

SPRING GARDENING NUMBER

The Rose—Its Care and Culture
Genealogies Found in a Garden

The Perfume Garden
Seacoast Gardens

Vol. XV

APRIL, 1900

No. 4



House & Garden



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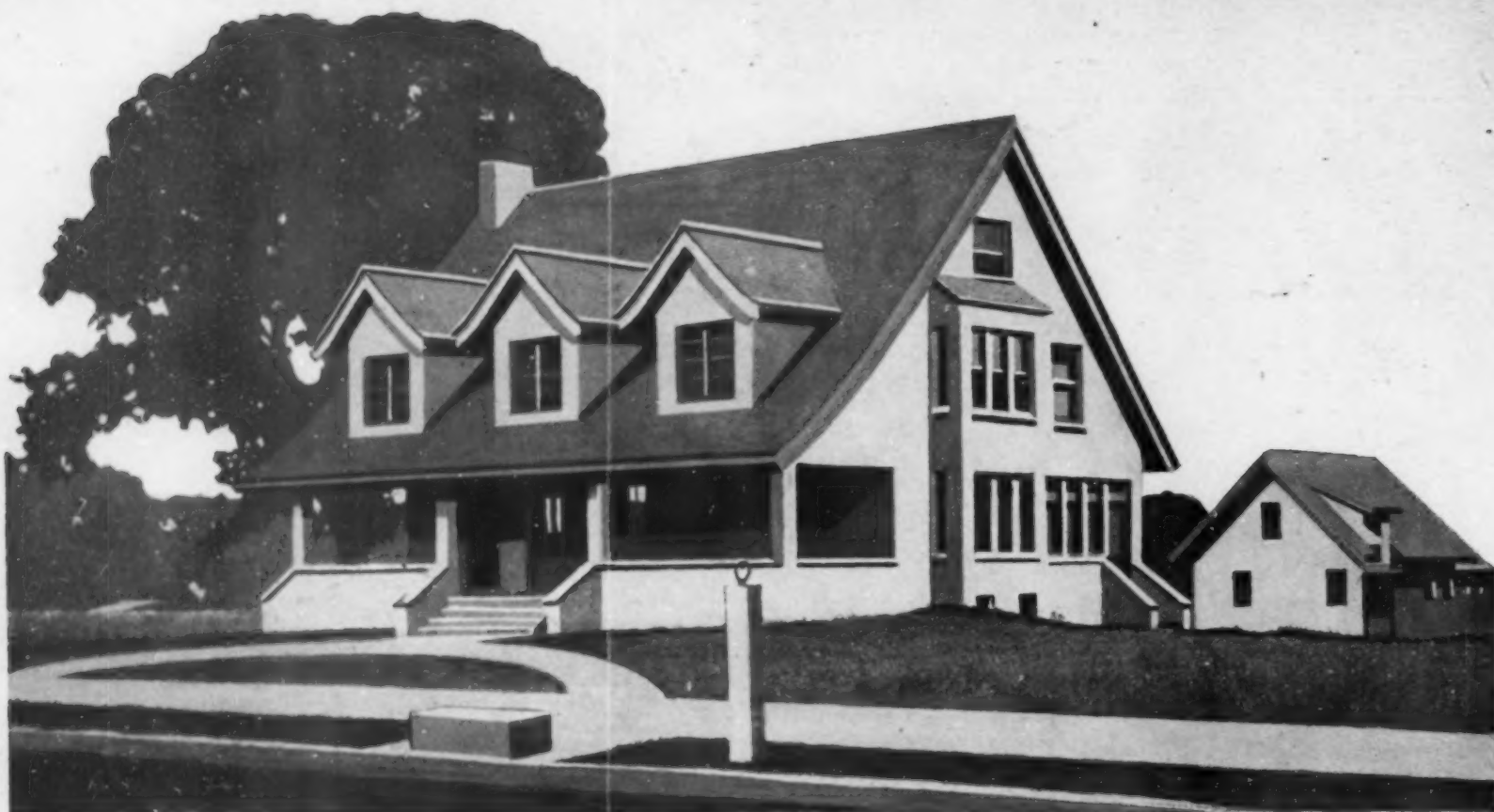
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The priest undertook the heavy task of restoration with enthusiasm, but, owing to a sad lack of funds, the work proceeded very slowly, until about a year ago, when increased funds became available. At present a force of more than twenty men, some of whom were among the first to undertake the work, are engaged in raising up the grand old structure to its former strength and beauty.

The only section practically complete is that portion of the mission formerly used as dormitories for monks, instructors and travelers. The corridor leading from the church westward through one that faces the south has a length of 170 feet. The corridor leading north, in the west wing, is of almost equal length. Opening from the corridor, on both floors, are rooms fourteen by fifteen feet, with fourteen-foot ceilings, all of which have four-inch cement floors. Twenty-two of these rooms have been completed.

The building is massive, the outer walls being three feet in thickness, while the inner walls are twelve inches thick. Two arches and the lattice brick work along the front have been restored for a distance of 186 feet. Back of these arches are the dormitories referred to, forming the south wing. These are practically complete, as is also the west wing, 183 feet in length.

The open court is to be 225 feet square. Its eastern side is formed by the massive walls of the church; its southern side by the restored wing, with its fourteen arches, and a portion of the western side

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This Department of Decoration is under the direction of MARGARET GREENLEAF, whose successful work as an interior Designer and Decorator is well known.

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by the western wing of the reinhabited structure. The northern wall is in the process of construction, as well as a portion of the western wall. The latter is of adobe. The inner tier of arches on the south side of the court has been restored and the corridor formed by them re-roofed. The arches supporting the dome of the church in the northern end of the mission have been restored and have only to be plastered in order to conform with the other portions of the building.

In its halcyon days San Luis Rey was a magnificent structure, covering fully six acres. Its southern façade was 600 feet long, that to the north being 400 feet. The inner court was 240 feet square, and contained eighty-eight immense cloister arches.

At the southeast quarter of this quadrilateral structure the church is located. Save that it is unroofed, this edifice is practically intact. Its walls are fifty-six inches in thickness, built of burnt brick and adobe. Both the inner and outer walls were plastered with white cement, much of which has fallen off, but this can easily be replaced, giving the structure a slightly appearance. The nave is one hundred and sixty by thirty feet, and has a ceiling sixty feet high. The work of Father O'Keefe will restore and give permanency to one of the finest structures in Southern California.—*American Contractor.*

THE SUEZ CANAL

ON June 2, 1908, the annual report of the canal was submitted to the stockholders. The gross receipts were \$24,023,700, it being an increase over the year 1906 of \$1,725,880. The commerce of the world is increasing, and the Suez Canal is the pulse of the commerce whose throb measures its growth. The Panama Canal, as important and grand a work as the present century has projected, will not compare with the Suez Canal in usefulness, unless the population of the world shall be changed in its base.

From New York to India, China, etc., is less mileage via the Suez Canal than it will be by the Panama and across the Pacific. But to this will come the opportunity of holding the entire Pacific coast line from the Straits of Magellan to Bering Strait.—*Western Architect and Builder.*

House & Garden

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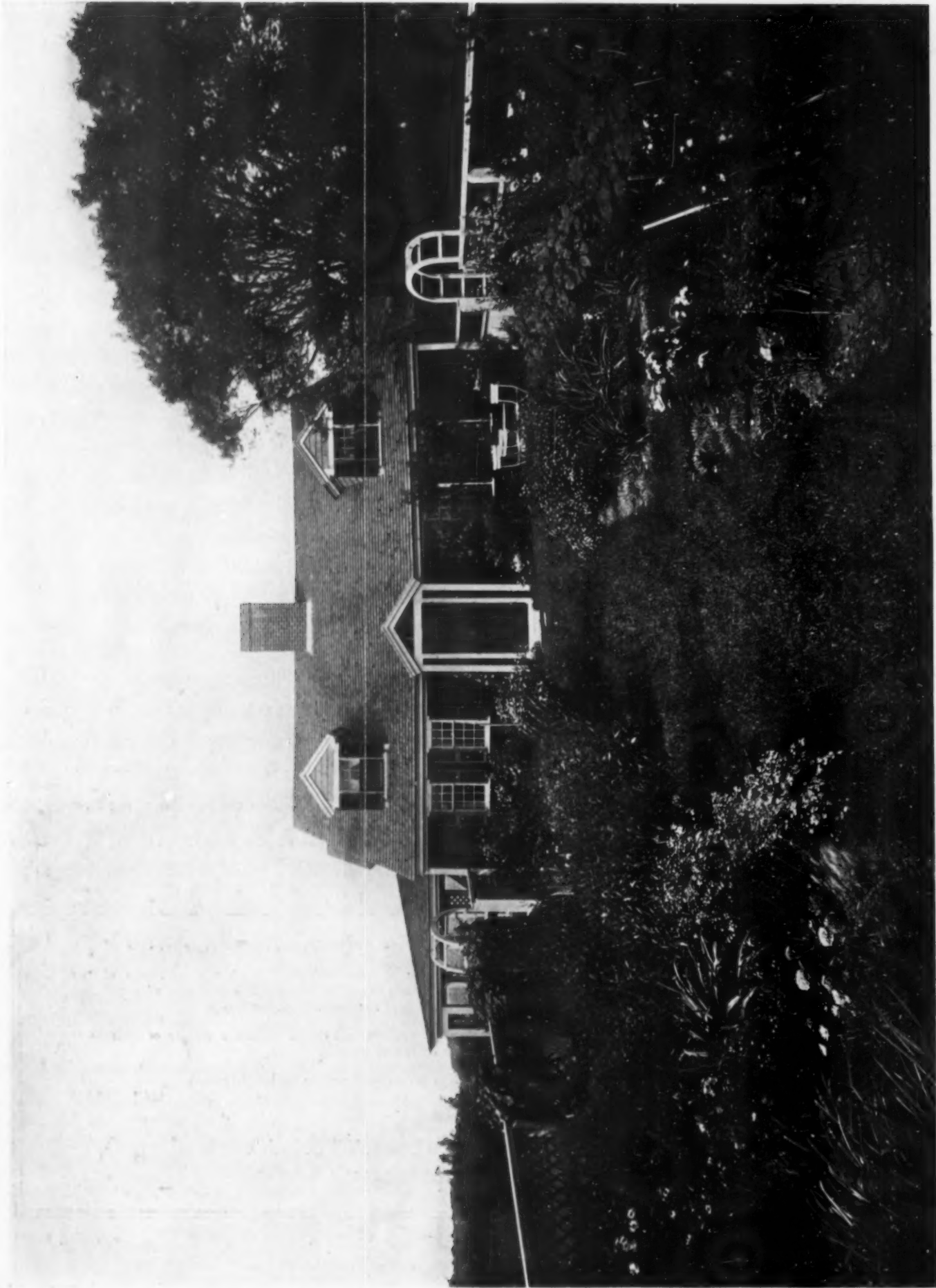
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WILLOWDALE, THE COUNTRY HOME OF MR. HARRY B. RUSSELL, ARCHITECT

House and Garden

VOL. XV

APRIL, 1909

No. 4

Willowdale—An Old-Fashioned House

THE COUNTRY HOME OF HARRY B. RUSSELL, ARCHITECT

Photographs by Leon Dadmun

THERE is always a certain fascination about the century-old farmhouse, which type abounds in all the seaport towns of New England, and is found in large numbers along the shores of Cape Cod. The house which is illustrated here is said to date back to the early time of the colonies, and was built by the first settlers in Pocasset, who migrated there from Plymouth. The date, however, is not known exactly, yet it is supposed to be about 1700. During the past decade or so, it had become quite unoccupied, so that when the present owner purchased it, it had the air of the "deserted farm," yet at once its many possibilities suggested themselves.

The effect to be realized was to keep the house "old-fashioned" and not to destroy any of the old-time feeling by the addition of the wings, which were necessary to make it habitable and convenient. One of these ells was added to the east end and contains three bedrooms and bath, while the other holds the service portion. Modern plumbing was installed in these additions, but not allowed to enter the old house, so that the old effect might not be marred. After these sections were completed, came the work of restoring the old part, yet this word could hardly be applied except as to paper and paint, which had previously been applied by ruthless hands. The fine



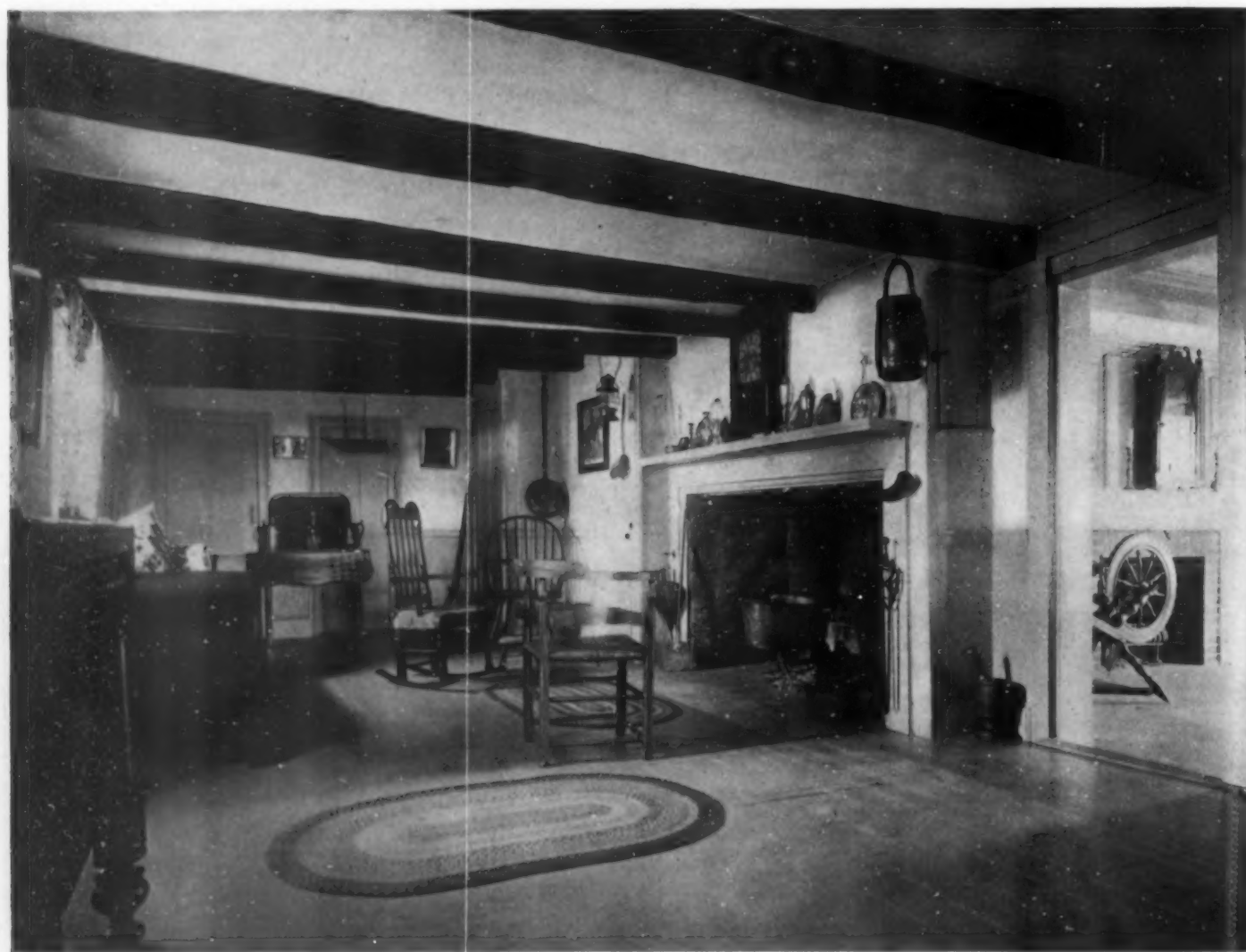
THE PARLOR—WILLOWDALE

House and Garden

old paneling had been painted green in one room and brown in another, and the papers were not the quaint kind needed for such rooms. Two of the sills were found to be rotten, and the dining-room had to have a new floor laid, and, of course, several mouldings were lost in sections which needs must be supplemented. After the country carpenter had spent much time "fixing up" what he thought to be an abode hardly worth expending a cent upon, the painter took his turn and it was then that the transformation seemed to take place.

Nearly a hundred years ago the highway running through the village was changed from the front of the house to the back, so a splendid opportunity was given to establish the garden on the secluded south side, upon which give the windows of the living-rooms. This space, as the photograph shows, is enclosed with a fence, painted white, having green lattice panels at the top. The summer-house was placed at the rear of the garden, having its axis on the central path leading to the front door, and having its outer three sides beyond the fence, so that a very interesting view

is obtained of the fields, with the hills and woods beyond. The garden is very simply laid out, being divided by means of a wide central walk of grass and a narrow cross path into four large flower beds. The scheme for the planting was carried out on old-fashioned lines, keeping, as far as possible, the taller plants in the centers of the beds, with the lower ones on the edges. Yet no special color effect has been produced, and there is no attempt at formality in planting. The inside of the fence is quite hidden with a growth of running vines, while a line of hollyhocks borders the interior with masses of golden glow at the lower corners. The grassy walks are kept mown and clipped about the edges, yet the grass grows up between the flat stepping stones of random shape that form the walk to the front door. These add to the delightfully natural effect of the garden, which is not over-ornamented nor over-tended, yet one cannot enter without feeling a certain order and symmetry, although the old-fashioned flowers seem to vie with each other in their charm of wild entanglement. Scattered about the garden are some old



THE DINING-ROOM—WILLOWDALE

Willowdale—An Old-Fashioned House

jars that give it scale, and a table and three chairs where tea can be served in the open. The summer-house serves as the out-of-door living-room and is made very comfortable with hammocks, numerous chairs and tables.

Upon entering the house, one passes through a small entry, the walls of which are covered with landscape paper, which is a reproduction of an old pattern, to the parlor. The charm of this room is the paneling, with its crude mouldings and the small chimney cupboard, placed at the top of the room, quite hidden behind the heavy beam which extends across the ceiling. The windows are very small and are set with deep recesses, having seats which are extremely quaint and interesting. The paper has a gray ground with small pink roses set symmetrically at intervals, and the pink curtains and cushions match in tone. In the corner is an open buffet filled with old pink Bristol cups and saucers which help to carry out the color scheme of the room.

The dining-room was formerly the old kitchen, extending nearly across the entire back of the house,

and has a very large fireplace, the sides of which are stone, but the old oven has disappeared. The beams are hewn and the rough and jagged appearance adds a decidedly homely feeling to the interior, which has its walls painted white, and the woodwork gray, and the whole brightened with gay flowered chintz curtains at the windows. As the illustration shows, this room contains several old pieces, which are quite unique, although not especially rare, but in keeping with the setting. This plain white wall with the gray makes a decidedly favorable background for the old pewter and glass used in the decorative scheme. The floor is painted a stronger gray than the dado, and the ceiling between the beams is softened in tone to show the effect of age.

The bedroom is also paneled on the side toward the chimney and has a dado and heavy beam running across the ceiling. The paper is very old-fashioned, with its design of a slender vine of green ivy running vertically to the cornice. On the floor is a large rag rug in dull tones, and the hangings on



ONE OF THE BEDROOMS—WILLOWDALE



THE GARDEN FROM THE PARLOR WINDOWS—WILLOWDALE

the bed and at the windows are a light figured stuff. A very narrow and steep stairway leads to the open garret through which runs the big, stone chimney and where repose old chests, with the usual supply of spinning wheels and looms. On either end of the

garret is a bedroom, furnished similar to that below stairs. Within and without the place holds together with a decided unity, the effect being simple to a most satisfying degree. Consistency has been the keynote and harmony prevails everywhere.

A Reporter's Interview

By TUDOR JENKS

SOME recent arrivals in our land
Are the scions of a noble band—
The Dent-de-Lions, an ancient race
Famed for their brilliancy and grace.

A prominent Editor ever alert
To render to each his true desert,
Despatched a Reporter to Open Air
With this *carte blanche* (and railroad fare):
"See what Taraxacums have to say,
And write it out in your own bright way."
(For kindly words do not cost a cent
To editors.)

The Reporter went.
There was no need afield to roam—
The Dent-de-Lions lodged near his home.
At first it seemed hard to select a group,
But he found, not far from his own front stoop,
A cluster of Dandelions gay
Who nodded and beckoned as if to say:
"Come chat with us!" His pen in hand,
The bright Reporter approached the band,

Who at once replied "he did *not* intrude,"
And said they'd not mind being "interviewed."

The Scribe began, "I should like to know
About your voyage. Did the breezes blow?"
"Well, yes," they said; "the winds were strong,
But the trip seemed anything but long.
We came last year. We floated over
From the opposite meadow—Land of Clover.
We landed in less than half an hour
From the time we left the parent flower.
The breeze died down, and let us fall
Just in the lee of this old stone-wall—
A pleasant harbor in which to rest,
So we settled down to do our best.
Why did we come? It is our delight
To make the dullest spots look bright.
Grass, of course, is a worthy plant,
But as for Art—you know it *can't*
Produce what belongs to a higher state.
Grass may be useful, but never great.
You don't see why? Then I'll explain.

A Reporter's Interview

Even the duller, human, brain
Must see that grass is too democratic
For the graces of the aristocratic."

The Reporter asked, "You claim for your race
A nobler and a higher place?"

"We do. Indeed, there's no mystery
As to our earlier history.
In our ancient annals, as in your own,
Our separate states each lived alone.
But we found, to wage a winning fight,
We must be composite—that is, unite.
Our plants thrived best who formed a nation
In a commonwealth of coöperation.
But not like the Grass, which runs to blades;
We love arts as well as trades,
And strive together as best we can
In furtherance of a common plan.
The Daisy family, as you see,
Makes rich an aristocracy—
They favor with special privilege
The floret-clan around the edge,—
These alone can wear 'the strap,'
A sort of feather in the cap.
The Thistles, too, made a federation,
But seek use rather than decoration.
The Thistle-floret avoids display
And remains a tube, in the ancient way.
They do not seek to attract the eye
But prefer outsiders should pass them by.
In fact, no one but a donkey loves
To handle the Thistle without gloves!"

The Reporter laughed, as in duty bound,
But a neighboring Thistle darkly frowned.

"We believe," the Dandelion confessed,
"That each should do what he does the best:
The roots should mine the nourishing earth,
Selecting whatever is of worth;
The stem transports with proper speed
To every part what it may need;
The leaves are lungs and chemists too—"

The Reporter broke in: "Oh,—very true!"
(For much he feared, before he got any
News, he'd be swamped in floods of Botany.)
"Yes, yes; I know. And the flower's station
Is to rear the younger generation.
But would I be right if I should state
That you think the young should emigrate?"

"Undoubtedly! Exhausted soil
In spite of youth and patient toil
Can never bring up hardy plants.
Our youths are natural emigrants;
Equipped alike for earth or sky,
When once mature, abroad they fly

In a golden ring around the world
Our banners greet the sun, unfurled!"

"That's very good!" the Reporter said,
While thoughts of Webster filled his head.
"But the world is wide, and when fleets set sail,
There are storms and rocks, and many fail."

"No doubt. But though a hundred fall,
And but one lives, it pays for all.
Wherever fertile soil is found
The little miner seeks the ground.
'No step backward,' is his cry;
Examine the seed and you'll see why.
It's as hard for our seed to retreat, you know,—
As it is for a fish-hook to let go.
And, once well planted, a seed that tries
Can always find the means to rise.
It sprouts, it buds, displays its gold,
Behold the flower! My story's told."

"But please explain," protests the Scribe,
"The benefactions of your tribe."

"We advertise, perhaps obtrusively,
We work in gold, in gold exclusively.
But children learn our stems to take
And best of wreaths and chains to make.
While certain tubes that sturdy grow
Will sound like trumpets if you blow."

"I've heard it said that in your prime,
You also serve to tell the time?"

"Well, well!" the Dandelion replied,
"Our clocks are not our chiefest pride.
No doubt they tell the children so,
And goldsmiths *do* keep clocks, you know.
Indeed, you'll think, I am afraid,
That we are Jacks of many a trade:
We serve the cook with salad-leaves,
The druggist in our juice believes,
And, sometimes, clever little girls
Bedeck themselves with our green curls—
But these are follies of the day.
I have a serious word to say:
Please warn your readers to beware
Of immigrants who seek their care—
Chrysanthemums, those Japanese
Who strive with Orient arts to please;
And Orchids, plants that have, in short,
No means of visible support;
Mere vagabonds who do not know
How native plants must toil to grow.
Excuse me!—it is growing late,
The shutters must be up at eight!"

And, just as the Reporter rose,
He saw the Dandelions close.

Seacoast Gardens

What to Plant in Them

IT is a wide subject because of the varying conditions of climate and situation. The first necessity, of course, is to establish a protection against the devastating and pitiless sea winds. Once this is accomplished, almost everything that grows in an inland garden, will grow and flourish in a garden by the sea. Some of the most famous old-world gardens are by the sea. If Nature has not done something in the way of trees, shrubs or rocks for protection, then artificial windbreaks must be constructed. There are many hardy shrubs and trees that are useful for this purpose: the tamarisks, the Austrian pines, the white and yellow spruces, many of the willows, the sea-buckthorn, which though of slow growth is of compact foliage and invaluable. The *Rosa rugosa* is most useful, with handsome enduring foliage and its freedom from insects. The ailanthus, though not valuable as a tree, fills so many useful offices in a plantation, as it grows fast and yields readily to the wind without breaking that its rather annoying habit of sending up suckers all about it, is not objectionable in a rough plantation, these young growths making good trees for planting elsewhere when in their second and third years. Ailanthus trees when planted closely together, and trimmed severely each year, form a fine clump of graceful foliage. A plantation composed of many of the above trees and shrubs, will, in a few years, make such a protection, that anything not too tender for the climate will grow and flourish. A great deal depends upon this first planting, the selection of the trees, their good condition, care in planting, etc.

Perhaps instead of generalizing about seacoast gardens, it would be more instructive if I described a garden on the southern coast of Rhode Island, which I have known for years, since its beginning, in fact. The place consisted of about ten acres of bare meadow land of coarse grass, without a shrub or bush or protecting rock. It was directly on the coast, facing south and west, and blown upon by all the winds of heaven. It seemed a bold thing to face the very discouraging opinions of others, and to insist a garden could be made out of such material. Now, after twelve years of effort, this bare meadow has been transformed into a stretch of really charming woodland—hedges, perfect lawns, flower borders and fruit and vegetable gardens. The first effort was to establish all along the north line of the land a plantation of white spruces and Austrian pines. The soil, which was naturally light and sandy, was deeply ploughed and enriched in a broad belt—thirty to fifty feet wide—the broadest part near the

sea. Five furrows were then ploughed, six feet between each furrow, and in these furrows the pines and spruces were planted, the trees being three to four feet high, each kind more or less grouped. These trees were carefully cultivated, no weeds or grass being allowed to grow about them for three or four years, then they were allowed to take care of themselves. Gradually a wild garden grew up amongst them, which has formed one of the most effective and interesting features of the place. When it became necessary to thin this plantation from time to time, the trees were removed to other parts of the place, where they were wanted, so that this plantation did good service as a nursery.

To the east, the place was protected against the cruel winds by the gardener's cottage and stable, working sheds, greenhouses, hedges, and a high stone wall, which supported the lean-to fruit houses. Two or three years after the planting of the pines and spruces on the north line, an irregular copse-like plantation was formed starting from the broadest part of the pines and spruces, and running diagonally across the meadow to the stone boundary wall on the south side. This consisted principally of silver birches, but among them were locust trees, poplars, thorns and sycamores. The locusts and poplars had finally to be dug up and discarded, because they harbored "borers"—and the thorns, because they became the home of the "scale." In places of these more silver birches were planted with white pines—and that most satisfactory *Crataegus Crusgalli*. Through this copse an irregular little path runs, and the whole plantation has become one of the delightful features of the place, sheltered from all winds, and the home of robins and song sparrows. In it only native plants find a place, and the most delicate of our wild flowers. In the most shaded parts among the ferns and Solomon's seals our lovely *Cypripedium* finds a home, the partridge berry, the trailing arbutus and ground pine, have settled themselves, and a welcome has been given to the English primroses. Outside this copse there is a protective planting of *Rosa rugosa*, tamarisk, privet, etc., for the full force of the destructive southwest wind is felt here. Beyond this lies the open meadow land, divided from the sea by the high road. This large open meadow has been planted in irregular belts and masses of gorse, broom and heather, now thoroughly established, though they are sometimes winter killed, but revive vigorously in the spring. But what gardener worth the name would be discouraged by failures! His

(Continued on page 3, Advertising Section.)

Inexpensive Little Houses

Small Investments that Pay Big Interest

By HELEN LUKENS GAUT

Photographs by the Author

"TENDERFEET" visiting Southern California, often note with surprise and wonder, great numbers of attractive and oftentimes artistic little houses that cuddle in side and back yards, close beside large imposing residences, like children hiding bashfully in their mothers' petticoats. Sometimes in appearance, they seem to be little more than doll houses.

They are for practical use, however, and not for play. Astonishing as it may seem, they are the best of income property, yielding from twenty to one hundred per cent on the money invested. For safe and sure and permanent returns they are a "joy forever" to their owners in the south-land, where renting propositions are in constant demand. They are popular with, and are sought by all classes, rich and poor alike. The working-man who cannot afford a large establishment finds his happiness and "Home, Sweet Home", in a little dove-cote that just escapes contamination with his landlord's back stoop, while Easterners, many of whom enjoy elegance and style at home (when they discover the tiny houses are really intended for habitation by grown folks instead of children and fairies) eagerly rent one of these back yard bungalows, the modest lines of which may not compare with the architectural splendor of their wood-sheds at home, and have a glorious outing, free from all household responsibilities and cares. Neither do they lose social prestige because of their back yard environment, for they are only doing in Rome, as the other Romans do.

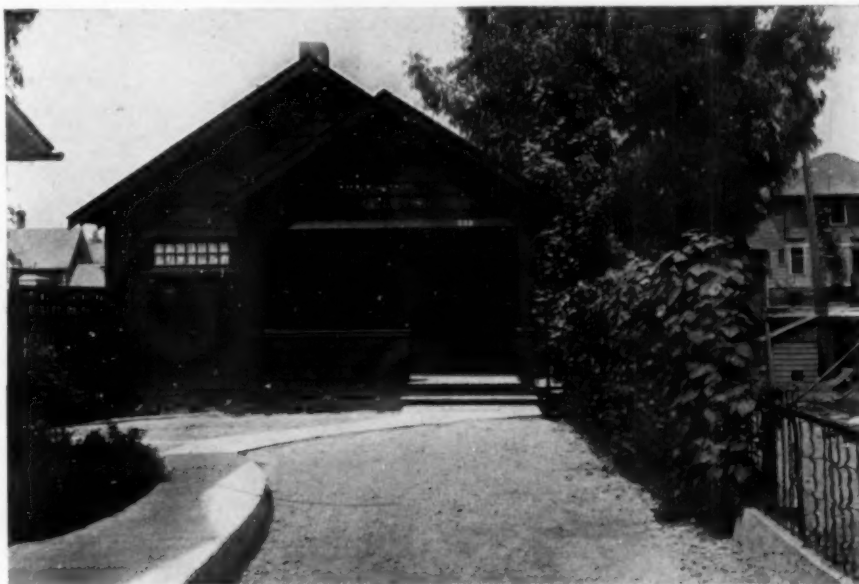
Residence lots in Southern California average

fifty by one hundred and fifty feet in size. After a house is erected on the front half, and a small barn or garage on the rear, there yet remains a considerable space, and it is on this surplus area, that would otherwise be used for pleasant, but financially unprofitable garden or lawn, that these little bungalows are built. The price of construction ranges from two hundred dollars up, and if simply furnished, they rent for from ten to one hundred dollars per month, according to location. A bungalow built on one side of a lot, facing a flower-bordered path or driveway

that leads to the main street, rents to better advantage than a cottage with an outlook into a kitchen window or cellarway. Sometimes there are several cottages in one yard, forming a settlement or colony, the rentals from which afford the owner a substantial living. He has sowed his seeds of investment wisely. He is rewarded by a continuous

crop that harvests itself, and drops the gold into his hand.

Imagine a three-room bungalow, plainly furnished, which cost, furniture and all, not to exceed six hundred dollars, that rents for seventy-five dollars a month. Money easily earned, you will say. An exceptional location among the homes of millionaires, however, makes this seemingly exorbitant rent possible. I have in mind another example of income property—an eight by twelve wood-shed. Before the transformation it was old and rickety, and in an unpromising back yard. In it a clever housewife discovered possibilities, and turned it into a cozy housekeeping apartment. She scared away the long resident rats and spiders, covered the walls with



Cost \$1,200. Five rooms and bath. Brick fireplace. Panel finish inside. Shakes outside. Rents unfurnished for \$25 per month by the year

House and Garden



This house cost about \$700

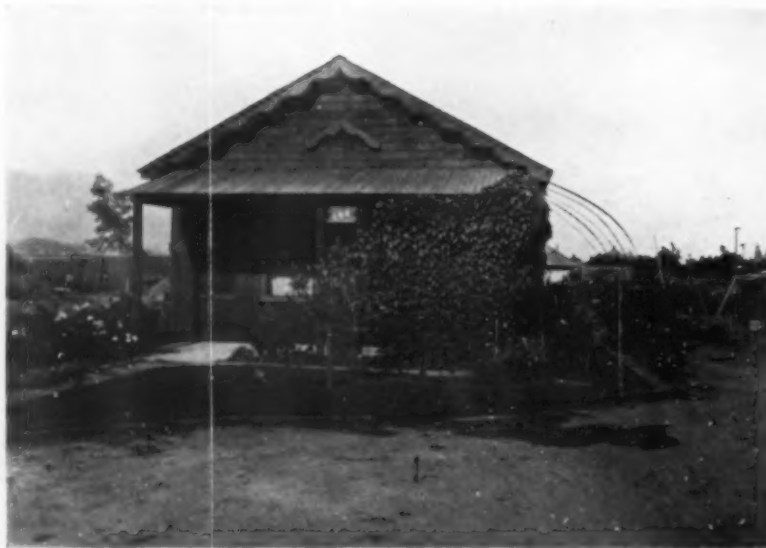
cheap burlap, hung dainty white curtains at the tiny windows, and added a bright rug and a few pieces of second-hand furniture. She next polished up the back yard, planted a rose bush and a geranium or two, and with brave anticipation hung out a sign bearing the tempting inscription "Room to Rent." A tenant came at once, almost as swiftly as the bee that scents honey, and for many months has paid six dollars a month for living in miladi's wood-shed.

Many of the little bungalows are so cozy and compact, and best of all, inexpensive, that some hints regarding their construction may be of help to small home-builders, as well as those wishing to put up cottages to rent. A good many people have the mistaken idea that conventional rules must be followed in building, that boards and shingles and plaster must be just so, that there must be exactly one teaspoonful of baking powder to every quart of flour. In Southern California, however, one discovers abundant, and sometimes startling originality in style of architecture. Unprepossessing barns, shacks and wood-sheds are, as if by magic, transformed into charming and comfortable quarters. After going through the evolutionary process

they are as changed in appearance as is the hobo who suddenly comes into fortune, and changes his rags for broadcloth. Again a heap of old lumber of every conceivable dimension, may, by ingenious hands, be used in building a dear little house, which when completed and freshly painted, is as crisp and inviting as a new bank note.

The tent house is cheapest and easiest to build. Sidings may be entirely of canvas stretched over the framework, or there may be a wainscot of boards three or four feet high, above which canvas extends under the eaves. Striped canvas is often used, but the stripes are bold and tormentingly monotonous. The happiest plan is to stretch white canvas over the frame and stain it some uniform color. Dark green or red is both

restful and effective. If there is to be no inside finish, the framework should be of planed lumber, for a tent house is so thin the "bones" are much in evidence. If stained black, or a rich oak color, the studding appears like a series of frames holding the canvas. Sometimes flowered cretonne or burlap is used for finishing the interior, but is not popular. The tent house idea is for abundance



The cost of this house was about \$500

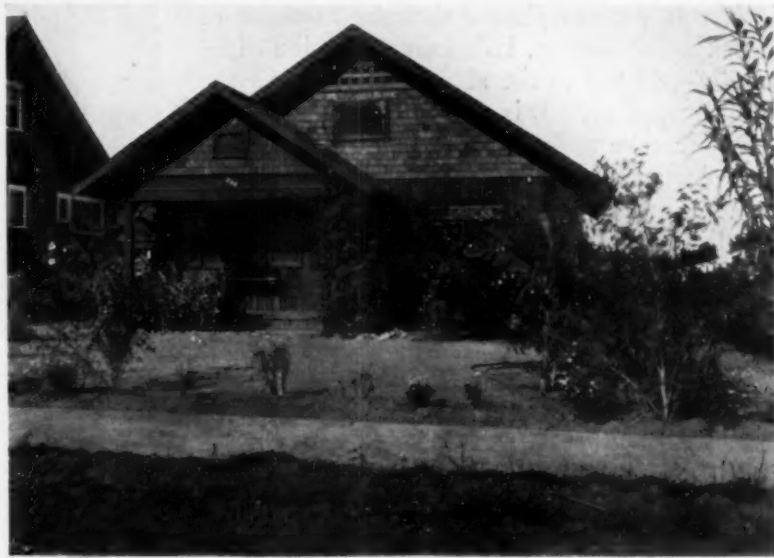


Exceptionally well built tent house. Two rooms and shower bath. Cost \$300

Inexpensive Little Houses

of fresh air, and health. The manner of outside construction can best be obtained from the illustrations. A cheap and simple style of cottage or bungalow and the one most popular, is that known as "box house." The sidings are of foot wide boards running perpendicularly around the foundation. Before the roof is added, the appearance is that of a great dry-goods box. The outer surface of these boards should be rough, and unplanned battens used to cover the cracks. The inner surface of these boards should be planed, and the cracks covered with planed battens. This gives an attractive panel finish to the interior. A plate shelf, five feet from the floor adds materially to the appearance. Ceilings may be fashioned like the walls, though instead of using battens, a more effective result may be obtained by substituting with two by sixes, and having what is termed a beamed ceiling. Walls and ceiling may be stained any color desired, or torched. The latter is perhaps, the richest and most popular finish. For rough surfaced exteriors, woodstain, in place of paint, is used exclusively, and is both durable and inexpensive.

A striking interior may be obtained by staining the



A neat little house which cost about \$800



Not for rent. The owner lives in the house

boards black, rubbing off the stain immediately after applying, thus bringing out the grain in the wood; and covering the cracks between the boards with split bamboo in the natural color. If two rooms are connected by a wide doorless arch, a grille of bamboo at the top of this opening adds another glad touch to the decorative scheme. Put in these rooms a fire-

place of cobblestones or clinker brick, and you have a home that is unique and altogether pleasing.

Perhaps the most popular way of finishing interiors is to have a panel effect extending five feet from the floor, then a plate shelf, and from that to the ceiling a frieze of burlap, either plain or figured. With dark paneling, scrolled or flowered burlap in reds, greens and tans, is especially striking. Bedrooms are dainty if the pine paneling is varnished and left in its own natural color of pale yellow, and a delicate flowered pattern of burlap used for a frieze.

Homes built in this way are separated from the world by but one thickness of board, and are not adaptable to cold climates, except as summer homes, but in medium climates they give happy satisfaction.



An attractive tent house

House and Garden

If one prefers plastered walls to those of paneling or burlap, lath may be nailed diagonally and flat to the siding boards, and the plaster applied. It is generally supposed that lath must be nailed to the studding, so that the plaster may crawl back, finding room to adhere, but I can say from experience, that in small bungalows with low ceilings, plaster is perfectly satisfactory if put on as above described. By following this plan, studding, as well as considerable labor, is dispensed with. The secret of success lies in nailing the lath diagonally to the boards, and using first-grade Alpine plaster. Shakes are frequently used for roofing, but as they are apt to curl and leak, it is economy to use shingles.

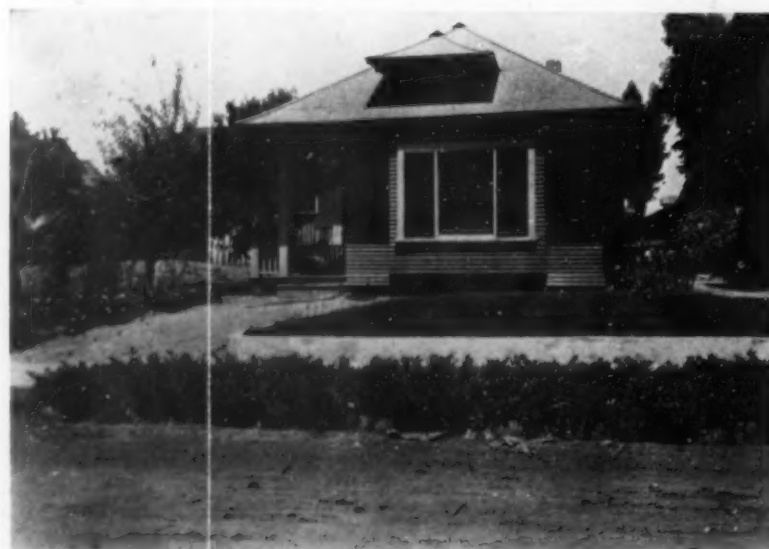
Houses a trifle more expensive than the box cottages, but exceedingly attractive, are those entirely covered with shingles or shakes.

To build these, a substantial frame-work is necessary, and the extra labor required to put them on counts up rapidly when figured at four and five dollars a day. Beveled siding, both planed and rough, is used considerably by builders, and makes a conventional genteel cottage.

For these small houses, lattice windows are most appropriate, or large



Cost \$1,000. Five rooms and bath. Panel finish throughout.
Rents unfurnished for \$25 per month, by the year



Cost \$800. Four rooms and bath. Rents unfurnished for \$18 per month

panes of glass with lattice panels on top and sides. A front door of lattice glass is also preferable to any other style. Window boxes filled with gay flowers, add much to the outward appearance of these little nests, and are pleasant for the housewife to look out upon as she sits at her sewing.

In these days, everyone strives for condensation. Beds are built in the walls,

so that in the daytime a sleeping-room may be turned into a parlor or living-room. Window seats are boxed and fitted with covers, making convenient receptacles for storing bedding or clothing. There are built-in sideboards and bookcases, and shelves galore, and oftentimes the arrangement is so complete and compact, that housekeeping is a pastime instead of an agony. There is no running up a long flight of stairs for a pair of scissors or a forgotten duster. The home-keeper has only to spin on her heel, reach out her hand, and grasp the entire situation.

For comfort on summer evenings, the rest-time of the weary, a wide porch with easy chairs is indispensable. Porches with cemented floors and walled with cobblestones,



Cost \$1,300. Six rooms and bath. Rents for \$25 per month by the year, unfurnished

(Continued on page 4, Advertising Section.)

The Rose—Its Care and Culture

By EBEN E. REXFORD

EVERY woman who has a garden tries to grow roses in it, but where one succeeds, ten fail.

One does not have far to seek in looking for the reason of failure. The plant is not understood, and therefore does not get the right kind of treatment. When you come to know its requirements and give it proper care, you can grow fine roses, but not till then. Those who form an opinion of the possibilities of the plant from the specimens of it which they see growing in the average garden, have yet to find out what a really fine rose is.

The rose is the flower of romance and sentiment, but, for all that, it is not a sentimental flower in many respects. It is a vegetable epicure. It likes rich food, and great quantities of it. Unless it can be gratified in this respect it will refuse to grow you large, fine flowers, and its annual crop of them will be small and short-lived. But feed it according to its liking and it will give you great, fragrant, perfect flowers in enormous quantities, and then you will know what the plant can do when it sets about doing itself justice.

It is a plant that will live on indefinitely in almost any soil, and under almost any conditions. But it will only do its best in a soil that is rather heavy with clay or a tenacious loam. It is a plant that likes to feel the earth firm about its roots. In light, loose soils it never does well. Some varieties make vigorous growth in a soil of clay and gravel, but they do not bloom as well as those which have a more compact soil to spread their roots in.

The ideal fertilizer for the rose is old, well-rotted cow-manure,—so old that it is black, and so rotten that it will crumble at the touch of the hoe. You

can use it safely in the proportion of a third to the bulk of earth in which you plant your roses. Work it well into the soil, and make the ground so fine, before you set out your plants, that it will settle firmly about their roots when you have them in place. Avoid lumpy soil, for that will leave some of the roots loose, and this is just what you should guard against.

Because roses are so beautiful, we naturally like to

plant them where their beauty can be seen to the best advantage. But I would not advise giving them a place on the lawn, or in the front yard. When they are in bloom, people will look only at their flowers but after the flowering period is over, they will have to look at the bushes, and then they will discover that a rose-bush without blossoms is not half as attractive as most other shrubs. We prune them back so sharply, in our effort to get fine flowers, that there is never any luxuriance of branches, and as ornamental shrubs, they are simply failures. This being the case, it is better to locate the rose-bed where it will not be very prominent to the visitor, or the passer-by, after the flowering season is ended. But try to have it where its glories can be enjoyed

by the occupants of the home,—not under, or close to, the living-room windows,—but where it will be in full view. If possible, give it a shelter of evergreens, or a wall, on north and west.

Very few of our roses are really hardy, though most of the catalogues speak of nearly all the leading varieties as being so. Most of the kinds we grow will lose the greater share of their branches during the winter, at the North, unless given protection. Their roots, however, are seldom injured so severely that they will not send up a rank growth during the



HYBRID PERPETUAL ROSE, CAPTAIN CHRISTY

season, but this is not what we want. We want roses, lots of them, and in order to have them we must contrive, in some way, to save as many of the branches of last year's growth as possible. This can be done without much trouble. Bend the bushes to the ground, late in fall, when winter seems about to set in, and cover them with dry earth, leaves, litter from the barn, or evergreen branches. In doing this you are not aiming to keep frost away from the plants, but, rather, to prevent the sun from getting at them and thawing the frost out after it has penetrated their covering. For scientific investigation has discovered that a plant, though comparatively tender, is not injured by freezing, if you can keep it frozen until the frost is extracted gradually and according to natural processes. It is the frequent alternation of freezing and thawing which does the harm. Therefore, if you can keep a tender variety of rose from thawing out until spring, after it freezes in the fall, the chances are that you will have but little difficulty in wintering it safely. The object of covering our roses, then, is to shade them, rather than to keep them warm. If earth is used

as a covering, it should be dry, and after it is put on, boards, or something that will turn away rain, should be put over it. If leaves are used—and these make an ideal covering, if you can get enough of them—they can be kept in place by laying coarse wire netting over them. Or evergreen branches can be used to keep the wind from blowing them away. These branches, alone, will be sufficient protection for the hardier roses, such as Harrison's Yellow, Provence, Cabbage, and the mosses. Teas and the Bourbon and Bengal section of so-called ever-bloomers, are most satisfactorily wintered in the open ground by making a pen of boards about them, eight or ten inches deep, and packing it firmly with dry leaves, first laying the bushes flat upon the ground. Then cover with something to shed rain. These

very tender sorts cannot always be depended on to come through the winter safely, at the North, with the best of protection, but where one has a bed of them that has been set out for summer bloom, he naturally hates to think of losing them if it is possible to save them, and he will be willing to make an effort to carry them through the winter. Even if only a few are saved, he will feel amply repaid for all his

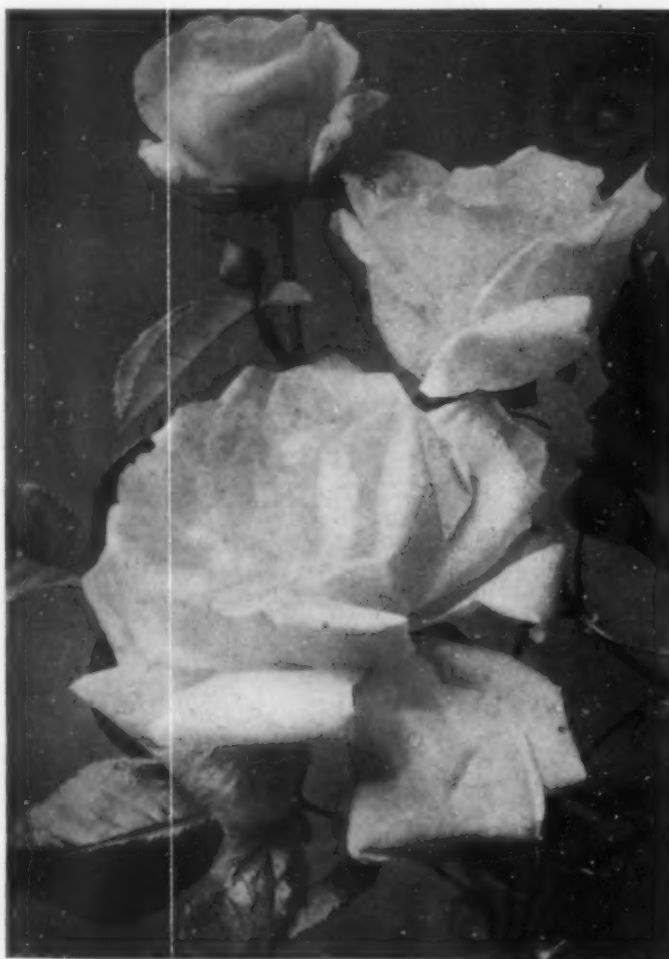
trouble. Generally all the old top will have to be cut away, but this class sends up vigorous shoots, early in the season, if its roots survive, and no great harm is done by the loss of old wood.

The best roses to plant are those grown by reliable dealers, who understand how to grow strong, vigorous stock, and who are too honest to give a plant a wrong name. Some unscrupulous dealers, whose supply of plants is limited to a few of the sorts easiest to grow, will fill any order you send them, and your plants will come to you properly labelled. But, when they come into bloom, you will find that you did not get what you asked for. The honest dealer will never play this trick on his customers. If he hasn't the kinds they order, he will tell them

so. Therefore, before ordering, try to find out who the honest dealers are, and give no order to any firm which is not well recommended by persons in whose opinion you have entire confidence. We have scores of such firms, but they do not advertise as extensively as the newer ones, because they have so many old customers who advertise for them by "speaking a good word" to their friends who may want anything in their line.

I would advise purchasing two-year old plants, always. They have stronger roots than one-year old plants, and will give a fairly good crop of flowers the first season.

Always buy plants on their own roots. It is claimed, by many growers, that some varieties of the rose do better when grafted on vigorous stock, than



PROVENCE ROSE

The Rose—Its Care and Culture

they do on their own roots, and this is doubtless true. But it is also true that the stock of this plant can be propagated more rapidly by grafting than by root-division, and, because of this, many dealers resort to this method of increasing their supply. It is money in their pockets to do so. But it is an objectionable plan, because the scion grafted on to roots of an inferior sort is quite likely to die off, and, if that happens, you have a worthless plant.

The roots will send up a strong, vigorous growth of branches, but from them you will get no flowers, because the stock upon which most varieties are grafted is that of a non-flowering sort. Many persons cannot understand why it is that their luxuriant plants fail to bloom, but when they find that this growth comes from the roots below where the graft was inserted, they will no longer wonder at the absence of flowers. Even if the graft does not die off, the plant will fail, after a little, because the excessive production of shoots from the roots of the variety upon which it was "worked" will rob the graft of vitality, and render it worthless. All this risk is avoided by planting only those roses which grow on

their own roots. In planting roses, make the hole in which they are to be set large enough to admit of spreading out their roots evenly and naturally. Let it be deep enough to bring the roots about as far below the surface as the plant shows them to have been before it was taken from the nursery row. When the roots are properly straightened out, fill in about them with fine soil, and firm it down well. Then cover to the depth of two or three inches, and apply at least a pailful of water, after which fill up about the plant, pressing the soil down with the foot.

We have several classes or divisions of roses adapted to culture at the North. The June roses are those which give a bountiful crop of flowers at the beginning of summer, but none thereafter. This class

includes the Provence, the mosses, the climbers, Harrison's Yellow and the Scotch and Austrian kinds. The hybrid perpetual bloom profusely in early summer, and sparingly thereafter, at intervals, until the coming of cold weather. The ever-bloomers are made up of Bengal, Bourbon, tea and noisette varieties. These are small in habit of growth but they are exquisitely beautiful in form and color, so

delightfully fragrant and so free flowering from June to November, that no garden should be without a bed of them. The rugosa roses are a recent acquisition. They are single, for the most part, but very bright in color, or of the purest white, and have attractive foliage.

The hybrid perpetual and ever-blooming classes must have special treatment in order to secure flowers from them throughout the season. Their blossoms are always produced on new growth. Therefore, in order to get flowers from them, you must give such treatment as will keep them growing. This is done by feeding the plants liberally, and cutting back the branches which have borne flowers, to some strong bud. This will generally result in the de-

velopment of a new branch, on which flowers will be borne. In this way we keep the plant constantly renewing itself, and in the process we are likely to get a good many flowers where we would get few, or none, if we let it take care of itself. The ever-bloomers are especially adapted to such treatment, and can be depended on to give entire satisfaction throughout the season.

The ramblers, now so popular, constitute a class almost by themselves in many respects. They are of wonderfully vigorous habit, have a dozen, or perhaps a score, of flowers where the ordinary varieties would have but one, bloom early in the season, and produce a wonderful show of color. The individual blossoms are so small that they do not please the exacting rose-grower, but there are so many in a



TEA ROSE, PERLE DES JARDINS

cluster, and these clusters are so numerous, that the general effect is very charming. The chief difficulty in growing this class is found in properly protecting it, in the fall. There will be scores of canes, from eight to ten and twelve feet in length. These will be stiff and hard to manage, and many of them will be cracked or broken in the attempt to lay them down, but it must be done, if you want a great crop of flowers next year.

Provide yourself with some thick leather gloves before you begin work. Then go at it carefully, and bend down a cane at a time, placing on it something heavy enough to hold it in place, when you have it flat on the ground. Avoid sharp and abrupt bends. These break or crack the stalk. When you have all the canes spread out on the ground, cover them with earth, litter, or leaves, and heap a generous quantity about the base of the plant. In spring it may be found necessary to cut away about one third of the length of each cane, as the later growth of the season may not have been sufficiently mature to survive the winter. Half ripened wood almost always dies away, thus necessitating a severe cutting back of the branches of nearly all varieties in general cultivation, in spring.

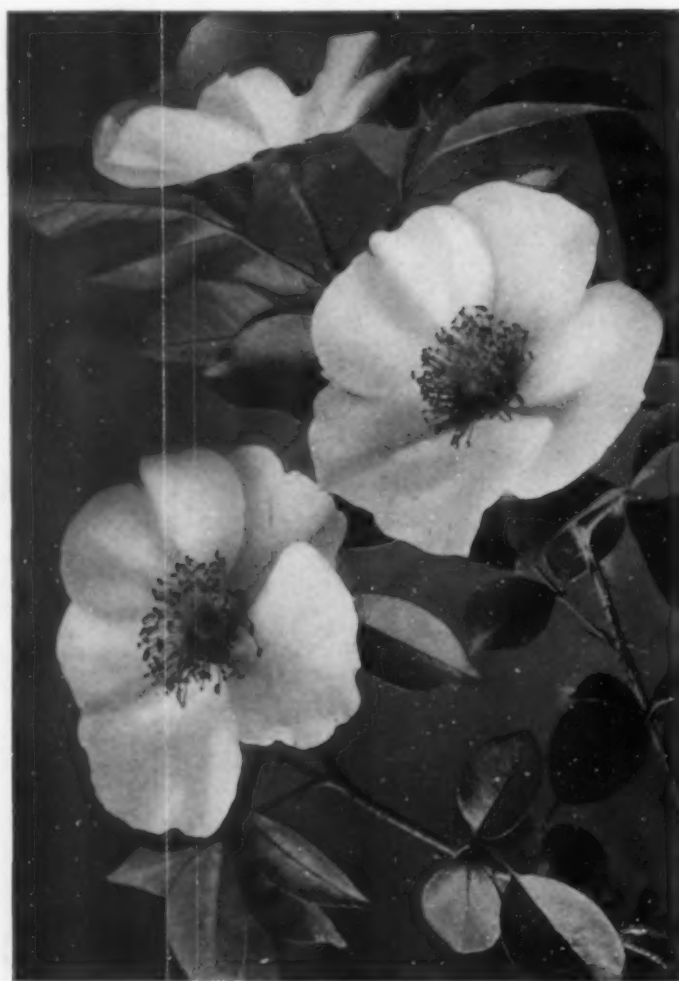
It is a good plan to go over each plant and thin out all weak wood, and cut away its branches in such a manner that there will be a free circulation of air.

Roses have their enemies, and it would seem as if there must be some kind of an understanding among them, as to their date of attack, because nearly all of them come at about the same time. The aphids I find no difficulty in keeping down with an infusion of the ordinary ivory soap of household use,—half a five cent cake, melted, and added to a pailful of water. This should be applied all over the plant, with a sprayer. For the worm that does so much damage at the time when our roses are just getting ready to bloom, I use a kerosene emulsion which I make by adding two parts oil to one part

of the soap mentioned above, while the latter is hot. Agitate the two together until they unite. Then use one part of this emulsion to five parts water, spraying it all over the plants. In rose culture as in every branch of horticulture, the price of success is constant vigilance. By the persistent use of home-made, cheap, safe and easily prepared insecticides, I keep my bushes free from the pests which will ruin their flowers if they are not interfered with.

The hardy climbing roses in general seem to be particularly susceptible to disease, especially to that scourge known as white mildew. Mildew is a fungous growth most frequently appearing in the damp weather of spring and fall. It gives the leaves a whitish appearance and causes them to curl up. By dusting flowers of sulphur over the affected parts while still wet with dew in the early morning its ravages may be checked; or a spray made of one-half ounce of potassium sulphide to two gallons of water is another good remedy. The Crimson Ramblers are troubled seriously with red spiders. This enemy is most active in dry weather. Use the garden hose with a small stream thrown with good force liberally on

the bushes. If this is not effective spray with a weak kerosene emulsion. The illustrations which accompany this article will give the reader an excellent idea of each class of roses of which mention has been made, with the exception of the ramblers. These have been so freely illustrated in all the leading catalogues, for the last five or six years, that everybody is familiar with their appearance. Our first illustration is from a photograph of Captain Christy, a most worthy representative of the great hybrid perpetual branch of the rose-family. The second is the Provence, perhaps the most beautiful of all the June roses. The third illustration is Perle des jardins, an old tea rose, but still one of the best, and the fourth is a faithful representation of the rugosa section.



RUGOSA ROSE

The War Against Ugliness

By EVA RYMAN-GAILLARD

IN the work of beautifying surroundings the things that produce finest effects with least expenditure of time, strength, or money are the things that appeal to most people and, for this reason, we turn to plants of one kind or another.

Plant life furnishes the most readily available means for making any place beautiful because it furnishes varieties suited to every possible place and purpose, and when the quest is for something quickly and lastingly effective the hardy shrubs and vines meet every requirement. The fact that they may be planted in either the spring or fall months is another factor that makes for their value.

After a shrub is once planted it needs but a yearly pruning, fertilizing, and forking around the roots to keep it in condition to become more beautiful each year, and if no other plants were obtainable there are forms enough in this one class to meet every need.

When considering the question of size suited to a given spot we have a range of choice varying from the foot-high dwarfs to the ten-foot specimens that are veritable trees, while the foliage ranges from the simple leaf to the decompound form that is as

gracefully beautiful as a fern, and from green to purple, red, yellow, and other colors.

If the question of blooming qualities comes up for consideration we find an even wider range of form, color, and season to choose from. For April we may have the silvery-gray catkins of the willow, the golden bells of the forsythia and after these come the gorgeous flame-red Japanese quince, the dainty pink flowering-almond, the purple and white lilacs, spiræas and snowballs—something, constantly, until frost spoils the hardy hydrangeas.

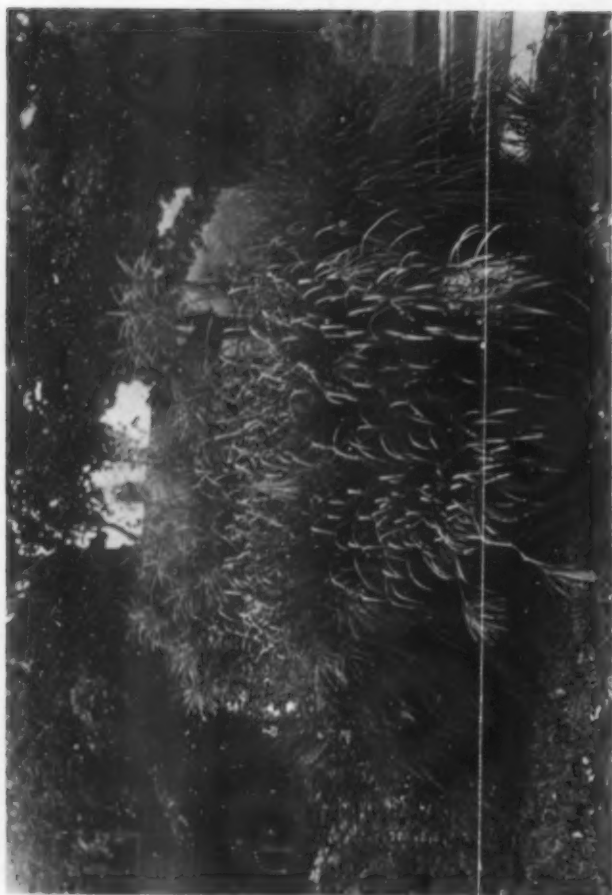
Even after the flowers are gone such shrubs as the sumac, the barberry, the snowberry, the bitter-sweet and others hold their fruits to give a touch of beauty to the winter landscape while still others have a vivid colored bark that gives them a beauty all their own.

Among hardy vines there is almost as much diversity of form, color and habit of growth as among the shrubs, and the grandest home ever built is made more beautiful by the addition of even one fine specimen, while the tumble-down hut, the old fence, or other unsightly object may be hidden

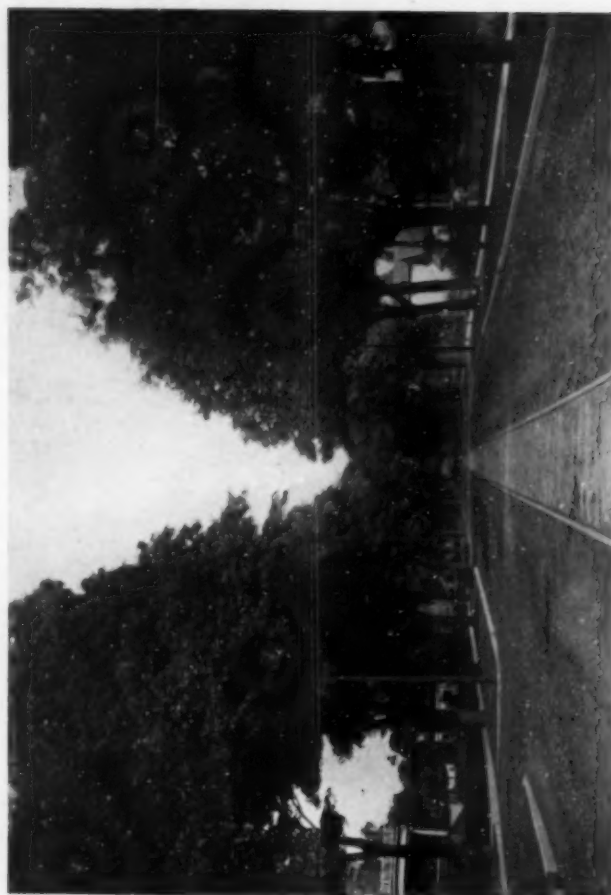


THE EFFECTIVENESS OF SHRUBS, VINES AND WELL-KEPT GRAVEL WALKS AND DRIVES

House and Garden



GRASSES SURROUNDING A SMALL FOUNTAIN



THE BEAUTY OF SHADE TREES ON THE STREET



A HEDGE OF SUMAC VERY LATE IN THE FALL



SHOWING THE BEAUTIFYING POWER OF VINES ON HOMES

The War Against Ugliness

and transformed by a generous use of them. If possible to go to the woods, or along country roadsides, many entirely desirable shrubs and vines may be found and this fact makes bleak and un-beautiful surroundings seem the sign of carelessness.

Don't "sniff" at these native wildings as "common" for many a wealthy man gladly pays a high price for the same kinds, and in many city parks they are given the place of honor.

The window or veranda that lacks shade or privacy may be quickly provided with both by the use of the rapid-growing sorts while a few posts or poles and a little wire netting will furnish support for vines that will furnish pleasant little loafing-nooks and at the same time produce beautiful decorative effects.

Perennials are another class of plants that give good returns for a minimum amount of labor expended on them and the beautiful perennial grasses, ranging from a few inches to six or eight feet in height, are well worth a place in any home grounds. Among them will be found varieties suited for use as hedges, for screen work, or for large specimen clumps on an open lawn.

Annuals, as a class, are smaller and less showy and so require more work to secure equal effects but, fortunately, this rule like others has its exceptions and the grandly effective castor-bean is one of them. The plant which, grown from seed, will attain a height of twelve feet and flaunt its immense leaves to the breeze is worthy of place among the "quickly effective" class.

The improved sunflower and several other large growing sorts are comparatively well known, but the list is all too short and should be increased at every opportunity. The writer read of the Japanese Zea (some catalogs called it maize) and decided to see what it was worth. The result was a cornstalk bearing ears of corn like any ordinary sort, but the

foliage and husks on the ear were beautifully striped with creamy-white and pink.

In effect it was a tropical grass of great beauty, and of all the people who saw it not one had ever known of it before—yet it was listed in several catalogs.

In most cities and towns street fences are being done away with very rapidly, and in many instances the line-fence shares a like fate and their removal gives an appearance of increased size that is of itself an added beauty. More than this, it gives a chance for co-operation among neighbors in the carrying out of plans that would be impossible with the old-style fenced-in yards, or to the individual working alone.

In the warfare against ugliness, cleanliness is an all-important factor and no amount of ornamentation can make a beautiful place of one where the walks are left overgrown with weeds, and with edges untrimmed. A well-kept, straight walk is more pleasing in effect than a neglected one of more graceful outline but, when equally well cared for there is more real beauty in a curved walk than a straight one and even where grounds are small, the arrangement may be made more effective by their use.

Withal, do not forget that the war against ugliness must be carried on outside the grounds as well as in, and ornamental planting need not be confined by the limits of the home-acre.

If your neighbor does not see it as you do, at first, he will be enlisted under your banner without realizing it, for this sort of warfare seems to gather recruits without trouble. To prove that statement one has but to look around and compare present conditions in both urban and suburban communities with those existing a few years ago. The old homes were neat, but they were selfishly so, while the work done to-day is done with a double purpose—the satisfying of a self-respecting pride in our homes and the desire to make the world more beautiful for every person that travels the highway, even the stranger within our gates.



A FARM HOME WHERE SHRUBS AND FLOWERS ABOUND

Genealogies Found in a Garden

By MARIE VON TSCHUDI

"Slight not a dwarf for his size
For he may have a giant for a friend."

THE casual visitor to a garden is apt to be impressed by its external appearance and to criticise perhaps not only its lack of artistic and formal arrangement, according to fixed rules for formal gardens, but also its riot of many colors that "jump at the eyes" and leave them bewildered and unsatisfied. Nevertheless any garden is interesting when one regards it with eager well-trained eyes, for there family trees can be found and pedigrees traced of Nature's great society, interesting and absorbing enough to occupy one a lifetime. If one never had a grandmother, when he was young, who had a garden where trees and flowers, shrubs, vines, vegetables and even weeds grew in opulent profusion then he has missed some delightful memories and experiences. I was doubly fortunate, for I had a grandmother who also had possessed a grandmother who owned a garden from which they had gathered wisdom as well as fruits and flowers and so I fell heir to many a bit of ancient and now almost forgotten garden lore connected with the things that "just grew" there. I learned that among the trees and plants, there was an aristocracy as high and mighty, as blue-blooded, so to speak, as that which once separated king from swineherd, Bramin from Pariah.

I also learned that Time's democracy had connected the lowly shrubs and vines with the lordly trees in many curious unions, though nevertheless the parents and children, cousins, uncles and aunts even of collateral branches of the same family lived in harmonious accord. Here in the world of nature was a genealogical record of ancient families more extended than the "Doomsday Book" of the first great William of England, more intricate than "Burke's Peerage" and far more interesting reading than the record of families in the book of Genesis, for in the Garden's book even he who runs may read. I remember a climbing vine that particularly interested me. It twined around one of the posts of the rustic fence and I watched it at first with no little solicitude, tacking little slips of cloth across the vine to hold it in place. From the time that its yellowish flowers appeared, until its ripe fruit fell or burst in the hand, my attention and interest never flagged and I was taught to call it the balsam-apple and that it was related to the gourd vine, not far off, to the water-melons, muskmelons, pumpkins and squashes, to the jewel-weed in the meadow and remotely to the lady-slipper and touch-me-not in the garden.

The ovate fruit, tapering towards each extremity,

when ripe was from eight to ten inches long, not unlike a cucumber in shape. It was of a gorgeous scarlet and orange color and was covered with little nodes or warts, an annual climbing plant, a native of the East Indies it was prized for its fruit and esteemed for its vulnerary qualities, but in its wild state, before it came to grow in this mild-mannered grow-if-you-please garden, these nodes were prickles resembling, though not so formidable, the prickly coat of that true American citizen, the cactus, the wild gooseberry and other unshaven fruit. The balsam-apple was heavy for the small vine to carry, the straps holding it none too firmly, but I paid it childhood's greatest compliment, thinking it looked "good enough to eat." Appetite was "whetted by the bare imagination" of what a feast it would make, but as I was forbidden to eat of all the fruits of the garden, without permission, I was told that its attractive appearance did not make it an edible factor of a feast, any more than its glittering yellow made it gold. It was opened in due time and revealed an exterior soft as a cushion, holding large red seeds that were covered with a sticky substance having an aromatic odor. These were put into a wide-mouthed bottle containing alcohol, that their balsamic properties might be extracted and which they soon turned to a golden amber color, a glowing tribute to the warm sunshine that had perfected them, and the first time anyone of the household was hurt or bruised or had a cold he was rubbed vigorously with this magic fluid, thus demonstrating its power to relieve pain. Compared with the more powerful balsam remedies known to the present *Materia Medica* its curative properties were not very active, but I can recall the sweet odor of that aromatic liniment even now, that true to the name given it, soothed and healed and one somehow never regards the hurts much when the cure is found for the plucking. It is a long genealogical record to search in order to find all the different genera, species and families connected directly and indirectly with this little vine whose real name is *Momordica balsamina*. It belongs to the *balsaminaceæ* family of balsam-bearing trees, shrubs, vines and flowers—and also to the *cucurbita* and *cucumis* divisions of the gourd family.

One of the many vines in the garden growing near the balsam-apple was one called Queen Anne's pocket-melon. It produced a gourd-like fruit, highly and delightfully perfumed, of the size and shape of a large lemon, somewhat flattened at the ends, with

Genealogies Found in a Garden

cinnamon-brown spots on its shiny yellow face resembling large moles or patches. In removing the warts that have been a characteristic distinction on the faces of many of its relatives in the melon families, Nature's dermatologist had left the sweet gourd these spots, which might be called facial blemishes by some and by others *grains-de-beauté*, as a physical legacy, a reminder of its race and it wore them with the seeming grace of a seventeenth century belle bedecked with patches and redolent with sweet odors. When ripe this fruit, sometimes also called pomegranate gourd, was placed in the house for ornament and fragrance. Closely allied to the balsam-apple through its relatives in the *cucurbitaceæ* family is the *cassabanana*, a very quick-growing perennial vine, that will climb from thirty to fifty feet in its native country, South America, and in Mexico and the West Indies it is planted for ornament and its fruit made into preserves. The fruit is slender, smooth, long and nearly cylindrical, resembling vegetable marrow, its relative among the squashes. It is of an orange crimson color, and has a strong, aromatic odor. The *cassabanana* is called the curuba of the tropics, and grown for its ornamental fruit which is said to make an edible preserve. It is well worth cultivating for it grows luxuriantly under proper conditions, and flourishes under glass if one has room for it. Another vine relative in the garden, connected on the melon side to the gourd family was the Chito (pronounced keeto), also known as the orange, mango or garden lemon, the melon-apple, vine-peach or vegetable-orange.

It is less robust than the muskmelon, with smaller leaves and bears a fruit the size, color and shape of an orange or lemon. The fruit has no muskmelon odor and although the flesh is like the cucumber it was not used except to make preserves, or mango-pickles and was pulled before it ripened. The seeds of the watermelon (*Cucurbita citrullus*) have been employed as a domestic remedy in many countries. In the shells and kernels of the seeds taken from the pumpkin (*Cucurbita pepo*) have been found a resin and a dark reddish oil—the seeds have a sweet aromatic smell and taste and dried or parched are very palatable and are eaten with a relish by the poor of Southern Europe. The cucumber (*Cucumis sativus*) was cultivated and eaten as a vegetable before little Moses was found in the bulrushes. Its seed, together with the seeds of the pumpkin, the muskmelon (*Cucumis Melo*) and the gourd (*Cucurbita Lagenaria*) are known as the greater cold seeds and kept among officinal remedies by apothecaries and are prescribed for many different affections. Pliny tells of a discovery to preserve the cucumber in vinegar. He might have added another volume to his "Natural History" describing the pickling and preserving of the various members of the cucumber family if he had lived in the twentieth century.

But a more remarkable plant than any I have mentioned is the squirting cucumber of the species, *Momordica elaterium*. A native of Southern Europe it is cultivated in England for its medicinal qualities and yields about one half ounce of a substance known as *elaterium* from a bushel of its fruit. In appearance and habit it resembles the different vines I have referred to, trailing on the ground but without tendrils. It has yellow flowers and produces a small cucumber-shaped fruit an inch and a half long and an inch thick, of a greenish color and covered with stiff hairs or prickles. If one were to touch it when ripe and before it falls, it would separate immediately from the stalk and eject with considerable force a number of seeds and a quantity of poisonous juice to a distance of two or three and sometimes twenty yards. It flies to pieces in this way, when it separates naturally from the peduncle and in this choleric, *noli-me-tangere* characteristic it resembles the lady-slipper and touch-me-not of the *Impatiens Balsamina* family. Our garden had a variety of this balsam family now considered by botanists as related to the geraniums, called the camelia-flowered balsam. This plant bears flowers that range in colors from white to dark scarlet and yellow. They are of easy culture and, germinating quickly, if started in May, should yield flowers by July and bloom then until frost. If service is more to be praised than beauty I must not omit to mention the garden's prickly-fruited or gooseberry gherkin, known as the Jerusalem cucumber of the West Indies. The fruit resembles diminutive sea-urchins offered for sale on the quays of Marseilles or like little green hedgehogs, headless and tailless, swinging on the vines for sport. After describing so many relatives of the little balsam vine and leaving out so many rare and curious ones for want of space, one finds himself interested in its tree connections, whose family name is *Balsamodendron*, from *balsamon*, balsam, and *dendron*, tree.

It is not the purpose of these articles on genealogies in a garden, to study too deeply the various characteristics that separate genera into species and species into families, but to trace the history of many seemingly insignificant plants to their original habitation and from their names find their kindred among others greater and more celebrated.

The name *balsamina* applied to a group of vines and shrubs, indicates that they have some physical distinction, however slight, some balsamic odor or healing quality, similar, though less powerful, to the gums and juices yielded by the balsam trees and in studying the members of this extended family group, giants when compared to their smaller and humbler relatives and renowned for their beauty as well as for their utilitarian qualities, one realizes that even in a garden it is not well to slight a dwarf for his size, "for he may have a giant for a friend."

Buying Trees

How to Buy—How to Plant—How to Care For

By L. J. DOOGUE

IN purchasing a tree, due regard should be given to the importance of making the tree fit the place for which it is intended. That is, the situation for planting should be suitable as to soil, exposure and character of neighboring plantings. All trees do not thrive on the same treatment and we should be sure that the kind we are to plant will be given as good a start as possible. After deciding on the kind we prefer, and being sure of its suitability, the next step is to get the best specimen of the desired variety.

Making the Purchase.—For the man not very familiar with nursery stock, the work of getting a tree is not the simplest. It's more or less of a pig in a poke, with a corresponding amount of dissatisfaction and worry, even before the results to judge by have evidenced themselves, that is, before the tree has leaved out and shown that it is healthy. Catalogues all advertise the best trees in the world for the lowest prices. They are all superlatively good. To prove this, all that is necessary to do is to look at the pictures and read the testimonials. It is singular, but the point of emphasis in all the catalogues is, that—"we sell lower than anyone else."

Sure, and there's where the colored gentleman is hiding in the wood pile. The spirit of commercialism runs riot from the ten cent counter to the nursery. The everlasting looking for bargains!

The Kind not to Buy.—Nurseries have many grades of trees for many prices. All sized purses can be accommodated, but in reality there is more profit in selling a bulk of cheap trees than there is in selling the more expensive ones. Trees sold for a very low price have had but little care. They have cared for

themselves from the time of planting in the nursery, until sold. When such trees are sold a plough is run down the row and they are turned out and packed up in short order. It stands to reason that during the time these trees have been in the nursery, they have made roots that have run to considerable distances and when the plough comes along these roots are destroyed. That does not mean that the

tree will die when placed in the ground in its new location, but it does mean that its chances for making a vigorous tree are many times smaller than a tree that has been cared for during its nursery stay.

The Kind to Buy.—Compare the roots of a tree as described above and one that has been properly grown and for which a good price has been paid. No better or more convincing argument can be offered. No words of explanation will be necessary. The roots of a tree are its life. The tiny little fibrous bunched mass of feeders are what mean successful growth.

A tree with these is what you want. To get this root system, means that the tree has been

the subject of much attention while in the nursery. It has been grown for seasons, it has been trained as to growth and it has been shifted many times. This shifting induces a growth of feeders close to the tree. When such a tree is dug up and shipped, even to very great distances, no anxiety need be felt for its safety. Such a tree will grow when again planted. Such a tree is not ploughed out like potatoes in the nursery, but it is carefully dug around and, as carefully, wrapping is put about the roots when about to be shipped. Five thousand field grown trees can be turned out as soon as one hundred of these. To reach this condition of perfection means that money has been spent



DUTCH ELM

Buying Trees



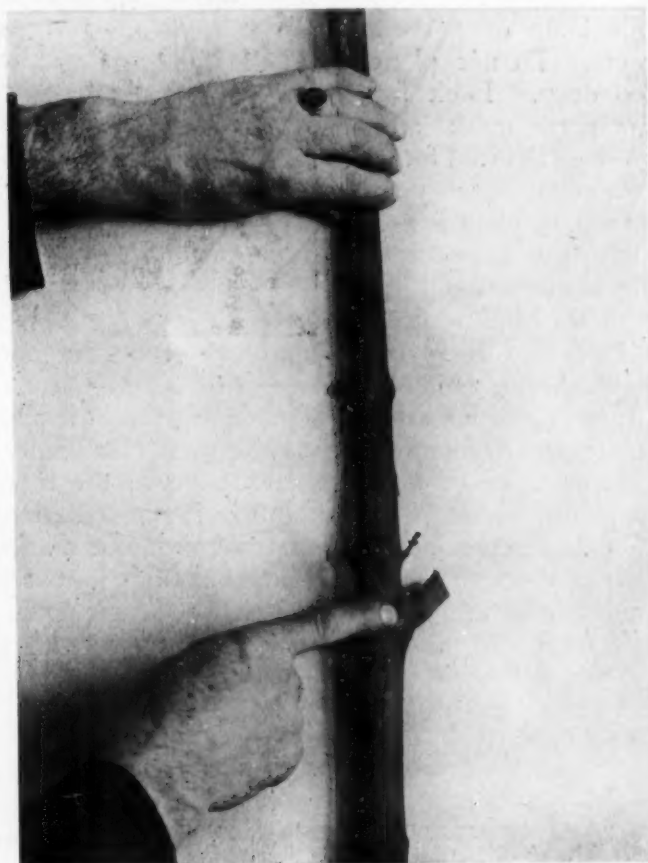
Vigorous roots should be fibrous like these and must not be injured in spreading



Prune the roots carefully, making a smooth cut wherever an injury or a broken root is found



Spread the roots out and work the loam well in about them



Make cuts close to trunk. This stump rots into the tree

on the labor required for the work. This is the kind of a tree to buy.

The Price to Pay.—If a person is sure they want a tree the price should be a second consideration. If you should apply to a first class nurseryman,—note the “first class,”—you should ask him if he has a tree such as you want. Then engage the tree, or trees, and afterwards ask the price.

Following this line of procedure you will receive better treatment than if you followed the usual way of asking the price first and quality last. A nurseryman would rather sell you a good tree than a poor one. They are great advertisers and there is no advertisement like a pleased customer.

► *How to Plant your Tree.*—When your trees reach you from the nursery get them into the ground without any delay; plant them the same day. If this is not possible heel them in, that is, pile loam over their roots. Don't plant too deep. Look for the earth mark and go by that. If the loam where you intend to plant is not up to the standard dig it out and fill up with the kind needed.

Use the best of loam. Make the hole large. If a small amount is put in at first, subsequent enlargement of loam area may be profitably made.

In unpacking a tree, use care to guard the roots. In planting make the hole, and in it stand the tree, afterwards spreading out the roots without tearing them. Work the loam well in about these roots and gradually fill in to the proper height. Water poured

on will help wonderfully as it carries the loam to every part, filling the spaces compactly. As a further protection to the roots after unpacking, they might be puddled, that is, they may be dipped in a mud puddle. This is recommended. You cannot afford to neglect any little attention in this matter.

After it is Planted.—When you have succeeded in getting the tree safely in the ground make a little

basin about it and for a few weeks give occasional waterings. During the heat of the summer this will be very necessary and the beneficial effects of such care will later manifest themselves. Nothing is ever lost by care with young trees. A strong stake should be driven well into the ground close to the trunk and the tree tied to it. A piece of rubber hose cut into two inch pieces and placed between the tree trunk and the stake will save the bark from injury. This stake must be firm enough in the ground to prevent any great oscillation until the roots have taken hold firmly.

Tree Guards.—Chicken wire makes a slightly and practical tree guard in most cases. Of course

where there is liability of accident from teams, a heavier guard must be used. Don't delay putting up some sort of protection. The wire mentioned can be put about the tree leaving a space of a couple of inches all around; the guard to be steadied by bands from the guard to the tree and back to the guard. The bands to be placed opposite each other.



HEELING IN TREES IN NURSERY

The Old Fence Row

There change has never set its seal;
And squirrels as in days of yore,
Along the worm-fence panels steal,
To find their winter store.

—Alonzo L. Rice

Early Poisonous Wild Flowers

By ANNIE OAKES HUNTINGTON

IN the succession of wild flowers which enhances the beauty of our fields and woods, through the spring and early summer, we find a rich and varied flora. In it are included many plants with fatal poisonous qualities, when taken internally, although comparatively few of them are injurious to the skin when they are handled.

One of the first of these poisonous plants to appear in early spring, in remote, wet woods and thickets is the Jack-in-the-Pulpit, *Arisæma triphyllum*. The leaves are three-foliate, and the flowers are most curious, with a brown spadix,—or fleshy spike of flowers,—covered by a loose, curving, green spathe, striped with purple and brown. The fruit, which matures in late summer, is a cluster of brilliant, scarlet berries. The large, flat tubers are acrid, and poisonous, and with some persons produce inflammation of the skin, if they are dug up and handled.

Another early moisture-loving plant, and one which, unlike the retiring Jack-in-the-Pulpit, forces itself upon our attention is the marsh-marigold, *Caltha palustris*. It blooms in April and May and spreads like a cloth of gold across wet meadows. It is a stout, smooth plant, with broad, glossy heart-shaped leaves, hollow stems, and conspicuous yellow flowers. They are much sought after by children, who should be warned not to put the stems in their mouths, for the plant contains two poisonous principles, jervine, and helleborin, which act on the system as purgatives, and cause discomfort and pain.

Closely allied to the marsh-marigold, and another member of the same crowfoot family, is the little, white windflower, or wood anemone, *Anemone quinquefolia*. It is a small, low-growing plant, with a frail, solitary flower of rare beauty,—white, faintly

touched with pink,—and with leaves divided into three, or five leaflets. It grows on the margins of woods, and blooms in April, before the foliage of the trees shade the ground. To certain people the acrid juice of this plant is somewhat irritating to the skin, and like other species of the family it contains the toxic principle anemonin, although in a less degree. The *Ranunculaceæ*, or crowfoot family, besides including the marsh-marigold, and wood anemone contains a large genus of dangerously poison-

ous plants,—that of the familiar yellow buttercup. All the buttercups are poisonous in varying degrees, and contain in all parts an acrid juice, and a yellow oil, which can be extracted from every species. The celery-leaved, or ditch crowfoot, *Ranunculus sceleratus*, is the most virulently poisonous member of the family.

It is a stout, freely branching buttercup, with thick, deeply lobed leaves, and flowers comprised of pale yellow petals which scarcely exceed the green calyx. It is found in swamps and wet ditches from New Brunswick to Florida, and westward, and it also grows in Europe and Asia. Death comes from taking the plant internally, and the juice blisters, and causes itching between the fingers of many persons, when the plant is handled. The small, green, spiked fruit is very acid and sharp, and should be kept from children, who seem to enjoy its peppery taste.

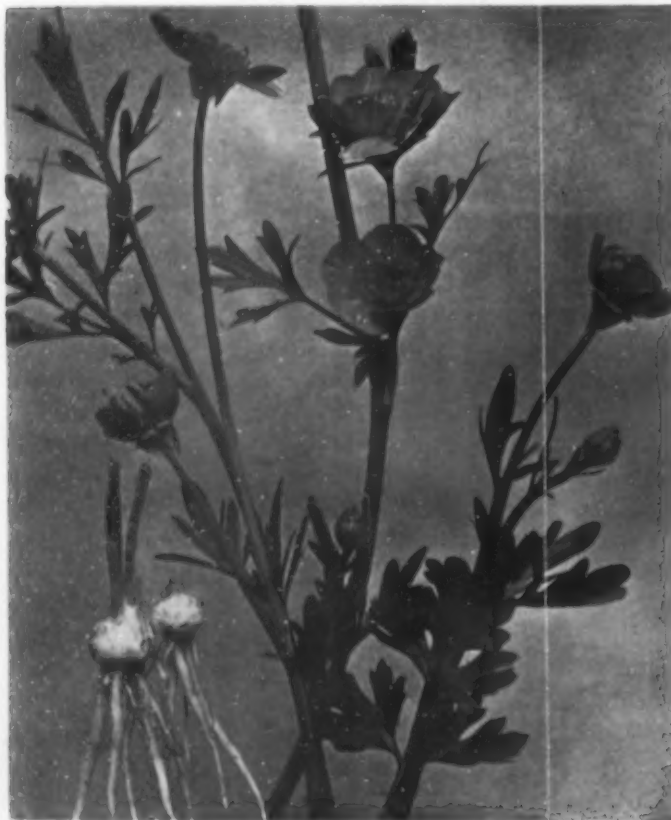
The tall, or meadow buttercup, *Ranunculus acris*, is another well-recognized poisonous species. It is found in fields and meadows, and is a tall, hairy plant, distinguished from the celery-leaved crowfoot by the flowers, which have petals two or three times as long as the calyx. The bulbous buttercup, *Ranunculus bulbosus*, the creeping buttercup, *Ranunculus repens*, both naturalized from Europe, are, like the tall buttercup, other poisonous varieties.



MARSH-MARIGOLDS

The cows of old-time picture books were usually painted grazing in flowery meads of yellow buttercups. As a matter of fact, however, cows do not eat buttercups; and if under rare and peculiar conditions they are forced to accept them for food, their mouths straightway become sore and blistered with ulcers, as any farm-hand can testify. The poisonous principle is dissipated by drying and heat, and the plant is consequently harmless to cattle when it is cut, and dried in with the hay.

Not long after the marsh-marigolds have withdrawn their resplendent gold from the low meadows, they become beautiful again with the royal purple of the wild blue flag. This iris, *Iris versicolor*, is found growing on the borders of swamps, and in wet places from Newfoundland to Florida, and westward. It is a strong, vigorous plant with long, sword-shaped, grayish-green leaves, and violet-blue flowers, variegated with yellow on the claw, and delicately veined with purple. They make their appearance in early summer, and are not only one of our most familiar native wild flowers, but they are also one of the loveliest and most decorative blue flowers in existence. The Japanese delight in the unrestrained, wide-spreading flare of the iris flower, and employ it constantly in various forms of conventionalized design. The perennial, fleshy roots have a nauseous, acrid taste and like forms of the cultivated iris, contain the poisonous principle iridin, which possesses cathartic and emetic properties.



THE BULBOUS BUTTERCUP

The Perfume Garden

BY EVELYN PRINCE CAHOON

MANY a person, not appreciative of the beauty of flowers, is very fond of the fragrance of them, and to the true lover the fragrance of flowers is always an additional and supreme charm. Some of us will have nothing in our gardens that does not contribute a distinct and pleasing odor.

There are flowers bearing fragrance that is strong yet seems confined close to the flower itself, so that the act of deliberately smelling is necessary to get at the odor. The carnation is one of these, and the pansy has a strong, peculiar and wonderfully refined fragrance that is not detected a little distance from the flower.

There is the other class containing the petunia, Nicotiana and the mignonette whose odor seems more volatile and is diffused, especially at evening when the cool air settles, over the entire garden.

There is a great group of starry white Nicotianas on each side of my garden gate, which in the evening perfumes the air for half a block around.

It is an easy step,—perhaps in the scale of perfumes only half a step—to the great central bed of double, white petunias beyond. But best is the atmosphere of mignonette near the veranda, it is not so obtrusive, and harmonizes better with the occasional odors wafted in from the other flowers. A bed of ten-weeks stock is sweet and soothing.

Lilies-of-the-valley and narcissus we have together down by the garden fence, in a long fragrant bed; but closer to the fence is a heavy growth of sweet peas, and so—from summer's beginning to its end—that is a place where a fragrant nosegay may be found.

During the summer we gather quarts of petals of various fragrant flowers, drying them slowly, which are destined to fill various pillows and sachets for Christmas. Each morning, as soon as the dew is off, we make it a rule to pick every blossom that is a day old, leaving only the current morning's blooms.

The blossoms are not the only part of the plant we want. There are plants and plants, and plants of rose and skeleton leafed geranium; there are lemon verbenas, southernwood, sweet-fennel, sweet-fern, and a great bank of rosemary with its aromatic leaves.

And so with Nicotiana, petunia and mignonette, with pansy, carnation and rose, with narcissus, lily-of-the-valley, lemon lily, tuberose and sweet pea, ten-weeks stock and plenty of sweet alyssum and verbenas, with the white honeysuckle over the porch and grape bloom in the arbor in June, and always an abundance of the aromatic leaves, sweet-fennel and fern, southernwood, lemon verbenas, and the geraniums, our garden is a delight to more than the sense of sight, and truly a garden of perfume.

A Great National Apple Show

By AUGUST WOLF

AN orchardist, stock-grower and banker, Michael Horan, of Wenatchee, Washington, is the apple king of America, having gained that distinction by capturing the chief prize of \$1,000 for the best carload exhibit at the National Apple Show in Spokane, December 7 to 12, when \$35,000 in premiums was awarded to competitors from various parts of the United States. Washington growers took fifty-eight first prizes, Canada captured fifteen, eleven went to Idaho, one to Montana and the rest were scattered. Much to the disappointment of the management and the thousands of visitors, representing every State and province on the continent, practically all the fruit sent from the States east and south of the Rocky Mountains was spoiled in transit. The apples had been taken out of cold storage and were sent to Spokane in heated cars, thus making them unrepresentable. To show the displays would have been manifestly unjust to the districts, hence, it was decided not to place them in competition or on exhibition, though prize moneys, medals and diplomas were forwarded to the growers from every State entered in the district contests. Although England, Norway, Germany and Japan all entered exhibits, none of them arrived in time. British Columbia was the only foreign country represented, and outside of Washington won more prizes than any other State.

Oregon had seventy boxes of fruit on exhibition. These apples had been shown at the Hood River fair and the fruit fair of the Oregon Horticultural

Association at Portland, where some of them won first and second prizes. The exhibit included Ortle, Spitzenburg, Yellow Newtowns, a favorite of the Hood River Valley; the Red Cheek, and several others of the favorite varieties. The display was awarded a silver cup, although it was not entered in competition. A special prize and diploma were awarded to Luther Burbank of Santa Rosa, California, for a display of thornless cactus, passion fruit and rhubarb.

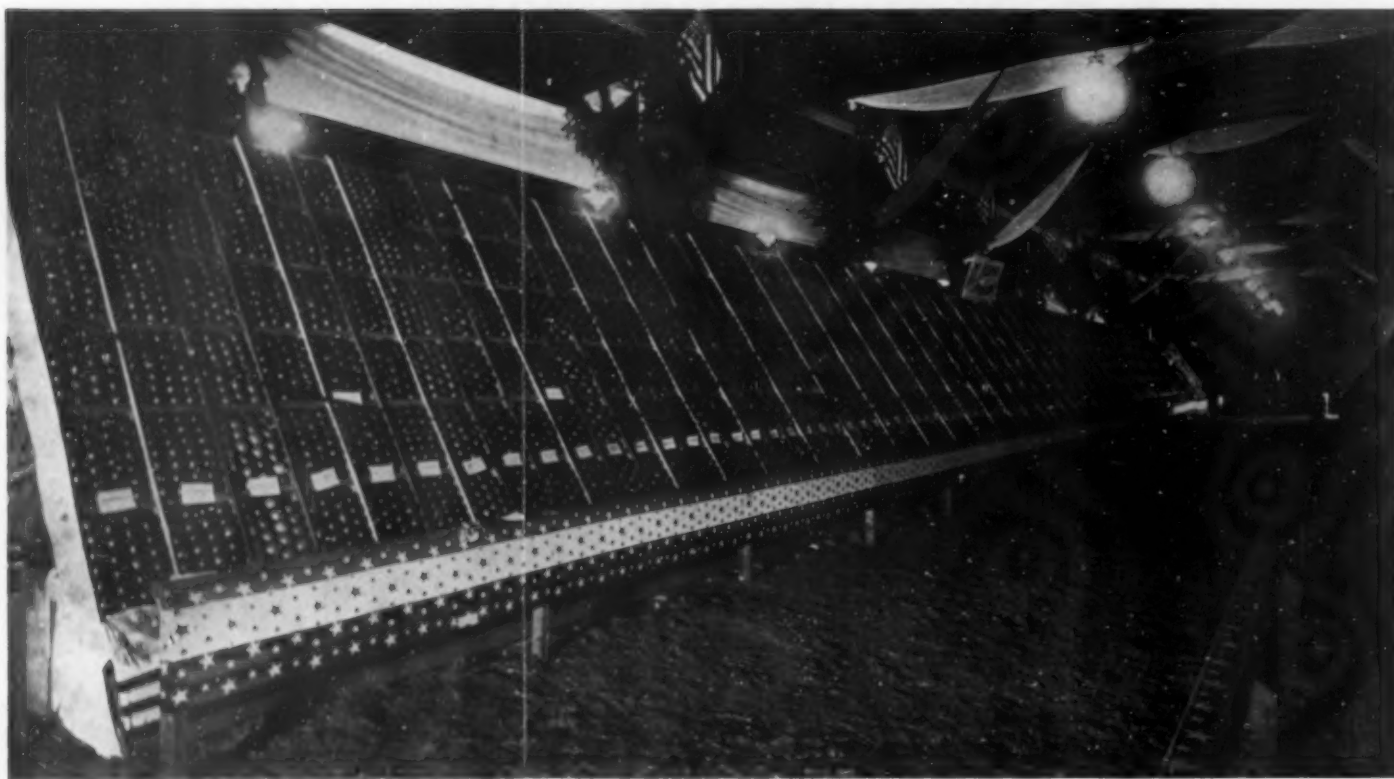
Records at the stiles showed 102,762 paid admission tickets, 4,000 season tickets and several hundred press and complimentary tickets, bringing the total attendance to 107,000 for the week. Apples of all sizes and varieties were exhibited in the highest state of perfection and with all the advantages which expert packing can produce. There was one carload of fruit covering 1,500 square feet of space, in which 70,000 dark red apples of uniform size and shade spread out in an expansive slope. On another was seen the bizarre effects of brilliant yellows

and bright reds alternating in five box lots, while in other places the rich Arkansas Blacks burned with a dull purple fire against a background of lighter shades.

There were State, district, county and individual exhibits by the hundreds, and it is likely that never before has man's genius contrived so many ways of utilizing a single fruit in such a diversity of designs. There was the Stars and Stripes in three colors of apples, a white salmon of true form and almost natural color and figures and devices, jars, baskets,



Wolf River apples grown by W. R. Mar, of Wenatchee, Washington, who received the chief prize for the largest fruit. The apple on the left side of the photograph weighed thirty ounces, and measured seventeen and a half inches in circumference. The one on the right side weighed thirty-four ounces and measured twenty inches, but was disqualified by a bruise



Mixed carload exhibit of Jonathans, Winesaps and Spitzenburgs which received chief prize of \$1,000 at the National Apple Show, and won the title of Apple King of America for Michael Horan of Wenatchee, Washington

barrels and boxes of apples, and just heaps of apples piled up in plentiful confusion. There were 940 plate exhibits.

The show was one of surprises and charm. It was more than an entertainment; it was more than educational; it was inspirational. As an observant visitor remarked: "It comes with clearness and force to the mind that apple growing is a delightful and profitable industry, capable of many-fold and speedy development. Here is the product from orchards already in bearing, but young orchards many times larger than the bearing orchards are now in the soil and under cultivation.

"We know that the product will be greater next year than this year, and greater every year thereafter for the next decade, even though not another apple tree should be planted. But more of them will be planted every year, and the expectations held out in their addresses by the speakers at the opening exercises of a coming product that will exceed in value the present returns from wheat-growing, mining and lumbering are not fanciful or improbable."

In addition to the barrel, box, basket and plate exhibits, demonstrations by spraying, packing and measuring machine concerns and exhibits of apple parers, cider presses and nursery stocks, seventeen young women of the domestic science department of Washington State College, were in attendance the entire week and taught housewives how to prepare apples in 125 different ways. The young women occupied an entire floor of an auxiliary building and

instructed 10,000 persons during the week. The receipts go toward equipping a new laboratory at the college. Oregon Agricultural College had Professor C. A. Cole and two assistants demonstrating the various methods of apple packing and dust and liquid spraying.

There was keen rivalry in the carload competition. The entries were: M. Horan, Wenatchee, Washington; H. M. Gilbert, North Yakima, Washington; Kress & Carey, Hamilton, Montana; C. C. Georgeson, Prosser, Washington; H. S. Simmons, Wenatchee, Washington; T. R. Tannatt, Farmington, Washington. The latter had three carloads.

Mr. Horan's exhibit was a mixed car of 630 boxes or 50,000 apples with which he scored ninety-six and one-quarter out of a possible 100 points. H. M. Gilbert, of North Yakima, Washington, formerly president of the Washington Horticultural Association, was second with a car of 70,560 Winesap apples, scoring ninety-three and three-quarter points and winning \$500, and Messrs. Kress & Carey, of Hamilton, Montana, were third with a car of McIntosh Reds, scoring eighty-five points and winning \$200 and 1,000 standard apple trees. In addition to the foregoing the judges distributed premiums amounting to \$33,300 in other competitions, representing practically every apple belt in the country.

Mr. Horan's fruit netted him approximately \$7,000, as in addition to the chief award he received prizes of \$200 offered by W. T. Clark, president of the Wenatchee Canal Company, and \$22 from a

A Great National Apple Show

spraying company, and sold his fruit for \$10 a box. James J. Hill, chairman of the board of directors of the Great Northern Railway Company, and his son, Louis W. Hill, president of the system and head of the National Apple Show, paid \$1,500 for 150 boxes, which were sent to England after being exhibited in New York, Boston and Eastern points. The Hills will present some of the fruit to the royal family and other friends in England.

Mr. Horan is a native of Stockbridge, Massachusetts, which he left in 1876 to engage in breaking horses in California. He came to Washington in 1888, where he grazed cattle on the present site of Wenatchee and the valley, buying thousands of acres of land at fifty cents an acre. He set out an orchard of fifty acres in 1900. It contains 7,000 pear trees, 1,500 peach trees and 1,340 apple trees. His crop in 1908 amounted to 8,000 boxes of

apples, 7,000 boxes of peaches and 7,000 boxes of pears. The apples were picked by George Drinkwater and packed by George Cruikshank, to whom Mr. Horan gives all the credit, adding:

"This is the first time I ever exhibited fruit. The apples were picked by one man and were packed by another. Our average was ten boxes a day, requiring two months to prepare the exhibit. Every care was taken to pack without blemish, bruise or scratch. Before the award was made I would not have taken \$5 a box for the apples. My orchard should yield 14,000 boxes of pears, 14,000 boxes of peaches and

16,000 boxes of apples in 1909. I had no practical knowledge of scientific fruit growing until a few years ago. At that time the land was worth \$100 an acre. That was in 1900 when the first trees were set out. I have refused an offer of \$2,000 an acre or \$100,000 for the tract. I would not take \$250,000 for the orchard to-day."

Mr. Gilbert, winner of the second prize in the carload competition said he entered a straight exhibit of Winesaps, running four to a tier or 112 in a box for the purpose of showing visiting Easterners what a carload looked like. He had more than a car of four and one-half tier, but chose the largest and best. Of his orchard at North Yakima he said:

"The orchard is set out where ten years ago sage brush was growing. At that time I cleared twenty acres and set out a portion of it to apple trees, growing garden truck between the rows. In the third year I finished setting out trees and put in apricot, peach and pears as fillers. This year, however, I cut out all the peach trees. The orchard consists principally of Winesaps, because this is one of our best commercial apples, but there are also Arkansas Black, Spitzenburg, Missouri Pippin, Jonathan and Ben Davis. In the last six years the peaches have yielded \$1,000 an acre. The entire orchard this year yielded 800 boxes of pears, 3,500 boxes of peaches, 300 boxes of apricots, 7,000 boxes of apples and some cherries. The exhibit at the show represented

(Continued on page 5, Advertising Section.)

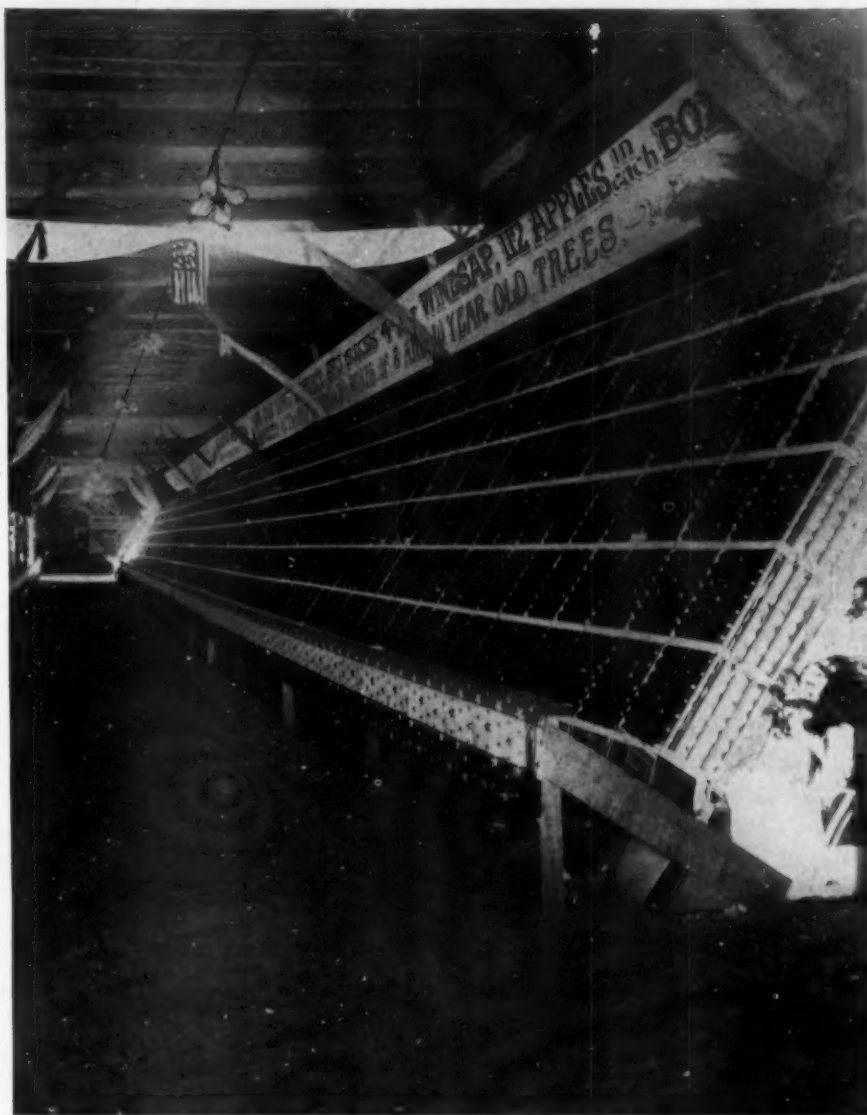


Exhibit of 70,560 Winesaps by H. M. Gilbert, of North Yakima, Washington, who was awarded the second prize of \$500 in the carload competition
Note the uniformity in size



The Appearance of the Car

Notes on its Care, Handling and Embellishment

By FRED D. TAYLOR

MANY motorists having made a run in wet weather and who bring the car in plastered with the sticky wet mud of the macadam road seem to think that all that is necessary is to "wash it off," so after directing the general handy man to wash it when he has time, turn their attention to more "important" and interesting things.

Cold shivers would run down the backs of lovers of horses and fine carriages could they see the manner in which motor cars are cleaned. They have lived in a sphere where customs have become fixed and where trained stablemen are available. Many motorists never have had horses or never became interested in them. They also seem to have become indifferent in seeing finely finished bodies scratched and marred, an inevitable result of the rapid pace which is taken on long runs. The devices of a machinist for cleaning a vehicle are quite foreign to those practiced by men who have been brought up to preserve paint and varnish.

The machinist will clean a dusty or even muddy body with cotton waste without "turning a hair," as the saying is, but let anyone assisting him put a stilson wrench on a nut or union of his beloved engine and the offence is unpardonable.

The men belong to different schools and the motor car to both, often causing the predicament of stableman running a thousand dollar machine or a machinist caring for a body equally costly each with great confidence in his dogmatic knowledge of how it should be done.

As many cars are used in the work formerly done

by station wagon or brougham, where appearances and smartness are considered, I submit, though, with some hesitation, that the care of paint and varnish on a car should receive some attention.

If the car, instead of being left till the mud dries, be immediately sprayed with a hose, using the hand to flatten the stream, thus preventing the solid stream hitting the mud with force, most of the mud will come off and the rest be left in a condition in which the sponge will take it off without harm to the finish. After spraying the car, starting with the upper body and using the sponge frequently, with a slow stream flowing from the hose held in one hand for that purpose, the hood or top, body, bonnet, and top of fenders should be cleaned, touching lightly and squeezing the full sponge on the mud rather than rubbing the dirt across the surface.

Glass should not be touched except by water from the hose for fear of carrying grease on it which should at all times be avoided and in fact grease should be kept from the body also. Next dry these parts completely with a chamois, rinsing it thoroughly in clear water and wringing it out now and then to remove any grit, after which the running parts below may receive the same attention using separate sponge and chamois on account of the unavoidable grease here met with. Jacking up the wheels will be quite a convenience in washing them, allowing them to turn as each spoke is cleaned and swinging, to get back of the front ones.

Anything except cold water is harmful to varnish and should not be used in washing. A temperature

The Appearance of the Car

of about sixty degrees Fahrenheit is about as low as is considered good for varnish and as cold as the garage should be allowed for the best storage. Washing in the sun is not a good plan nor the use of a hose with a metal nozzle which sooner or later will strike and injure the finish.

When such a proceeding seems hopeless, as after a run over a freshly oiled road which is still damp, a good wagon soap may be tolerated on the chassis and under body, washing a part and immediately rinsing the soap off before going on. Gasoline should not be used for this. To clean off grease running out of the hub or where grease is on varnish, generally on the rear axle structure, a damp sponge of turpentine will do no harm.

A clean sponge, dampened in warm water, will clean the windows and a paste of whiting allowed to dry on the glass will leave a fine polish on being rubbed off with chamois. The chamois should never be put in hot water; wet slippery elm is the nearest approach to the result. All brass work should be dried and polished immediately. After polishing the brass on a car one often wonders what it is all for.

This part of motoring if attempted by an enthusiast will supply all the benefits of a gymnasium; a pair of rubber boots and a long rubber apron covering the chest will keep him quite dry while soapsuds and water will restore him to his former proud position of expert on motor vagaries with an appetite. One notices many things about the construction of the car while cleaning it, the brakes and drag links and knuckles of the steering gear (two of the most important parts of the car, involving its safety), receiving attention among others.

Motoring parties are always conspicuous even though now so numerous and having become used to this some are inclined to become careless of appearances and indifferent of what the audience think. The impossibility of keeping neat on long fast runs associates carelessness of appearances with motoring but the suggestion that the privacy of open country be taken advantage of in which to be comfortable and happy may be worth considering.

In town a certain dignity might be attempted, no toes peeping over the body of the tonneau or feet resting on the dashboard or arms or wraps hanging over the sides, smoking limited to one person, preferably not the driver. The driver, even the professional, need not sit stiffly as in a carriage with horses but should not have the position of sinking in his seat, which is so good on a tour for change of position, but an erect, comfortable position denoting easy confidence and alertness without intensifying the latter by leaning forward over the wheel.

The left hand should hold the wheel and a good custom for the novice to follow is to associate the steering with the left hand.

A fifty horse-power touring car running with the muffler cutout, on a smooth level road is ludicrous and should it be in a speed trap, anywhere from ten to twenty miles is added to what the constable would otherwise estimate the pace to be. The cutout is useful when listening to the exhaust of the cylinders, indicating whether all are firing—by retarding the spark this is made more distinct—and as a warning at crowded crossings it is effective. The standard honk of the automobile horn readily associated with timely warning is, however, much more practical, not causing the panic unusual noises are apt to create in the "mere pedestrian." The recollection of innocently running a car up to a crowd of people about to board a street car, and stopping near them to wait till there was room to pass, suggests this, as the releasing of the clutch and resulting speeding up of the engine and imperfect muffler of an earlier design sounded to one man directly in front as though a machine at high speed was close upon him. Of course his dodging backward and forward while the car was at rest was funny and it was hard not to laugh, especially as he became angry and threatening immediately afterwards. But sometimes people have no doubt noticed a face looking sternly over the wheel when they have blocked the way, and mistaken for impatience what was an effort to keep from laughing.

Therefore the novice should practice facial control, as frequently the situation, while amusing to him may be very trying to others. A smile is particularly annoying on the face of the victor in those little tests of speed which add spice to a run now and then. Retaliation is sometimes indulged in by the vanquished—and that time-honored joke of "reversing the wires on the timer"—is perpetrated on the victor, which, he discovers on the road after a satisfying lunch. While not attended with serious consequences, the replacement is accomplished at the expense of time and some display of temper.

Whistles, bells, quacking novelties and sirens seem out of place in town although in the country they may be used to advantage, but even there the well-known honk has the conventionality of years of use to recommend it to the owner of a fine car.

Among the purely ornamental novelties of motor-dom the small gilt figure of an eagle has almost entirely monopolized the place on top of the radiator and if made part of the cap to the opening makes a very good handle. This is a very pretty custom if the figure be small, and quite patriotic where the bill holds a narrow ribbon of the national colors. There are also some delicate looking glasses for holding flowers, made in graceful designs with metal attachments, to be used in closed cars which are all very pretty, though many would prefer to carry that extra weight in tools.

THE EDITOR'S TALKS AND CORRESPONDENCE



The Editor, Margaret Greenleaf, wishes to extend a personal invitation to all readers of *House and Garden* to send to the Correspondence Department, inquiries on any matter pertaining to house finishing and furnishing. Careful consideration is given each inquiry, the letter and answer being published in due time as matters of interest to other readers. Where an early reply is desired if a stamp and self-addressed envelope are enclosed, the answer will be sent. No charge whatever is made for any advice.

THE number of inquiries we have received in regard to the use of stencils in the decoration of side walls and fabrics has suggested our talk for this month.

There seems a very general impression that stencilling is a difficult art, and to employ it successfully one must have had training and experience. This is entirely an erroneous idea and it is the amateur who often achieves the greatest success. Where one has a good eye for color combination one should plan original effects in the color treatment of the design selected. If, however, one lacks the confidence for this it is possible to obtain color designs which may be followed closely with the most satisfying results.

One of the largest companies manufacturing paints, varnishes, etc., are now making an especially interesting line of stencil designs for their customers. These are applicable to side walls, frieze and fabrics. The same company manufactures a full line of washable stencil colors, and supply full and comprehensive directions for their proper use, thus enabling anyone to follow them.

The stencil designs made by this company are practically and easily put together and are intended to cover all requirements of stencilling. They are made of extra heavy paper and finished ready for immediate use. The colors which they make are put up in small tubes which sell at ten or fifteen cents a tube, and larger sizes at proportionate rates. They also sell a medium with which the color must be mixed before applying.

In addition to the wall decoration it is possible to use these patterns successfully on curtains, pillow covers, portières, etc.

The best method to use in stencilling a fabric is to stretch the material smoothly over blotting paper and fasten firmly to a table top or drawing board. The stencil should be fastened in the same way, using thumb tacks. The blotting paper is advocated as it absorbs all extra color and prevents it from creeping under the stencil. After

the design has been selected careful measurements should be taken to insure the repeat of the stencil meeting properly at the corners and fitting in the design to the best advantage.

In the patterns referred to, the proper guide for the repeats are cut clearly on the stencil. A pencil line will serve as a guide on the border patterns. Smaller brushes should be used in stencilling fabrics than are used for wall decoration, and in putting on the color it is best not to brush it on, but to tap the brush allowing the color to spread easily. The color should always be tried out on a waste piece of fabric before beginning. The back of the stencil pattern should be cleaned occasionally to prevent the color running under. It is a very easy matter to reverse a pattern, where it seems desirable and the stencil should be cleaned on both sides. It is best to use a separate brush for the different colors.

These general suggestions will be found of service to the amateur worker with stencils, and as long as she is satisfied to confine herself to simple patterns there will be no difficulty in obtaining results which will be gratifying.

There is no form of decoration which for the same cost in time and money will give such satisfying results as this. Years ago stencilling stood wholly for the stiff and uncompromising geometric designs, scroll, twists and funeral wreaths of the house painter-decorator. These found their places on upper walls and ceilings and were perhaps worked out in salmon pink and terra-cotta with strongly gilt lines. To most minds this style of decoration is closely allied to the dado of Lincrusta, the patent rocker and onyx and brass lamp tables of the same period.

To-day, however, it has taken a new dignity and meaning. It is the decoration most favored for walls and draperies in the house of craftsman suggestion where the severely plain lines and perfection of design and construction in wood and furniture speak of hand work and artistic simplicity.

Where walls are of rough or sand finished plaster and painted in dull tones, the stencil frieze used

The Editor's Talks and Correspondence

about the upper wall may show again on a reduced scale as a border to window draperies and on table covers and cushions.

A very charming dining-room we recall, in a tiny seaside cottage, the decoration of which was largely the handiwork of the mistress of the house. The room was almost square—about sixteen feet—and had a simple paneled wainscot reaching to the height of six feet. Above this prepared canvas had been stretched on the unplastered wall, reaching to the ceiling line and finished by a picture mould,—the height of the ceiling being only nine feet.

The wainscot and all woodwork of the room was treated with a clear white paint, and upon the oyster-white background of the canvas a stencil design of windmills was applied and the suggested landscape broadly touched in afterward. The color used was the various shades of Delft blue.

Oyster-white linen homespun curtains outlined the wide casement windows; stencil decoration was also used upon these, the two lower corners showing a repetition of the windmill design. The ceiling of the room was purely white like the standing woodwork, and the floor stained walnut brown. A quaint drugget in blue and white, made after the old-fashioned rag carpet, seemed well suited to the room.

The furniture, however, was the finishing touch, and for this also the housewife was responsible. She had purchased an ordinary square kitchen table and kitchen chairs of deal in unfinished state, that is, in the natural wood. These she treated with several coats of white paint exactly matching the white of the woodwork.

The top of the back of each chair was delicately lined with blue, and in the center of the panel again the stencil windmill motif was used.

"I should be almost ashamed to tell you," the artist of this room said, "how very little money it has cost and, indeed, the comparatively small amount of time required."

One of the chief claims to distinction of the little room was that it was wholly washable—curtains, woodwork, walls and even rugs. The stenciled canvas had been treated with a coat of thin varnish which showed a surface like glass and was as readily cleansed. The same finish had been given to the furniture. "In the city," the housewife continued, "I go in for dull soft surfaces and dim colors, but here I want my little dining-room to be as clear and shining as a choice bit of Delft pottery."

CORRESPONDENCE

HARD WOOD FLOORS

I AM considering the building of a residence and desire to have your suggestions as to the most suitable and prettiest, light colored, hard wood

floors. For the parlor, reception-hall and dining-room, would you advise different woods for each room? Is ash a hard or semi-hard wood? What is the most desirable finish for the hard wood floors, waxed or polished?

Answer: We would recommend if your rooms open well together that you use the same flooring throughout. Oak is an excellent selection. If a parquet border is desired for one or all of these rooms it could be introduced. We are sending you the addresses of firms who will give you information in regard to the cost, etc.

Ash is a hard wood. For the finish of hard wood floors we would recommend some one of the various products the names of which we are sending you by post. Any of these will supply a good durable finish and an effect closely resembling wax.

ADVICE ON DECORATION

Kindly send your free advice on decoration, also samples of wall coverings and draperies as offered in HOUSE AND GARDEN.

Answer: We will be glad to supply you with advice and samples as requested, but to do this practically we should have further information in regard to your house. Send us a rough draft of your floor plans giving exposure and dimensions of the rooms, the character and finish of the standing woodwork and we can help you intelligently.

PIPING WATER INTO THE HOUSE

I have a farmhouse in New Hampshire to which I wish to carry water from a spring which is about 300 yards from the house and a little below the level of the house.

I want to use the water in the kitchen, bath, etc., all on the first floor. Kindly suggest the easiest method to accomplish my wishes in this matter.

Answer: We are sending you the addresses of a company who can supply you with full information as to the best method to employ and the cost of same.

STAIN FOR THE EXTERIOR OF THE HOUSE

I am building a shingle house in Arizona and am anxious to use a stain which will not fade in the strong sunlight of this country. Is it possible to obtain a gray stain on shingle which will last? If such is used for the house what stain should I use for the roof? I am enclosing a self-addressed envelope.

Answer: We take pleasure in sending you the addresses of firms who will supply you with samples showing the shingle stain. You will find the gray stain particularly well adapted to your section of country. This improves decidedly with age, and the climatic conditions of Arizona will effect the improvement rapidly. If gray is used for the side walls, moss green should be selected for the roof.

IN THE CITIES' MARTS

[To all inquiries desiring the addresses of the retail shops carrying the goods mentioned in this department, these will be sent promptly upon receipt of request enclosing a self-addressed and stamped envelope. All communications should be sent to the Special Service Bureau of HOUSE AND GARDEN, 345 Fifth Avenue, New York City.]

AS the spring season draws near one naturally turns her thoughts to the furnishing of the country cottage. If this is to be done inexpensively and successfully it is necessary to thoroughly canvass the shops before making a definite decision, as one is very apt to form ideas that are impossible to carry out at a moderate cost and she is, therefore, not satisfied with what the shops have to offer from their regular stock. While, on the other hand, if she visits the shops first she will be able to find combinations that are charming and the prices within reach of the most limited pocketbook.

This year's importation of wall-papers shows a variety of designs in two tones which are particularly attractive for living-rooms, the price being ninety cents a roll of eight yards. These papers are of English make and the texture is rather rough. The same design is reproduced in three different colorings, old rose, sage green and a beautiful tan. There are also two tone fabric design papers of domestic make for forty cents a roll of eight yards, the soft brown being the most attractive color. This makes an excellent wall covering, and one can find in a New York shop a cretonne to combine with this which is a good imitation of the expensive linen taffetas. The background is linen color, the design wrought out in greens, dull reds and soft browns. It is forty-five cents a yard, thirty inches wide and will give a very desirable touch of color to the room if used as over-draperies at the windows.

The most appropriate floor covering for the living-room in a cottage is the bungalow rug. These are made in two tones, the center being plain with the border in a darker tone. These are reversible, and there is practically no nap. The price is \$3.00 a square yard, and it is possible to purchase one in a beautiful shade of brown that will harmonize with the paper and cretonne mentioned. Wicker furniture stained a soft brown with the chair cushions covered with cretonne will complete the furnishings of an inexpensive but attractive living-room. Wicker arm chairs can be purchased in the natural color from \$5.00 up, the staining is \$2.00 extra.

Wicker tables have generally been made with the top of wood and the wicker woven over this. This method of construction made the table very heavy and until recently it has seemed impossible to design them otherwise. A manufacturer of wicker furniture has just succeeded in making the top of split wicker and of course this makes the table extremely

light in weight. The surface is very flat and they are no more expensive than the regulation wooden tops covered with wicker. Bookcases, writing desks, flower stands and hanging flower baskets of wicker can be purchased at a moderate price.

If one wishes to furnish a room in Japanese style, she can find a very attractive Japanese frieze for \$6.00 a roll of eight yards. The design and colors are suggestive of a Japanese garden at twilight. The soft gray blue of the background tones in perfectly with the colors of the Japanese lanterns and kimonos worn by the maidens, while the almost black tree trunks and branches give character to the design. Although there are a variety of colors shown they are all in the soft subdued tones so characteristic of the Japanese art, and which are so seldom reproduced in the modern wall-papers.

An attractive wall covering for a bedroom shows a design of poppies, grass and leaves against a dull turquoise blue background. The poppies are a delicate shade of pink, the grasses and leaves are a soft tan shading into a greenish gray. The price of this paper is but thirty-six cents a roll of eight yards. One can purchase a plain blue Wilton carpet in exactly the shade of blue shown in the background of the paper for \$1.75 a yard. For window curtains there is a white muslin showing a dainty design embroidered in pink and green to be bought for forty cents a yard. A plain pink fabric matching the poppies in color may be used for over-draperies at the windows, this is fifty-four inches wide and costs ninety cents a yard. This same fabric comes in a variety of colors and is very serviceable for window curtains as it is guaranteed not to fade. The stencil design of the poppy and grass may be used as a decorative border on such curtains, or arranged as corner motifs.

Some of the chintz papers for bedrooms are very inexpensive but effective in color and design; for a bedroom where paper of this kind has been used, a plain drapery material repeating some one of the colors shown in the paper should be chosen. It is always possible to find in the shops a cretonne from which flowers may be cut and applied on the material in the form of a border, or flowers applied on the inside corner of each curtain will be found very attractive. The flowers should of course match those shown on the paper.

It is almost impossible to find in the shops the desired combinations ready applied on the curtain. There is, however, a firm that makes a specialty of doing just this kind of work. One may purchase her own materials, cut out the flowers and arrange them to suit her own fancy simply leaving the applique for other hands to accomplish. If she desires this same firm will cut out flowers and arrange them artistically on the curtains as they have competent designers for this kind of work.

THE GARDEN

Suggestions, Queries and Answers

JOHN W. HALL

AN essential to pleasing effect is the proper selection of places in the garden for the different annuals. This must be determined in advance, or at the time of transplanting to their permanent abodes. Not only must the bloom color effect be taken into consideration but the general habits of the plants must be regarded.

Thus mignonette should be put near the house that its refreshing odor while in bloom may enter through the open windows. The chrysanthemums should be set in such place as will best carry for a long season a showy bed of green. If there is a dull spot in the garden it can be lightened by the common marigold. The blooms last late into the season and are rich yellow and orange in color. China asters do well in places where the bloom is desired in late fall. Petunias are ever beautiful and bloom all season. If the flowers are kept picked off the bloom is almost limitless. They are also admirable for window boxes, hanging baskets or for beds. *Salvia* will give a brilliant and delightful red far into the fall of the year.

While these are mostly regarded as common flowers, yet they, and hundreds of others similar, are almost indispensable in the garden. It will be a dull garden if undertaken without them.

The lathyrus, perennial pea, will prove a charming permanent addition to any garden. The flower lacks the fragrance but for beauty it even surpasses the sweet pea. It will bloom in the spring long before the others. Year after year it can be depended upon to bear magnificent clusters of flowers. It is perfectly hardy and with ordinary care will grow from eight to ten feet high. The vine can be grown from the seed and can be obtained in colors or shades as the sweet pea.

For a border plant try the *Platycodon (grandiflorum pumilum)* as it is one of the finest now offered. It comes quite true from the seed, flowers freely the first year and is perfectly hardy. In growth it is so compact as not to require support. The flowers are handsome, bright deep blue and of extra large size.

The summer flowering oxalis is another extremely fine border plant. It is equally desirable for pot culture, for the hanging basket, and the vase.

The pictures in the seedsmen's catalogues will prove alluring. But the essential thing to remember is that good results cannot be obtained without thorough preparation of the garden in the beginning.

Dahlia roots may now be planted in all sections of the country south of Washington City. In the

Northern and Eastern sections nothing can be gained by this early planting. Better flowering results can be had if planting is deferred a month or six weeks.

Plant life requires persistent attention. The vegetation for which there has been a longing during the winter months is beginning to show up. The gardener must get busy among the plant growth. It is necessary to begin early. Cut out all dead plants or limbs. Such if left are breeding places for fungi or insects and sources of infection to healthy plants.

Keep injurious insects off of the plants by spraying. Besides their own injuries they are likely to introduce the spores of fungi to plants not affected. Bordeaux mixture is a standard fungicide. Keep plants in healthful condition by proper pruning, fertilization and cultivation.

The nasturtium is one of the most popular flowers of the day. It is constantly growing in favor, whether for decorating the table, grown in boxes on the porch, or in beds on the lawn. Then it is such an easy grower, can be grown in so many places and with a little attention will bloom until frost. The yard can hardly be said to be complete without the nasturtium. Either the climbing or the dwarf variety does well on most any soil; in fact the flowers of the dwarf variety are more brilliant if the soil is not over rich. There are a great variety of shades of flowers, some very rich and showy; delicate shades with threads of yellow, white, black, green and maroon.

Protection that was put about the rose bushes should be removed before the buds begin to swell. When this protection is removed it is a good time to prune. The best results are obtained from severe pruning, especially if strong long stems and fine blooms are obtained. The soil about the roots of the plants should be stirred at the time of pruning—that will cause it to warm up.

USE OF FERTILIZERS

At what stage of plant growth is it best to use fertilizers? I have heard so much contention as to the proper time that I am seeking information that I may act intelligently.

ADA C. C.

Worcester, Mass.

The question implies that the plants to be fertilized are already in the ground. If not, however, it would be well to use a good compost, one-third compost to two-thirds of good soil in filling-in around the roots of the plant at time of setting out. As to the use of fertilizers for plants in general, it should be applied while the roots are young. Unless fertilized then and pushed along the roots attain only a small growth and become hardened. After

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the roots have hardened but little plant growth will be developed during the season. As Nature is always busy and impatient give the rootlets nourishment and give them aid in the shortest cut towards early growth.



An example of severe pruning for the purpose of getting choice, long stem blooms

PRUNING ROSE BUSHES

Should rose bushes be pruned every year? If so, when, and to what extent? I want choice blooms rather than numbers.

IRENE C. D.

Altoona, Pa.

By all means prune the rose bushes every year. Now is the time, before new growth starts up. As you desire superior quality instead of numbers of blooms the plants should be cut back severely. The illustration shows rose bushes pruned for choice long stem flowers.

ROSES FROM FLOWERING WOOD SHOOTS

In a catalogue just received I see it stated that the rose bushes offered for sale are from "flowering wood" shoots. What is meant by that expression?

R. M. D.

Lancaster, Pa.

The term used by the florist is intended to express the difference between "flowering wood" and "blind wood" shoots. Plants grown from what the florists call "flowering wood" shoots give about three times the number of blooms per plant as do those grown from "blind wood" shoots.

If you desire to propagate stock for next season it is best to take the cuttings from shoots that have bloomed. The "flowering wood" shoots are usually

much longer than those of the "blind wood," and if the flowers are cut with reasonably short stems there will remain sufficient length of stem for propagation purposes. The wood near the base of the flowering shoot is harder and more mature than it is near the base of the flower.

The "blind wood" shoot is generally of very slender growth, usually terminated by a leaf; the "flowering wood" shoot is larger and more vigorous and is terminated by a flower bud. It is more economical for the florist to produce stock from the "blind wood," but to the disadvantage of the grower.

CHEMICAL FERTILIZERS

What kind of chemical fertilizer should I use, and what proportion to produce the flower of the violet as well as long stems and rich foliage? H. B. T.

Lafayette, Ind.

If you have to purchase fertilizer why not cut out the commercial and supply yourself with pulverized sheep-manure? The violet fed moderately on this manure will give you ample supply of very fine blooms on long stems. Consult the advertising columns of HOUSE AND GARDEN for the name and address of the manufacturers of pulverized sheep-manure. I have used the product with the greatest success in all phases of gardening. It would be best to mix the sheep-manure one part to four of good loam; the violet will not stand too quick action of any fertilizer.

VINES AND SHRUBBERY FOR A NEW HOUSE

I have just gone into a new house and there is neither shade nor shrubbery about the place. There is a front porch fully exposed to the morning sun that I want to shade with vines. How can I best treat the yard this year and what vines shall I put to the porch?

K. L. O.

Norwalk, Ohio.

Your surroundings are not unusual at this season of the year. While you cannot hope to do a great deal with a new place the first year of tenancy yet it is possible to have a fairly respectable garden.

First, give the lawn attention; remove litter of all description. Procure of a florist a few plants of California privet standing three or four feet high and put them in clumps, two or three plants together. Well fertilized they will grow nicely and maintain a rich green during the year. You can also get in a few beds of annuals which will do well.

For the porch there are a number of vines which will give good account of themselves with proper care. An old favorite is the morning glory. Planted in a loose bed well fertilized and the ground stirred about the roots occasionally it will grow from

twenty to twenty-five feet during the season. The foliage is from light to dark green while the flowers are of manifold shades—blue, purple, red, pink and white. Perhaps the Japanese varieties are handsomest and the vines make a very comfortable shade.

The cobæa is another desirable vine for emergency growth and is worth giving a trial. The foliage is beautiful, the buds light green and as they open change through violet to purple.

Through summer, fall and until killed by the frosts it is a daily bloomer. The annual growth is about equal to that of the morning glory. It is a great spreader, putting out many side shoots.

Be sure to give the wild cucumber a wide berth should any of your friends be so unwise as to suggest it for your porch.

A KNOWLEDGE OF BOTANY NOT ESSENTIAL FOR GARDENING

Is a knowledge of botany necessary for me to succeed with my garden?

FLORA B. R.

Kensington, Md.

Not at all. Knowledge of botany is desirable just as is a knowledge of any science. The botanist is a man of science; it rarely occurs that he makes even a good amateur gardener. About the only service the botanist can render about the garden is to give names to plants. The nurseryman might find such a person useful. If you understood botany like the botanist doubtless your time would be occupied with plant mummies instead of getting life and pleasure out of the garden. It is for the enjoyment derived that the gardener cultivates flowers.

SEACOAST GARDENS

(Continued from page 118.)

hopes like his flowers are perennial; and the failures of the present only add zest to the hoped for successes of the coming year.

And so this garden grew year by year, without any formal plan—suggesting itself in fact—and a grass path would start away here and there—little surprise enclosures of hedge or wall for the cultivation of special plants, or development of color effects, would arrange themselves—certain trees and bushes would complain of their neighbors and ask to be removed to more

Why stir up the Dust Demon to Frenzy like this?



WHY THIS \$25 VACUUM CLEANER DOES THE WORK OF A LARGE POWER PLANT

Many persons think of Vacuum Cleaning only in connection with a big gas engine hauled around on a wagon or a big stationary power plant costing \$500, \$1,000 and upwards.

Therefore they are astonished when told that the IDEAL VACUUM CLEANER, which weighs only 20 pounds and is operated either by hand or a little electric motor, is the perfection of the Vacuum Cleaning principle.

For this astonishment there is no need. Here are the facts:

Every Vacuum Cleaning system consists of four essential parts: (1) Motor Force; (2) Suction Pump (3) Filtering Tank or Separator; (4) Hose with Nozzle.

The Motor Force operates the Pump. The Pump sucks the air from the Tank or Separator so as to create in it a Vacuum. To fill this Vacuum, air whirls in through Nozzle and Hose, carrying with it dirt, dust, grit, germs and all other foreign matter.

Why, heretofore has there been need of a Motor Force of great power? Simply because the Pump and Separator have been far from the spot where the actual cleaning is done—out in the street or down in the cellar—so that the Force has had to operate through pipes and tubing over long distances and around sharp angles.

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(FULLY PROTECTED BY PATENTS)

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Hand

“It Eats Up the Dirt”

Or Electric
Motor

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You can't keep your carpets, rugs, curtains, upholstery, wall decorations, etc., clean with broom and brush, and least of all with carpet-sweeper. Vacuum Cleaning is the only right means, and with the IDEAL VACUUM CLEANER at your service, there is no longer any excuse for your being without its benefits.

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Let us tell you how you can get one of these wonderful machines promptly. Also send for our Free Illustrated Booklet. It tells an interesting story of a remarkable saving in money, time, labor, health and strength. Send for it to-day.

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 - How to make a small room look large.
 - Why certain colors are more suitable than others for bedrooms.
 - How to stencil a wall.
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- These, and many other practical suggestions, are given to aid you in the beautifying of your home with

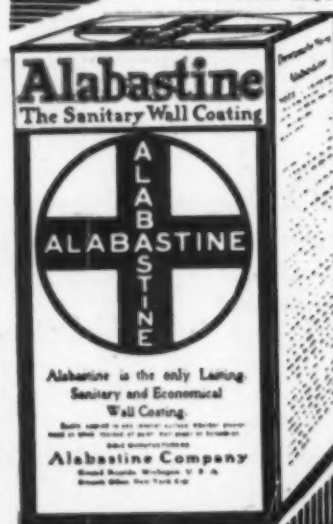
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Be sure that your workman brings Alabastine in original packages, and mixes according to directions. Alabastine is very durable, very economical, does not fade, rub nor scale off, and its soft velvety tints reflect the light, making the home bright and cheerful. Send us 10c in coin or U. S. stamps for "Dainty Wall Decorations." It is the best practical book published on the subject.

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congenial companions and conditions. And I think a garden of this kind must be much more interesting than one formally planned by even the most skilled of landscape gardeners. There is an element of companionship about it, and the owner's sense of responsibility makes him more persistent and thorough in his study of its needs, and he can give delighted assent to what Mr. Rider Haggard calls, "this most gentle, fragrant and wholesome of arts." And much as we may complain of the narrow necessities of seacoast planting, and feel irritated that so little individual effect can be had, where everything must lean up against every other thing for protection and support, the observant eye must rejoice in the restrained beauty of the softly rounded and moulded forms of vegetation, and of closely planted trees and shrubs, which give to the low-lying coasts of New England, a beauty of their own caused by the constant cruel pruning of ceaseless winds.

INEXPENSIVE LITTLE HOUSES

(Continued from page 122.)

are suitable for these small cottages, and can be made with little expense. They give style, and break what might otherwise be monotony of woodwork. Best of all are tiny fireplaces, where, about the cheering crackle and glow and warmth, the family can sit when nights are chill with whisperings of winter. A small fireplace can be built for \$25.00 and for considerably less, if the home-builder is familiar with masonry, and does the work himself. Chimneys are, for some reason, usually placed at one end of a house, practically out of sight from the street, "hiding their light under a bushel" as it were, instead of taking a stand in the front row and letting their "light shine before men." A wide stone chimney, if well placed, will change a meek, timid little house, into one of confident dignity. A pleasing plan is that of building a chimney against the front of a house, letting it extend through the porch roof or pergola.

Aster incisus, formerly called *Calimeris incisus*, is a capital early flowering species. Botanical works say of it that it blooms in August and September, but with us it flowers in July.

A GREAT NATIONAL APPLE SHOW

(Continued from page 139.)

one-fifth of the crop grown on three and one-half acres of eight and ten year old apple trees."

The officiating judges were: Maxwell Smith, dominion fruit inspector, British Columbia; Professor John Craig, head of the Department of Agriculture, Cornell University, Ithaca, New York; H. M. Dunlap, Savoy, Illinois, president National Apple Growers' Association; R. W. Fisher, professor of agriculture, Montana Agricultural College; S. A. Beach, horticulturist, Iowa Agricultural College; Claude I. Lewis, professor of general agriculture and pomology, Oregon Agricultural College; Professor J. R. Shinn, horticulturist, University of Idaho, and Professor W. S. Thornber, horticulturist, Washington State College.

ATTENTION TO DETAILS

EVERY part of an architect's profession requires careful attention, as, for instance, the character and finish of stone in the different parts of a building. As an illustration, a little observation will show that the bases, pedestals and all portions of the stone work that are near the pavement should be as hard as can be afforded. We are familiar with a fine structure that probably cost over \$100,000, and it is not ten years of age, and the first-story piers finished with pedestals with molded caps and bases, and almost every one is broken and spalled, and the building looks like a ruin.

All the molded parts are finished with square angles, and were easily broken. Had a hard limestone or granite been used, or had the square angles been rounded, very few, if any, would have been marred and broken; or, had the stone work of that character been higher up, all would be well.—*Western Architect and Builder.*

INTENSIVE CULTURE FOR ORCHARDS

WHAT is needed is not more orchards but better-cared-for orchards. This means smaller orchards. The great success achieved by fruit growers in Colorado, Washington, Oregon and other Northwestern States is not due so much to superior climate, soil or other natural conditions as to the fact that

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Improvements made
in a little way"

HOW MANY THINGS

in your house which could and ought to be refinished with a beautiful glossy surface that "wears like iron," if you only knew how.

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If your dealer does not keep JAP-A-LAC, send us his name, with 10 cents to cover cost of mailing and we will send a free sample, quarter pint can of any color (except gold, which is 25 cents) to any point in the United States.

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The average stain will not hold its color at the seaside; ours will. This is perhaps the hardest test of a stain. Ours gives no offensive odor, will not wash off nor turn black. It gives a wealth of artistic beauty at a lower cost than paint.

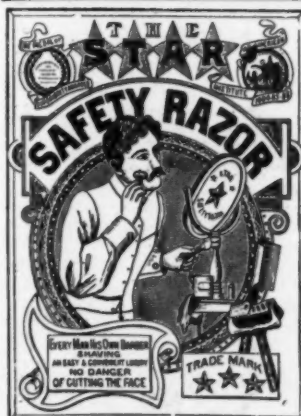
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Why the Star Safety Razor is superior to all others:

IT HAS A BLADE

That cuts and shaves clean the most wiry beard.
You need not throw away.
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It is the best and cheapest safety razor by test (for the past thirty years) in the world.

Single Razor \$1.50

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Razor stopper and stop in case for \$3.50

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Just read what the following eminent horticultural authorities—entirely unsolicited—say about our different kind of catalogue. Will give you a better idea than anything we could write of the brand new features in Dreer's Garden Book for 1909. We have received hundreds of other letters just as flattering:

I beg to acknowledge, with thanks, receipt of your 1909 Catalogue, which, as usual, is full of interest. I note with approval, your introduction of cultural notes, which is a step in the right direction.

Yours very truly,

IDA D. BENNETT, Author of "The Flower Garden" and "The Vegetable Garden."

I have the copy of your Garden Book which you so kindly sent me, and find within its pages much that is instructive in the amount of information so simply set forth as to be intelligible to every one. The illustrations are excellent, and the improved varieties of perennials and annuals make one long for the coming of Spring, that they may have a place in the garden.

Very cordially yours,

HELENA RUTHERFORD ELY, Author of "A Woman's Hardy Garden."

I am in receipt of your Catalogue for 1909. It is far and away the finest and most practical Garden Book of the season. I think you will find it just what most amateur gardeners need. You ask for suggestions for its improvement. The only suggestion I would make along this line is to add more cultural notes to future editions, thus making it of permanent value, and making it unnecessary for the amateur to invest money in books on floriculture. In advising this, I am talking against my own interests, for such a catalogue would interfere with the sale of my own books, but I am frank in answering your question.

EBEN E. RENFORD.

JOHN E. HAND & SON, Florists, Center Moriches, N. Y., write: We wish to thank you for the catalogue we have just received. It is well worth the price of any of the standard works on horticulture.

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they make fruit growing their sole business, and give the trees their best care, thought and attention.

Hundred-acre orchards are not uncommon, but they do not begin to be as profitable as the ten-acre tracts, which one man can take care of. Efficient labor is hard to get and harder to direct. For this reason big orchards will never be as profitable as small ones that will just about keep one or two men busy.

A ten-acre bearing orchard of any fruit, well located, will return a very handsome living if properly managed.—*Farm and Home.*

A ROMAN ROAD

AN old Roman road was lately unearthed in Hertfordshire, England. From certain evidence it is considered to be a military road, extending over a considerable region and connecting the many military posts of the Romans. The road had apparently suffered but little damage, and the wheel tracks could be clearly made out. The road was thirteen feet wide. The wheel tracks show a gauge of four feet six inches. The tracks are not in the center, but on each side, leaving a walking way between them. Lying on the road were some Roman nails, a fragment of a horse shoe and what appeared to be a heavy linch pin.—*Western Architect and Builder.*

TREES AND SHRUBS THAT ARE IN FLOWER IN APRIL

THE month of April may be said to be the first one of the season in which trees and shrubs flower in the Middle States. Should March be warm a few shrubs flower then, but they are not to be relied on before April. The following list contains the greater number of those that may be looked for in April:

Dirca palustris, *Jasminum nudiflorum*, *Chimonanthus fragrans*, *Daphne Mezereum*, *Cornus Mas*, *Lindera Benzoin*, *Lonicera Standishi*, *Magnolia stellata*, *Corylopsis spicata*, *Forsythia* in variety, *Rhus aromatica*, *amelanchier*, in variety, *Amygdalus nana*, and *Azalea amara*.

Magnolia stellata is sometimes called *M. Halleana*. It is a species every one looks for in a collection, as it is the first of all to flower, and its habit is so bush-like. The flowers are white, of a light

(Continued on page 8.)

MOON'S TREES



This is how our trees make a place look

They are grown away from the smoke and gases of cities on fertile agricultural lands, so well suited to the healthy vigorous growth of plant and tree life.

SPECIALTIES FOR THIS MONTH

Evergreens and shrubbery of large size, that does away with years of waiting for results.

Shade Trees in endless variety, Vines, Roses, Old-Fashioned Flowers; in short, "Some Hardy Plant for Every Place and Purpose."

Write us about these. Send for our catalogue.

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When you buy a rug or carpet don't rest your decision absolutely on the appearance and design.

Go farther than that.

Be sure to look for the name "Whittall's" (as indicated above) woven in the back. Look carefully—the name does not show prominently in some colors. If it is a genuine "Whittall" it will be there just the same.

In this name you have a guarantee of proved value—of longest wearing qualities—a guarantee that it is made of selected pure wool, closely woven, colored with dyes subjected to the severest test.

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Tell your dealer you want to see "Whittall" rugs and carpets. If he cannot supply you write to us direct, giving his name.

We want you to have our FREE BOOKLET, Series I.

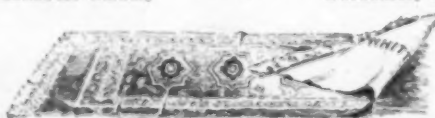
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It is full of helpful suggestions on floor covering. Write for it to-day.

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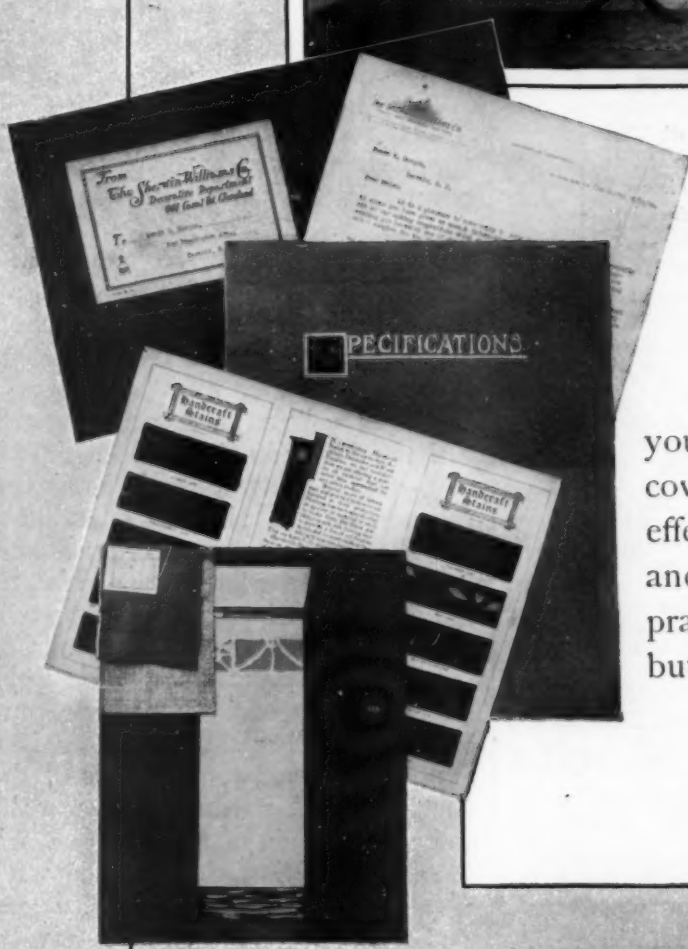
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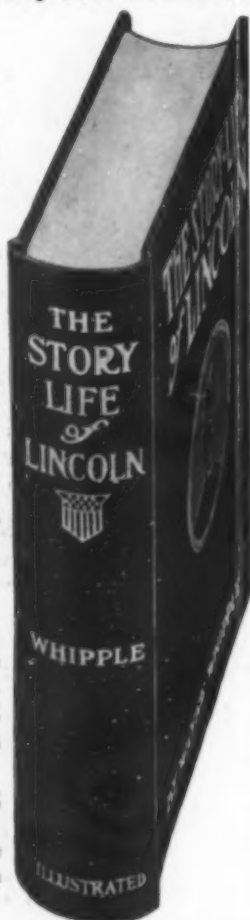
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rare combinations of the best prize-winning blood of England and America. The results of thousands of dollars expense and years of waiting.

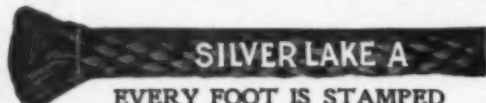
At Stud. The Imported International Winner, Belvidere Adam Bede: Sire Eng.

ch. Adam Bede, by Donnington, ch. Dominie, by ch. Pitcher; Dam, Asterisk, by Eng. ch Tosse, by ch. Veracity, by ch. Visto. Fee, \$15. The noted winner Sabine Rebel, by Imp. ch. Sabine Result, ex. Imp. ch. Sabine Sunbeam. Fee, \$15. The prize-winning Norfolk Craftsman, by ch. Norfolk Richmond, ex. ch. Norfolk Handicraft. ELBERT E. GOWEY, Bracerville, Ill.

French Giant Argentcuil Asparagus Roots, grown from imported Seed, under highest garden cultivation, for Country Home Use.

Finest Flavored and Largest Asparagus Known
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Planting direction free. Also California Privet.
S. L. de FABRY, Grower, Little Silver, N. J.

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"SILVER LAKE A"

pink in the bud, semi-double and fragrant. Magnolias produce a flower bud on the end of every shoot, as a rule, and as the stellata makes innumerable twigs, there are thousands of flowers on a bush.

Cornus Mas is another early and beautiful flowering shrub, a native of Europe. Just as soon as the last freezings are over—and before sometimes—the flowers expand. They are not large, but are numerous, and altogether make a fine display. The flowers are yellow and, as may be surmised, a large, handsome bush is a great attraction in the first days of spring.

A few brief notes on the other trees and shrubs named will be in order. *Dirca palustris* is called leatherwood, because its branches may be twisted like a leather string without injury. It has small yellow flowers, before its leaves, and red berries follow. *Jasminum nudiflorum* is the well known hardy jasmine. It will flower in March in a warm spot when a few warm days meet it. It is best to plant it on a northern exposure, to retard its flowering. *Chimonanthus fragrans* has whitish yellow flowers. They are extremely impatient to expand. Their fragrance is delightful. This shrub should also have a northern exposure, but it is not hardy in the very cold States. *Daphne Mezereum* is early and sweet. The flowers are open in the first few early days of spring, and after them pretty berries adorn the bushes.

Lindera Benzoin is the old *Laurus Benzoin*, the spice bush of our woods. Its small yellow flowers are produced early, and in great abundance. All parts of the bush, leaves, berries, twigs and roots, possess a pleasant odor. *Lonicera Standishi* belongs to the bush honey-suckle class. Its flowers are white, with a faint pink tinge, and they expand among the earliest of all in April. *Corylopsis* is a shrub having light yellow flowers, produced in drooping racemes, appearing before the leaves, as is the case with the greater number of those mentioned. *Forsythia* is the golden bell, and exists in more than one species. *F. viridissima* is the oldest known. It has a stiff growth. Another, *F. suspensa* is of a drooping habit. Both have yellow flowers, the last named one having them a shade lighter in color than those of the *viridissima*.

Rhus aromatica is the early flowering sumach, a somewhat trailing bush, having yellow flowers which are followed

by red berries. Amelanchier has for common names, Indian cherry, snowy mespilus, shad bush and others. Some varieties are dwarf and very floriferous, their sprays of white flowers being greatly admired. *Amygdalus nana* is the flowering almond, pink and white, well known in all collections. *Azalea amara* is the evergreen azalea. It opens late in April, and when its numerous claret colored flowers expand, it is greatly admired.

Regarding the hardiness of the subjects named, in Pennsylvania every one mentioned is perfectly hardy, the hardest winters never hurting them at all. In the colder parts of Canada, Wisconsin and Minnesota the Amelanchier, Forsythia and *Cornus Mas* are reported quite hardy; the flowering almond and Lindera fairly so when deep snows help them. Corylopsis, *Daphne Mezereum*, Dirca, *Rhus aromatica* and *Magnolia stellata* are believed to be hardy to Chicago at least. Some of our native magnolias are quite hardy at Waukegan, Ill., and this Japanese one, stellata, appears very hardy.

Jasminum nudiflorum and *Lonicera Standishi* are fairly hardy all over the Middle States; perhaps the least hardy of all is *Chimonanthus fragrans*.—Park and Cemetery.

THE RURAL TELEPHONE

GOOD roads, rural free delivery and the rural telephone as benefits to the farmer, can hardly in equity be compared as they are not in competition with each other. Good roads have always been a benefit. Rural free delivery from its start in 1897 has been a great help to the farmers and in eleven years according to the report of the auditor for the Post Office, has grown to a total of 40,000 carriers. But the rural telephone starting since that time is already outstripping both of these in the number of farmers it is reaching and the ways in which it is benefitting them.

The rural free delivery carrier's route rarely exceeds twenty-four miles in length and serves on an average about seventy farms. A rural telephone will operate as far as forty miles with as many as thirty or forty telephones on the line. Of course in the well settled states the farmers have both but in the vast sections of open country, it is

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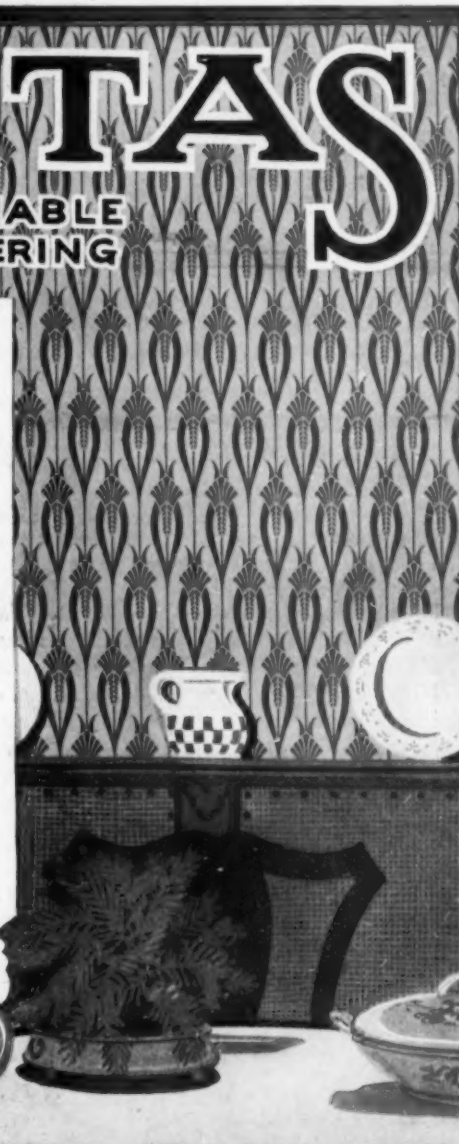
And no other wall covering, however expensive, can give you the *fade proof, crack proof, tear proof, stain proof, and dirt proof durability* of Sanitas—always instantly cleaned as bright as new with a damp cloth.

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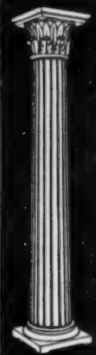
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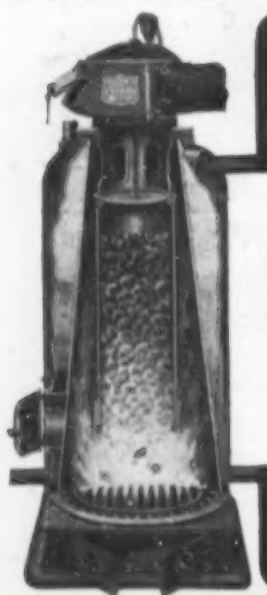
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obvious that it will be some time before rural free delivery can reach as many farms as the rural telephone.

The low first cost of the rural telephone puts it within the reach of all. On lines less than twelve miles long the cost is \$4.94 per mile not including poles—the latter to be cut and furnished by the farmer himself. On lines over twelve miles long the cost is but \$6.87 per mile; same arrangement about the poles. In either case, the cost of his telephone set complete is \$13.00. The above figures represent standard "ground" one wire construction and long distance telephones. It is a simple matter to build the line and no operator is required. The annual maintenance expense is not over seventy-five cents—the renewal of the dry batteries in the farmer's telephone. In addition the farmer can run the line to a neighboring town and there connect with the town exchange and long distance service to the rest of the country.

The rural telephone in sickness or emergency enables the farmer to summon immediate aid. It enables him to learn the latest market prices and so get more money for his products. It removes the isolation of country life; it improves the conditions surrounding the farmer's wife. During the day and evening it is used a great deal for social intercourse—everybody being able to "get in" on the line at the same time if they desire.

In many sections of the United States where rural telephone lines exist, it is customary to furnish weather bureau reports over them each morning. For instance at 9 o'clock in the morning the telephone company in town will give three long rings over each rural line entering its exchange and those who desire may, on taking the receiver off the hook, hear the operator read the weather bureau report. The companies often also give out at the same time, the prevailing market quotations.

The rural telephone certainly is the farmer's greatest servant. In using it to do errands, it saves him time. In dry seasons, he may be promptly notified of the approach of prairie or forest fires, of not infrequent occurrence if his farm adjoins a railroad, or in case of fire in his own home he can summon aid without leaving the farm himself. It is hard to say in what way it helps him the most

House and Garden

on the various things mentioned above. Wherever he is, ask him if he would be willing to do without it and his answer is "No!"

In the vast sections of open country away from schools, churches and other conditions improving country life, the rural telephone is fast reaching out and removing one of the greatest disadvantages of living in the country; namely, that one must travel a considerable distance to reach a market or talk with a neighbor.

It is estimated that there are about seven million farmers' families in the United States to-day, taking the word farmer in its broadest sense and including all families living in the open country. Of those it is estimated that in the few years since the rural telephone has been considered seriously, more than two million have adopted it and it is rapidly being extended.

The rural telephone born of necessity and of vital benefits to the farmer has as its further recommendation, its accessibility to the entire population of farmers, many of whom cannot be reached by rural free delivery or good roads for generations to come.

PHILADELPHIA CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS

AT the January meeting of the Chapter routine business was transacted and addresses and discussions were given and participated in by various members on the following interesting subjects, amongst others: A Code of Ethics, The Institute Finances, Contractors and Specifications, Competitions, Mr. Totten's Report on the International Congress at Vienna, the Report on Affiliated Societies, The Advocacy of a Student Membership, a National Bureau of the Fine Arts, Schedule of Charges and Endowment Fund.

ABOUT ORCHARD TREATMENT

THERE is considerable interest in the minds of fruit growers about the question regarding the comparative value of the two systems of orchard treatment, clean culture and sod culture. Some very careful experiments under the supervision of the State stations, especially in Ohio and New York, have been conducted. And there are some practical fruit growers giving these plans the

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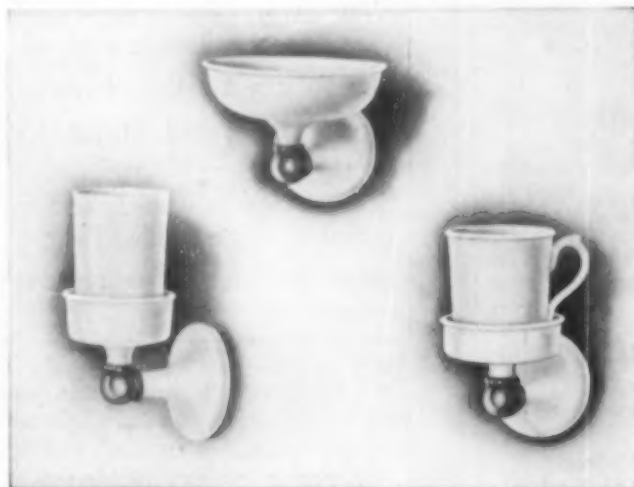


Plate 1610-K

Plate 1620-K

Plate 1615-K

PRICES:—No. 1610-K, China Bracket, China Receptor, China Tooth Brush Vase with heavy Nickel Plated Brass connection, complete..... \$3.00
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test of actual trial in a business way. So far there have been some rather conclusive results that others would do well to observe.

One of these is that on steep land it is very hazardous and often very wasteful of the fertility of the soil to practice clean culture. The waste by wash is too great. In such cases there can and should be some method of culture used that will prevent the soil waste, and only strips should be cultivated at most. These can be alternated so as to have the soil loose from tillage between rows running parallel with the slope, and in the rows a grass mulch. By this I mean that the grass, weeds, etc. be mowed and forked under the branches of the trees to serve as a mulch. By growing cowpeas in the interspaces and letting the crop rot on the ground, or pasturing it down by hogs, much fertility (nitrogen) may be added to the soil at almost no expense. If potash in the form of muriate or sulphate, and phosphorus in some of the preparations of bone or rock phosphate, are applied liberally, there should be no difficulty in keeping the soil rich.—*The Farmer*.

WHITE CEDAR FUNGUS

FOR the last fifty years students of plant diseases have been searching for the parasitic destroyer of the white cedar (*Chamaecyparis thyoides*). Finally, this has been discovered in the coastal swamps of New Jersey by William H. Ballou of New York. After years of search, Mr. Ballou began climbing the cedars, and, as a result of this difficult work, at last found the golden-yellow fungus that does the damage. It proved to be a *hydnum*, and was examined by Dr. H. J. Banker, an expert on this class of fungi, who pronounced it to be a new species and named it *Steecherium Ballouii*. The next step will be to find some means of combating this destructive fungus.—*Exchange*.

BERRIES, BIRDS AND BEES

THE relation between berries and birds and bees seems to me more close the more I observe it. The rose-family fruits came into existence geologically at the same time with the fruit-loving singers; all of the older birds were flesh eaters. Monkeys, squirrels, robins and parrots, as well as you and I, opened our eyes about the same time as



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the cherries, apples and pears. We have moved on together, and now civilization means a very decided mutual understanding with each other, and interdependence. Imagine all the rose-family suddenly obliterated, and you would have to give up nearly all our familiar birds as well.

The tie has become intellectual as well as material. The berry garden is a library by itself. Our boys and girls ought to be taught to study what is said and done there by Nature. The story of evolution is the story of life, and life forms the one all-important study of living beings. The strawberry is a sort of freak in the family, for it is a swelling of a receptacle of seeds, retaining its seeds lightly all over the surface. There was no object whatever in this swelling but to tempt birds to eat them and so carry the seed about for sowing. Now that man has come and likes big fruit, the little strawberries have to pass away, and the big ones are puffing out with importance. The raspberry is an enlargement of the separate seed sacks, until a cap of these sits on the receptacle or fruity stem. This cap we pull off for eating, leaving the receptacle on the bush; but in the case of the blackberry the receptacle also is sweet and eatable, and it comes off with the rest of the berry. The seeds of all these berries are simply kinds of nuts, with the shell surrounded by attractive sacks of juice. It was a shrewd piece of business on the part of Nature, for otherwise there would not have been the least chance for any protracted survival or any general spread of such delicate fruits. You will note that it is those things everywhere that tempt the birds that get the best chance to be propagated and sowed everywhere. When wings were only fins in the water there was a poor showing for this rose-family. Rodents like the fruit well enough, but they eat the seeds and throw away the pulp. We are obliged to kill red squirrels because, besides killing young birds, they will strip a tree of pears inside of three or four days, leaving only a mass of gnawed refuse. This puts an end to their usefulness in that direction.

We join with the birds in rejecting the seeds and scattering them about the soil. Evolution has not, so far, got any good grip on the wild cherries and haws and sloes, yet they serve as food for birds, and they get sowed, but so far without acquiring any useful development.

The Only Real Stains
If you have only seen the crude and tawdry colors of the thinned-paint imitations of

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you have no idea of the beautiful coloring effects of the true Stains. They are soft and deep, like velvet, but transparent, bringing out the beauty of the wood grain. Half as expensive as paint, twice as handsome, and the only Stains made of Creosote, "the best wood preservative known."

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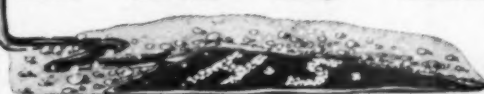
It doesn't pay to *experiment* with paint—Because it's always at *your* expense.
Now, every batch of hand-mixed Lead and Oil paint is more-or-less an *experiment*—
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They probably will at some time get a start, after which they will be of value to ourselves, and under tutelage will be made over into valuable fruits. At any rate you can hardly get a prettier small tree on your lawn than a red-fruited wild cherry. I have also a very rare yellow-fruited specimen. So far only one member of this family has rejected the sack and become a nut—that is the almond. Others may follow on the same line and occasionally a peach comes very near to it.—*Journal of Agriculture*.

ITEMS FROM AUTOMOBILE TOPICS

PREVENTIVES AND REMEDIES

When the work that tires are called upon to perform and the care which they receive from the average operator is considered, it is wonderful that service of any kind is obtained from them. The following list of hints has been issued by a prominent manufacturer of tires, and motorists will do well to put them into practice:

First, see that the brakes of your car work correctly, evenly and easily. Never jam on the brakes too suddenly. Instant locking of the wheels not only injures the tires, but may produce excessive strain of the driving and braking mechanism of the car itself. A car can always be stopped in a shorter distance by putting the brakes on firmly but gradually.

Do not round curves at too great a speed. It is playing with fate to attempt to round corners on two tires—besides it is bad for the tires themselves.

See that the wheels always run true. The unequal planes of some wheels will cause unusual strains which wear out the tires very quickly. Keep away from the curb, as jamming the wheels against the resisting stone will often chafe the tires very much as well as straining the wheels out of alignment.

Avoid overloading your machine. It is reasonable to assume that the manufacturer has not allowed any great factor of safety in equipping his machine with tires, whereas he may have allowed about 500 per cent more strength than was required in the mechanism which he is responsible for. Tires will not stand up under a greater strain than they are designed to carry.

Keep all oil or grease away from your tires. See that the garage floors are as

clean as possible, and wipe off oil from tires as soon as seen. It is a good precaution to see that all oily rags, cans, syringes, candles, etc., are kept away from the inner tubes in the tool box, or better still, have them in separate oil-proof enamel cloth bags, which are inexpensive and useful. Keep inner tubes well covered with powdered talc, and keep from warm places.

Never expose your tires to too great warmth or cold for any length of time and it is a wise plan to stop on the shady side of the street in summer time.

Start your machine in a straight line if possible, and do not twist around on your steering wheel before you get started. Not only the tires, but the steering mechanism as well, will suffer if this practice is continued. Do not run your motor car along in the car tracks, as this grinds down one edge of the tire.

In touring choose the "softest" part of the road. Many prominent drivers always run with one side of their car on the edge of the road in the soft dirt. Avoid all obstacles and irregularities, cross car tracks preferably at a wide angle. A little judgment and care in following these rules may mean dollars in your pocket at the end of the year.

Experiments with jets of various sizes should be carried out carefully, as only a slight difference in size will produce a marked difference in the running of the engine.

A good rule is to use the largest accumulators convenient to carry.

If heavy gasoline is used, some slight adjustment to the carburetter becomes necessary. The needle valve should be packed to raise the level in the float chamber, and more air should be admitted, preferably below the jet.

THE BOY IN THE COUNTRY

HE left the old farm because of the everlasting drudgery attached thereto, and he the son of a well-to-do farmer. That farm life is confining, close, hard work, that the boys oftentimes are called from bed in the early hours of the morning is true, but that city life is a panacea for all ills mortal that the country boy has to put up with from the cradle to the grave is by no means true.



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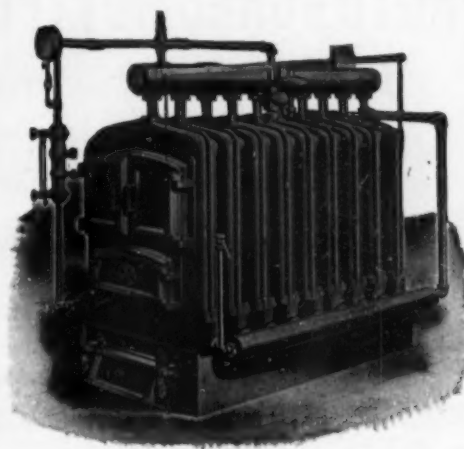
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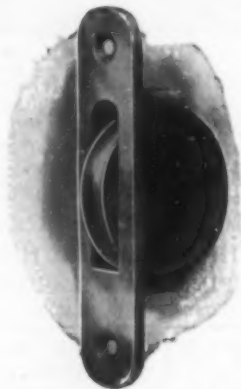
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The great trouble with country boys is that they are not aware of the circumstances under which the city boy is compelled to live and work if he has to earn his living by the sweat of his brow. The idea held up to the country boy is to go to town and get a nice, easy, soft snap such as so-and-so has. How many of them do it? Not one in a thousand. Far more go there to find work in some close, stagnant mill, to sweat amid the fumes of steam or tobacco smoke; or perhaps in some iron mill or foundry, surrounded by the curses of their fellowmen, toil out a weary day of eleven or thirteen hours at night, and after the day is over go home—and to such a home!

Up some little back street in a band box built of brick and named a house, more than likely our workman has his home, there to pass away the weary hours of the night amid the heat and stagnation of probably a filthy street, only a few feet wide, hot, close and dirty. In any large city on some sultry night one may see the workmen and their families in these little narrow city streets stretched about the steps and pavements in all conditions. These are not slums either, but fairly respectable neighborhoods. To such a condition of life many of our country boys have gone, and many more are to-day preparing to go. Fat pay and big pay envelopes? Not in these times; if our city laborer averages \$12 a week he is a lucky man. Tens of thousands get less rather than more.

Country boy, before you make the change, in the name of that country you have been taught to hold in reverence, look and do not leap! If you understand farming there are just as many chances on the land to be worked out as there are in the city. This is a great country, and if you do not like the kind of farming you are working at, there are many others. If you belong to a family that follows the grind, grind, system of all work and no play, when you reach your majority and start for yourself, follow out an easier system. Do not condemn country life just because you have been unfortunate enough to be brought up in the home of a man who knows nothing but grind. Do not overlook the fact that if such a man was your boss in the city he would grind your life away; long, long before you were twenty-one years old you would be

occupying some six feet of green turf, where at last you would not hear the dreaded call and curse of the boss. Country life may not be, and probably is not, what many would like to color it; but all things being equal, it is far preferable to city life. That is just where it comes in. City life is never compared with country life on an equal plane. Remember that if you must work in the country for a living you will have to work in the city for one too, and if you possess the ability in yourself to rise above the ordinary workman in the city that same ability will carve out a home for you in the country. Look before you leap, consider all things, and if you are sure you can better yourself in the city, go; if not, stay on the old farm.—*The Country Gentleman.*

SMILAX

WITHOUT question the smilax is still the most useful as well as the easiest grown of decorative greens. Nor is there any doubt as to the profitableness of its culture, whether raised extensively for the wholesale market or in small batches by the retail florist. And that the making of a new plantation every year with young, thrifty stock is by far the best plan, seems also settled.

The first two weeks in July, after the rushing flood of spring business has subsided and when the florist is anxiously looking about him in search of some more hard labor to prevent a break in the enjoyment of healthful perspiration, is the time to start in anew with smilax. In selecting the spot for a bed to be made he must bear in mind that smilax, to do well, wants at least sixty degrees of heat in the winter and that it requires sufficient room overhead for the vines as well as under foot for the roots. Therefore, a solid bed on the bare floor of a pretty warm house, at least seven feet below the rafters, would be the proper place for a smilax bed. Digging and manuring will prepare the ground for the reception of the top layer, which should be six inches in thickness, held in place by a neatly constructed planking all around, and be a compost made up of heavy garden loam and barnyard manure in equal parts. Vigorous seedlings, coming out of three-inch pots, are now planted, and not until they have made a fair start will any great amount of watering be necessary.—*Florists' Exchange.*

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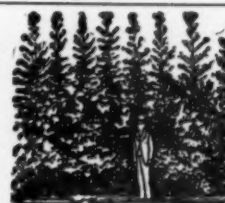
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A PICTURESQUE ACRE

A LITTLE knoll crowned by great gray boulders, from which a picture of unusual diversity can be enjoyed, is the site chosen for the unostentatious home of Mr. Chas. P. Austin. Looking across the slope, a comprehensive view of the Old Spanish Mission Church rises in the foreground; beyond this the town of Santa Barbara stretches out, while still further on the placid waters of the Pacific Ocean glisten in the setting sun, while from its bosom rise the rugged mountain peaks of the several channel islands, all tinged with the brilliant hues of a perfect sunset. Catharine Robertson Hamlin contributes a graphic pen picture of the site and describes the modest home which Mr. Austin and his artistic wife have erected on the western boundary of the continent.

THE MAGNOLIA TREE

Georgia Torrey Drennan, that enthusiastic floriculturist and writer of the South, presents a short paper on the family of *Magnoliaceæ*. The trees and shrubs of this family are particularly ornamental and beautiful. The various members of the family are scattered over a wide range of latitude and are both evergreen and deciduous in habit according to location. Perhaps no more magnificent blossom is grown on any forest tree than that of the *Magnolia grandiflora*, the best known member of this rather extensive family, and to it Mrs. Drennan devotes the greater part of her description and illustrations.

AN ARTIST'S HOUSE

Trained as artists have been in the laws of proportion, the harmony of design in both line and color, and an accurate knowledge of the value and possibilities of materials, they often achieve results in their own houses which are unusual and effective, and this too, at a comparatively small cost. Such a house is that of Dr. and Mrs. Bushnell near Mayfield, California. Debora Otis describes it, and the photographs illustrating the text indicate how much may be secured in that favored climate for the sum of \$2,500.

GERMAN IRISES

Mr. Clarence M. Weed of the State Normal School at Lowell, Mass., writing on the above subject, urges the desirability of extending the number of varieties of these "Rainbow Blossoms" beyond the three or four so long known and so generally distributed throughout our gardens. Mr. Weed goes into detail as regards the structure of this flower and points out the individual parts so that they may be readily seen and comprehended by any one. Golden Flag, a yellow sort; Bridesmaid, a white and lavender combination; Florentina Alba, a pure white; Montspur, a soft violet; Sappho, a blue and indigo and Silver King, a silvery white are a few he recommends, which indicate the wide and varying range of colors to be obtained.

THE SMALL HOUSE WHICH IS GOOD

Two charming examples of cottage art by Joy Wheeler Dow are described and illustrated by him under the sub-title of "The Art of a Cottage as Exemplified in Two Recent Designs." These cottages are frankly new ones, only they were "thought out" in the vernacular of other days, and developed with extreme conservatism. The low ceilings, the high window sills, the small and numerous panes of glass in the windows, the carefully moulded interior woodwork painted white all tend to create the impression of that earlier period some eighty or a hun-

dred years ago, when such effects in design were the rule and were appreciated for their intrinsic value.

THE SUBURBS BEAUTIFUL

Down in Alabama near the city of Birmingham, a Suburb Beautiful has been developed. While Nature has been very kind, it is the use and adaptation to which she has been put by the cultured residents of that residential section that has produced the results, so satisfactory, so artistic. The illustrations in every instance show the building sites "before and after" the improvements. What to some would mean very discouraging conditions have been turned to most artistic account. Prospective builders can derive much inspiration from this article. It is from the pen of Sumter Mays Ball.

THE SPRING RENOVATING

We are glad to announce a timely and most practical article from Louise King, for the May number, under the title given above. She takes up many questions of vital interest to the housewife. Wall coverings, draperies and general refitting of the rooms of the home are considered.

HORSE CHESTNUTS—POISONOUS BUCKEYES

The second sketch in the series on Poisonous Plants and Wild Flowers by Annie Oakes Huntington will appear in the May issue of *HOUSE AND GARDEN* under the above caption. Their blossoms come in May and are most beautiful. The fruit and bark produce a bitter poisonous principle, known as esculin, which is occasionally employed in medicine. Read carefully and make the children familiar with the danger which lurks in the attractive nuts of both the above trees.

AN IDEAL SUBURBAN HOUSE

A few miles from New York City in the Borough of Rutherford, New Jersey, nestling among the trees of a shaded street, stands a snug, compact little house, its Dutch gambrel roof silver gray in color and its white first story walls and trim, partly hidden by the shrubs and trees, presenting a graphic demonstration of the successful combination of practicability and art. It is the home of Mr. Robert Barrons, an architect and a designer. Mr. Geo. B. Mitchell describes it in detail and with plans and photographs profusely illustrates the descriptive text.

GARDEN FOES AND HOW TO COMBAT THEM

Plant life in the garden is beset by foes of three classes: Insects that chew, such as caterpillars, beetles, grasshoppers, slugs, etc. The sucking insects, such as lice, aphids and scale; and last, mildew or blight, which is a disease within the plant. Ellen P. Williams enumerates the most approved methods of destroying and preventing the ravages of these foes and gives the several formulæ best suited for use in dealing with the various insect enemies or diseases. This article is of value to amateur gardeners everywhere.

THE MEDICINE CHEST IN THE GARDEN

"An ounce of prevention is worth a pound of cure." The truth of this old adage remains undisputed through the lapse of years. Prevention of many of our bodily ills, says Evelyn Prince Cahoon, may be secured through the use of the common vegetables in our gardens. She tells of the medicinal qualities of a long list of them and advises us to "cheat the doctor" by keeping well through their intelligent use. Concisely written yet full of food for thought.