three plants attract more attention from passers-by than any other garden on that street.

Be methodical in your garden-work. Keep watch of everything, and when you see something that needs doing, do it. And do it well. One secret of success in gardening is in doing everything as if it was *the* one thing to be done. Slight nothing.

For vines that do not grow thick enough to hide everything with their foliage, a lattice framework of lath, painted white, is the most satisfactory support, because of the pleasing color-contrast between it and the plants trained over it. Both support and plant will be ornamental, and one will admirably supplement the other. The lattice will be an attractive feature of the garden when the vine that grew over it is dead, if it is kept neatly painted.

But for the rampant grower a coarse-meshed wire netting is just as good, and considerably less expensive, in the long run, as it will do duty for many years, if taken care of at the end of the season. Roll it up and put it under cover before the fall rains set in.

The simple fact of newness is nothing in any plant's favor. Unless it has real merit, it will not find purchasers after the first season. Better wait until you know what a plant is before investing in it. We have so many excellent plants with whose good qualities we are familiar that it is not necessary to run any risks of this kind.

Many home-owners make the mistake of putting down boardwalks about the dwelling and yard. Such a walk is never attractive, and it has not the merit of durability, for after a year or two it will need repairs, and from that time on it will be a constant source of expense. The variegated appearance of a patched-up boardwalk will seriously detract from the attractiveness of any garden. It may cost more, at first, to put down cement walks,—though I am inclined to doubt this, at the present price of lumber—but such walks are good for a lifetime, if properly constructed, therefore much cheaper in the end. There can be no two opinions as to their superior appearance. Their cool gray color brings them into harmony with their surroundings. They are never obtrusive. They are easily cleaned, both summer and winter. And the home-maker can put them in quite as well as the professional worker in cement if he sets out to do so, though he may be longer at the work.

But *make sure* about the location of your paths before putting in cement walks. That is—be quite sure that you know where you want them to be. A boardwalk can be changed at any time with but little trouble if you get it in the wrong place, but a cement walk, once down, is down for all time, unless you are willing to spend a good deal of hard labor in its removal.

Never do spasmodic work in the garden. The unwise gardener neglects what needs doing until so much has accumulated that he is forced to give it attention, and then he hurries in his efforts to dispose of it, and the consequence is that much of it is likely to be so poorly done that plants suffer nearly as much from his hasty operations as they did from neglect. Do whatever needs doing in a systematic way, and keep ahead of your work. Never be driven by it.

It is one of the most satisfactory laws of Nature that we can have only what we work for. Too many seem to forget this, and think that because a flower hasn't a market value, like corn or wheat, it ought to grow without any attention on their part. Such persons do not understand the real value of a flower, which is none the less because it cannot be computed on the basis of a dollars-and-cents calculation.

Man, wife, and all the children ought to work together for whatever adds beauty to the home, and nothing is more effective in this line than a good flower-garden. I can remember when it was considered an indication of weakness for a man to admit that he was fond of flowers. I look back with amusement to my own experience in this respect. Because I loved flowers so well, when I was a wee bit of a lad, that I attempted to grow them, I was often laughed at for being a "girl-boy." "He ought to have been a girl," one of my uncles used to say. "You'll have to learn him to do sewing and housework." It often stung me to anger to listen to these sarcastic remarks, but I am glad that my love for flowers was strong enough to keep me at work among them, for I know that I am a better man to-day than I would have been had I allowed myself to be ridiculed out of my love for them. If the children manifest a desire to have little gardens of their own encourage them to do so, and feel sure that the cultivation of them will prove to be a strong factor in the development of the child mind.

Seedling Hollyhocks almost always look well when winter comes, but in spring we find their leaves decaying from the effect of too much moisture, and this decay is likely to be communicated to the crown of the plant, and that means failure. Of late years I protect my plants by inverting small boxes over them. The sides of these boxes are bored full of holes to admit air, which must be allowed to circulate freely about the plant, or it will smother. I invert a box over the plant after filling it with leaves, and draw more leaves about the outside of it. This prevents water from coming in contact with the soft, sponge-like foliage, and the plant comes out in spring almost as green as it was in fall.

Plants can be moved with comparative safety any time during the summer if one is careful to disturb their roots as little as possible. Take them up with a large amount of soil adhering, and handle so carefully that it will not break apart. It is a good plan to apply enough water before attempting to lift them to thoroughly saturate all the soil containing the roots. This will hold the earth together, and prevent exposure of the roots, which is the main thing to guard against.

After putting the plant in place, apply water liberally, and then mulch the soil about it with grass-clippings or manure. Of course removal at that season will check the growth of the plant to a considerable extent, and probably end its usefulness for the remainder of the season. Unless absolutely necessary, I would not attempt the work at this time, for spring and fall are the proper seasons for doing it.

In a letter recently received a lady asks this question: "Do you believe in flower-shows? If you think they help the cause of flower-growing, will you kindly tell me how to go to work to organize such a society?"

To the first question I reply: I *do* believe in flower-shows and horticultural societies when they are calculated to increase the love and appreciation of flowers *as* flowers, rather than to call attention to the skill of the florist in producing freaks which are only attractive as curiosities. I sincerely hope that the day of Chrysanthemums a foot across and Roses as large as small Cabbages is on the wane.

The thing to do in organizing a floral association is—to paraphrase Horace Greeley's famous advice as to the resumption of specie payment—to organize! In other words, to get right down to business and give the proposed society a start by bringing flower-loving people together, and beginning to work without wasting time on unnecessary details. If you make use of much "red tape" you will kill the undertaking at the outset. Simply form your society and appoint your committees, and you will find that the various matters which perplex you when looked at in the whole will readily adjust themselves to the conditions that arise as the society goes on with its work. Put theories aside, and *do something*, and you will find very little difficulty in making your society successful if you can secure a dozen really interested persons as members. I would be glad to know that such a society existed in every community.

I would advise my readers never to have anything to do with plant-peddlers. Of course it is *possible* for the man who goes about the country with plants for sale to be as honest as any other man, but we see so few indications of the possession of honest principles by the majority of these men that we have come to consider them all unreliable, and, as a matter of protection, we have to refuse to patronize any of them at the risk of doing injustice to

those who may be strictly reliable. They will sell you Roses that have a different colored flower each month throughout the season, blue Roses, Resurrection Plants that come to life at a snap of the finger, and are equally valuable for decorative purposes and for keeping moths out of clothing, and numerous other things rare, wonderful, and all high priced, every one of which can be classed among the humbugs. Patronize dealers in whom you are justified in having confidence because of a well-established reputation for fair dealing.

The Hollyhock is often attacked by what is called "rust." The leaves become brown, and dry at the edges, and the entire plant has a look much like that of a nail which has been for some time in water, hence the popular name of the disease. This "rust" is really a fungoid trouble, and unless it is promptly checked it will soon spread to other plants. If it appears on several plants at the same time, I would advise cutting them, and burning every branch and stalk. If but one plant is attacked, I would spray it with Bordeaux Mixture, which can now be obtained in paste form from most florists. This is the only dependable remedy I know of for the fungus ills that plants are heir to. Asparagus is often so badly affected with it, of late years, that many growers have been obliged to mow down their plants and burn their tops in midsummer, in their efforts to save their stock. Never leave any of the cut-off portions of a plant on the ground, thinking that cutting down is all that is necessary. The fungus spores will survive the winter, and be ready for work in spring. Burn everything.

A house whose foundation walls are left fully exposed always has an unfinished look. But if we hide them by shrubs and flowering plants the place takes on a look of completion, and the effect is so pleasing that we wonder why any house should be left with bare walls. The plants about it seem to unite it with the grounds in such a manner that it becomes a part of them. But the house whose walls are without the grace of "green things growing," always suggest that verse in the Good Book which tells of "being *in* the world, but not *of* it."

I would always surround the dwelling with shrubs and perennials, and use annuals and bulbs between them and the paths that run around the house.

On the north side of a dwelling large-growing Ferns can be planted with fine effect. These should be gathered in spring, and a good deal of native soil should be brought with them from the woods. They will not amount to much the first year, but they will afford you a great deal of pleasure thereafter. Use in front of them such shade-loving plants as Lily of the Valley and Myosotis.

Nowadays "tropical effects" are greatly admired. We have but few plants that adapt themselves to this phase of gardening. Canna, Caladium, Ricinus, Coleus, "Golden

Feather" Pyrethrum and the gray Centaurea cover pretty nearly the entire list. But by varying the combinations that can be made with them the amateur can produce many new and pleasing effects, thus avoiding the monotony which results from simply copying the beds that we see year after year in the public parks, from whose likeness to each other we get the impression that no other combination can be made. Study out new arrangements for yourself. Plant them, group them, use them as backgrounds for flowering plants, mass them in open spaces in the border. Do not get the idea that they must always be used by themselves. Cannas, because of the great variety of color in their foliage, can be made attractive when used alone, but the others depend upon combination with other plants for the contrast which brings out and emphasizes their attractive features.

Speaking of new arrangements reminds me to say that the amateur gardener ought always to plan for original effects if he or she would get out of gardening all the pleasure there is in it. It may seem almost necessary for the *beginner* to copy the ideas of others in the arrangement of the garden, to a considerable extent, but he should not get into the slavish habit of doing so. Hazlitt says: "Originality implies independence of opinion. It consists in seeing for one's self." That's it, exactly. Study your plants. Find out their possibilities. And then plan arrangements of your own for next season. Have an opinion of your own, and be independent enough to attempt its carrying out. Don't be afraid of yourself. Originate! Originate! Originate!

When you invest your money in a fine plant you do it for the pleasure of yourself and family. When a neighbor comes along and admires it, and asks you to divide it with her, don't let yourself be frightened into doing so from regard of what she may say or think if you refuse. Tell her where she can get a plant like it, but don't spoil your own plant for anybody.

I am well aware that advice of this kind may seem selfish, but it is not. There's no good reason why my neighbor should not get his plants in the same way I got mine. I buy with the idea of beautifying my home with them, and this I cannot do so long as I yield to everybody's request for a slip or a root.

I have in mind a woman who, some years ago, invested in a rare variety of Peony. When her plant came into bloom her friends admired it so much that they all declared they must have a "toe" of it. The poor woman hated terribly to disturb her plant, for she was quite sure what the result would be, having had considerable experience with Peonies, but she lacked the courage to say no, and the consequence was that she gave a root to the first applicant, and that made it impossible for her to refuse the second one and those who came after, and from that time to this she has kept giving away "toes," and her plant is a poor little thing to-day, not much larger than when it was first planted, while plants grown from it are large and fine. She wouldn't mind it so much if her friends were willing to divide *their* plants with *their* friends, but they will not do this "for fear of spoiling them." Instead, they send their friends to her. This is a fact, and I presume it can be duplicated in almost every neighborhood.

The flower-loving person is, as a general thing, a very generous person, and he takes delight in dividing his plants with others when he can do so without injuring them. He is glad to do this because of his love for flowers, and the pleasure it affords him to get others interested in them and their culture. But there is such a thing as being overgenerous. Our motto should be, "Home's garden first, my neighbor's garden afterward."

It is generally thoughtlessness which prompts people to ask us to divide our choice plants with them. If we were to be frank with them, and tell them why we do not care to do this, they would readily understand the situation, and, instead of blaming us for our refusal, they would blame themselves for having been so thoughtlessly selfish as to have made the request.

The question is often asked:

"Why can't we save our own flower-seeds? Aren't the plants we grow just as healthy as those of the seedsmen we patronize year after year? Ought not the seed from them to be just as good as that we buy?"

Just as good, no doubt, in one sense, and *not* as good, in another. We grow our plants for their flowers. The seedsmen grow theirs for their seed, and in order to secure the very best article they give their plants care and culture that ours are not likely to get. Their methods are calculated to result in constant improvement. Ours tend in the other direction. The person who grows plants year after year from home-grown seed will almost invariably tell you that her plants "seem to be running out."

The remedy for this state of things is to get fresh seed, each year, from the men who understand how to grow it to perfection.

One ought always to keep his shrubs and choice plants labelled so that no mistake can be made as to variety. We may be on speaking terms with the whole Smith family, but we never feel really acquainted with them until we know which is John, or Susan, or William. It ought to be so in our friendship with our plants. Who that loves Roses would be content to speak of La France, and Madame Plantier, and Captain Christy simply as Roses? We must be on such intimate terms with them that each one has a personality of its own for us. *Then* we know them, and not *till* then.

The best label to make use of is a zinc one, because it is almost everlasting, while a wooden one is short lived, and whatever is written on it soon becomes indistinct.

In attaching any label to a plant, be careful not to twist the wire with which you attach it so tightly that it will cut into the branch. As the branch grows the wire will shut off the

circulation of the plant's life-blood through that branch, and the result will be disastrous to that portion of the plant.

Different varieties of perennials ought to be kept track of quite as much as in the case of shrubs. As the old stalks die away and are cut off each season, there is no part of the plant to which a label can be attached with any permanence. There are iron sockets on the market into which the piece of wood bearing the name of the variety can be inserted. An all-wool label would speedily decay in contact with the soil.

Sometimes we get very amusing letters from parties "in search of information." Not long ago a woman sent me a leaf from her Boston Fern, calling my attention to the "bugs" on the lower side of it, and asking how she could get rid of them. How did I suppose they contrived to arrange themselves with such regularity? A little careful investigation would have shown her that the rows of "bugs" were seed-spores. If anything about your plants puzzles you, use your eyes and your intelligence, and endeavor to find out the "whys and wherefores" for yourself. You will enjoy doing this when you once get into the habit of it. Information that comes to us through our own efforts is always appreciated much more than that which comes to us second-hand. Make a practice of personal investigation in order to get at a solution of the problems that will constantly confront you in gardening operations.

In answer to another correspondent who asked me to recommend some thoroughly reliable fertilizer, I advised "old cow-manure." Back came a letter, saying I had neglected to state *how old* the cow ought to be!

But the funny things are not all said by our correspondents. I lately came across an article credited to a leading English gardening magazine in which the statement was made that a certain kind of weed closely resembling the Onion often located itself in the Onion-bed in order to escape the vigilance of the weed-puller, its instinct telling it that its resemblance to the Onion would deceive the gardener! Is anyone foolish enough to believe that the weed knew just where to locate itself, and had the ability to put itself there? One can but laugh at such "scientific statements," and yet it seems too bad to have people humbugged so.

A woman writes: "I don't care very much about plants. I never did. But almost everybody grows them, nowadays, and I'd like to have a few for my parlor, so as to be in style. You know the old saying that 'one might as well be out of the world as out of fashion.' I wish you'd tell me what to get, and how to take care of it. I want something that will just about

take care of itself. I don't want anything I'll have to bother with."

My advice to this correspondent was, "Don't try to grow plants."

The fact is, the person who doesn't grow them *out of love for them* will never succeed with them, therefore it would be well for such persons not to attempt their culture. This for the plant's sake, as well as their own. Plants call for something. Plants ask for something more than a regular supply of food and water. They must have that sympathy,—that friendship—which enables one to understand them and their needs, and treat them accordingly. This knowledge will come through intuition and from keen, intelligent observation, such as only a real plant-lover will be likely to give. Those who grow plants—or *attempt* to grow them—simply because their neighbors do so will never bring to their cultivation that careful, conscientious attention which alone can result in success. The idea of growing a flower because "it is the fashion to do so!"

It may seem to some who read what I have said above that I do not encourage the cultivation of flowers by the masses. That's a wrong conclusion to jump at. I would like to have everybody the owner of a flower-garden. Those who have never attempted the culture of flowers are very likely to develop a love for them of whose existence, of the possibility of which, they had never dreamed. A dormant feeling is kindled into activity by our contact with them. But these persons must begin from a better motive than a desire to have them simply because it is "the style." The desire to succeed with them *because you like them* will insure success. Those who would have flowers because *it is the fashion* to have them may experience a sort of *satisfaction* in the possession of them, but this is a feeling utterly unlike the pleasure known to those who grow flowers *because they love them*.

I am not a believer in the "knack" of flower-growing in the sense that some are born with a special ability in that line, or, as some would say, with a "*gift*" that way. We often hear it said, "Flowers will grow for her if she just *looks* at them." This is a wrong conclusion to arrive at in the cases of those who are successful with them. They do something more than simply "look" at their plants. They take intelligent care of them. Some may acquire this ability easier and sooner than others, but it is a "knack" that anyone may attain to who is willing to keep his eyes open, and reason from cause to effect. Don't get the idea that success at plant-growing comes without observation, thought, and work. All the "knack" you need to have is a liking for flowers, and a desire to understand how you can best meet their special requirements.

In other words, the *will* to succeed will find out the *way* to that result.

Just now, while I am at work on the last pages of this book, comes an inquiry, which I answer here because the subject of it is one of general interest: "Every spring our Crimson Rambler Roses are infested with thousands of green plant-lice. The new shoots will be literally covered with them. And in fall the stalks of our Rudbeckia are as thickly covered with a *red* aphid, which makes it impossible for us to use it for cut-flower work.

Is there a remedy for these troubles?"

Yes. Nicoticide will rid the plants of their enemies if applied thoroughly, and persistently. One application may not accomplish the desired result, because of failure to reach all portions of the plant with it, but a second or a third application will do the work.

By way of conclusion I want to urge women with "nerves" to take the gardening treatment. Many housewives are martyrs to a prison-life. They are shut up in the house from year's end to year's end, away from pleasant sights, sounds, fresh air, and sunshine. If we can get such a woman into the garden for a half-hour each day, throughout the summer, we can make a new woman of her. Work among flowers, where the air is pure and sweet, and sunshine is a tonic, and companionship is cheerful, will lift her out of her work and worry, and body and mind will grow stronger, and new life, new health, new energy will come to her, and the cares and vexations that made life a burden, because of the nervous strain resulting from them, will "take wings and fly away." Garden-work is the best possible kind of medicine for overtaxed nerves. It makes worn-out women over into healthy, happy women. "I thank God, every day, for my garden," one of these women wrote me, not long ago. "It has given me back my health. It has made me feel that life *is* worth living, after all. I believe that I shall get so that I live in my garden most of the time. By that I mean that I shall be thinking about it and enjoying it, either in recollection or anticipation, when it is impossible for me to be actually in it. My mind will be there in winter, and I will be there in summer. Why—do you know, I did a good deal more housework last year than ever before, and I did it in order to find time to work among my flowers. Work in the garden made housework easier. Thank God for flowers, I say!"

Yes—God be thanked for flowers!

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