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A trial this year of one of the following collections of 12 varieties will convince you and make a Peony enthusiast of you.

1 year 2 year

<table>
<thead>
<tr>
<th>Collection</th>
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<td>Diamond Collection</td>
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</table>

New Peony catalogue for 1916 will be ready about August 1st as usual.

GEORGE H. PETERSON

Rose and Peony Specialist

Box 30 Fair Lawn, N. J.

BUNGALOW

FOLKS

mostly know (and the rest are learning fast) that there really is only one wood for Bungalows—and that is "Cypress, of course." Write for Volume 5, Cypress Pocket Library—very complete general treatises by well-known architects, covering all the puzzling questions on Bungalow building, from designs to furnishing—sent promptly with our compliments upon your request.

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It makes a complete oscillation from one side to the other every three seconds, thoroughly watering a rectangular area's feet wide and 50 to 70 feet long. No. 2 will water an area 14 feet wide and 50 to 70 feet long.

The jetted pipe is turned from side to side by a powerful little water motor which is both simple in construction and durable. It produces a fine rain-like shower that thoroughly waters every inch of the ground without overlapping or missing and does not injure the plants or pack the soil.

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LET us help you choose a car which shall be a delight to your entire household. Surely the subject is too important to pass over lightly. You have your preferences, but do you know about just the car that has all the qualities you desire? Our Information Service will take especial delight in helping you learn all the facts about the various makes of cars, including Touring, Roadsters, Electric, Motor Trucks, etc., etc.

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If you will send us your building plans we will send you some timely and worthwhile suggestions. Write Dept. G, Crittall Casement Window Company, Detroit, Michigan.
Who's Who in Dogdom

So far we've described—Airedales, German Shepherds, English Bulls, Pekingese, Collies, Police Dogs, Great Danes, the Russian Wolfhound and the Sealyham Terrier.

This month it's the Irish Wolfhound, and besides showing a picture of a very intelligent-looking specimen, we give a list of reliable Irish Wolfhound Kennels, whose addresses will be furnished on application.

Look through the Kennel announcements in this number. Read about the worth while dogs offered. Write to the advertisers for details of the breed you select.

The Irish Wolfhound

Among the symbols of early Celtic history, few possess greater interest to the student of pagan and Christian Ireland than the Irish Wolfhound—the national dog of Ireland.

Of all dogs this giant hound of the Gaels has the most romantic past. A fine type of valor and beauty, he is inseparably associated with the history, romance and legends of Ireland from the earliest recorded days. His fame is celebrated again and again in the cycles of Finn, while the history and old laws of Ireland mark the value in which the hound was held.

A good description of the Irish Wolfhound was given by Father Hogan about twenty years ago. He traced the breed back through each century to the year 391 A.D. and said that in that year Flavianus, upon his return from Rome to Ireland presented seven immense dogs to the Roman consul Quintus Aurelius Symmurus to provide barbaric amusement in the arena. It is repeated that all Rome viewed them with wonder.

In the first century, the King of Ulster and the King of Connought offered the King of Leinster 6,000 cows and a charted and harnessed famous Wolf dog and finally went to war over its possession. In 820 A.D. the laws of Wales put the value of the Irish dog in twice the value of a work horse and affixed a penalty of six full value. Through hundreds of years these dogs were the most valuable presents that could be made to Royalty. With the elimination of Wolves early in the eighteenth century, the usefulness of this great dog began to dwindle and about 60 years ago had almost been forgotten. At about this time Capt. Graham, an English sportsman, secured a few specimens from Sir John Power of Kilmam and with judiciously crossing brought back the Irish Wolfhound to its original high standard.

The male dogs weigh from 120 to 160 pounds and measure 30 to 36 inches at shoulder. Females are slightly smaller in build. They have a lovely disposition and absolute loyalty is a strong characteristic. In fact the Irish Wolfhound is a real dog and one that may well be proud of its ancient lineage.
Six Racy Adventures
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Adventures? Tush! We all love them! We look for them in a dozen different directions, always hoping to find a new one madder than the last. Some of us are so hard up for them that we go to the races and back homes to whom we were never introduced. Some of us even try to put a cyclometer on Mexico to find out how many revolutions it makes in a minute.

But why trifle with substitutes? If you will only send us one very special dollar, you will get six racy New York adventures. We assure you against unhappy endings, unfurling bookmakers, and the amalgamation with your system of a machete, probably covered with germs.

Every number of Vanity Fair—the magazine of New York life—is an incomparable adventure. It brings you, every month in the year, all that is going on in the very heart of Manhattan—the art, theatre, music-halls, studios, cabarets, sports, fashions, and sculpture galleries. Vanity Fair is a glass of the tone of life, a draught of the cup of gayety.

Vanity Fair—we know it to be true—is the best $3 worth in the world. You assimilate a dinner in four hours, a theatre-ticket lowers the limit of joy to three, a sixpence makes a guilder round about three days of silver liberty in forty minutes—but Vanity Fair keeps right on spending evenings with you every one of the twelve months.

We believe so thoroughly in its pleasure-value that we will send you the next six numbers in return for only one of your dollars. Count on $1.00, a dollar, for safe delivery. Send to-day for Dingee & Conard Co., 69 Sterling St., Clinton, Mass.

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QUALITY BULB CO.

FRANK CROWNSHIELD, Editor

25 cents a copy

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Readers desiring information about the care and feeding of poultry or wishing to purchase seeds, eggs, feed or equipment, are invited to write us. We are in touch with leading poultrymen throughout the country. Thus we are able to put you in touch with those who will give you your needs carefully and reliable attention. Address The Poultry Yard, House & Garden, 440 Fourth Ave., New York.

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Made in standard sizes as follows:

<table>
<thead>
<tr>
<th>Size</th>
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<td>4' x 2'</td>
<td>$1.25</td>
</tr>
<tr>
<td>5' x 2'</td>
<td>$1.50</td>
</tr>
</tbody>
</table>

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For orders containing of 10 or more we will allow an additional 10% discount off the above prices. Order sizes best adapted for your purpose and send money order, check, New York draft or currency by registered mail and we will send you the best article on the market for your poultry.

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W. F. offer for Immediate Delivery. Nothing can be this good. No. 1 martling Silver Campine HENNESSEY, Millford, N. J.

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New Colonial Residence only 2 years old, in perfect condition; 2½ stories; rooms: 3 baths, sun room, sun balcony; Garage with two auxiliary sleeping rooms and shower; basement: boat house with dock and 50 feet of waterfront for winter storage of boat; all steel conservatories (cost $1,200.00); vine laurel pagoda, lilac pool, lilac pool, lilac pool, lilac pool, lilac pool; bronze metal screens on all doors and windows, metal wrought iron on all windows; glowing wains on windows and porches; large front town: enclose with piastra baulade. Running gardens in three terraces designed and planted by Woodell & Smythe, including Italian garden with four beds of old-fashioned flowers and four beds of rarest choice flowers, pink, purple, green, white; greenhouse: osiath, fruit, vegetable garden with rustic summer house: a house for an artist. Everything, including contents of house, same as new. Private bath, beach in manor with storage for canoes and boats.

Inside drive limousine: 30 ft. mahogany trimmed ELC (S$1,800.00) speed boat; completely equipped; bedroom ($900.00) plus guest suite; large swimming pool, conservatories, oriel: outer; ornamental: all paintings; display cases and hangings designed by Kahn; all furniture of mahogany, new and recent; bedrooms with built-in cupboards, linen shelves, and bathrooms; all living rooms; 3 baths, sun room, sun room: carai:ge with two auxiliary sleeping rooms: private slip for yacht; a house for an artist. Price of entire property with complete furnishings, $65,000.

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Vogue will do

—what Vogue has done

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For years we have been saying that $2 invested in Vogue will save you $200, because we know it to be true. Look back over the last five years and think how many things you have discarded, almost unworn, because they were a little demode? Did you wear the garden smock, the sport frock, the flared skirt, the basque, the fur-edged coats, the ruffly poke-bonnet, the garden smock, the futurist color-scheme, the sport coat, the ruffy-poke- bonnet mode... Did you wear these things when they were new, or did you fail to find out about them until they were a little demode?

Today, 1916, Vogue says: Well—there are pages and pages of what we say about fashions in the August 15th issue. If our judgment has been dependable in the past, it is surely just as dependable now.

Vogue

Conde Nast, Publisher
Edna Woolman Chase, Editor
443 Fourth Avenue, New York City

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$4 a year
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There are few houses as well made.

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May we send a Portfolio of similar country homes built by us?
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SERVICE FOR READERS

Catalogs and other information relative to building, decorating and furnishing the house, planting and caring for the garden and grounds, or in regard to the purchase of real estate, dogs, poultry, and poultry equipment, may be secured promptly and without charge or other obligation. In writing, please state specifically just what you wish, so that exact information may be furnished in conformity with your desires. Address Information Service, HOUSE & GARDEN, 440 Fourth Avenue, New York City.

The House & Garden Shopping Service will purchase any article shown on these pages. Information as to where to purchase such articles will be sent without charge.

The Editor is always pleased to examine material submitted for publication, but he assumes no responsibility for it, either in transit or while in his possession. Full return postage should always be enclosed.

The address of subscribers can be changed as often as desired. In ordering a change, please give both the new address and the name and address exactly as they appeared on the wrapper of the last copy received. Three weeks' notice is required, either for changing an address or for starting a new subscription.

FALL FURNISHING

Refurbish! Refurbish!

Along those two lines the householder centers her activities in September, and on those two lines the September number has been planned. For the leader comes a striking article on English Interior Decoration, showing the work of Frank Brangwyn and Bailie Scott. Then follow a superb small house by Blood Tuttle, articles on Collecting Old and New Sevres Added Furniture to Its Architectural Background, Rugs, The Care of Furniture, A Little Portfolio of Good Interiors, Apartment Decoration, two suburban residences of merit, pages of the newest rugs, furniture, fabrics, glassware and wall papers. For the gardener is a practical article on Making a Wall Garden, Transplanting House Plants and two pages of helpful suggestions on shrubbery planting, and two pages on Phlox, "the American Plain."

Did you ever stop to think of the aims of House & Garden? Vogue tells the up-to-date woman what clothes to wear; Vanity Fair, what books to read, what pictures to see, what currents of modern life to touch. In the same measure does House & Garden tell her what architecture to choose for her house, how to furnish it, and with what garden to surround it.

Frank Brangwyn is generally known as an artist. He is also a designer of furniture and a decorator. The September number shows his work.
The average porte cochere is a sorry thing; it is so obviously "stuck on," an architectural afterthought. Created as part of the structure itself, and treated with such dignity and charm as this corner glimpse shows, it is at once beautiful in itself and a real contribution to the ensemble of the house.
HE GASOLINE AUTOMOBILE OF TOMORROW
An Attempt at a Prophecy Based on the Immeasurable Superiority
of the Present Car Over the Original

ERNEST A. STEPHENS

Habit is so strongly developed in the human make-up that it will probably continue to cause the motorist to speak of a friend's car as being of the 1912 stage, thereby inferring to those wise in automobile matters that he himself is the copy possessor of a creation of the midsummer of 1916. Although this method has been probably the most convenient way of fixing the gulf which heretofore has tended from year to year in marking the distance in design, material and equipment from year to year in marking the advances in the refinements of detail which may add to the comfort of the occupants of the car, but otherwise the nearly defined line of demarcation which separated one season's products from those preceding one's will nearly vanish. This degree of absolute standardization is strongly indicated by the recent trend of thought in the automobile engineering world, and it would be premature to contend that it is in any sense an accomplished fact, that standardization in all things connected with the pleasure given was to be achieved in the near future. It is true that the fundamental principles governing the operation of internal combustion engine, transmission and the final drive to the rear wheels are recognized in present practice to a point where standardization may be said to have been effected, but outside these few others the imagination of the designer has had full play.

Before dealing with the probable or possible differences which the car of tomorrow is likely to exhibit when compared with its immediate predecessors, it may not be out of place to observe that the total output of the American car factories was about 35,000 in 1906; over 200,000 in 1911, and in the following year, which saw the introduction of electrical starting and lighting in commercial form, the number of cars produced was almost double that of the year before. Each year since then has shown a substantial increase in the number of automobiles manufactured in the United States, a conservative estimate putting the number of cars produced in 1916 at over 1,200,000, a substantially increase in the number of cars produced this year before. Each year since then has shown a substantial increase in the number of automobiles manufactured in the United States, a conservative estimate putting the number of cars produced in 1916 at over 1,200,000, a considerably higher percentage than the mere saving of weight and a few others the imagination of the designer has had full play.

Lessons derived in a great measure from the careful study of the automobile racing game, its foibles and its successes, have enabled the automobile engineer to appreciate the advantages of a straight-line drive shaft, the possibilities of improved spring suspension, the fact that pneumatic tires had passed the experimental stage, and that the use of light pistons and connecting rods meant something of much greater importance than the mere saving of weight only. The information gained from racing experience, in conjunction with that afforded by exhaustive laboratory research, has played its part in the evolution of the touring car of today and thus the motorist is reaping the benefit in the form of a pleasure automobile which, although not even approaching finality in design or materials, is to all intents and purposes a production which combines efficiency and comfort in a distinctly marked degree.

THE AVERAGE CAR OF 1916

An analysis of the various cars of 1916 gives an average automobile fitted with a relatively high-speed engine developing over forty horsepower under normal touring conditions. This engine is fitted with light and well-balanced pistons and connecting rods designed to assist materially in the reduction of vibration at high speeds. Disc and cone clutches run about fifty-fifty and the three-speed selective type of transmission is almost universally used. Fuel is fed to the carburetor by means of a vacuum system, the tires are 33 x 4 inches, the average wheelbase is 120 inches, and the streamline touring body accommodates five passengers. The one really doubtful point about this average car is whether its engine has four or six cylinders. The figures are so close and commercial competition has improved
to reconstruct the tragedy of former days, when the journey or iron town had to be undertaken, perhaps, by train, tube, trolley, ferry or wagon mixed in varying proportions, and with each change of method of transportation adding to the miseries of even a comparatively short trip. Comparing the picture of today with the present and, pursuing the line of thought, imagine what tomorrow or the day after may bring in the way of added refinement and luxury to what is now a pleasant enough trip.

THE CAR OF TOMORROW

Present indications are that the car, which, under the old order, would be referred to as the 1917 model will differ but little in outward appearance from the products of the present year. The body may hang a little lower, owing, principally, to the fact that the springs will be more nearly flat. Efforts may be made to reduce the present average wheelbase of a hundred and twenty inches by about four inches.

THE GROWTH OF THE AMERICAN AUTOMOBILE

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*Estimated

This reduction will be, however, effected by a readjustment of the spring suspension, and the body capacity will be in no way reduced. Radiators will be just a little higher and a trifle narrower, and the general effect of these deviations from the present type will be that the car will appear more compact than formerly. In many cases the structure of the body will be slightly broken by the top of a cow located between the front and rear compartments. Special attention will be given to the interior appointments of the touring body, which will, in many cases, be fitted with individual seats, changing the individual type, as is the case in some of the more luxurious covered cars at present. Interior and step illuminating electric lights will come into more general use, cigar lighters and hair curler heaters will be included in the regular equipment, and in fact the touring car of the immediate future will be turned out with many of those little refinements which have hitherto been confined almost exclusively to the limousine or sedan.

In the case of the coming enclosed car of standard type there are already instances of the interior decoration scheme being carried out by famous modistes and it is more than certain that many of the leading builders will surpass all previous efforts in regard to appropriate trimmings and interior finish that are possible and practical.

For the motorist who loves the open country and who is also partial to the theatre or the dance, but who is able to keep one car only, the rapid development of the detachable type of body is a stroke of good fortune. This type is designed that it may be readily installed on the regular touring body when needed, and quickly removed when not required with the use of special tools or the employment of a mechanician. In any case such a body enables the owner to thoroughly enjoy a winter trip, fully protected from the inclement weather, at a cost which is relatively exceedingly low. A year ago most of these detachables were little more than a trouble through rattling or of as yet the workmanship have removed these faults.

There were no radical mechanical changes in 1916, although many minor improvements were effected during the year and on the whole as a whole and materially improved.

The car of to-morrow will continue to gain in mechanical efficiency along similar lines. No very startling advance is likely to occur in the near future, and the pleasure automobile inspected nationally shows early in 1917 is probably sure to be equipped with a block of an engine having reciprocating parts of reduced weight and bulk.

The small bore cylinder will continue to gain in popularity and the engine will form a unit with the clutch and transmission. Improved methods of carburetion will be strongly evident, and it is known that even the vacuum type of fuel feed will be used almost universally.

ELECTRIFICATION AND TRANSMISSION

All cars, except the very low-priced productions, will be fitted with electric driven tire pumps, and it is estimated that ninety-nine models out of each hundred will be fitted with electrically-operated starting and lighting systems of improved type and greatly reduced weight. As a result the ignition will be cared for by the electric system, the individual magneto being used in comparatively few cars. This is a strong tendency towards simplification of methods of lubrication, oil bolts with their evils taking the place of the conventional method. But the evolutionary development in this direction is the introduction of a system whereby the work of filling up with lubricant is not necessary only about twice a year, and for this purpose a sausagelike bottle, and employed selective type of transmision is the magnetic and the hydraulic types. The former has been developed to a point which apparently closely approaches perfection, and it seems likely to take a leading position in the immediate future. The hydraulic system, although developed to any extent in its possible relation to the pleasure car. It may, however, prove to be a force to be reckoned with before very long.
GARDENING WITH THE CAR

Wherein the Lover of Native Shrubs and Plants Finds Endless Pleasure

CAROLINE M. RICE

The common hobble-bush, one of the viburnum family, shows handsome white flowers and large leaves turning red in autumn

Native gardening for the amateur is a new art, though the soft beauty of the landscape work in our modern city parks has become a source of refreshment and pleasure to thousands of people. But the fact is not realized by many people that the high-priced artists who have created it yet some of their best effects by copying directly from nature and frequently use exclusively native flowers and shrubs. These very plants are growing wild and free in our woods and along our country roads. Almost everyone is somehow or other within a reach of the country, especially by motor, and the art of landscape gardening need not be given over entirely to the professional if we once begin to appreciate the possibilities of our woodland plants.

One of the greatest joys in native gardening the amateur finds in gathering his own material and working out his own design. If he wishes to develop it without professional aid, he will take pleasure in the designing of open spaces and banks of greenery. And the procuring of the desired plants and vines year by year may lead—particularly if he has a useful automobile and some boys and girls to assist in the search—to woodland expeditions of long remembered benefit and delight.

What Native Gardening Means

The new native planting does not consist in placing specimen plants of one's favorite flowers in unmongenial proximity in hard formal beds, to be laboriously sheltered through the winter in hothouses or renewed every year with labor and expense. Once planted it requires little care beyond the summer's heat and winter's cold. More and more the amateur native gardener has worked out a design suitable to the ground he is to develop; he next considers what vines, shrubs, flowers and trees can be found in his locality suitable to his purpose. If he thinks there will be little material at hand, let him try what can be done within ten miles of his home, and he will be pleasantly surprised. If he is possessed of the true nature lover's spirit, he may develop the enthusiasm of a collector.

Yet it is well to remember to have a conscience as to where the plants are obtained. The immediate roadside should never be despoiled, nor any woodland nook shorn of its beauty. Sometimes permission should be obtained from the owner of the property. As the fall is generally the best time for transplanting, one possible method of selecting is to go through the woods or meadows when the plants are in their prime, marking choice specimens with bits of tape or colored wool. These can be noted and procured later at the proper season. One advantage of seeking one's own plants is that it takes one to see the woods under the changing lights of the varying seasons of the year. Even trees do not present too difficult a problem for the amateur landscape lover; he is planting for the future.

The shrub planting is a very interesting part of landscape work. The shrub border serves with softening effect as a background, as a boundary, or for foundation planting as against the house, and if properly selected is attractive on its own account at all seasons of the year. In spring the blossoms begin, to be followed by a variety of shades of massed foliage and late summer flowers; then its scarlet, gold and purple leaves give an autumn tone, while bright berries and even stems of striking colorings give pleasure in a dreary winter landscape.

Wild Shrubs and Vines

Our countryside affords a great variety of shrubs excellent for these purposes. Counted as small trees or tall shrubs for the background in the taller border are the larger varieties of sumac, handsome with their plume-like red fruit panicles; the sheep or nanny-berry; black haw holding its white flowers, but berries and twigs of striking colorings; the elderberry which gives the final effect of symmetry and of light and shade. Nature's methods are followed as closely as possible. Harsh, ugly foundation lines disappear behind heavy plantings of shrubbery. Bed lines are never straight nor geometrical, but curve irregularly with careless grace. Flowers in masses give high lights of colors.

The size and situation of the grounds will determine whether one should leave open vistas, as is possible with plenty of space or on a hillside, or enclose a small yard with privacy to shut out the sight of ugly walls and surroundings. With small grounds the gardener should not attempt to get in miniature all the effects of a park, but should select one or two simper ideas and carry them out. In the end, whether the place be large or small, if he follows the correct general principles, he will give his grounds a distinction that was lacking under the old treatment of formality and restraint.

Collecting the Plants

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Shad-bush is one of our best and earliest flowering wild shrubs. Its white blossoms open almost before the leaves

Among the dogwoods, considerable variety is available for the maker of native gardens. This is the alternate-leaved form of the dogwood.
wood and the high bush cranberry—especially good.

Of the medium sized shrubs the coral berry, or Indian currant, is most useful in all landscape work, covering steep banks and mingling its berries in the border. Others are the maple-leaved viburnum and the fragrant sumac. Wild blackberries and raspberries can be used. Chokeberries for a loamy soil (the black and the red planted in contrasting groups), and lead plant for rocky slopes are both valuable for massing. But wild roses should be a chief delight, and there are many varieties. The prairie rose, very hardy, with profuse blossoming and bright red hips, is the best of all.

PLANTING ARRANGEMENTS

For the best effects in the shrub border too much sprinkling in of the different kinds is not good. Better is a massing in groups of a dozen or more of one sort, with three or four plants of unusual character scattered through to accent the different seasons with their blooming. Some attention must be paid to the nature of the ground, whether it be wet or dry, of light soil or rich, or shady or exposed, as certain shrubs require special conditions. Most of the varieties mentioned will grow in a wide range of soil. As for pruning it should be done not all at once in the spring, but from time to time after each sort has done blooming. Of shrubs that attract wild birds, it is known that the elderberries are used as food by fifty-seven varieties of birds and the dogwood and sumac by forty-seven each. Wild cherries, too, are good for this. What charming effects can be secured with vines! The sunny porch is shaded, the shady porch is framed in clambering festoons, an unsightly wall transformed into a fall of living green; an airy pergola tosses with sprays. Only vines must be pruned sufficiently to keep the growth from becoming rank. The well-known Virginia Creeper is good for such uses, but is liable to bring insects about the veranda. Virgin’s Bower is a dainty native climatis. Bittersweet is a familiar autumn sight climbing fence corners along country roads, hanging thick with clusters of yellow berries, split to show their scarlet centers; but it is not so often used as it should be for covering walls and trellises. The trumpet creeper, a handsome vine, is native as far north as Illinois and Pennsylvania. The moonseed, when brought in from the woods and cultivated, becomes a beautiful climbing vine. Then, too, wild salixes, the green briar and the cat brier respond attractively to cultivation. Among the most vigorous and beautiful of native vines is the wild grape. This should have plenty of room, as it often grows to a height of 40’. For a pergola it is very handsome, the long sprays of well shaped and expectant tendrils swaying gracefully from the denser masses.

FLOWER SORTS TO GATHER

As for flowers, here our garden is so different from the old flower bed type that our grandparents might have asked where the garden was! That is it—it is nowhere, for it is everywhere! The whole place is a garden. And instead of herding flowers to a small remote space to which one may occasionally find one’s way, we have them banked under or against the shrubbery, running down a hillside, or colonized in an open space beneath the trees, perhaps rioting in a green and unexpected nook; clumps and masses of wild asters, phlox, bluebells, wind flowers or wild lilies. To those who love them these wild flowers have a more delicate and spiritual beauty and grace than the cultivated species.

Other native flowers are clematis, coreopsis, and, near a waterside, wild blue flag, the handsome hibiscus, bearing flowers 3” or more across (it is useful, too, as a border shrub), and the modest but free blooming little spider-wort. A handsome eastern garden has a walk massed with yellow cone flowers, which are among our commonest wayside blossoms. Goldenrod in its many plummy varieties is effective, but its roots impoverishes the soil, killing its weaker neighbors, and can be introduced only sparingly. These prairie flowers grow in their native habitat, with a protection of tangled grass roots and decaying vegetation. Wild flowers are best moved in the fall, set out in the afternoon, and shaded a few days.
Folded up, this table occupies only 1\(\frac{1}{2}\)" x 9" x 24". Unfolded it is a complete table 5" wide by 4' long, amply strong for luncheon parties. The wood is birch. All metal parts are rust-proofed. $5

The latest thermos suitcase is a restaurant for six people. The case is wood covered with glazed Therduc. Complete with three bottles, two metal food boxes, sugar box, butter jar and six sets of spoons, forks, knives, etc. $45

ULTIMATE TOUCHES OF MOTOR COMFORT

As manufacturers confess their inability to improve the machinery, they have turned their energies to improving the comforts and conveniences of the cars. These are a few of their efforts. For the names of shops address HOUSE & GARDEN. They may be purchased through the HOUSE & GARDEN Shopping Service, 440 Fourth Avenue, New York City.

The binding is soft, white washable rubber, the lights green and amber or orange and amber, making a restful, convenient goggle. 75c.

The O. H. Klaxon may be used either outside or in, being driven by motor and making a racket to be heard half a mile away. Designed to go under the hood, the O. H. Klaxon is a powerful horn with a motor that makes 30,000 noise contacts a minute.

The top tray of this auto wardrobe trunk is so made that it can be left standing. Made of heavy coated black keratol and leather.

Designed for cars with limited tonneau space, this running board motor restaurant is equipped with two Thermos bottles, food jar, two metal food boxes and six sets of forks, spoons, knives, etc., $50. For seven persons, $1.50 extra.
The house stands at the top of a slight rise with broad lawns stretching about it on all sides. Dense shrubbery planting and tall trees in the immediate vicinity of the terrace assure privacy. The construction is plaster over stone; the architecture, modern English domestic based on Tudor precedents with a strong Italian feeling incorporated.

From a decorative standpoint the music room is an unusual but successful combination of periods. The furnishings are mainly Adam and the room is a mixture of Adam and Italian Renaissance.

"BROOKFIELD"

Meritorious For Its Architecture, Its Furnishings and Its Garden Setting

WILSON EYRE & McILVAINE, architects

The east terrace is paved with slabs of native stone. In the middle is a marble basin surrounded by a design in varicolored tiles. Striped awnings and box trees lend intimacy.
In the library the plaster walls are sand finished, the same tone enriching the moulded plaster ceiling. The curtains are casement cloth. The woodwork is confined to the built-in bookcases and the chimney, the oak being simply paneled with classical pillars at either side.

The room may be characterized as having a strong Tudor feeling.

In one of the bedrooms is a set of black and gold lacquer decorated with Chinese designs, while the chair is Queen Anne, the lines of the bed are unusual but suitable for that type of decoration.

COUNTRY HOUSE
The Residence of Jay Cooke III, Esq., at Chestnut Hill, Philadelphia

The English spirit that characterizes the other rooms is maintained in the dining-room. Here is used an excellent set of Chippendale. The window shades are of the old-fashioned painted type.
1492 Columbus discovered America. About 400 years later Americans discovered the country. It came about somewhat in this fashion:

Groups of idealistic young men, many of them still sporting their senior honors, began to think great zeal for social uplift. They saw the crowded cities, and wept. They saw the shoddy output of American factories and American factory life, and set themselves to right matters. The road to salvation, they pointed out, led back to the land. Having found that road, they themselves walked upon it, as an example to the nation. In various sections of the country sprang up communities, many of them co-operative and communistic, devoted to reclamation of farm lands, the revival of handicraft and the intensive simple life.

The papers were full of it at the time. Likewise was the market flooded with all manner of handmade articles—rag rugs, bayberry dips, Colonial chairs and pottery. Then, somehow, the movement petered out.

The town of M in the Connecticut Valley was the center of just such a community. Now M is no different from a dozen other New England villages. It consists of one main street and a sprinkling of muddy side lanes. On the common stand the two churches, the postoffice, the general store, the hotel and the town hall. The houses are all painted white with green shutters. The inhabitants are either very old or very young, for the youths seek the city as soon as they reach the earning age. The only mass recreation, apart from the Dorcas Circle and the Grange, is a Thief Detecting Society, with a history as ancient and honorable as the Ancient and Honorable Artillery of Boston—and as useless; and a safe and sane Shakespeare Club which meets once a month to read aloud from a Bowdlerized edition, the men of the class re-reading the passages out of an unexpurgated x.

To-day the movement is rarely mentioned in M. The natives dis miss it with few words. In a barn down the brook the hand looms are falling to bits and the hand presses and the bayberry dip moulds and the potter's wheels are all rusting away. Some of the men are left; they have gotten their feet on the earth and they form the nucleus of a delightful intellectual circle.

The movement failed, failed as it did in a dozen such centers. And yet, despite the failure of these zealots backers to the land, America has seen a steady increase in country living and farm reforms.

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A GARDEN THRESHOLD

It is best to come into a garden by slow degrees. The gridded gate, the low steps, the shaded path—by such stages is the beauty reached. This is the progress of one who visits the garden that surrounds the residence of Jay Cook III, Esq., at Chestnut Hill, Philadelphia.
CONSIDERING THE LILIES
The Flower of a Hundred Sorts Which Always Come True
A Score of Good Varieties for the Garden
GRACE TABOR

NOTWITHSTANDING all its subdivisions and subgenera, the lily has one striking peculiarity: it defies hybridization—or it has seemed to, thus far. All the lilies in the world appear to have been created by divine fiat, and finished. And man’s efforts and interferences are, in their case, of no avail in changing them.

This is not to say that no hybrids have ever been grown. There have been a great many, as a matter of fact, for growers are by no means satisfied with what Nature has done for us in the way of lilies, any more than they are satisfied with what she has done in the way of other plants, wide world over. The hundred-odd species and varieties which she has furnished are regarded by man as only a good beginning.

But though crossing has been accomplished hundreds of times, and seed has developed from such crossings which, being sown, has duly sprouted and produced tiny lily plants unlike either of the parents in appearance and unlike each other, blossoming time brings only the same old flowers. Verily it is a mystery.

Only one in all the long list of lilies is suspected of being a hybrid; and that is suspected only because it is not found wild anywhere in the world, while all the others are. Not being able to locate the place of its nativity, botanists are driven to the suspicion that this old Nankeen lily—Lilium testaceum—may be a cross between the true Madonna lily of southern Europe and Lilium Chaledonicum of Greece.

DIFFERENT TRUE FORMS
Most familiar of all forms, because we all know it in the common tiger lily of old dooryards, is the “Turk’s cap”—literally just that. In this form the petals, or perianth segments, as they call them in lilies, are curved or rolled back until their tips almost touch the base of the flower where it joins the stem. In some species the evenness of this rolling back or recurving is quite remarkable, while in others it is noticeably irregular. The tiger lily is one of the latter, its segments frequently showing a twist as well as the recurve.

The plant which everyone knows as the Easter lily in this part of the world, but which is not the true Madonna lily at all, is probably the next best known lily; and may stand as the representative of the funnel or trumpet shaped form—this the segments curve outward from rather long tube of the flower, but do not recurve so decidedly, though in some to do a little. The flowers, however, are distinctly like a trumpet when analyzed.

The two remaining forms are practically only one, the difference being in the way flowers hang on their stems rather than their shape. Spreading and but very slight outward curving, their segments are for...
make them look like dainty bells in theirf

times; but one group is upstanding, 
forming natural cups or chalices, while
the other droops and nods and sways for
the world as if it were actually a set
of elfin chimes. So the first is called the
upward curving clusters at the ends of
which is bright scarlet, and its va-
rass: you can hardly fail with them.

some lean so to red that orange-

The Madonna lily is superb in color and form.
Take special pains to keep it free from disease
after growth starts.

riety parthenocion, which is a clear, true
yellow. Confine yourself to one or the
other of these species. There is not suffi-
cient difference between them to warrant
having both in one garden.

In the rose-red division Lilium specio-
sum, another from Japan, is supreme, and
every garden ought to have a clump or mass
of these, planted where you cannot see
them and the scarlet lilies at the same time.
For myself, I like them better than I do
the more brilliant and glaring reds. Lilium
speciosum, var. rubrum, is said to be more
hardly and thrifty than the type (L. specio-
sun), but I have found them both per-
factly satisfactory and no one will have
any difficulty with either. I am sure. The
type is almost white, overlaid with a deli-
cate pink flush and dotted with rich red
spots. It is a magnificent flower, indeed.
The variety (rubrum) is a transparent
carmin-e-red which also has the effect of
being laid over white.

The darkest of all lilies is L. Brownii,
held by some to be not a distinct species,
but only a variety of L. Japonicum, being
native to the same parts of Japan. Happ-
ily this is an "easy-to-grow" and espe-
cially recommended to beginners by the
authorities. It is not as showy as some,
but nevertheless is very attractive, for
the inside is white, while outside it is
deep red-purple, and the flowers are large
and fine. It belongs to the trumpet-
shaped class, as do all of the lily family
that are white on the inside.

To this class the Easter lily of to-day
belongs—Lilium longiflorum or L. Har-
rissi, according to whether the bulbs have
been grown in Japan or Bermuda. The
flowers of this are much longer than
those of any other white lily that will
grow in the garden, and it is as fine a
garden lily as it is for pots, forced at
Easter time—if you get healthy bulbs.
To do this, buy L. longiflorum rather than
the bulbs of L. Harissi, for the Japan grown
bulbs are not likely to be diseased, while
those from Bermuda are almost sure to be.

DISEASE PREVENTION

This Easter lily of to-day is not the true
Madonna lily. This is seldom seen now,
for its susceptibility to disease has made it
unpopular. Then, too, L. longiflorum forces
much more easily, and everyone seems to
think an Easter lily must be a lily in a pot
in the house at Easter time.

As far as the disease is concerned, it is
with a lily just as it is with any other plant;
there is absolutely no use in trying to cure
a disease, after it has once taken hold. The
only cure for plant diseases is prevention;
therefore, to grow Annunciation lilies that
are healthy and free from disease they must
be kept healthy and free from it. from the
instant they stick their heads above ground,
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SILHOUETTES OLD AND NEW

Which Answers the Question of Who was Silhouette and Why and How Silhouettes were Made and Collected

GARDNER TEALL

Nearly a century and a half ago Johann Kaspar Lavater, of Zurich, wrote his famous work on physiognomy, laying great stress therein on the power of the outline of the human profile to express traits of character. That was before the silhouette had come to be known by this name. Then it was generally called a shade. "What," wrote Lavater, "is more imperfect than a portrait of the human figure drawn after the shade! And yet what truth does not this portrait possess! This spring, so scanty, is for that reason the more precious."

The silhouette offers a delightful field for the collector to browse in. Not only is the silhouette portrait, genre-subject or landscape, artistically interesting, but silhouettes are not difficult to acquire as compared with many other objects that attract the collector's fancy. Of course genuine original examples of the work of the most noted silhouette artists have been in demand these many years past, and the prices for such specimens is higher in consequence than for unsigned or unknown silhouettes. However, a very interesting plan is to combine the new with the old, to collect modern silhouettes as well as antique ones, for it is well to remember that modern silhouette artists display a skill in this artistic craft that does not suffer in comparison with the earlier silhouette cutters. It is an art that has endured.

As to the origin of the silhouette, tradition has it that Korinthea, daughter of Dibutades, who lived about 600 B.C., found the profile shade portraits which even the best of these new-art producers charged. I venture to say that professional jealousy lay at the bottom of this professional jealousy lay at the bottom of tacking Etienne de Silhouette's name on many of the Pompadour's sitters, which even the best of these new-art producers charged.

1767. He was secretary to the Duke of Orléans and was one of the Commissioners appointed to settle the Franco-British frontiers in Acadia. He was made in 1757 in the face of great opposition, his economical policies were not relished by the extravagance of the nobility. To Madame de Pompadour I believe the credit should be given for obtaining the appointment. Sometimes, perhaps, the world will come to understand how the Pompadour saved France as often as popularly she is thought to have ruined it. In the first twenty-four hours of Silhouette's ministere the economies to the extent of seventy-two million francs were effected, it is said. Before long those opposed to him denounced his economies bitterly. He was called the Minister of France, Prince of Penury, and so on.

However, he persisted. As a result Silhouette, as a name, came to be applied to all cheap things. Etienne de Silhouette died in 1767, but the memory of his economies outlasted his policies and founded his name a byword abroad as well as at home. When the fashion for cutting portrait shades was at its height in England about 1825, the art was given the name of the French Minister who had died over fifty years before! And the name has clung.

The Early Silhouette Artists

In those days the portrait painters (the, the less well known ones, not the masters) found the profile shade portraits skillfully cut were hurting their own business by reason of the very cheap price at which they were sold, which even the best of these new-art producers charged. I venture to say that professional jealousy lay at the bottom of tacking Etienne de Silhouette's name on many of the Pompadour's sitters, which even the best of these new-art producers charged.

The art of the silhouette was by no means a new thing to England in 1825. As Elizabeth Pyberg did silhouette portraits for the King and Queen. With Korinthea and others have immortalized the pretty story. Benjamin West, Mulready, Le Brun and many others have employed the subject in their pictures, so there is no lack of evidence.

Who Was Silhouette?

For a long time silhouettes were, as has already been noted, referred to as shades. Often, too, they were called shadowgraphs. Just how the name silhouette came to be attached to shadow pictures is interesting to note. Etienne de Silhouette (sometimes the name is spelled Silhouette, without the l) was a French Minister of State who was born in 1706 and died in 1767. He was secretary to the Duke of Orléans and was one of the Commissioners appointed to settle the Franco-British frontiers in Acadia in 1749. That was before his appointment as Controleur General, which was made in 1757 in the face of great opposition, his economical policies were not relished by the extravagant nobility. To Madame de Pompadour I believe the credit should be given for obtaining the appointment. Sometimes, perhaps, the world will come to understand how the Pompadour saved France as often as popularly she is thought to have ruined it. In the first twenty-four hours of Silhouette's ministere the economies to the extent of seventy-two million francs were effected, it is said. Before long those opposed to him denounced his economies bitterly. He was called the Minister of France, Prince of Penury, and so on.

However, he persisted. As a result Silhouette, as a name, came to be applied to all cheap things. Etienne de Silhouette died in 1767, but the memory of his economies outlasted his policies and founded his name a byword abroad as well as at home. When the fashion for cutting portrait shades was at its height in England about 1825, the art was given the name of the French Minister who had died over fifty years before! And the name has clung.

The Early Silhouette Artists

In those days the portrait painters (the, the less well known ones, not the masters) found the profile shade portraits skillfully cut were hurting their own business by reason of the very cheap price at which they were sold, which even the best of these new-art producers charged. I venture to say that professional jealousy lay at the bottom of tacking Etienne de Silhouette's name on many of the Pompadour's sitters, which even the best of these new-art producers charged.

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The silhouette has found place in Japanese art, being used effectively in two values or shades of intensity.

The smallest on record—exact size. A bull fight cut by a Mexican Indian. Silhouetting is a favorite pastime of those Indians.

Reproduced from an original by Auguste Eduard, made in New Orleans in 1844. Note the background introduced.

...
The Kissel-Kar six. Grease cups are conspicuous by their absence. Note the slanted windshield.

The Dodge, a four cylinder touring car selling at a popular price.

An eight cylinder Peerless. This car is also furnished as a roadster or limousine.

This eight cylinder Oldsmobile has a six passenger sporting body and a Victoria top.

A Hupmobile fitted with landaulet body. Touring bodies with windshield tops are featured.

The McFarlan ninety has a double cowl body and slanted windshield.

The auxiliary seats of this seven passenger Studebaker disappear into the floor when not in use.

In this Chandler limousine all seven passengers, of whom five are inside, face forward.

The Scripps-Booth eight which exhibits up-to-date tendencies in body design.

An Abbott-Detroit with luxurious sedan body.

A Rauch & Lang electric brougham, available for town or country.

The latest Paige Fleetwood model six cylinder car. The body is of true streamline type.

This Woods coupe may be used as a gasoline car, as an electric, or as both.
The 1917 Chalmers Six-30 with seven passenger double cowl body.

A six cylinder Pierce-Arrow coupe with accommodations for three passengers.

The Owen Magnetic. This car has an electrical speed changing device.

A Packard Twin-Six, or twelve cylinder, touring car.

Lowering the top of this semi-touring White converts it into a seven passenger touring car.

A Jeffrey four cylinder car with new type roll-edge body.

A four passenger brugh-ham model Detroit electric.
CONSTRUCTING THE PRIVATE GARAGE

Where to Put It—How to Make It—How to Tie It Up with Your House and Grounds

MORRIS A. HALL

Generally speaking, the person who builds a garage expects to get more motoring with greater comfort and usually for less money. By having the car closer at hand, more accessible, it is more usable and as a result more used. If nothing else did, this would justify the relatively small expense of building and maintaining one's own garage on the property.

In building such a place the following items should have serious consideration: Floor plans and number of floors, the relation of the layout to the ground levels; materials, lighting (natural and artificial), ventilation, heating, facilities for doing work, equipment, supply of fuels, etc., and finally the relation of the garage to the other buildings that are near it.

The latter may be considered briefly. If the other buildings are all of a certain shape with a fixed relation of height to width and length, a certain kind of material for the foundations, another certain kind for the side walls, a third for the roof, etc., in short, if all the other buildings are in harmony and each constitutes one part of the general scheme, the garage should be designed and built so as to conform with that scheme. This might influence the floor plan, relation to ground levels, and surely would influence the materials.

FIGURING THE SIZE

Admitting that is not the usual case, the size and floor plan should be taken up first. In most instances the rectangular shape is best and most economical, with a length about 1.6 times the width, the latter being fixed by the size of the car, and the needed working space on the sides. Thus, if the owner finds his car is 5' 8" wide and feels sure that 3' 2" on each side is plenty of working space, this gives an inside width of 12'. Then the best length would be about 1.6 times this or 19' 3". Both these are inside dimensions so the outside sizes would be greater, varying with the materials used.

Unless a big turning space is available, the garage should have a turntable, located preferably near the door and directly in the middle of the width. Then the washbenches, cupboards for tools and supplies, etc., should be at the farther end. The owner's door should be a small one separate from the main garage doors. Close to this, preferably on either side of it, should be the washstand and the clothes lockers. Equally close on the other side should be the source of gasoline supply, water and oil. This arrangement makes it possible for the owner to enter, put on his motor-togs, fill all oil and fuel tanks and the radiator without too much walking around.

Of course, it goes without saying that the gasoline and oil tanks should be of safety type, buried in the ground outside of the garage building and as far away as possible. All that is inside the garage is the connecting pipe and outlet faucet, perhaps the quantity gauge.

If the building is long enough and wide enough to warrant it, a low second story...
An excellent type combining garage and chauffeur's quarters. Wide doors and drives make approach and exit easy and convenient.

A half story is desirable, for it makes a place to store a winter body in summer, a touring body in winter, or either when overhauling the chassis. This need not be finished off, except when it is desired to make provision for the chauffeur, in which case a full second story, entirely finished off, and with bathroom, is desirable.

The ground levels have an influence only when building both house and garage simultaneously. In some cases it is possible to make good use of a hilly piece of ground by building the garage as part of the basement of the house. Very often a lot which is high in the front and low at the rear lends itself very well to this economical combination.

**Construction Materials**

As to materials, it should be borne in mind that a fireproof building is doubly desirable, from the standpoint of protecting an investment in both car and building to say nothing of its contents, but also from the point of view of lowered insurance. With this thought fixed, cement stucco on hollow tile, or cement plaster on metal lath, all stone, all brick, or all concrete in the form of blocks are the most desirable. In making the choice, the car owner will be governed by the material used for the house and other buildings, the amount which he feels he can spend, the time available for building, and other similar items. Other things being equal, the writer favors the first two.

In the matter of light, practically all garage builders go wrong. This is the one thing which is needed most in a garage, particularly if the owner plans to do any work on the car himself, or have any done. And yet nine garages out of ten have insufficient lighting, both natural and artificial. In an investigation made by the writer at one time in twenty-five garages visited one had good light and four were classified as fair. The balance were either bad or very bad, and these included a number of expensive two-car garages. Only one had five windows, five had four windows, five had three, nine had two, four had only one and one had no windows at all!

A garage 12' 6" by 20' outside, as mentioned previously, should have at least three windows on each side, two in the back and two in the front door, a total of ten. And where built low it should have a skylight in addition, or if the roof is sloping two skylights. And the artificial lighting provision should be just as good, for there are many dull holidays and Sundays when the mechanically inclined man will want to work off his surplus energy repairing, adjusting or cleaning the car.

Ventilation is important to keep the garage smelling sweet and clean, and also to rid it of the dangerous fumes from fuel and oils. The latter it must be remembered are heavy, and the ventilation for these should be low, preferably at the floor level. Other ventilation should be high, preferably at or in the roof construction.

**Heating the Garage**

Heating is a problem all by itself, complicated by the highly inflammable nature of the gasoline, oils, oily waste, etc. This calls for heating in which there is no open flame, barring all stoves or open heaters. When near the house, the steam or hot water system can be extended to it readily, but at a distance a separate plant is needed. On many large suburban places the greenhouse and garage can be combined very effectively, both as to building cost and utility on the one hand, and appearance on the other. In a case of this sort the copious supply of heat provided for the greenhouse takes care of all need for heat in the garage. In this connection a word of caution: do not put the greenhouse on top of the garage as exhaust gases from the motor will kill the majority of house plants.

It is well to build in an overhead beam of wood or metal to form the basis for a hoist, needed for taking off a body, taking out an engine or any similar heavy work. (Continued on page 34)
When you were a youngster did you want a pony? And if you couldn't have a pony didn't you like a playhouse best? Well, here are the playhouses. They can be bought through the HOUSE & GARDEN Shopping Service, 440 Fourth Avenue, New York. The names of the manufacturers will be furnished by the Information Service.

- **E. F. Hodgson Co.**
  - An attractive little house up whose trellises vines can be trained. It is made of cedar, and has a 6' x 7' room and 3' x 6' porch with two seats.

- **E. F. Hodgson Co.**
  - Somewhat larger than its adjoining neighbor, this one measures 8' x 8' inside, with a 4' x 8' porch. The general plan is quite similar.

- **E. F. Hodgson Co.**
  - This screened playhouse would also be good for the children's sand pile.

- **Photo by Beals**
  - A variation of the Indian wigwam, of poles covered with birchbark, always appeals to the youngsters.

- **W. D. Brinckle, architect**
  - The addition of a stack and flue makes the playhouse available for winter.
THE GASOLENE FARM

and the Really Big Work on It Which the Automobile is Doing Today

F. F. ROCKWELL

Photographs by Brown Bros.

TWO of the most important phases of rural development during the last decade or so have been the increase in size of the "small" farm, and the increase, in many sections of the country, of the number of small "farms" which are used as dwelling places and run as side issues to some other profession or occupation of the owner. Although these two conditions seem somewhat paradoxical at first glance, they are not so in reality; the first illustrates the fact which hundreds of government investigations have proved to be true, namely, that the large farm as a business proposition is superior to the small farm; and the second equally important fact that the professional, business or skilled workman who can use his spare hours during the summer season to produce a large part of his food supply possesses the equivalent of a very substantial increase in salary.

Just what all this has to do with the coming of the automobile to the farm may not at first be apparent, but there is a very intimate connection in both cases. It is a connection much deeper and also much more spectacular than commonly supposed. Everyone has seen pictures of the practical, low-priced car backed up to the wood pile, sawing wood, or hitched by some clever arrangement to a mowing-machine, with comments on what the automobile is being made to do on the farm. But the really big work which the motor car is doing for the farm, so far as the economic side of the question is concerned, one hears and sees little about them; but in the end they will prove of hardly less influence than the development of the steam locomotive. They are quietly but rapidly changing the whole status of a large part of American agricultural life.

Important as the economic aspects are, or may become, however, it is doubtful if they outweigh the tremendous social advantages which the popular priced car is bringing, and has in many sections already largely brought, to farm dwellers, both those who dwell for a living and those who want but a home in the fresh air and an occasional fresh salad. You will probably have a chance, some time this month or next, to attend a country fair. Just glance observingly over the arrays of autos you will see there, of all kinds, colors, calibers and previous conditions of servitude. But each one means that for its owner, at least, the greatest bugbear, drawback and obstacle to real country life—_isolation_—has been to a very great extent removed. The auto is completing the function of the telephone in bringing civilization out to the soil, and making possible that intercommunication without which efficient rural organization would be an impossible task.

To the farmer with a car, distances up to five or six miles are within as easy range as one to two miles formerly were by horse travel. The rural church, the school, the grange, the institute, the field demonstration, fairs and exhibits, visits to well-managed farms, buying and selling organizations—all these agencies for better farming and happier living are not only made more accessible, but they themselves can be greatly improved because serving so much larger units of territory and consequently being able to command the services of much higher priced and more skilled men.

A Woman Farmer's Story

To one whose life has been spent in entering the practical side of country life, however, it must have forcibly presented itself. Marketing of products in one-fifth to one-half the time formerly required; a much greater range of markets available; rapid transit for the manager or supervisor of work on the big farm or the "chain" farm; mobility of labor and materials; the saving of time formerly wasted in getting to and from work for the spare time small farmer—these are the things of tremendous importance which the automobile is doing for the farm, so far as the economic side of the question is concerned. One hears and sees little about them; but in the end they will prove of hardly less influence than the development of the steam locomotive. They are quietly but rapidly changing all the economic aspects of life.

The modern dairy farmer straps his milk cans on the back of his car and makes the six-mile trip to the railroad or milk depot comfortably, returning much earlier than in the horse days.

Not only has the automobile lightened the actual labor of farm life; it has made possible the marketing of produce in from one-fifth to one-half of the time formerly required.
The things one can do with a car on the farm, in the nature of the case, more or less conditional. But the man without previous experience who is thinking of buying a utility car may get from them some points of useful experience.

To take the first question first, what are the things one can do with a car on the farm? Undoubtedly where the car saves most time is in getting the product to market or shipping point, and for this purpose some form of truck is generally used, although there are hundreds of small places whose chief products are eggs, berries or some vegetable specialty, where the back part of the tonneau serves as the truck and does for hauling back the small bulk of supplies needed, such as two or three bags of grains at a time. With a heavy canvas so formed that it can be quickly thrown over the back seat and floor and "stay put," this is a perfectly feasible plan if a little care is used in loading and unloading and not too much weight put on.

**LIGHT AND HEAVY TRUCKS**

When it comes to the regulation truck, there are all sorts, many of them especially designed for different kinds of work. There is no space here to go into great detail, but experience has proved in many cases that it is more economical both in original outlay and in upkeep and running expenses not to get too heavy a truck. In other words, select your machine to handle the average load it will have to carry, rather than choose one capable of handling regularly your maximum load, as you probably would in selecting horse equipment. With the amount of time saved by motor transportation it is usually possible to split up any extra heavy carriage into one or two additional trips.

Another question to be considered is solid versus pneumatic tires. While the former have been and probably will continue to be best for very heavy loads and heavy wear, for ordinary conditions they are likely to be less satisfactory in the end. As I once heard a practical repair man say in answer to the contention that solid tires were cheaper, "the expense of solid tires is in the engine," and over rough roads that is undoubtedly true.

**TRAILERS AND OTHER DEVICES**

Another way of utilizing the car for farm purposes, which has been rapidly increasing in favor during the last few years, is by the employment of "trailers." There are of various forms and sizes, but the principle is to get the weight of the load off the car so that the rear car springs will not be overloaded, and at the same time to keep the load so near the car that it will be practically part of it. The trailer has of course the additional advantage of leaving all the space in the car itself available for passenger use, and of eliminating the danger of disfiguring it. Trailers in use have proved practicable for all sorts of hauling, where an occasional load only is to be taken to or from town, or supplies taken along as on a camping or fishing trip, they are the simplest and cheapest solution of many a haulage problem.

Tire expense for service cars, trailers, etc., is of course an important item. A considerable percentage of this expense may be saved by utilizing worn passenger car shoes for "re-treaded" or double-treaded tires. The expense of having two old tire chains converted into one is much less than the cost of a new tire, and while the double -treaded tire is not as neat looking, it can frequently give just as long service as a new one, and of course cut the expense in half.

Where a simple truck body with or without top is used, a tarpaulin of suitable size should be provided and always carried along to protect the load from dust as well as from rain. It should be provided with a sufficient number of short pieces of rope, with rings or eye-bolts along the side, so that it may be quickly put in place and held tight over any size or shape load that is likely to be put on.

In the main, these are the varied uses for which the farm car can be put. The average man with ingenuity may find even more jobs for his motor, but it is more visible to use the car as a car than to convert it to sawing logs and such. For the wide value of the car on the farm lies in the fact that it is ready for use at any moment, which is more than can be said of the average team.
THE DOG FOR THE CAR
A Variation of The Old Theme of "Take The Family Along"

Photographs by Beals and Brown Bros.

Among the smaller breeds the ever popular Pekinese is a favorite "accessory." Two of him will fit comfortably in even a small semi-racing car. A chow finds himself as much at home in a runabout as in the reception room. Though he may need a seat all to himself, he is a good companion.

WITH the advent of these gasoline-driven days there has come a new stage on which the dog stars well-nigh as brilliantly as he has done for ages in the home: the stage of the motor car. The dog in the car is today a conspicuous and popular feature in town and country. Whether Peke or poodle, chow or Chihuahua, Pom or pointer, the fact of his breed matters little so long as he "fits."

The photographs on this page were taken at one of the big race meet openings early in the summer. They suggest a few of the many possibilities in a theme that is ever growing in favor, and which appeals as strongly to the dog as it undoubtedly does to his master or mistress.

The Irishman likes to be there or thereabouts whenever anything happens. But even he cannot safely ride on the hood at high speeds.

For a more topiary effect the poodle is in a class by himself. He would doubtless be seen frequently in cars were he less rare in the home.
The perfume garden is restful and sweet with the scent of grass pinks and other fragrant blossoms

THE GARDEN OF SWEET PERFUMES

We Plan Our Gardens for Color and Form Harmony — Why Not Consider Perfume as a Leading Factor?

KATE V. SAINT MAUR

It is unfortunate that the Pilgrims arrived in America during a period of religious persecution which caused any gratification of taste to be looked upon as a beguilement of Satan. Even to this day our gardens bear evidence of Puritanical repression of anything so pleasing to the senses as perfume, for though they are glorious in color now, they lack the enchantment of fragrance which makes the old established gardens of Europe so alluring. Yet plant odors are so delicately indiscernible and suggest such a wholesome fragrance that there is good reason for introducing perfume plants into the garden, and not a single objection, since it means only a few packets of seed and a little thought in the selection of sorts.

SCENTED SHRUBS AND VINES

In the distant corners you may use such shrubs as white and purple lilac, syringa, strawberry shrub, flowering currant and Adam's needle, which throws up a branching flower stalk 4' or 5' high bearing hundreds of creamy white, fragrant blossoms. These four large shrubs bloom in succession and provide perfume from early spring until late in August. The first three are perfectly hardy, but Adam's needle or, to give its true name, hardy yucca, must have some light protection during northern winters.

Such vines as honeysuckle, jessamine, clematis, mignonette vine and moonflower should be planted around porches and pergolas, to ensure bedrooms receiving a benediction of fragrance on cloudy days and after the shades of evening close in, when their perfume is always stronger then the bright rays of the sun during the hours of bright sunlight.

The white day-lily grows about 2' on...
The old-fashioned honeysuckle has a place in the scheme which none other could quite fill.

...and since it is not especially attractive appearance, can go into some odd corner. Wallflowers are among the sweetest hardiest of English perennials, but it is lost impossible to carry them through American winters. We have been denied their delightful fragrance until a few years ago, when an annual variety was developed which is almost as sweet as the perennial I very easy to grow from seed.

Other Plants for Perfume
Verbena Mayflower, with large clusters of pure white or pale pink flowers, is especially fragrant at night; so, too, are white or pink and white petunias. Various pinks, including the clove scented grass pinks of May; the beautiful pale yellow and white Marguerite carnations; double white Sweet Williams; ten-weeks stocks, canary, rose, May Queen (a pale lilac) and Princess Alice (pure white) are in bloom for weeks. Mignonette; snapdragons. Giant White, Chamois, Golden Queen and lilac; three dainty edging plants, Virginia stock, sweet woodruff and sweet alyssum; flowering tobacco (Nicotiana affinis), growing about 3 or 4' high, branching with clusters of white tubular flowers; night blooming stock (Matthiola bicornis), a low, weak stemmed plant with ragged pinkish or white flow...
THE DROUGHT RESISTING CACTUS

To that Spare Dry Spot in the Garden, Where Nothing Else Succeeds, the Plants of the Desert Will Add a Wealth of Unique Interest

ROBERT STELL

A T least to the average gardener, the cactus is essentially a product of its natural environment. Less academically, it is a plant of the desert, by the desert, for the desert. Where other growing things would wither and die in the moistureless glare, the cactus waxes fat and high. When rain does fall it is sucked up and stored in the plant’s body. Minimum surface combined with maximum thickness reduces the loss of moisture by transpiration through the cactus’ pores. Foliage leaves it lacks. Heavy outer walls surround the natural reservoirs within, defenses against dry times. In a word, the cactus is one of Nature’s own shining examples of the value of preparedness. It is forearmed.

Then why, since a garden is no desert, consider these desert products for the garden, do you ask? Well, for two particular reasons:

In the first place the cactus family is a novelty, in the sense of being composed of members that are different from all other cultivated flowers. They are grotesque in form and often beautiful in flower, certain to attract the eyes and comments of all who see them, and to add a unique touch to plantings which are not too formal. Again—and this is a genuine recommendation—many cacti will grow where nothing else worth while will, in the full sun of midsummer and through the long droughts which often then prevail. Many an otherwise bare and neglected corner can thus be made to bloom and hold the interest with its freakish crop.

SUMMER CULTURE OUTDOORS

It is perhaps needless to say that with the exception of a few species such as the hardy Opuntias, cacti cannot stand exposure to our Northern winters. Some flower lovers who grow them as house plants make it a practice to set them outdoors during the summer months, transferring them from the pots into the open soil of the garden in many cases this plan is successful, but it involves danger of bruising when repotting the plants in the fall, a safer method is to plunge pots and all, without disturbing the roots, in the chosen garden spot. In this way the same effects will be obtained as the pots will be entirely buried in the earth. With the return of cool weather it is a simple matter to install the plants in the house for the winter.

Successful cactus culture is largely a matter of proper soil and perfect drainage. A half-and-half mixture of good fibrous loam and fine sifting from the old lime rubble of a brick building, with a little clean sand added, will fill the bill as far as soil is concerned. As to drainage, in the summer, select a warm, well drained spot outdoors which is sunny and has a good circulation of air. It is best at all times to avoid breaking or bruising the plants in any way. It especially does this apply to the late fall and winter when growth is most nearly dormant. During spring and early summer such injuries heal almost quickly, and the danger of resulting disease is lessen.
Line and color are the two essentials of decoration. Unfortunately these pictures show only the line, but the color is described. The lines of the furniture may suggest ideas for your own rooms.

For further information address HOUSE & GARDEN Shopping Service, 440 Fourth Ave., New York

An unusual arrangement of the stairs adds individuality to the hall. The woodwork is white and the wall paper a peacock pattern in green and lavender; the furniture is consistently Colonial.

Image & Watson, architects
The dining and breakfast rooms have been well combined in this suite. Walnut Queen Anne furniture, white woodwork and a two-toned rug are used in the dining-room, with painted furniture in the porch breakfast room beyond.

© M. H. Birge & Sons Co.

S.F. & Watson, architects
The trouble with most halls is that they are cluttered. Better far a Spartan Colonial simplicity as shown here.

Edmund B. Gilchrist, architect
In a pleasing fashion the furniture of this room is adjusted to its architectural background of white mantel and built-in bookcases. The walls are a light tan in small pattern, the rug a one-tone made from carpeting. Antiques and reproductions are well mixed and excellently arranged.

A guest room with the modern note. The furniture is black lacquer with polychrome designs, the draw pulls of silver and blue. Carpet, grey Wilton. Hangings of printed linen with curtains of Phrygian lace and draw curtains of Punjab silk in natural colors.

In this living-room, again paneled walls of light grey have been set a blue color scheme: a deep damask upholstered Chesterfield sofa with bronze cushions, two chairs in black antique velvet, Chippendale cabinet, table and mirror, a blue damask hangings. The rug is an Oriental.

A little card room has been furnished in black lacquer with rouge color legs and derbody, Asia Minor hangings of printed linen and embroidered net curtains. Silk sun curtains, a broom lamp and vellum shade with adjustable frame.
A striking feature of this dining-room is the use of mirrors over the mantel and over the console on the farther side. Candelabra and sconces have been effectively placed. The paper is an old design in panels. The over-door decorations are interesting and harmonize with the scheme.

The disposition of the furniture in this living-room is calculated to avoid crowding and impart the restfulness of large spaces in addition to showing the valuable rug just displayed and even wearing. Note that the woodwork is considered sufficiently decorative in itself.

A dining-room Chinese in feeling. Walls paneled and painted light grey, a mulberry Chinese rug with design in blue, rose and gold; brass sconces; floor lamp of black lacquer with floral designs and Chinese symbols. The furniture is Chinese in black lacquer with gold and jade spots.

The effectiveness of this dining-room is gained by a few pieces of furniture, and those good in line and consistent in period. The room would be further enhanced by putting shirred scrim curtains on the French window, attaching the curtains against the glass top and bottom.
NEXT to the modern sanitation of the country house, the most important advance made in the last few years from a hygienic standpoint has been the proper disposal of the sewage. It was not many years ago that the owner of an isolated country home was satisfied with a new bathroom or two and gave little thought about the drainage system upon which they depended. Now, however, science has stepped in, and the slipshod methods that menaced not only the water supply of the vicinity but even the air of the house are passing away. The old-style cesspool is no longer a dreaded necessity. We have learned how not only the water supply of the vicinity and disposal field of today.

THE SEPTIC TANK SYSTEM

The septic tank is primarily a water-tight receptacle into which the sewage empties, located preferably a hundred feet or more from the house. At the smallest it should be large enough to hold an eight-hour output, and from there up the size will vary with the design. This tank serves a dual purpose as a place in which the sewage undergoes bacterial action and where the solid substances have an opportunity to settle.

From the tank a line of sewer pipe leads to the disposal field, which is usually a system of porous tile laid end to end in shallow trenches about 12" to 18" under the surface of sod land. The tile receives the effluent from the tank and distributes it under the roots of the grass which will absorb all moisture and odor.

There is at present quite a variety of disposal systems, all of which are designed to meet special requirements of location and soil. The usual practice for large residence work is to have a double tank, the sewage flowing from one part into the other, and from there syphoning periodically to the disposal field. This has the advantage of thoroughly flushing the entire tile bed, which enables a greater absorption, and is especially valuable when the contour of the land does not furnish adequate grade for the tile lines. Another variation is to use a twin disposal field having a head-gate which permits alternate use. In any system the solid substances, which represent only about one-quarter to one-half of one per cent of the entire sewage, should be removed from the tank every few years as required.

Let us see how the design works out in actual practice. Consider that you are the owner of a country house with, say, four bathrooms and the usual kitchen and laundry fixtures. The garage is provided for elsewhere. The rain-water from your roof is also taken care of. You tell us there is an average of six in the family, with two servants. So with a customary per capita water consumption your house would be well served by a septic tank 10' long, 5' wide and 6' deep, divided into two compartments and connected with a disposal field having from 200' to 600' of porous land tile, the number of feet of tile required between these limits depending upon the ability of the land to absorb moisture.

The tank can best be built of concrete and arranged as illustrated. The first chamber (A) receives the sewage and accumulates as sediment the solid substances. The second chamber (B), into which the liquids pass, gradually fills until emptied by periodic discharge of the automatic syphon, which passes the effluent on to the disposal field. As the tank is placed entirely under-ground the sewage is kept warm, so that the tile beds will not freeze, even in extreme winter weather. In fact, the heat generated by the septic action tends greatly to obviate danger from the frost. Both the inlet pipe and the pipe connecting the two chambers should be fitted with tees and carried well below the level of sewage, so that the surface where the bacterial action is most efficient will not be disturbed by the inflow and outflowing currents. For this latter purpose a baffle board is run across the receiving chamber. The two manhole covers on top give access for cleaning.

Next comes the disposal field which should be located on the down-hill side of the septic tank where the contour of the ground will give proper grades for the tile lines. The connection is made by a line of sewer pipe, which should have a pitch of about 1⁄8" per foot. The grade of the disposal tile should be 3" to 6" in every 100', the steeper grade being used where the soil is more porous, in order that the liquid may flow through the entire course before leaching out. The sketch illustrates an arrangement of the disposal field, with a head-gate to permit alternate use of the two halves of the bed. It is evident that if the tile have a "rest," they do better, and greater efficiency of absorption obtained from the surrounding soil. The tile trenches are dug 18" deep, and are filled around the tile with porous material, either sand and gravel or cinders. No more should be used, the ends being merely butted together and a piece of burlap laid over the joint to prevent clogging the pipe while filling the trench. After the work is complete the rest of the aura can be used as garden. The cost of such a system, as illustrated, would be approximately $600.

THE SYSTEM FOR THE SUMMER CAMP

Now all this applies particularly to a fairly large country house. If we consider a camp or shooting-box located in the woods, the problem is somewhat different. Suppose that you desire to provide for six or eight people as inexpensively as possible without polluting your nearby stream or lake. You expect to use the system of the septic tank intermittently and probably not over three months of the entire year. Furthermore, building materials are almost unobtainable. Consequently you would hardly be warranted in constructing a complete disposal (Continued on page 52)
THE LAWN BIRD FAMILY

Grotesque as they are in color and form, these quaint things of painted and varnished wood will almost make a horse laugh. You plant them in the lawn or place them on the porch. They may be purchased through the HOUSE & GARDEN Shopping Service, 440 Fourth Avenue, New York.

The demure duck is life size, and though her colors are blue, yellow, black, white and natural wood, they will not fade.

Naturally her mate looks more masculine. His colors are the same, though differently arranged. These two cost $8.50 each.

No, this isn't a bird—merely a lady candlestick for bungalow or porch. Natural wood, red, white and black spots to indicate robe. $10.

Spar varnish instead of feathers ensures the fastness of this big crane's natural wood. red, black and blue plumage. He costs $8.50 as shown.

Here is the way to use the goose in the garden. Life size, white with a yellow head, black and white eye. $5.50.

The rooster is red, black, white and natural; parrot, greenish blue and red; cockatoo, white, yellow, red, black and natural. $3.50 each.

Aquarium bowl, 10½" x 10½" x 6½". Stand, 10" high x 10½" wide, black, natural wood and water-blue. $18 complete.
Permanent Planting and Its Bearing on Future Effects — Deciduous Sorts That Stand the Test

ROBERT S. LEMMON

With more than mere sentimental fancy it has been said that trees are the most human of all rooted things. They have character, long life, individuality. Comfort is in their shade on a summer day, and to the call of the wind each answers with a different voice. We may not say that trees have souls or power underlie the great majority of tree planting examples of the principle which should embody all that is best and most satisfying. Comfort is in their shade on a summer day, and to the call of the wind each answers with a different voice. We may not say that trees have souls or power underlie the great majority of tree planting examples of the principle which should embody all that is best and most satisfying.

PLANTING FOR PERMANENCY

It would seem to be obvious enough, this matter of planting for the future, and of a truth many a man attempts it in all good faith. Yet how often is partial or complete failure the result, for some reason which lack of knowledge or foresight failed to consider.

Take, for example, the choice of varieties. It is a great temptation to set out the quickest growing sorts for the sake of their relatively speedy results. But, with but few exceptions, the rapid growing trees have weak wood. For 60' to 70', perhaps, they shoot up splendidly, lifting and spreading long limbs and casting shadows far across the lawn. Then, when they have reached their prime and are beautiful for all to see, comes a summer gale which in five minutes leaves them but wrecks of their former selves. Slender branches, graceful and perfect in outline but brittle at heart, are ripped off and tossed a dozen yards away. Crowns are shattered, trunks split, beauty and symmetry forever destroyed.

A strong and certain growth is essential to the tree which shall withstand the winds, and, except in a few species, this is not characteristic of the rapid growing varieties.

But all this is destructive rather than constructive. Let us therefore consider some of the best of those deciduous species which are at once sturdy, especially desirable: the Norway, the red, the white and the sugar maple.

The first of these is the dense, round headed tree with broad leaves that turn clear yellow before falling, which forms such superb avenues in some of our suburban towns. No sight in the tree world is more beautiful than a perfect Norway maple in October, and when we learn that it one of the few exceptions to the rule that quick growers are weak, its desirability as a home grounds tree is still further enhanced. There is a red leaved variety, to which is sometimes used in combination with the yellow and makes a good contrast where two colors are desired.

The true red maple is indeed well named. Beginning with its red blossoms in spring the color scheme is repeated in the scarlet autumn leaves and, after they have fallen in the red twigs which hold their tint through the winter. It is desirable in every way, spreading, symmetrical tree from 50' to 100', with a head of slender, erect branches. The bark is a dark grey, somewhat flaky, and the limbs pale by contrast.
But the finest of all the family, in the opinion of many, is the sugar maple, the sort whose sap is so eagerly gathered for boiling down to syrup and sugar. It is a tree of superb form and stature, sometimes reaching a height of over 100', compact and symmetrical with its many upright limbs forming an oval head which spreads somewhat with old age. Beautiful throughout the year, the sugar maple reaches its greatest glory in the autumn, when it glows with a wonderful harmony of yellow, red and orange colors. It is one of the rapid growers which are superbly adapted to permanent planting. It is one of the few species as will do their full part in making your place of the future a spot of tree beauty and lasting charm.

The American elm, a splendid tree in the landscape which can never be forgotten. A trunk straight as a mast and sometimes 200' from root to crown; short branches forming a regular, conical head and in early summer bearing greenish yellow, tulip-like flowers; lobed leaves 5' or 6' long and broad, dark green above and paler beneath, which change to clear yellow in autumn—these are a few of the characteristics which the tulip tree possesses. It has been said that the wood is brittle, but I have never seen any indications of this in growing specimens. I know of several which have successfully withstood gales which wrecked maples, chestnuts and even spruces growing near by, and this in summer when the foliage adds immeasurably to the strain put upon the branches by the rush of the wind.

So much for the choice of such species as will do their full part in making your place of the future a spot of tree beauty and lasting charm.

We come now to a tree which is excellent around a house rather than the house itself. Too often this fact is overlooked, and we find the branches so closely crowding about and above the building that free circulation of air in summer is seriously impeded. If you consider a moment you will realize that a house which is itself densely shaded but surrounded at a distance of a few yards by an expanse of sunny and superheated ground will be less cool than one which, while the sun may strike it directly, is encompassed with a ring of shaded, cool air which has a chance to circulate and penetrate through the open doors and windows.

From the landscaping as well as the onlooker's standpoint, the interplay of sunshine and shadow in any tree planting on the grounds should balance. Nor does this refer merely to the actual shade area created by the trees—their own habit of growth has no small effect upon it. From a distance an elm or a white birch, for example, gives less of an impression of shadow than does a horse-chestnut or a European linden, simply because more light passes through the interstices of its limbs and foliage.

It is a mistake to plant a great variety of trees, lest the effect be too hodge-podge. Out of ten specimens, perhaps six should be of one species, three of another, and one of a third. As a general rule they will look best when irregularly grouped instead of being spotted around like the dots on milady's veil. Exceptions to this plan are found in the case of those too rare and perfect specimens which, like the elm, the European linden and a few others illustrating this article, are so superb as to dominate all the surroundings by their very magnificence of form and stature. But wherever and whatever your trees may be, remember that permanence should be one of their greatest charms.

Speaking generally, there are two sources from which your trees may be obtained, the nurseryman and Nature. Young stock from the former is apt to be of better shape and more easily transplanted than the wild specimens, for it has had better care and enjoys the advantage of being taken up and prepared for shipment by professionals who thoroughly understand their business. On the other hand, trees of larger size and consequently more speedy effectiveness may be obtained from their wild sites. If care is taken to select carefully those specimens which are of well-shaped, healthy growth, the results from "natural" trees are often excellent.
"ALLONBY," THE COUNTRY RESIDENCE OF CHARLES PLATT, ESQ., AT LAVEROCK, PA.

JOSEPH PATTERTSON SIMS, architect

As found, the house looked not unlike Belgium after Von Kluc got through with it. As restored and enlarged it is thoroughly characteristic of the Pennsylvania stone farmhouse type and truly Colonial.

The house and the garden have been treated as separate units, trees and shrubbery surrounding the house, the more formal development being kept for the rose and kitchen gardens.

Stand about where the L is in the living-room on the plan, and you command a pleasing vista across the bricked hall and through the house door to the forecourt.
The library was an addition to the original structure. Its finish does no more modern, however, than the other rooms, as the Colonial simplicity was reproduced.

An old fireplace at the end of the dining-room was turned into a lounge the original inglenook window—an unusual Colonial detail—being preserved intact.

Among the pleasing additions was a sunken forecourt in front of the housedoor, with a brick pavement laid roughly in wide bond.

To the right is the living-room fireplace as found; above, the same place preserved. The walls are sand finished and in every way the Colonial spirit has been maintained. A study in contrasts that makes no house to be neglected beyond the possibility of saving.
WHERE IRON ENTERS INTO THE GARDEN

There are some uses in the garden for which no fabric is better fitted than iron. Its durability resists the weather. Those who cannot resist the temptation of buying the objects shown here can purchase them through the House & Garden Shopping Service. For names of shops address HOUSE & GARDEN, 440 Fourth Avenue, New York City.

Intended for a boat house, or seaside cottage, a pull in pursuit of a fish. Of hand-forged wrought iron 31 1/2" long by 21" high in black finish. It has a weather-proof bearing, $20.00.

Nature supplies the moon; the rest of the picture can be bought in wrought iron and put on the barn. 32 1/2" long by 14 1/2" high, and highly effective. $25.00

And this is why the hen crossed the road. Realistic and intended to cap the roof beam of a garage. It is 28" long and 15 1/2" high, of hand-forged wrought iron, with weather-proof bearing, $30.00.

Of antique lines, wrought of hand-forged iron, is a footscraper that can be built into concrete or masonry or screwed into wood floor. 8" wide by 3 5/8" high. Black finish, $5.00; galvanized, $5.50.

Based on antique lines, wrought iron footscraper will add an interesting note of utility to the entrance. Its top can be useful. 10 3/4" wide by 4" high, electric wired, complete, $20.00.

There are some types of dens where iron for alone is suitable and part of garden this Rococo Settee would admirably, $100.00.
This Calendar of the gardener's labors is aimed at serving as a reminder for under taking all his tasks in season. It is fitted to the temperate climate of the Middle States, but its service should be available for the whole country if it be remembered that for every one hundred miles north or south there is a difference of five degrees of latitude. The plantings or earlier in performing of garden and farm operations are:

**SUNDAY**

1. Sun rises 4:56; Sun sets 7:16. Germany declared war on Russia, 1914. Make a final clean-up of the whole place, get all the weeds out and mulch everything possible to offset dry weather.

2. Nothing will give better returns in the cool fall weather than sweet peas, and this is the time to sow; solid benches are preferable, though raised benches or pots will do. Buy the very best seed.

3. King of Norway born, 1872. Of late years we have had very fine fall weather; take advantage of this condition by sowing several rows of peas in the garden this month.

4. First Atlantic cable message, 1877. Make two sowings of beans this month. Keep the rows about 15" apart so they can be easily protected from early frosts.

5. This is the last opportunity for setting out late celery; use plenty of water in greenhouses. Early celery can now be blanched for table use, with a few boards.

**MONDAY**

6. 7th Sunday after Trinity. A bed of strawberries set out now and well cared for will produce a good crop next season. Strawberries delight in a very rich soil.

7. Order what bulbous plants you want for winter forcing in the greenhouse. Buy good bulbs of tulip, hyacinth, narcissus, lilies, calla lilies, alliums, ornithogalum and freesia.

8. Maskmelsons should be ripening outdoors. Place boards under each melon, do not step on the vines, and do not pull the fruit; it will leave the vine of its own accord when fully ripe.

9. Late cabbage and cauliflower should now be set out. Keep the plants well watered until root action starts, and well sprayed to kill the cabbage worm until they start to head up.

10. This is an excellent time to go around and label all the plants in the perennial garden; in case you desire to transplant any, or when digging the border in the spring, it avoids losses.

11. Fall spinach can be sown now. Make successful plantings until October. That which matures now can be used; the rest can be protected over winter, and will be extremely early.

12. Make two sowings of lettuce this month. Sow good big patches as soon as the supply until Christmas if properly grown and protected later on.

**TUESDAY**

13. 8th Sunday after Trinity. Full moon. Evergreens can be transplanted now. Use plenty of water and keep the plants sprayed until root action has started and they have a grip.

14. Relief of Pekin, 1900. Onion if stopped in growth should be pulled out and laid on their sides. After the tops have dried, twist them off and store the roots.

15. Panama Canal opened, 1914. Several useful greenhouse plants, started now from seed and grown in pots, will flower this winter. Among them are stocks, mignonette, clarkia, nicotiana, etc.

16. Why not sow a big batch of perennial seeds now, if you have cold frames to winter them in? This is a very inexpensive way of making large perennial plantings.

17. Keep the runners removed from the strawberry beds, and the plants well cultivated. Do not allow them to suffer for want of water—they are now forming their crowns.

18. Emperor of Austria born, 1830. Keep a sharp lookout for the early tomatoes. They are already setting their fruit and must be kept in check.

19. Arabic sunk, 1915. Keep all dead flowering shoots removed, particularly from perennials. They make a garden unsightly and reduce the plant's vigor.

**WEDNESDAY**

20. 9th Sunday after Trinity. Pope Pius X died, 1914. Carnation plants should now be moved from the field to the greenhouse. Select a dark day, and shade until they root.

21. Watch for red spider on your evergreens; many fine specimens are ruined by these pests. Frequent spraying with any good standard insecticide will control them.

22. Cuttings of all bedding plants like geranium, coleus, etc., should now be taken over in the greenhouse for next spring's bedding.

23. Be sure the greenhouse is in shape for the winter. Any loose glass should be rebedded, the boiler looked over and any new parts required should be ordered.

24. A careful study should be made of bulb plantings for this fall. Most people buy the bulbs before they have decided what they intend doing with them, and the results are unsatisfactory.

25. Do not neglect spraying garden crops and orchard with Bordeaux mixture, as in this month above all others the fungous diseases are at work and must be kept in check.

26. Keep all new shoots on vines and climbing roses properly tied up; fall storms and sleet will soon be here and they may destroy years of growth in a few minutes.

**THURSDAY**

27. 10th Sunday after Trinity. On any indication of yellow or curly in the peach orchard the tree or trees affected should be instantly removed and burned.

28. How about natural planting of some of the bulbs that multiply and establish themselves in this climate, such as the trillium, crocus, narcissus, lily of the valley, snowdrop, etc.?

29. Japan annexed Korea, 1910. Raising seedling daffodils is very fascinating. Gather the seed pods now and hang them in bags in a dry place. Later the seeds can be removed.

30. Roses will be starting into active growth again. Encourage them with top dressings of bone meal or wood ashes and keep them well watered. Liquid manures are also beneficial.

31. Sun rises 5:26. Sun sets 6:35. This is an excellent time to sow any lawns that may be contemplated. Permanent pastures of all sorts of mixtures can be laid down at this time.

**FRIDAY**

32. October is the last month to plant any bulbs. Keep a sharp lookout for the early tomatoes. They are already setting their fruit and must be kept in check.

33. Japan annexed Korea, 1910. Raising seedling daffodils is very fascinating. Gather the seed pods now and hang them in bags in a dry place. Later the seeds can be removed.

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**SATURDAY**

37. Very hot and still the air was. Very smooth the gliding river. Motionless the sleeping shadows. —Longfellow.

“Slow down, while sluggards slumber, And you shall have corn to sell and to keep.”

The highest known waterfall is the Grand Falls, in Labrador. It drops 2,000', more than twelve times as far as Niagara.
SEEN IN THE SHOPS

The articles shown on these pages may be purchased through the House & Garden Shopping Service, or the names of the shops will be furnished on application to House & Garden, 440 Fourth Avenue, New York City.

"The anchor that held" is a candlestick of iron with verdigris finish fitted with a bayberry dip. Entire profits to go to wounded French and Belgian soldiers.

$1.00

Visualize this set of English Faience—a copy of old Chelsea—arranged on a table, and you see it suitably used. The center vase is 5" high by 2 1/2" wide. $6.50. The smaller vases are 5" high by 2 1/2" wide. $4.00. The set complete, $22.50.

Designed by J. B. Platt

Hand embroidered with gaily colored worsteds in fantastic designs, these heavy linencloth crash pillows serve well for porches. The edges are bound with worsteds.

$12.00

Courtesy of Patricia Irwin

Victorian furniture revived. The mirror frame is gilded oak leaves with painted flowers. Table of black lacquer with gold decorations and painted roses. Chairs and tabourets of gilt upholstered with blue damask; these three being Louis Philippe.

$12.00

The varieties of garden baskets are this style is substantially woven and with leather. A leather kneeling added to the equipment of useful

$10.00

Courtesy of Patricia Irwin

Oak William as table of unusual A 17th Century mahogany. And an English decorated I screen. The can and compote Waterford glass flower painted Dutch artist of Century.
Couresty of Patricia Irwin


Couresty of Susan Westrope

One of a pair of Adam chairs with carved backs and tapering legs ending in the characteristic spade feet.

Completing the pair of Adam chairs, this shows the center splat design of drapery suspended over medallions.

Painted furniture of grey green with gaily colored flower decorations. Table 36½" high and 29" long, $20.00. Chair, 35" high, rush seat, $20.00. Footstool, 8" x 14" x 4"; $4.00 plain, $5.00 decorated.

Couresty of Susan Westrope

Suitable for the living-room is a Louis XVI secretaire inlaid of rosewood and satinwood, arranged in diagonal floral design. The ornaments are old bronze.

Designed for iced tea or lemonade is a new set of iridescent glass with attractively shaped glasses and pitcher. An odd and useful feature is the cover to the pitcher. Complete, $5.00.

Couresty of Susan Westrope

The mirror is convex surmounted by a gilt eagle. It is 4' high and 31" wide. The cupboard is of oak with baloons turned leg and inlaid doors. Two drawers are included below.
While August is usually considered a slack month in the garden, as a matter of fact some of the most important jobs of the year are to be done at this season. Several of

next spring's vegetable crops, and your supply of biennials and perennials and hardy annuals for the flower garden will depend on your efforts during the next few weeks. And this fall's most important vegetable—celery—is still to be grown.

Last Call for Vegetables

If you act promptly, have the soil in good condition, and use early varieties, there is still time to plant for late fall use a number of the more quickly maturing vegetables, such as beans, beets, turnips, peas, lettuce and radishes. Beets planted for splendid development, provided there is rainfall, ensurinc not only perfect germination, but rapid, strong, healthy growth during the early part of the season, and use early varieties, there is still time to plant for late fall use. A convenient way is to plant in rows 12" to 18" apart, omitting every fifth row. The plants to be grown by the hill system, which is generally the most satisfactory for the home garden, should be at the same distance in the rows. Extra strong growing varieties, in rich soil, will require full 15" of room. In planting, soil the root in water for a few minutes before setting—enough to let them get thoroughly saturated. A convenient way is to place several rows upright in a flat, then pack in water and allow them to take up the right amount. Then they can be used, without moving the plants again distribute them along the row.

In ten days or so, when they have taken give a light dressing of nitrate of soda. If the soil well cultivated, to maintain a dust barrier between the plants. Water closely and cut all runners as fast as they appear. This is the all the energy of new growth into the development of a strong crown for each plant, with the result of a full crop next year.

Have you any of the new fall bearing beets ready to plant? If so, have you made any vision to keep the fruits clean when they develop? If not, make the bed as soon as possible—it cannot be but a handicap at first. If so, the asparagus will be in prime condition for planting in a deep trench at once, prepare the soil properly, and get good plants. There is no better place to use the compost heap for the seed bed. Fork it up and mix it with nitrate of soda, keep them free from weeds, and keep the soil worked up to the plants as they grow, so that the stalks will tend to an upright position. If the weather is dry they can hardly be given too much water, but if the watering must be done with a hose, apply it late in the afternoon and be sure to use enough to give the ground a thorough soaking. The earliest part of the crop should be ready for use toward the end of this month. When it is well grown, and two weeks or so before you want it for use, press them in with a board or brick. By all means use potted plants. They are usually the most satisfactory; with ordinary care, in good soil, they will yield a heavy crop next June if planted early this month. A convenient way is to plant in rows 12" to 18" apart, omitting every fifth row. The plants to be grown by the hill system, which is generally the most satisfactory for the home garden, should be at the same distance in the rows. Extra strong growing varieties, in rich soil, will require full 15" of room. In planting, soil the root in water for a few minutes before setting—enough to let them get thoroughly saturated. A convenient way is to place several rows upright in a flat, then pack in water and allow them to take up the right amount. Then they can be used, without moving the plants again distribute them along the row.

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August Activities Among Flowers, Vegetables and Small Fruit

F. F. Rockwell

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No cultivation is satisfactory unless done with the right amount of care. There is one of the most useful
The modern apartment has many things to its credit; every conceivable convenience for modern living. And the old restored farmhouse has its distinctive charm. But in both there is usually lacking—unless one is fortunate—adequate, convenient and good looking lighting fixtures. The same is true of many of our best "brown fronts" where one can find such horrors as a green beetle- backed hanging chandelier over the dining table. In each of these cases the rooms may be suitably furnished, but the fixtures will be an eyesore that completely destroys unity and dispells charm. These conditions exist because householders do not look on fixtures as part of the furnishings. If the fixtures are bad, call in the junk man and have them removed. You will then have a clean slate to work on.

Possible Substitutes

Having disposed of your monstrosities, you face the problem of what to substitute. The best real procedure is to have the fixture off at the outlet hole, and use side lights. Where the work is under construction, from the floor or even less to fit the furniture. A better effect is had by using a double light fixture than a single; the latter being apt to look spooky when lit. Besides, it is better to have the arms spreading enough to allow several inches between the sockets. If the sockets are 8' apart, they permit the use of a shade or globe; otherwise an over-all shield would have to be used. With two bulbs thus shaded, the light is softer and less concentrated.

For a room 18' square, four double brackets will give sufficient light. All need not be used save on "grand" occasions. Used in a dining-room in conjunction with four table candles or candles on the serving table, and the lighting effect is at once sufficient and charming. In the living-room reading lamps are required in addition to side fixtures. Base outlets can be put in and and the wires run under the rugs. Do not be persuaded into using the regular side fixtures with the wires coming out of them for the table lights. They disfigure the wall and are unpleasantly conspicuous. Any mechanic can run a wire along a door or window trim and paint it to match the woodwork. But the base outlet plan is better. Have a general idea where you want your lights to be and arrange the outlets accordingly. If your table stands on a rug, a hole can be made and buttonholed and the wires slipped through. There are no wires, then, to trip over or be untidy. The job assumes a look of permanence, which all homemakers desire.

In addition to these practical construction facts the householder should not neglect the value of fixtures in the furnishing and decorative scheme of a room.

Fixtures and Color Schemes

Much of the feeling of a period room lies in the detail of the side fixtures. The furniture may be конglomerate, but if the walls and proportions are true to the period, and the fixtures as well, the seal is thus set upon the room. Or visualize a room where the rug is Chinese, the walls a plain tone and the hangings suggestive of the Chinese in design. As a distinctive touch use four Buddha brackets picked out with yellows and orange and blues of the rug and hangings. The room is at once made unusual. The same may be said of the Adam fixtures, the design being so marked and exquisite that attention is immediately drawn to them.

Crystal fixtures have come back. They find their place in any formal room where each crystal plays with the light, embellishing and enriching a delicate wall surface. Another attractive fixture is so arranged that the light is reflected in a gracefully shaped mirror with a tiny garland etched in the glass. Such a fixture would look well in a bedroom with the frame painted and antiqued to match the hangings. This coloring of fixtures is a vital part of the decorative scheme.
Our editors' task is to observe, to discover, to compare, to price, to select—the things that go to complete a gracious and charming home. The forthcoming issue is an example of what skill and experience our editors have set before you—of what skill and experience you can do to set before you—of what skill and experience you can have—of what skill and experience you can prepare for a cozy, livable home.

The Autumn Furnishing Guide shows well-chosen examples of the kind of a magazine you may expect each month. Moreover this issue is an excellent advantage of our trial subscription offer (to new subscribers) for the next six issues, beginning with the September number. It is not necessary even to open it, but to see the subject of the home, whether the service supplies what you want and meets all your requirements. Without expense you can secure information on all the subjects indicated in the coupon below or others that you select.

Check the subjects that interest you and your others will suggest to yourself. We can supply all the needs, not only relating to furnishing and decoration, but in regard to all phases of building, remodeling, repairing, gardening, poultry and other home matters, and anything for the subject of the home and its surrounding and their care. Our only consideration is that you are sincere in your desire for free information, otherwise we will advise you whether the service supplies what you want and meets all your requirements.

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ADVICE ON AUTUMN FURNISHINGS

September House & Garden is a guide to the annual autumn furnishing and refurnishing of the tasteful home. Next month you will be investing a great deal of time, thought, and money in putting your house to rights for the winter months. You cannot afford to be without the accurate judgment of trained experts on house problems.

House & Garden is a council of experts discussing all sorts of house and garden problems. We are making this September number solidly compact with household “do’s” and “don’ts.” These are just a few of the subjects treated—there are dozens more:

- Reclaiming the Old Apartment
- Gardens Among Stones
- The Rugs of the Heathen Chinee
- Preserving Your Periods
- To Blossom at Christmas
- Hansel, Gretel & Co.

The amiable and unappreciated little dachshund as an indoor city pet.

There will be ever so many photographs of good house arrangements, period styles in furniture, new wall papers, and good interiors. Fifty percent of the issue is devoted to practical autumn furnishing problems. Every regular department will concentrate on them. Don’t risk disappointment with your furnishings this winter because you were uncertain what you wanted to do this fall. Twenty-five cents expended on House & Garden for September will bring you twenty-five hundred percent return in house contentment.

There will be a big demand for this particular number. To make sure of it, reserve your copy at the newsstand, or enter your subscription now.

25 cents a copy

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With which is incorporated American Homes & Gardens
Conde' Nast - Publisher
440 Fourth Ave. New York

$3.00 a Year
The Garden of Sweet Perfumes

(Continued from page 31)

ery: the catnip (Silene officinalis), a tall, leafy plant with large white flowers; and four o'clocks—all these are easily raised from seed.

Sweet herbs as well as flowers must have a place, as they are wanted for salsas and pot-pourris. Southernwood and borago are both aromatic. A lotion made by steeping sweet fern leaves in boiling water will relieve the burning irritation of ivy poison.

RAISING LAVENDER FROM SEED

Lavender is hardy when it is once firmly established, but it is not a plant for a green-house. At first I bought nursery stock, but out of two dozen plants I got from four different sources in two years only one lived, and that was always a small plant, so bordered to the slower method. In March a shallow box was filled with potting soil and watered, then covered with about 1/2" of soil, patted down firmly. The box was then covered with glass and placed in a west window. As soon as the seedlings appeared the glass was removed and they were shaded from direct sun and slightly sprinkled every morning, when 2" high they were transplanted to a deeper box and set 2" apart. About two months later they were pricked out in a partly shaded seed bed in the garden, and the last two leaves were nipped off each plant to ensure a better growth.

Cultivation was constant all summer until August, when they were again transplanted—this time to a bed which was to be their permanent home, a border partly shaded from sun. It happened to be a very dry summer, so they were sprinkled every morning. When cool weather the winter, the seedlings are well established in 2" pots, which dries and blows away. When the seedlings are well established the mulch will have to be increased as the weather becomes colder. A cupful each of lavender, thyme, and mint, steeped in two quarts of vinegar, will make a good wallflower for the invalid. Rosemary is another scented perennial, and the plants can be easily obtained from any nursery. If you want to raise from seed, you should provide a cold frame. After you have one well-grown plant, it is better to propagate by clipping off the top, which turns brown and falls away.

VIOLETS AND HERBS

There are, to be sure, new silhouettes turning up every day, but reliable antique dealers will not publish in Hartford in 1846 and is as rare, perhaps, as Eduard's. With modern artists who have produced silhouette pictures one may mention Paul Knowles (famous for his discovery of a new method of producing silhouettes), Arthur Rackham, Howard Pyle, F. V. Batton, Valentine, Caro, Henry Seidler, Henry Rieter, Jules Dizé and Maxwell Ayton.

There are, to be sure, new silhouettes offered to collectors as old, but reliable antique dealers will not stoop to such catering, and the collector who becomes interested in silhouettes will find the trouble of raising a full crop of Strawberries next year; also offers Celery, and Cabbage Plants, Seasonable Vegetables, and Potted Strawberry Plants. Also, and greatly appreciated by the birds. PHERES, or, when connected with running water as water-spreaders make it possible for the gardener to fill the troughs of convalescence a cupful of the mixture in the sponge bath is both gratifying and refreshing to the invalid.

TEN POUNDS OF LAVENDER FLOWERS

The center piece serves as food trough, or, when connected with running water as water-spreaders make it possible for the gardener to fill the troughs of convalescence a cupful of the mixture in the sponge bath is both gratifying and refreshing to the invalid.

Ten pounds of lavender flowers and one pound each of musk, rosemary and mint leaves, all dried and mixed with one ounce of ground cloves, was grandmother's formula for the moth bags which preserved our furs and woolens just as effectually as carborundum balls or tar mixtures do in these modern days. To keep your garden blooming constantly, flowers must be gathered every day. They may be used to make pot-pourris, which will keep well in a fragrant all winter. Make the concoction in a big stone jar which has a lid, and in the fall fill fancy jars from it.

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The Ideal Greenhouse for the Ideal Garden Setting

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U-BAR GREENHOUSES

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U-BAR GREENHOUSES
PIERSON U-BAR CO.
ONE MADISON AVE. NEW YORK
Sewage Disposal for the Country Home
(Continued from page 36)

What you need in this case are two dry wells about 3' in diameter and 5' deep, built of the local stone and laid without mortar. There should be no bottom, and the top can be roofed with logs covered by a 1' gravel bed. Locate these dry wells 20' apart, the second a little down hill from the first, and a bottom blind drain 2' below the surface of the ground. Both wells should be at least 100' from the nearest neighbors or close enough to the plumbing fixtures by a tightly, carefully laid sewer line. This system is nearly as efficient as a well designed septic tank and disposal field, will give 25 years' service for 2 to 4 persons, with an occasional cleaning of the well through which the sewage will pour. When the surrounding soil is entirely clogged and no longer able to absorb the effluent, the old wells should be filled in with earth and two new ones constructed. These tanks, with the sealer and drain, should cost about $425.

The Case of the Seashore Cottage

The last case to consider is a cottage by the seashore. You, the owner, do not want a septic tank and seepage area. The position of your neighbors' houses and the danger to near by wells. You have not the time, ability, or equipment to accommodate a regular tile disposal field. Besides that, your household averages only from five to six persons. Consequently, the expense seems unreasonable. And you are perfectly right. If you have a heavy clay soil to contend with, a complete system might be the only sanitary alternative, but with the sandy gravel and loam that exist as the seashore there is a very efficient combination much less expensive to construct.

First comes the tank built of concrete and located underground 50' or more from the house. It should be deepened about 6' longer and 5' square. The manhole cover should be absolutely tight and the concrete of the tank well being waterproof. In the case of the larger septic tanks, it must be fitted with tees to avoid disturbing the surface of the sewage. The outlet pipe should run toward the downhill side of the trench 2' deep and 2' wide for a distance of 5'. If the original trench need not be straight, as long as it has a slight, even grade from the trench to the sea. A I-road bed 9' deep laid 40' of 4" land tile connecting into the tank with 5' of sewer pipe. The pipe should be laid with open joints as described above, and the trench filled with gravel and sand. This filled with the connecting sewer and drain, should not cost, under average conditions, more than $500.

Although easy to construct and practical, even upon small pieces of property where the soil conditions are favorable, this arrangement combines the two essential factors of a disposal system—it is efficient and economical. The tank drain provides an ideal place for the action of the anaerobic bacteria, In the decomposition of the organic matter in the sewage, and the tile drain, with the open joint, allows the surface of the ground makes possible the absorption and oxidation of these compounds and action of the anaerobic bacteria. In this way Nature's scavengers are employed to get rid of the mischief is already done beyond repair. The spraying of the property, when the sewage enters the seashore and natural glasses, is a very easy matter; that is no objection about its being one of the most gorgeous things in all the world—Lilium regale, the old Nankeen lily—the one sus pense; and nothing is more fragrant than the character of the earth and two new ones constructed, so there is no reason for not having a colony of it. It is called Lilium regale var. It is the trumpet form, of course. All the members of the Lilium regale, the one suspected of being a hybrid—is L. t. tigrinum, and nothing could be more stately than this lovely species. It and the two above are Turk's caps, the former has a pink outside and white within that should not be omitted. It is the trumpet form, and the other two cases are more or less flat, in which case it is almost impossible to omit the "gold lily of Japan"—the splendid Lilium auratum—not because it is difficult to grow, but because it is not permanent and needs constant rejuvenation. Of course, there is no question about its being one of the most gorgeous things in all the world—Lilium regale, the old Nankeen lily—the one sus}
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Considering The Lilies

(Continued from page 52)

Lilies generally prefer a light, rich soil, but some will grow where these ideal conditions do not prevail. The best to choose for really heavy soil would be *Tolumnia*, *Spathiphyllum*, and *Canadensis*. Any or all of these will succeed in fairly heavy soils if the summer the family light and sandy earth is preferable. They will grow in most good garden soils, provided there is perfect drainage. This is absolutely essential.

The character of a lily bulb for a moment, and you will see why. Composed of layer after layer of overlapping scales, is there anything less calculated to resist the ravages of moisture? Most complete drainage is easily seen to be almost their greatest necessity, and lack of it their greatest handicap. And as long as the bulb do not dry out as easily as sandy soils, nor drain as thoroughly after heavy rains, they naturally do not suit lilies. Japanese species, indeed, cannot endure a particle of moisture entering the bulb; and the Japanese growers have learned to plant these on their sides to ensure keeping their hearts perfectly free from it.

Extremely susceptible to heat, also, are lily bulbs, so they must not be allowed to go into well drained earth, but deep into it. If they can go where the sun will not strike during the hot season, so much the better. Thus it is that in the shrabbery border they do the best, usually, for here the earth above them is shaded and cool, though the stalks and leaves and flowers are not deprived of sun. This is what they like best: sun at their tops, but shade at their feet.

All of the Japanese species send out roots above the bulb, along the stalk where this has grown, for these proper protection and sufficient depth to ensure their not drying out, the roots must be set very much deeper than those of other species. Ten inches below the surface of the ground is not a bit too much, because that means that a hole 1' deep should be dug for every bulb. Make its diameter 1' or 2' more than the circle of the bulb, and put 1' of clean sand in the bottom of it. Set the bulb on this, sift more sand around it to fill the space and cover it to a depth of 1'. Then put in the earth. This not only ensures perfect drainage, but also shields the bulb from direct contact with anything injurious either above or at the side of it.

Mature should never touch a lily bulb—or any kind of bulb, for that matter—yet lilies need plenty of very rich feeding. When they are fed in sand as described, their roots reach out and get nourishment from the brachial downward. The moisture that has passed through the manured soil above them. Thus they are properly enriched while in danger of being injured. The European and native species need not go more than 6" below the surface of the ground, for this does not produce the lateral roots along their stalks above the bulb. Otherwise it is well to plant them just the same, as far as sand and stones are concerned, as the Japanese species.

All bulbs should be mulched in the fall, after the top growth is dead, with strawy manure or autumn leaves. Thus they are properly enriched while in danger of being injured."

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**Constructing The Private Garage**

(Continued from page 25)

When the turntable is omitted, a pit can be constructed in the floor to enable working beneath the car, but this is undesirable generally. It is critical in the door and is dangerous when the car is not over it. Lots of built-in shelves, cupboards, etc., can be used in the work and give good storage space. They add little to the cost compared with their value. Drainage is highly important, for

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Awarded Gold Medal at Panama-Pacific Exposition

During recent years I have found the hybridizing and raising of seedling Irises a very interesting pastime. Of the many thousands raised scarcely any two are alike. These beautiful new Irises, raised at Wyomissing, are a selection from the many thousands of hand hybridized seedlings. During the past season these Irises have been frequently exhibited at flower shows held by Garden Clubs and other organizations where they invariably won highest honors both in this country and abroad.

Mr. Gilbert Evatt of Australia, writing to the Gardeners' Chronicle of London, states that having obtained the best varieties of Germany, England, France and America, he found that for "delicate beauty, combined with size and fine fragrance, the seedlings of Farr are unsurpassed." Gard. Chron., April 25, 1916.

I am sure that those who are interested in growing especially fine flowers, things out of the ordinary, particularly for exhibition purposes, will find these a great improvement over more ordinary varieties. From the numerous fine flowers I have selected those which I offer as the PANAMA-PACIFIC COLLECTION

Chester Hunt. S, medium-blue; F. dark blue, shading at base. 2 ft., 8 in.

Hawatha. S. pale lavender, flushed pink; F. rose, purplish, hooded lavender. 2 ft., 8 in.

James Boyd. (1915). Strongly head-terrorized standards bearing a high dome-shaped center; clear light blue, shading darker at base. Very early bloomer. Named in honor of my dear friend Mr. Boyd. This iris is of Silver Cup and is a Gold Medal for a study of Irises made by the Philadelphia in 1915 (all plants from Wyoming Nurs.

Janinta. S. and F. clear blue, shading to blueish lavender. 2 ft., 8 in.

Mary Garden. S. pale yellow, flushed pale lavender. 3 ft., 6 in.

Red Cloud. S. clear lavender-bronze; F. velvety maroon-crimson, shaded dark red, edged plated white. 4 ft., 6 in.

Wirflunit. S. cream-white, suffused with rosy salmon; F. deep rose at the base, shading to a flesh-colored bloom. 2 ft., 8 in.

(A Little girl of ten, trying to describe this Iris, said: "I really can't tell you what color it is, but it's a kind of fancy color.

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BERTRAND H. FARR, Wyomissing Nursery Co. 106 Garfield Ave., Wyomissing, Penna.

In the September issue of Garden I will tell you all about the wonderful collection of Peonies that my painstaking care has made the largest assortment in America.

So many have asked me to help them with their gardens that I have found it necessary to form a special department in charge of a skilled landscape designer and plantmen. I shall be glad to assist any one who wishes, whether by official suggestions or to advise how to remodel any given plan. For the preparation of detailed plans a charge will be made.
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on this handsome residence shown in winter scene is of Terra Cotta Tiles known as the Imperial Spanish pattern, detail more clearly shown in border.

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