Vol. II.

CCTOBER, INCOMA

No. 10.

# HANNING TO SERVICE TO

A Magazine devoted The Architecture Garden Sind Decoration 2

Single Number 50 Cests 1222 CHESTNUT STREET, PHILADELPHIA

Five Dollar

#### THE MEYER-SHIEREN CO., ME.

Invite inspection of its

#### PLUMBING FIXTURES

Since an disvestigation of the perfection of mechanical detail, the appearance and anish which characterizes its manufactures will demonstrate why these fixtures are used in an many well-known restraces, and why they are comowhat higher in price.





DO NOT SHRINK OR SWELL-CHEAPER THAN PINE

HANDSOMEST DOORS FOR THE MONEY IN THE MARKET, BEAUTIFUL IN GRAIN AND COLORINGS

AND NOT EXPENSIVE.

E. A. CARLISLE, POPE & CO.

#### ELEVATORS

PASSENGER AND FREIGHT

MORSE, WILLIAMS & CO.

PHILADELPHIA

#### THE H. B. SMITH COMPANY

704 Arch Street, Philadelphia

#### Manufacturers of HEATING APPARATUS

LEDGER ADOTTONAL EDILER



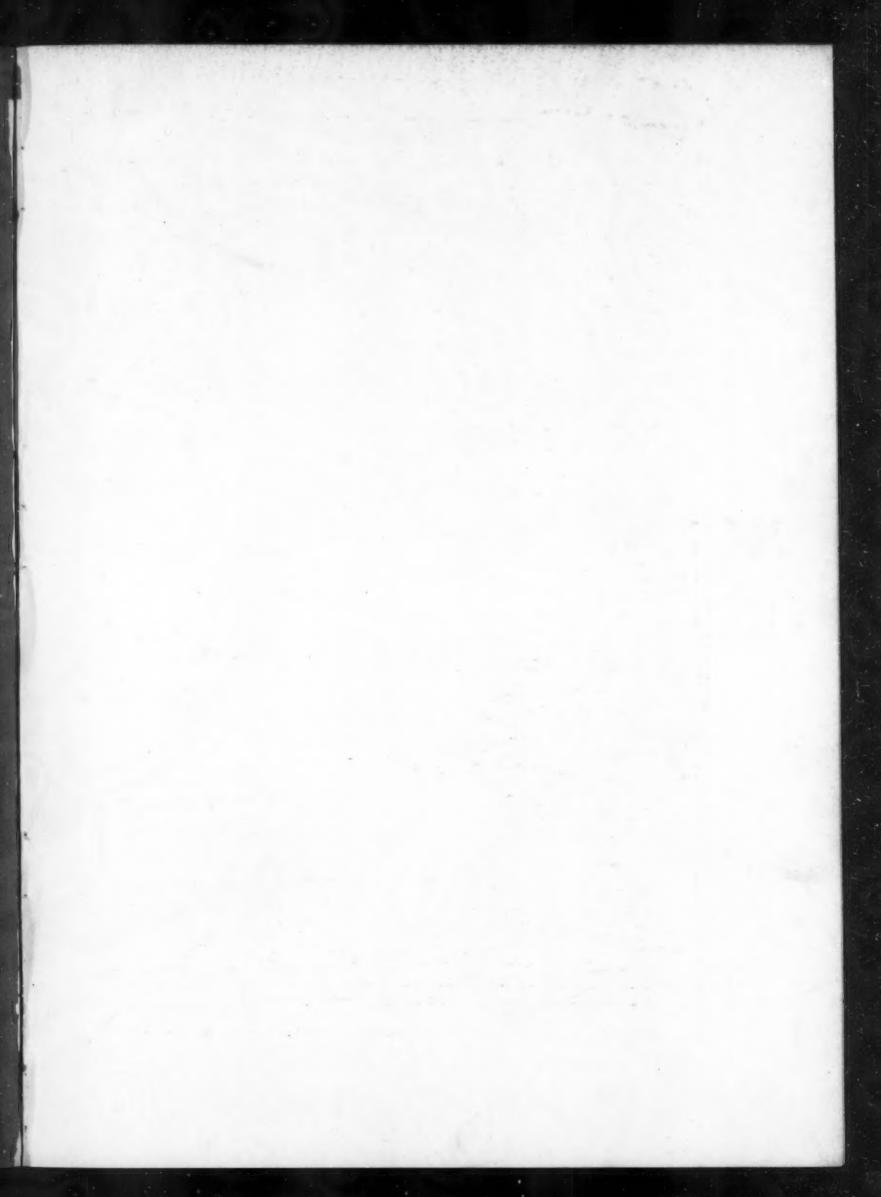
History Award at Communic and National Empire Foliatory and Duratific,

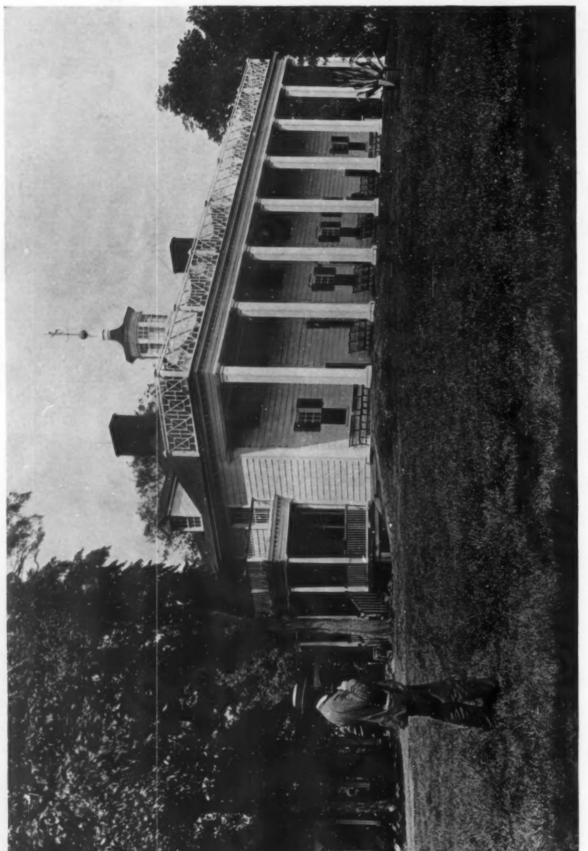
Send he most Caralogue or call and are Minibil

RADIATORS

CASTROLICS PRICES BEST RESERVED

ESTABLISHED 1953





THE MANSION AT MT. VERNON

## House & Garden

Vol. II

OCTOBER, 1902

No. 10

### THE GARDENS AND GROUNDS OF MOUNT VERNON, VIRGINIA

In the fresh of the morning the old garden was a place of delights. The shadows were still long and held that limpid depth which is of the early day alone. The cool moist air was heavy with the scent of the flowers. The rose, queening it here in the full beauty of her own month of June, was dominant;

but as the wind drew gently across the beds and borders, there came a breath of mignonette and a weaving of many delicate and delicious fragrances upon a ground of pungent box.

Bird-song filled the silence of the garden. Catbirds piped their tuneful varied airs, in the intervals of breakfast, and the wood thrush, hid in a leafy bosquet, dropped slow notes silver clear and sweet. The squirrels, too, find thicket here and

were skurrying about in numbers, very tame.

We came into the garden not by the wicket from the lawn but from the road behind the "quarters" and greenhouses. One sees the garden thus more in its relation to the lawn and to the house. In the front of the picture some quaint box-bordered beds hit just the right key in the impression.

Beyond these, tall box hedges, clipped flat

on sides and top, enclose large rectangles where flowers are set in geometrical figures. To right and left the garden spreads its length, and beyond its farther wall rise masses of foliage from the trees about the lawn through whose boles and branches the white walls and red roofs of the "mansion" and dependencies gleam.



THE PORTER'S LODGE

MT. VERNON

In the box borders at our feet are clumsy and involved patterns, of a formal sort and rather Dutch in suggestion. These and further traces of topiary art near by witness the hand apparently of some schooled gardener of the eighteenth century Old World who was employed at Mount Vernon toward the close of Washington's lite. There is a tradition that his diploma, engrossed in Dutch, is extant among his descendants in Alexandria.

The main lines of the garden—defined by gravel walks and box hedges—still conform to the simple plan of the old map said to be from Washington's hand, the original of which is in the Toner Collection of Washingtoniana in the Library of Congress, in charge of Mr. Lawrence Washington. The only later map I have been able to find is one of the present estate of Mount Vernon,



THE HOUSE FROM THE GATE

MT. VERNON

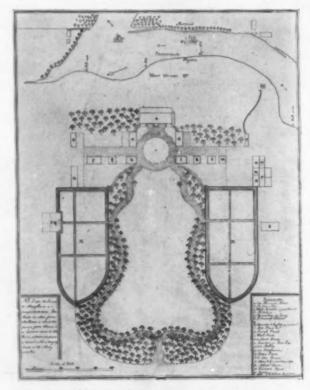
made under direction of the Chief of Engineers of the Army, and as yet unpublished, of which I was courteously allowed to make the partial tracing given here. On the old map both walled gardens are designated "Kitchen-Gardens" (marked X X on the plan) but the north one was devoted entirely to flowers, whose overflow partially invaded the south garden as well.

The Washington Diaries, though full of reference to the lawn trees, contain little as to the planting of the gardens. We read that the conservatories held many rare plants, in some cases presented by friends, but mostly bought at the famous gardens of John Bartram the Quaker, a horticulturist of note in his day, near Philadelphia. Bartram, dying during the war of the Revolution, was succeeded by his son William who had also earned some reputation as a botanist, and who was consulted in the arrangement of the Mount Vernon Conservatories. The first greenhouses were destroyed by fire in 1835, when the house itself had a narrow escape, but they were rebuilt as before. Others have been added along the east wall, and between these and the little "Spinning House and the Shoemaker's and Taylor's Apartment" is a small rose-garden.

The Mansion grounds contain some twenty acres, the plan of which, by no means elaborate, is chiefly interesting as embodying Washington's idea of the proper fashion for a gentleman's place. It is symmetrical and

well balanced, very practical in the disposition of buildings and treatment of grounds, and secures the stately effects of order and formality, while not ignoring the possibilities of the site for a freer landscape composition in parts.

Thus the public approach from the highroad in the west was laid out on strictly formal lines with a long straight avenue leading in from the lodge-gates, while from the piazza on the east side of the house, where the intimate life of the family and its close friends was lived, the eye was



WASHINGTON'S PLAN OF MT. VERNON

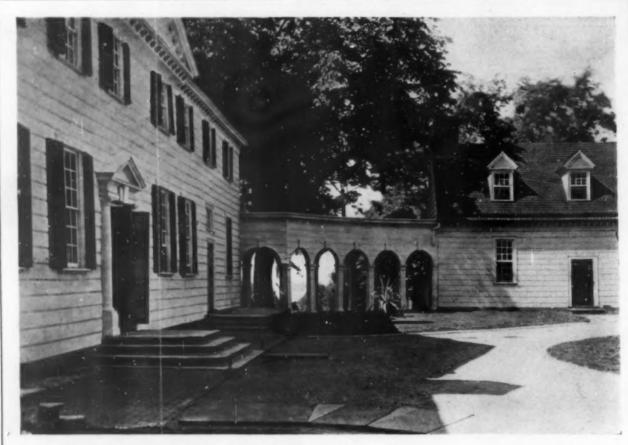
-The Mansion House	1-Wash-house
-Smith's Shop	mm-Coach Houses
White Servants' Apart-	n-Quarters for Families
ment	000-Stables
-Kitchen	ppp-Necessaries
-Repository for Dung	q-Greenhouse
-Spinning House	rr-Corv Houses
	s-Barn and Carpenter's Shop
-Shoemaker's and Tailor's	t-Schoolroom
Apartment	u-Summer-house
-Storehouse, etc.	w-Dairy
-Smoke-house	xx-Kitchen-Gardens





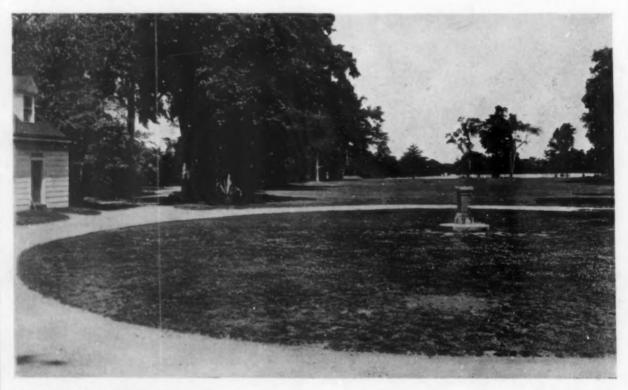
THE WEST FRONT OF THE HOUSE

MT. VERNON



THE WEST FRONT AND PASSAGE TO THE KITCHEN

MT. VERNON



THE LAWN FROM THE WEST DOOR

MT, VERNON

pleasured with the natural beauties of wood and river. The east lawn slopes away from the house in a gradual descent toward the river with reaches of greensward broken by parked tree masses merging into a hanging wood upon the acclivity of the bluffs. These fall away rapidly to the river shore; and the wood, left in its natural state, served to hold the soil in place upon the escarpment of the bluff against the scouring of torrential rains. A footnote in the old map reads:

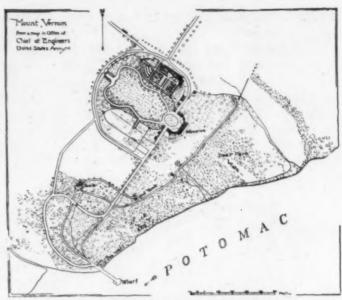
"From the house to Maryland is a perspective view. The lawn in view from the house is about 100 paces. From thence is a descent down to the river, about 400 paces, and adorned with a banging wood with shady walks."

In the old days before the War, Washington followed the hounds among his neighbors and kept up a kennel of good dogs. Some of the favorites' names, to be found in one of his housebooks, have a tuneful sporting ring to them, as: Vulcan, True Love, Ringwood, Sweet Lips, Singer and Forester, Music and Rockwood. Lafayette sent him a pack of French staghounds in 1785, but finding them fierce and troublesome, he gave them away and stocked his park with Virginia deer.



THE WELL HOUSE

MT. VERNON



THE PROPERTY AT MT. VERNON
From a map in the Chief Engineer's Office, U. S. Army

The level sweep of the lawn seen from the north end of the portico has a less grandiose beauty. The trio of elms grouped about the ice-house, the ivied wall with a gable of one of the "quarters" beyond, and a broad field of wheat against a dense mass of forest on the left combine in an effective bit of landscape. The west lawn, as a whole, is best viewed from the stone platform and steps at the west entrance door. Washington set up the historical surveyor's instrument and read the bearings of the various tree-sites as he determined them, having personally chosen the trees for transplanting from the finest in his forests, as he rode about in the early morning over the estate. The plan of the shaded drives which flank the lawn is regular without stiffness, and the eye follows agreeably the flowing lines until they converge at the entrance gates. As one strolls under the dappling shade, these curves give an effect of changing views which a straight avenue lacks. From this approach the buildings close the perspective in a well-balanced and very dignified grouping. I chose for the photograph of them, as giving the most effective ensemble of Mount Vernon, a point in the axis of the lawn of which the house axis is a prolongation. Here one has the mansion in elevation with its wings—the kitchen on the right, the office on the left—joined by graceful curved arcades to the main building in a very agreeable symmetry.

Upon the map one remarks that the plan of this lawn and avenues has somewhat the outline of a bell. As the gravel ways converge to the oval which they describe before the house, on a diameter equal to the full length of the front, there is a heavier massing of trees upon their shoulders, meant to screen the outbuildings which the lay of the ground and other practical considerations bring into

ness, and there is a fine sweep of the Potomac visible over the further treetops. Beyond, the road dives down through groves to the river landing.

I had intended keeping out of this paper matters of history with which everyone is assumed to be familiar, but the master is so closely associated with his home—this precious monument we have of him so fortunately preserved to us—that a few words about his relations to it seem unavoidable.



THE SOUTH END OF THE HOUSE

MT. VERNON

this location. A glimpse along down the front of those on the right of the road descending to the stables is full of interest. The storehouse faces the gable of the kitchen, and then come the smoke-house, the wash-house, and the coach house, in this order. The ramp of the well-built road with its cobbled gutters, the grass border against the little houses, and the pyramidally clipped box hedges between them are of a pleasing quaint-

Mount Vernon is rather a modest house, as compared with some of the great places of Colonial Virginia, such as Westover and Shirley for instance, but it has all the appointments and the finished elegance of the house of a gentleman of the times. Washington inherited the estate from his half-brother Lawrence in 1751, the property having come to Lawrence, the older brother, by the death of their father, Augustine, in 1743. It was

a large estate of several thousand acres, on the Potomac below Alexandria, known as Hunting Creek. Lawrence had held a Captain's commission under General Wentworth and Admiral Vernon in their joint expeditions against Cartagena, where the British were defeated, and, being an admirer and friend of the Admiral's, he named the place for him. The estate was bordered by the land of the Fairfaxes on the north and of the Masons on the south. Lawrence, after his marriage with Anne Fairfax, made it his home. George Washington lived here as a boy under his brother's protection. He was a good deal at "Belvoir," the Fairfax place. When Lord Fairfax came out to live in Virginia, where he owned a small principality, he soon made a friend of the boy, had him much about, looked after his seat a-horseback, taught him to ride to hounds over a pretty stiff country, added a London touch to his manners, and looked into his letters and his politics more or less. And the latter probably gave the cynical old man of the world some piquant surprises.

He took Washington, then a boy of sixteen, to survey his lands upon the Shenandoah, and this covered three years of rough work on the frontier. Lord Fairfax built a great rambling log house near the junction of the Shenandoah with the Potomac, and there he lived with his hunters and Indians and a great pack of dogs. Washington made several visits there later during the old lord's life, and this man who had been one of the wits of his day, the friend of Addison and Steele, himself an occasional contributor to the "Spectator," now turned in disgust from the old world to end his days a recluse in the wilderness of the new, must have left a strong impress on the younger mind.

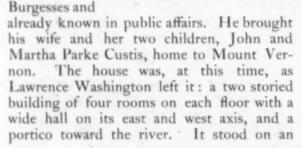
Washington's brother Lawrence was also a personage, and both Mount Vernon and Belvoir were much visited by people of note, distinguished travelers and others; so that Washington's social training was an unusually broad one, although he never visited the mother-country, as did so many young gentlemen of consequence in his day. The ownership of Mount Vernon classed him



THE WALK AROUND THE WEST LAWN

MT. VERNON

among the wealthier planters of Virginia, and his marriage in 1759 to the widow Martha Custis, the richest woman in Virginia, brought him a very large addition to his fortunes. He was then in his twenty-seventh year, a tall fine figure of a man, a member of the House of





THE STOREHOUSE, WASH-HOUSE, COACH HOUSE AND STABLES

eminence, of about one hundred feet above the river, sloping down to the shore in broad finely wooded and parked slopes. Washington thus described the site and region: "A high, healthy, country, in a latitude between the extremes of heat and cold, on one of the finest rivers in

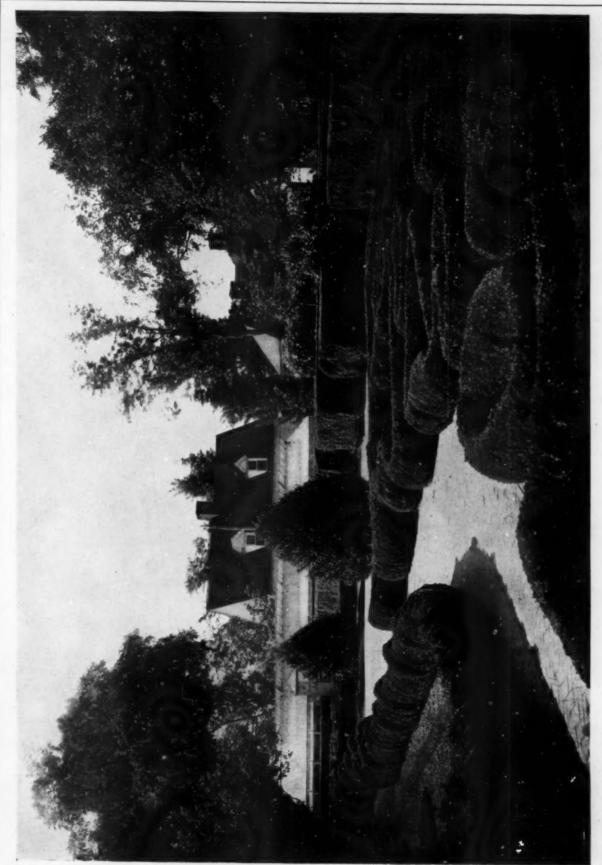
the world. . . . The borders of the estate are washed by more than ten miles of tidewater; several valuable fisheries appertain to it. . . . . ."

When not in attendance upon the Virginia House of Burgesses, of which he was a member for fifteen years,—his family usually accompanying him to Williamsburg and re-



THE KITCHEN-GARDEN

MT. VERNON



IN THE BOX GARDEN

maining during the session,—Washington, barring occasional visits to Annapolis and Alexandria, was with his household at Mount Vernon looking after his productive farms. He had over four thousand acres under cultivation. Wheat and tobacco were the staples which he shipped from his own wharf to

Belvoir and Gunston Hall. All these matters we have mostly from the accounts and diaries of Washington himself, which cover a period of forty years, and they are interesting here as showing the personal habits and tastes of the man who made this beautiful old place, so characteristic of his dignity, his



A CORNER OF THE KITCHEN-GARDEN

MT. VERNON

England and the West Indies. His brand of flour was well known.

He had brought out new furniture, and clothes and books at various times, from England. We have description of a couple of very handsome coaches which he imported. He kept good horses and dogs, and drove with the family in a coach and four, with negro postilions in livery, to Pohick Church of a Sunday. He had his barge on the river manned by negro boatmen in his colors. Altogether, he maintained a state equal to that of his neighbors Fairfax and Mason at

modesty, his sense of fitness, and eminent practicality. If one has studied Washington understandingly the place speaks of him at every turn, so strong is the impress of his great personality upon the home he made with his own brain and hand.

After the resignation of his commission to the Congress in 1783 he again retired to Mount Vernon, and there soon found the old house inadequate for the entertainment of visitors who flocked about him. Deciding upon enlargement, he set about making plans for the alteration of the buildings, and for



IN THE KITCHEN-GARDEN

The Gate beyond opens to the Lawn

MT. VERNON

extension and adornment of the grounds. He made his own plans, drew up the specifications, and superintended the work in person.

Leaving the old house of Lawrence Washington practically intact he added to each gabled end, extending the roof in hipped form over the new wings. The mansion stands to-day as he left it—the outbuildings and grounds as well, I may add. It has two stories and a generous garret, is about ninetyfive feet long by thirty wide, and on the east toward the river, it has a broad piazza reaching to the eaves—its flat roof carried on square columns, above the entablature of which runs a light balustrade. Three dormer windows pierce the river side of the roof; there are two and a pediment, about thirty feet wide, on the west, and one on each end. A small observatory—or lantern—with a spire rides the ridge. The house is entirely of wood and very solidly framed. The outer covering is of broad and thick boards, worked into chamfered panels to give the appearance of cut and dressed stonework. This has held its own as well as any other part of the staunch

old building. The plan shows a wide central hallway into which open, on either hand, two rooms. In the west end of the hall a broad heavy stairway ascends in two runs to the floor above, the arrangement of which is practically the same as that below.

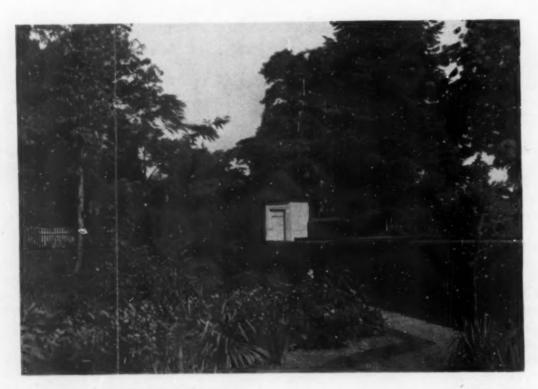
North or left of this hall on the ground floor are reception-room and parlor, opening through into the great drawing-room which was the principal feature of Washington's additions. Occupying the full width of the house this is a handsome room, with panelled walls and a high ceiling richly ornamented in stucco relief. The pitch of the older rooms is low. Those south or right of the hall are a second parlor and the dining-room through which one enters the library and breakfast-room of the south addition, where there is also a small stair to the second floor. This is in short a plan of the house.

At noon we were making toward the old kitchen-garden on the south side of the lawn, and first stopped behind the kitchen for a draught at the well-house against the wall. There is a generous brick pavement here.



OLD BOX IN THE KITCHEN-GARDEN

MT. VERNON



A CORNER OF THE BOX GARDEN

The Small Building is the Schoolroom

MT. VERNON

Incidentally the attention to proper paving about the buildings is noteworthy. A broad pavement carries across the whole west front, and there are handsome stone platforms and steps to the outer doors, and walks from the house to the several outbuildings so that one could get about comfortably in any weather. To such details Washington gave close attention.

The kitchen-garden drops down below the lawn in a couple of terraces, a sunny sheltered spot within a goodly wall of brick. On the upper terrace are the small fruits, the herbs and simples, the salads and savories. As we entered, the strawberry beds were sending up into the warm sunshine a fine tempting aroma — to which the camera promptly yielded. Against the warm south face of the wall are the finer fruits, doubtless espaliered in Washington's time, the wall being especially meant for that use as in the English walled gardens.

Here were nectarines, we shall say, the West Indian cocoa plum, apricots, French pears, and some of the finer grapes. The hardier vines are run on a trellis on the edge of the grassed slope to the lower terrace. And further along under the walls are the beehives, whence comes a deep humming and signs of great activity this warm June day. Here, by the way, my friend of the camera might have found retribution for that little matter of the strawberries, but for the gardener's kindly warning. From the far end by the summer-house, where the master may have rested on a summer's day to con his bucolics or direct horticultural campaigns, or where, in watermelon time on a midsummer moonlit night, he may have set a picket against raids upon the commissary not unlooked-for in these parts, we took a shot down the ranks of young corn and sprouting vegetables of the lower terrace. The picture ends against the east wall, ramping down to the red gable of the stables in a composition having quite an air of old France about it.

On the upper terrace there are bits of hedge-border left. Note the overgrown unkempt old box by the path to the gate from the lawn! And here and there hollyhocks and hardy shrubs make brave play of bloom among the old-fashioned annuals. This friendly assembling of the fruits and flowers



THE QUARTERS

MT. VERNON

is charming. The fresh green of a lettuce bed is delicious against the scarlet poppies. The crisp gray-green roses of the "cabbagepatch" are finely set off by a broad belt of sweet peas in purpling bloom. There is superb decorative suggestion in the pattern of the running cucumber vines against the umber earth. The squash are fine in the juicy green of their broad furry leaves punctuated with yellow blooms. The effectiveness of the vegetables in form and color as a setting for such flowers as chance among them suggests arrangements of esthetic inin stone or brick with good broad "cheeks." But what a good landscape-architectural result we have in the arching of the grapevine over its rough posts, through which the eye follows up the gravel path between the old box to the lawn gate! And the shrubs on either flank of the steps occur happily. Beauty is so easily reached in the ordering of simple elements.

Where there is a good wall, as at Mount Vernon—and no enclosure is more economical in the long run, more profitable always, for the kitchen-garden,—it is a pity that it should



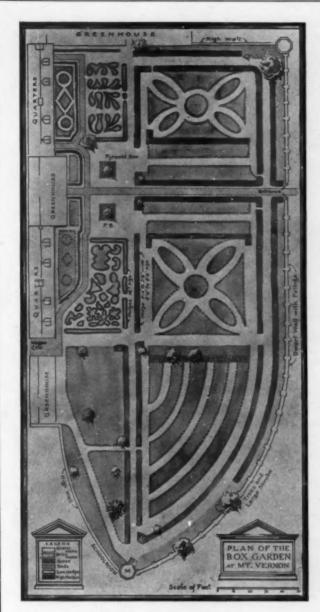
THE BARN

MT. VERNON

terest in the kitchen-garden. The French potager is made frequently a place of beauty by this means. The mere symmetrical arrangement of beds and rows is pleasant to the eye, and grassed walks between give an air of elegance. The sodded slope, dropping down in two steps from the upper to the lower terrace of the kitchen-garden, at Mount Vernon has this sort of value. The grape-vines trained along its crest have a charming grace, and even the path worn at its base has a certain formal value.

Those wooden steps which show in the picture would be better for "risers," better still

not be put to its best usefulness by the training of fruit against it. Wonderful results, at once practical and beautiful, are gotten in that way. Certain of the finer varieties of apple yield marvelously when so treated. It gives opportunity for guarding against insect enemies, for the removal of superfluous buds; and it ensures to a judiciously limited amount of fruit the best conditions for perfect sunning and shading and faultless development. I do not mean to say that there could be anything more beautiful than the natural branching of an apple-tree, but we may enjoy that in the orchard. Here in the kitchen-garden



PLAN OF THE BOX GARDEN
Specially measured and drawn for House and Garden

the hand of man is properly at work guiding nature. And against the wall the espaliered tree is the more effective both in looks and in yield of fruit. If the sun be too hot and the wall too dry, as in our climate is often the case, so as to wither the blooms and fruit, wires may be stretched a little away from the wall,—from the buttresses, for instance, here at Mount Vernon,—or a screen of ivy or other dense vine-growth may be made to cover the bricks to keep them cooler.

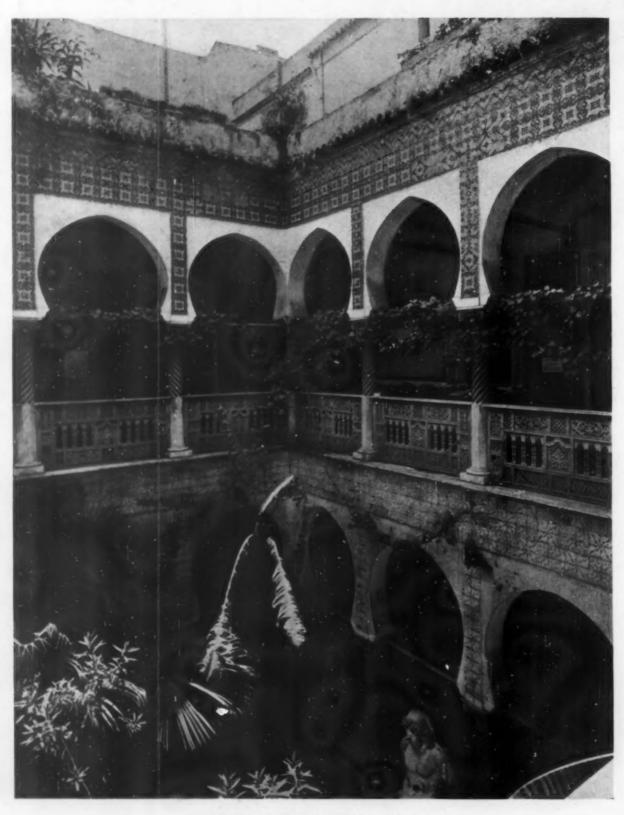
One rather misses sunflowers from the old garden. A company of these stalwart welldisciplined fellows would show well down in the angle of the stables and the wall. A vellow rose or other climber against the wall here and there was generally to be found in the old garden; and jasmine was a favorite. Altheas and lilacs there were, and of course, nasturtiums, bachelors'-buttons, gillyflowers, and stocks, sweet williams, pansies, and the As the air drew over the ranks of these and across the beds of lavender, sage, and thyme-those simples found in every old garden, the good housekeeper's aids, which we have mostly now from the grocer's -it came laden with a fragrance indescribable.

Our last look at Mount Vernon on that pleasant day was backward over the yellow waving wheat to the long row of "quarters" which break the north wind from the gardens. They massed well in the westering sun, which picked out sharp high lights on the little dormers. One could fancy the mammies and pickaninnies of an old long-gone time about their doors and on the road, a feature not the least pleasant and picturesque of the banished glories of the southern planter's home.

Albert Burnley Bibb.



The Quarters, Mt. Vernon



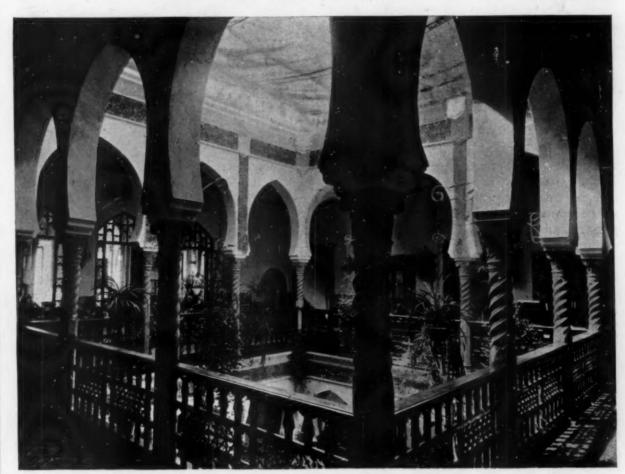
COURT OF THE MUSEUM, ALGIERS

#### MOORISH COURTS

GARDEN within one's house and in A the heart of a city! This is now, and has been for centuries, the possession of the Moor. The sun beats pitilessly upon his roof and bleaches into powder the surface of streets heated by Saharan winds; but once within the entrance of his dwelling, the hot aridness is left behind; the din and uproar of the busy thoroughfare dies away; and the silence of a home reigns in its place. Unsightly filth and squalor are forgotten, and all senses refresh themselves before the garden of that open court, around which the life of the domestic establishment quietly passes by. Through open doorways are wafted the fragrance of flowers, the songs of birds and the muffled plashing of fountains. Open to the sky is the courtyard, and although unsheltered from the sun, the warm rays are tempered below by fresh verdure and the shadows of surrounding

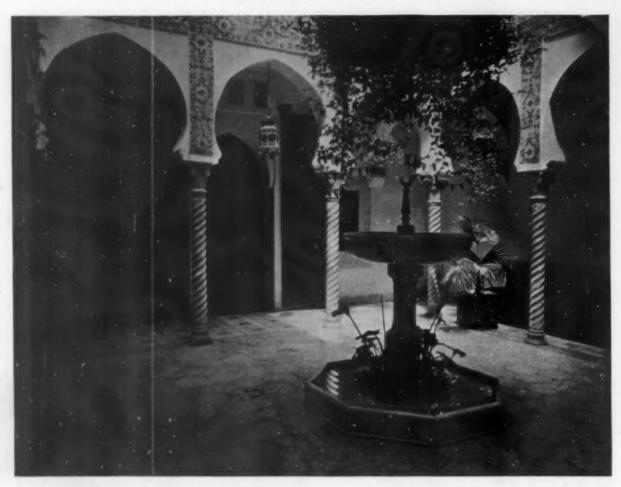
arcades, the reverse image of whose arches is mirrored on the still surface of a pool.

City life under torrid temperature is quite bearable in northern Africa. The rational arrangement of the houses makes it so. They have many features from the lack of which we suffer here in summer months, but the central court is the most important, and it is the vital part of Moorish house-plans. It gives so much enjoyment, indeed, to home life in a warm climate that we find its counterpart, the Spanish "patio," growing in favor in our own Southern States and in California. The external walls of a Moorish house follow the meandering lines of the lot—usually an irregular quadrangle. Along three sides are arranged the living-rooms. These apartments are narrow in proportion to their length, often being but ten or twelve feet wide; and arches are sometimes thrown across them at about one-fourth the length of the room from each end, so as



MOORISH GALLERY IN THE CHÂTEAU HYDRA

ALGIERS



COURT OF A MOORISH HOUSE

ALGIERS

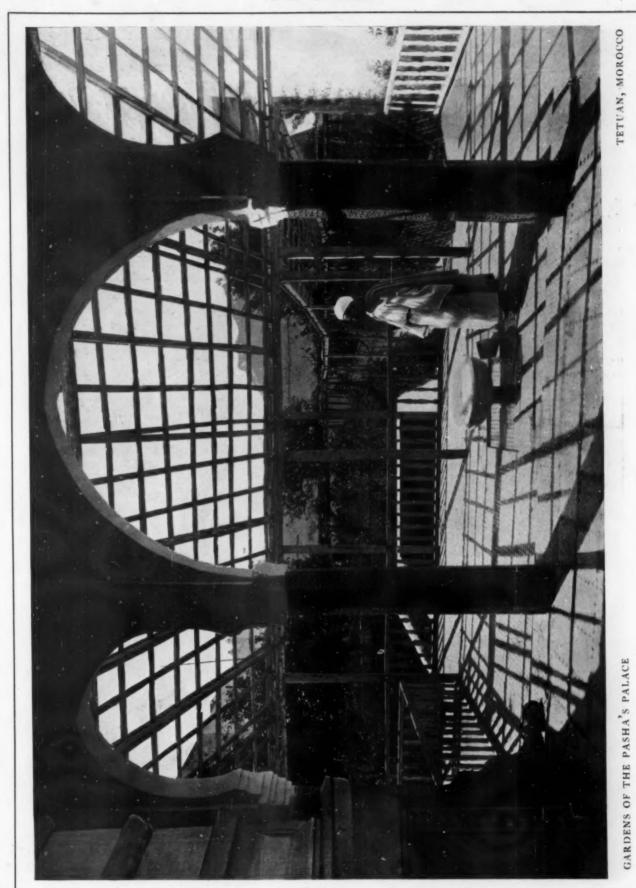
to improve the apparent proportions. The kitchen occupies the fourth side, and is shorter than the other rooms by reason of its containing the stairway, an entrance passage and necessaries. An open colonnade supports the second floor; and if there is a third story, a second tier of columns is superimposed upon the first.

The irregularity, which is caused at first by the shape of the property itself, continues throughout the Moorish house. Only by accident, it would seem, are two lines ever parallel or horizontal. Often the general quadrangle has several breaks within the length of each side, and no effort is made to conceal these inside the rooms. Even the familiar "horseshoe" arch is declared by some travelers to be constructed entirely by the eye without any established rule, and can never be found with its two halves exactly alike. The cusps

which traverse the intrados of the arches are also delightfully free in their contours.

If it be impossible to obtain a square or rectangular court by the above arrangement, a second court and surroundings are devised—sometimes in the position of a mezzanine floor. It may be allotted to guests, women's apartment's or to servants, and would have a separate entrance from the street. This entrance is always L shaped so that no one from without may look into the court, though his gaze may succeed in passing the huge door heavily locked and studded with nails.

The outside of the houses have few windows, and light and air are obtained from the court. Each room has a central door opening upon the corridor. Additional air and some light are admitted through a panel of fretwork above the door, and very often by a series of narrow open slits high up on the walls. These openings are about three





IN THE PALACE OF AHMED-BEY



IN THE ARCHBISHOP'S PALACE

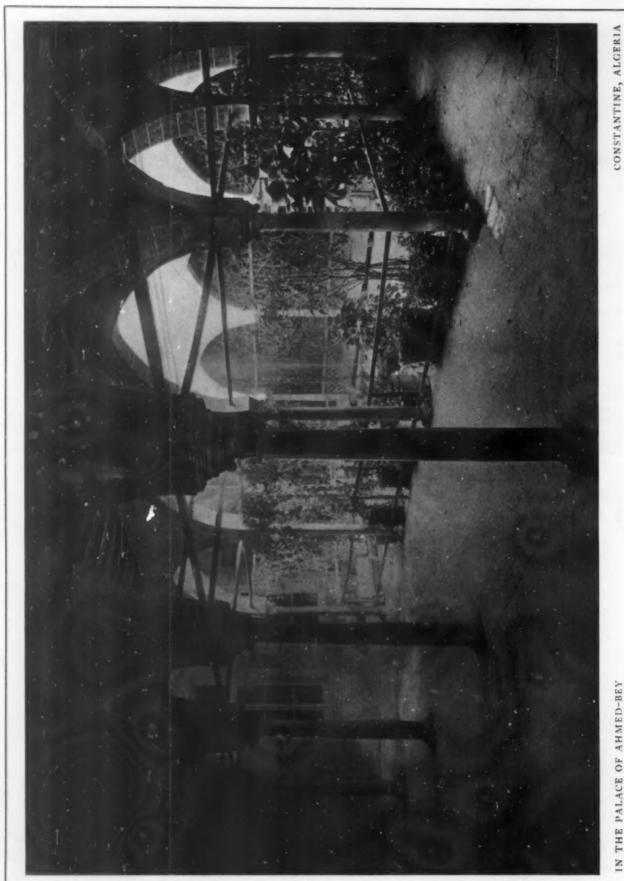
ALGIERS

inches by twelve or eighteen, and are widely splayed inside. The rough walls are built of a sort of mud concrete, made by ramming certain stony soils, moistened by water, in a framework the required width of the walls. Where lime or gypsum can be obtained, it is preferred for finishing. A feature of the interior walls is the dado or wainscot. In the rooms this is hung with rush matting; in the court it is covered with tiles, colored in cool hues. Above the latter the walls are always white or cream colored, with slightly incised geometrical designs, much of which has, in recent times, been covered with white-wash by unappreciative servants.

The advantages of the court are for all, but the garden is the possession of the wealthy. In the poorer houses, the "patio" is wholly paved with tiles, but the larger buildings have open spaces of soil filled with masses of flowers, as our illustrations show. In the surrounding corridor are drinking founts set within the walls and richly ornamented with the most decorative tiles, Rain

water is collected in tanks, not for household purposes merely, but to provide a garden ornament. A small pipe supplies a jet in the center of the open space, and the water gurgles there, but a few inches high, and marring not the stillness and repose of the court.

Every Moor who can afford it has an outer garden in addition to the planted court we have been considering. Like the house, it shows a closed front to the street. It is always walled in and crowded with creepers and shrubs in which appear masses of such hardy flowers as geraniums, roses, jessamine, violets, lilies and pinks. The walks are all paved with tiles and covered with light trellises. With its accustomed modesty the water, here too, bubbles quietly into a low open tank sometimes containing fish. Cut flowers and potted plants are seldom seen in the houses; and at the hands of the Moor the plant life, which is his solace, enjoys non-interference and a tranquillity all its own.



IN THE PALACE OF AHMED-BEY

#### THE PROPER FUNCTIONS OF OPEN-AIR STATUARY.1

It is idle to talk about the necessity of art. A savage does not need it—and the civilized man is never without it. Art is the crystalization, in concrete form, of the dreams of beauty of the soul. And great works of art are the sublimest products of the activity of man. Therefore a nation's rank in the

piness and actively help the growth of crime. Beauty is the largest source of joy on earth, and therefore, also, the deepest fountain of health. Few men know the profound influence the beautiful exerts over the soul and through the soul over the body. And there are certain kinds of ugliness so oppres-



A REMNANT OF THE INTERNATIONAL EXPOSITION AT BARCELONA

scale of real greatness is determined exactly by its art and its art alone. Of course, by art I mean all kinds of art from Poetry to Painting, from Architecture to Gardening, and from Sculpture to Music.

The beautiful is the one thing of supreme importance in this world after you have enough clothes and bread and butter to keep you out of jail. Wise men know this. They also know that ugliness and ugly surroundings paralyze the moral sense, create unhap-

sive that they eternally invite melancholy and disease.

When the morning sun—that glorious decorator of the world—gilds a landscape after a storm, do you not feel an inexpressible joy in your soul?—and does not that joy set the heart beating faster and send the blood coursing to the ends of every vein in a fine health-giving flow? Whatever is a joy to the soul is medicine to the body, and the initiated know the therapeutic value of the beautiful. Let us hope that it will soon be understood by those who make our laws.

<sup>&</sup>lt;sup>1</sup> An address delivered by F. W. Ruckstuhl at the Public Library, Boston, April 14, 1902.





LIONS, BY G. GARDET

Every alderman in Boston should know that civic beauty means civic health, and fewer insane, fewer criminals and fewer taxes.

During an eight years' sojourn in Paris I learned that it is possible for a man to be quite poor and yet entirely happy so long as his surroundings are beautiful. And nowhere in the world is the workman who struggles for his daily bread and daily wage

quite so gay and happy as in Paris. For, as soon as he steps into the street, he sees beauty nearly everywhere. But to go to any of our large cities and towns and, with the exception of a few spots where the rich congregate, you find the most picturesque ugliness imaginable. In fact, I do not know of a single large city in the United States, outside of Washington, which for its own self as a city is fit to arouse the enduring love

Nature has been prodigal of beauty—picturesque and sublime—in this land; but man has defaced it with an indifference that is simply disheartening. This may seem unpatriotic. But I have no patience with a costly chauvinistic patriotism which regards even the vices of our country as virtues. How comes it that in the cities and towns of this land of wealth there is so much forbidding ugliness? So many reasons come to my mind that I will not attempt to answer the question.

France is not nearly so rich as America; but since the establishment of the present Republic, thirty-two years ago, France has spent, in its cities and away from battle-fields, ten times more money than this country for all kinds of civic art. And we ought to go there and learn from that great nation the value of the beautiful in civic life and how to get it, and the great lesson that even real poverty is endurable with a serene soul if one is surrounded by beautiful gardens,



of a cultured THE ST. MICHEL FOUNTAIN

nues, fountains, grand buildings, and noble monuments raised to the nation's great dead. Why do the Frenchmen refuse to emigrate? It is because they have the most beautiful villages, the most beautiful towns and cities and the most beautiful land in the world. They love their country because their country is lovely.

fine statuary,

splendid ave-

You Bostonians, no doubt, think you have a beautifulcity. So you have in some

respects. Your suburbs are beautiful, your city is finely situated on one of the finest bays in the world, but still—in your city proper—I find an astonishing amount of ugliness, in fact enough to belie your reputation for culture and refinement; and if I am here at all to-night, it is because I thought I might do something to help the suffering men of taste among you to get your citizens properly aroused to the ugliness still existing in your city and to realize your vast possibilities of beauty.

PARIS

This brings me down to the question of the evening: What are the proper functions of open-air statuary? These functions are, in reality, only four in number, but very important, morally. They are: to delight, to refine, to console, to stimulate.

The natural man seeks delight. In common with all animals he seeks the beautiful.—a beautiful wife to put into a beautiful house in a beautiful garden on a beautiful street in front of a beautiful square with beautiful food and beautiful music. To realize this is to find paradise on earth and supreme delight. Now, the most important ele-

ment of beauty in any such combination—outside of the wife—is statuary. By statuary I mean not only bronze monuments but ideal statues, beautiful vases, fine columns, fine ornaments carved on fine houses, monumental fountains, as well as artistic lampposts and gateways, whether carved in stone or cast in bronze. All these are sculpture or statuary—when finely done.

It is impossible for even a savage to walk through the park of Versailles with its miles of beautiful avenues, fountains, statues, trees, and flowers, without feeling a certain amount of delight. And why do people from all over the world flock to Paris, Dresden, Vienna, and far Buda-Pesth and Rome? On account of the people who live there? Not at all. But because those cities delight them. Those cities are all splendid, with the ugly reduced to a minimum, and the largest element of that splendor is, I repeat, statuary in its various forms.

Do you know that for twenty years power-



A MARBLE FOUNTAIN, BY REYNES, IN THE PARK
AT BARCELONA

ful syndicates have been trying to get a law passed in Paris by cajolery, chicanery and corruption, to permit them to put upan elevated railway - and always in vain, in spite of the great need of rapid transit. I saw one design involving fine stone arches and stone balustrades. vases, flowers and statuary all along the line. But the Parisians could not be cajoled, driven or corrupted to give the franchise. And Paris will never be uglified and brutalized by an elevated rattle-

trap. They now have a fine underground system. Then to think of those ignoble, nerve-racking, soul-destroying, disease-breeding horrors—the elevated roads of New York and Chicago! The Frenchman knows—the American is only beginning to divine—the spiritual and medicinal value of delight aroused by the beautiful.

The second function of open-air statuary is to refine men, and when they begin to be refined the divine, dormant in man, begins to awaken. And, as men become more and more refined, crimes of a brutal nature decrease and good manners and politeness increase. Has not Bulwer Lytton, the most polite man of his day, said truly: "Manners are more important than religion."

I have travelled from California to Egypt and from Spain to Hungary, and have always observed that the politest and most refined people live in the most artistic cities. Not only is it reasonable that this should be so, but I have found it so by experience.



A GROUP IN LEAD, BY COYSEVOX

BASIN OF NEPTUNE, VERSAILLES

The tendency of the beautiful to decrease crime is not disputed by those who know mankind. Of course, a million statues in marble and bronze would not prevent all crime in any city. But, everything else being equal as to plentifulness of food, clothes and labor, that community will be the most refined and have the least crime which is the most beautiful; and statuary is, I say it once more, the most important element in any prospect of beauty, whether in city or country. If you doubt this still, take a walk in the park of St. Cloud, near Paris,



FAUN AND BACCHANTE BY CHARPENTIER

destroyed during the siege of that city. The trees, flower-beds and walks, everything is nearly as it was when the palace was in its glory, except that all the statuary has been removed. Then walk down to Versailles, where the statuary is all in place, and you will soon be convinced that, in any combination of beauty, statuary is, really, the backbone and most important element of all.

The third important function of open-air statuary is to console, and there never will be a time when the majority of men will not need consolation.



"FRANCE IN 1871," BY CABET



"REGRET," A TOMB BY MERCIÉ



PORTION OF THE MARZORATI TOMB AT MILAN,
BY BARZAGHI

First, we have the cemetery statue and monument. Some of you no doubt will smile at this. I do not blame you. For, cemetery statuary is, in general, in America and often in Europe, a disgrace to the family which paid for it, and fit to make the dead turn in their graves. But if you go to some of the European cemeteries you will find many monuments, among the ugly, so fine that they are a positive source of consolation to the holder. Consolation is a "sweet sorrow," to borrow a phrase from Shakespeare, and dear to all of us in moments of disappointment when we need sympathy. And therefore, cemetery statuary above all should be not only plentiful but of the finest kind. As such, it could render a distinct service to the afflicted and become a source of moral help to any city.

The proper function and wonderful possibilities of a cemetery have never been fully exploited. But, that it could be made so beautiful as to be a source of great mental and moral help to a community I am certain. The main requisite for it is that the statuary be fine and not absurd.



MONUMENT IN THE CAMPO SANTO, GENOA,
BY FABIANI

Besides the consolatory statuary in cemeteries we should have such public monuments which commemorate the sufferings and martyrdom of large bodies of men or important individuals as are involved in battles and in such catastrophies as the blowing-up of the Maine, for example, and monuments to a Lincoln or a McKinley. When we raise a monument to a martyr we honor him and, at the same time, find consolation for ourselves. Remember that the function of consoling is one of the most important in life, and in the past has been, and still is, largely the principal source of the spread and staying power of Christianity.

But the most important function of openair statuary is to stimulate the nation to activity.

The Greeks were the greatest, most refined and intellectual race in history. They gave to mankind unsurpassed models for every form of art from poetry to architecture and for many things besides. Their love for the beautiful was so strong that they strived to perfect not only art but their bodies as well.

Physical strength being also a national necessity they early inaugurated the Olympian games. In order to make these more and more popular they introduced the custom of giving the victor at their great national games, held once every four years, first, a mere crown of olives, and later, a marble statue of himself. This acted as a powerful stimulus, and was, perhaps, the first use ever

made of open-air statuary for the purpose of stimulating the activity of the citizens in a given direction.

No intelligent man doubts for a moment that a fine public monument is a powerful stimulus to mankind. Let any father take his son out walking on a spring Sunday, and as he approaches a monument, his boy will likely ask him: "Papa, what is that?" Papa will have to explain, of course. He will be compelled to tell his boy the story of the life and achievements of the man monumented. In the very process of doing this he will arouse the enthusiasm of his boy, and it is most likely that the father himself will be newly fired to dedicate himself once again to the task of emulating the hero whose noble life he has been allured to describe to his son; and in that new self-dedication, resolve to push his boy as far as he can on to a finer manhood, and to make him his votive offering to his country, thus enriching mankind with the most royal gift a father can offer.

Or, suppose while you are strolling about in a park you suddenly find yourself in front of a fine ideal statue like Dubois' magnificent "Charity." Do you suppose you could get away

from the spell of that statue without having been inoculated with at least a vague amount of new love for your fellow-man? Impossible! Talk about the use of statues—why there is nothing on earth just so precious to a city from a moral point of view.

The three greatest men this country has produced are, to my mind, Washington, Lincoln and Emerson; and your city would find it a real, heavy interest-bearing investment—

investment understand!—to build a million dollar monument to each of these heroes. You have very fine monuments to Washington and Lincoln by the sculptor Thomas Ball. Why have you not raised a monument to Emerson? Do you not know that he is the greatest writer this country has developed, that he was your neighbor, and that he is worthy to stand with Plato,



THE TOMB OF BAUDRY, BY MERCIÉ, IN THE CEMETERY
OF PÈRE-LACHAISE, PARIS
The man at work is Mercié himself

Goethe and Shakespeare? Do you not know that Emerson is, perhaps, the finest soul that the nineteenth century has produced, and that he is to-day one of the most powerful moral forces in the world? If you should spend a million dollars on a monument to Emerson, you would make a master stroke of mere business. You would again publish everywhere that you are really the one city of America with sense enough to value moral force on a level with mere military



courage and with possessing yourself moral courage enough to dare proclaim that position, at which the whole intellectual world would rejoice. You would put a premium on a young man's becoming a hero of Peace as well as of savage War, and it would give you more prestige than the building of fifty sky-scraping hotels or a thousand ugly factories.

Your Lincoln monument is a superb thing, but its setting is poor. You should create a fine square for it, put it in the center, on a splendid platform, surrounded by balustrades and with flowers and fountains, with a magnificence worthy of the great hero and martyr-even if it cost a million dollars to do so. Nothing is too costly to glorify those three great men, - not for their sakes, but for your own; for when a city sets up a stingy monument to a great man, it

only belittles itself. It is impossible for me to pass the statue of a noble man without mentally taking off my hat and silently thanking him for having lived; for every great man has helped to make life as fine as it has become to-day, and as fine as it is bound to become to-morrow. We should raise monuments not to the great dead but to our vast appreciation of the great dead. They need not our monuments, but we and our children need them; and every time we show our appreciation of a

real great man in a royal manner we ennoble our souls, raise ourselves in the scale of true civilization and increase our own glory.

I think you are too intelligent to make it needful for me to use more words to convince you of the uplifting and stimulating power of open-air statuary and of its absolute necessity in any city pretending to be civilized. I have now spoken of the four moral functions

which are really proper to openair statuary-to delight, to refine, to console and to stimulate the people. (The accompanying illustrations are grouped according to these heads). Let us now see what is the effect of the setting-up of statuary in a city from a material point of view.

The first effect is, to raise the price of real estate. Permit me to say, without the slightest fear of successful contradiction, that you cannot place a \$20,000 monument—if it is a good one of

where in your city without raising the value of the surrounding real estate, by far more than the cost of the structure; provided always that the monument is properly placed, but above all properly kept. This has been proved so often that it has become an axiom. I have not the time to prove it again here. If any neighborhood begins to run down slightly at the heels, all you have to do is to create a small square in its midst

and put into it a fine statue and you will



THE MONUMENT OF THE GIRONDINS, BORDEAUX

soon see that the statue will act like a tonic on the entire neighborhood. If you wish to elevate your slums, put in a few life-giving statues, and see that they are well kept and you will see them work wonders. This has been frequently done in Paris—that best governed city in the world.

Hence nothing is more shortsighted and stupid, from a mere business point of view,

than to cry "extravagance!" when a city government spends money for statuary. The annual outlay of New York city now is about \$100,000,000. Just two years ago the city government put up a new marble building for the Court of Appeals. It is the finest special Court House, perhaps, in the world and an honor to New York city. \$180,000 was spent for the statuary — a mere bagatelle! Yet a certain number of foolish demagogues howled about spending

so much money for art when there were so many poor about, not knowing that the more money you give to the poor the poorer you make them, and the more money you make circulate by giving the poor work in making statues as well as sewers, the richer you make them.

In the days of Augustus, thirty years before Christ, there were more than 5,000

statues in Rome. These did not save Rome from destruction. The Almighty could not save a civilization based on cruelty and in-

justice. But I feel convinced it was the art of Rome that was largely responsible for making Rome die so slowly. To prove this, however, would require a volume, and we must pass it by. Do you know why Bismarck did not shoot Paris to pieces during the siege in 1870? Because he knew the world would never forgive him for destroying so much beauty.

art of Paris thus became its savior, and the money spent in beautifying Paris thus became the heaviest paying investment ever made in history.

In every street of your city there ought to be a monument every half mile apart and a square about each monument and fountains and flowers in each square. There ought to be statues around your public buildings, hotels and even your factories, in your squares and in your parks, every-

where, of all kinds-portrait, ideal, allegorical, historical, etc. And if you spend one or two millions for statues in Boston during the next ten years you will enhance the total value of your city by ten times as much—simply in brutal dollars. Remember that a fine work of art is immortal, and an everlasting moneymaking asset to the city that possesses it. Italy to-day practically lives off of the art it created three and five hundred years

And need I speak of the second effect of



MONUMENT TO BRUNO AT ROME



THE MONUMENT OF THE REPUBLIC, BY PEYNOT

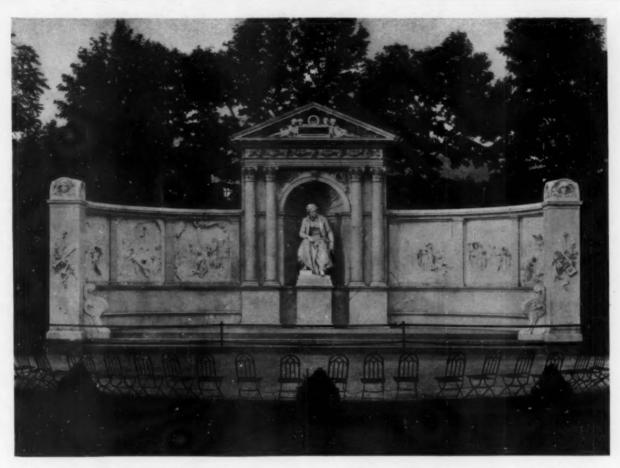
AT LYONS

placing open-air statuary in your city—the honor it will reflect on you? Is it not true that the ablest men in all ages prize honor more than anything else? Why should not a city seek honor more than anything else? Do you suppose that your schools and jails, sewers and hotels, railways and docks, trolley-cars and codfish multiplied a thousand-fold will bring you-special honor? Not much, believe me! If you want Boston to become honored the world over and double its population in twenty-five years, do as they did in Paris-proceed to spend liberally for monuments, fountains and statuary in your streets and parks, surround them with flowers and keep them properly.

What would that cost each man and woman per year? Let us see. There are about 100,000 men in Boston. One respectable cigar costs fifteen cents at any respectable shop. If 100,000 men would each treat the city of Boston to one cigar per year it would bring in \$15,000.

For this you could erect a fine statue or fountain. Now, if every woman in Boston would treat the city to a bunch of violets you would have another \$15,000. Thus, for the price of one cigar for each man and a small bouquet of flowers for each woman in Boston you could put up two fine monuments per annum, fifty in twenty-five years. Besides, the money would not be destroyed. For the average cost of the raw material of a \$15,000 monument would be about \$2,000. The rest would circulate as wages and support a dozen families for a year.

Before closing let me say you should always bear in mind the importance of properly placing your statuary. You may accept it as an axiom that the greater the man and the more strenuous the life he led the larger should be his monument and the space around it, and the closer to the daily life of your city. Hence a statue of Washington or Lincoln placed in a small side square would be ridiculous.



THE MONUMENT TO GRILLPARZER

IN THE VOLKSGARTEN AT VIENNA

The Statue executed by Zumbusch, the Reliefs by Weyer

It would be equally ridiculous to place the monument of a minor poet like Whittier in a large square where the people meet—now in friendly chat and now in angry riot. Such a monument should be placed in a small square or park if for no other reason than that a small square or nook in a park is conducive to meditation—a large square to agitation.

Of course, in the case of so overshadowing a great man as Emerson, you ought to give him a great monument in a great square, but still always away from the turmoil of your business centers and market-places—in a quiet spot conducive to reflection. For there should always be harmony between the character of the place and the character of the statue. It would be manifestly absurd to place a dancing Venus in front of your Trinity Church, no matter how fine it might be as a work of art and proper in a museum. Parks are

the proper places for the placing of ideal statuary of which we, in this country, are ridiculously poor. Ideal statuary should never be placed in a city square, except it be an accessory of a fountain or monument. Nothing is more charming than the parks of Europe where one wanders about and suddenly, in a nook or junction of two paths, finds a beautiful ideal statue, group or fountain. Large portrait monuments should never be placed in parks. Small monuments and busts are permissible in parks because they do not overshadow the surroundings where they are placed.

Last, but not least, comes the proper keeping of open-air statuary. Nothing is more sad than the run-down condition of monuments in Spain, especially in Madrid. They show that the people are either in great poverty or in a state of lamentable moral apathy. A monument

and its surroundings should always be kept as clean as possible and show the evidences of the loving care of the people, even if everything else is left untidy. It is a sign of vigorous national life, cheerfulness and of the daily success of the community. Your city government should be made fully aware of this, for every dollar spent in erecting, but above all in properly caring for public statues, is not only money invested but moral health insurance as well.

I come here to you, as I said, as the Vice-President of the Municipal Art Society of New York—a society organized to embellish that city. Any citizen may belong to that society who is willing to pay the dues of five dollars a year. That society will, in a few years, wipe out much ugliness in New York. You should organize a similar society here. But, if you do, let me advise you to name it

THE ARCH OF PEACE AT MILAN

Designed by Cagnola

"The Boston Embellishment Society." Our Municipal Art Society will be glad to help you. Now supposing you organize such a society, let that society appoint a commission of architects, sculptors and landscape gardeners, and develop a comprehensive scheme for beautifying Boston—as a whole—not a patch here and there. Let that commission lay out a grand scheme of avenues, parks,



THE ANDREAS HOFER MONUMENT NEAR INNSBRUCK

squares, monuments, fountains, etc., as a similar commission has lately done for the city of Washington. Then suppose that in carrying out such a scheme you spend one or two millions of dollars, the effect would be that Boston would really become the Athens of America. Your city would soon have a real reputation for culture and splendor, and people of wealth would flock here to live and bring their money along and make commerce flourish. Thus for an insignificant million or two of dollars you could not fail to increase enormously your population, your wealth, your happiness, and your glory.

# A HOUSE AT WYNNEWOOD, PENNA.

DESIGNED BY D. KNICKERBACKER BOYD, ARCHITECT.

FIRST glimpse of this house is through Aa long and shady highway, once a private lane. Though its lines have not yet been softened by age, it seems already to have been built for a vicar or a country gentleman of the early English times. Upon closer approach, the archway over the drive becomes an inviting portal. One of an imaginative mind looks beyond for a quaint court or lane, with well kept hedgerows, little gates and trailing vines, between rows of rambling cottages. cottages are not here, but the hedges and shrubbery have been started. The arch-. way forms a porte cochère without making an unsightly projection from the house. There is plenty of outdoor living space at the other end, but even here, the porch does not obtrude itself, so adroitly is it abutted to the house. Visitors on foot enter the hall by a front door from the terrace, and those who drive alight in the sheltering archway, and are ushered through a vestibule into an

entrance hall—the same into which the front door opens. To either entrance, the attendant has but a few steps to take from the pantry. The effect from this hallway through the passage to the main hall and stairs beyond, is most attractive; and, by means of its woodwork and quaint windows on each side, is in close touch with the character of the exterior. This planning also assures privacy to the family, who may be oblivious to those entering the house until they are announced. Once within the inner precincts of the home, the cozy hall, its stairway and mantel, become a middle feature in a vista from the dining room to a raised fire-place in an ingle-nook across the living-room. Containing, as this building does, but two stories intended for occupancy, the entire space left in the roof-peaks becomes a most efficient barrier for the heat of American summers. A sweep of roof, interrupted only by the studied grouping of the gables, is a great charm of the composition. The timber work, while not of constructive necessity, has structural significance. It is more than a mere pretense, being of heavy timber built up solidly on double sheathing, interlined.



THE FRONT

A HOUSE AT WYNNEWOOD



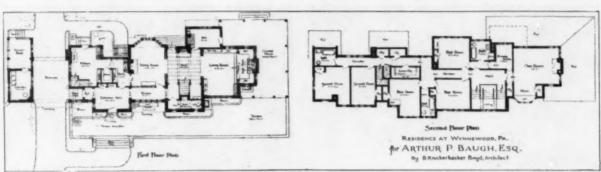
THE DRIVE ENTRANCE

A HOUSE AT WYNNEWOOD



THE REAR

A HOUSE AT WYNNEWOOD



THE PLANS

A HOUSE AT WYNNEWOOD

All this work, as well as the barge-boards, posts and other wood details are rough on the face, and planed by hand here and there, so that when the stain and varnish were applied, a pleasing play of light on the smooth and rough



A CORNER OF THE DINING-ROOM

surfaces was obtained. The shingles of the roof are laid to uneven lines and aged in appearance with a black stain; in fact everything has been done to remove as much as possible, all suggestion of an unmistakable newness.



THE ARCHITECT'S PRELIMINARY SKETCH

A HOUSE AT WYNNEWOOD



THE HALL CHIMNEY-PIECE

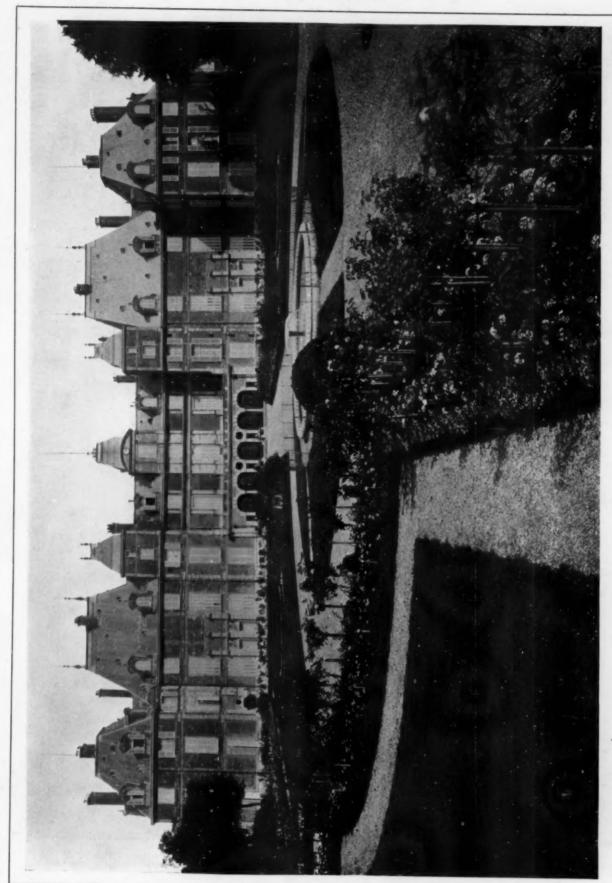


THE MAIN STAIRWAY



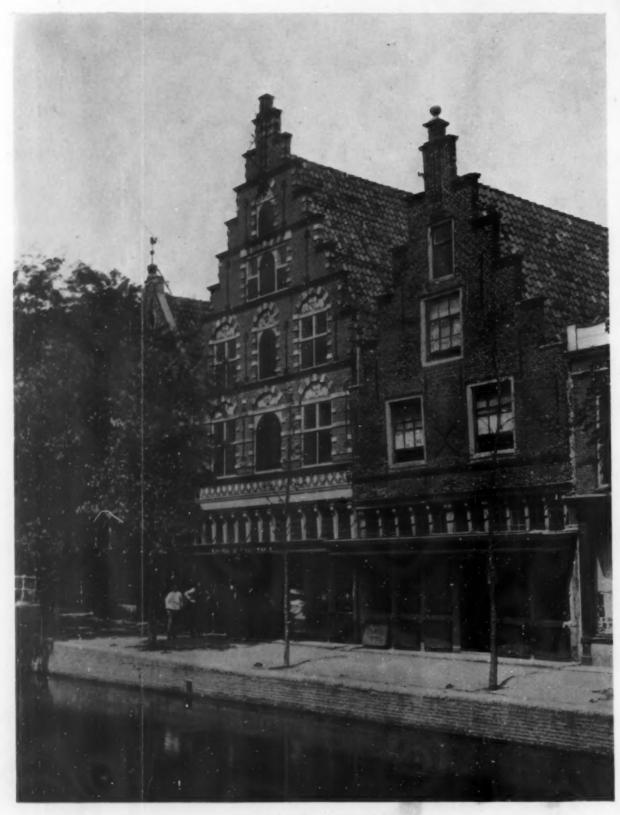
THE LIVING-ROOM

A HOUSE AT WYNNEWOOD



GARDENS OF THE CHATEAU

EU, FRANCE



OLD HOUSES IN ALKMAAR

#### DUTCH HOUSES AND GARDENS.

BY J. G. VELDHEER AND FREDERICA HULSWIT

THERE has been a time when Holland was regarded, and not without reason, as a great museum of antiquities. Many people incline to the same view even now; and not only where articles of virtu are concerned, for the Hollander himself is rather

generally believed to be a couple of hundred years behind his time in every way. Such views being frequentamong the art-loving strangers who visit these lowlands, one is forced to sympathize with them in the cruel disillusioning which awaits them, a first glance being amply sufficient to arouse a sense of disappointment, for taken as a whole, the larger cities and more prominent places have lost so much of their former glory that only a shadow remains of all their oldtime interest and

Still some traces of the Holland of centuries ago remain even down to the present; but to find them, one must leave the highways with their great centers of trade and population and turn one's steps to the comparatively remote and so-called dead cities and villages, formerly examples of life and traffic, now slumbering behind their ancient walls and historic gates, dreaming of their day of power and prosperity. Preëminent

among these are the old seaports and cities of the Zuyder Zee and Zeeland, which retain even yet much of their earlier picturesque and peculiar beauty.

Here one finds a faint reflection of the olden days. Along the still canals, buried

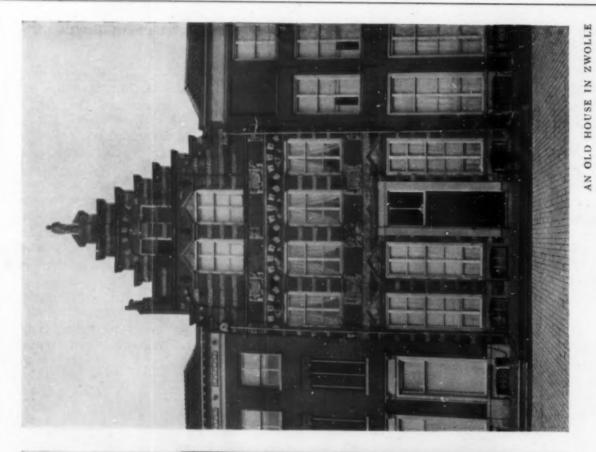
under the shade of time-worn trees and bending forward a little as if with the burden of vears, rows of ancient houses mirror themselves in the placid water. The comparative simplicity of their facades, the rich brickwork and great shutters joined to the stair-like ascent of their gables - always in old Dutch architecture facing the street -give to the whole an aspect quietly dignified yet cheerful, a reminder of a greater day. And when the sun finds a way through the dense foliage

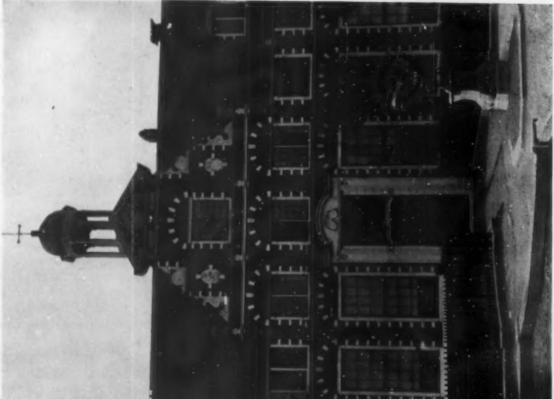


THE TOWN WEIGHING-HOUSE, ALKMAAR

overhead with dancing lines and trembling spaces of soft green light which laugh and play over the quiet street, the moss-grown tree-trunks and the red roofs, then these rows of old houses make a most beautiful and joyous picture.

Dutch houses of the seventeenth and eighteenth centuries were, as a rule, built of dark red brick, the frieze and arches of doors and windows ornamented with white sand-





IN THE COURTYARD OF AN OLD HOUSE



A DOORWAY IN HAARLEM

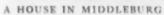
stone, the steps of the gable being finished with the same stone. The windows were large, the principal lines of the sash forming a cross, and the small panes were set in lead. Only a few examples in good condition still exist. The front door opened into a large square apartment called the voorhuis or vestibule. This was continued by a long marble hall extending the whole length of the house



A FAÇADE IN EDAM

and opening on the inner court. Usually this hall was built on the side of the house so that the stairs and all the rooms were located on the same side of the passage. Of these once such famous interiors with their carved oaken walls and great chimney-pieces very little remains. Whole apartments have been taken up bodily and removed to different museums, and only very rarely is such a room to be found in a house occupied at the present day. Of the period of Louis XIV and





XV are still some

examples, all, how-



A MODERN INTERIOR



THE " DE STEENROT " HOUSE, MIDDLEBURG

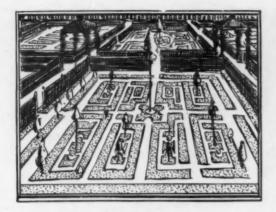
ever, much restored. The stairs of the houses were generally open and came out upon the second floor into a long hall similar to the one below. Remarkably good examples of the style are to be found in Middleburg, a

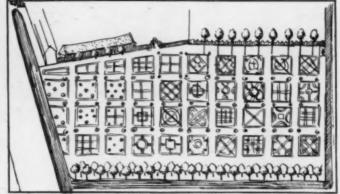
famous old city of

Zeeland, as well as

in Haarlem, Enkhuisen, Alkmaar and Kampen.

Much of the furniture of these old houses has been carefully preserved. Antique bookcases and chairs, splendid clocks in old oak or walnut cases, were in most Dutch families religiously taken care of, and the owners' pride in such pos-





AN OLD DUTCH GARDEN

PARTERRES OF AN OLD GARDEN IN VLAANDERN

sessions is surely justified, since so much of the expensive and ornate work of to-day falls far short in artistic merit and solidity of the simpler yet rich designs of these earlier times.

The same quiet simplicity of the houses was reflected in the daily life of their in-

mates. To the Hollander, although very hospitable, his home was a holy place, the sanctum sanctorum of his heart. Here all his best and finest qualities came uppermost, and here all the virtues of the family life with all the dear home traditions were fostered and propagated.

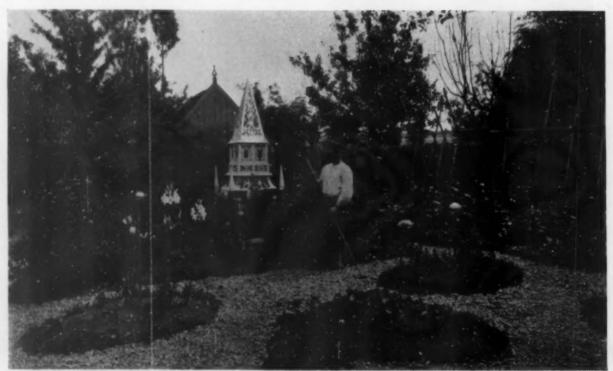


BESIDE A DUTCH CANAL. From a pencil sketch by J. G. Veldheer



INTERIOR OF AN OLD HOUSE

MARKEN



IN A DUTCH GARDEN

BROECK



A WATERSIDE COTTAGE

BROECK

The gardens, like their owners, were characterized by a certain middleclass dignity and stateliness. Traversing the long hall and passing through the great door one came first into the inner court separating the garden proper from the house. This court with its ornamental old pump suggests so strongly



ON ONE OF THE MINOR CANALS

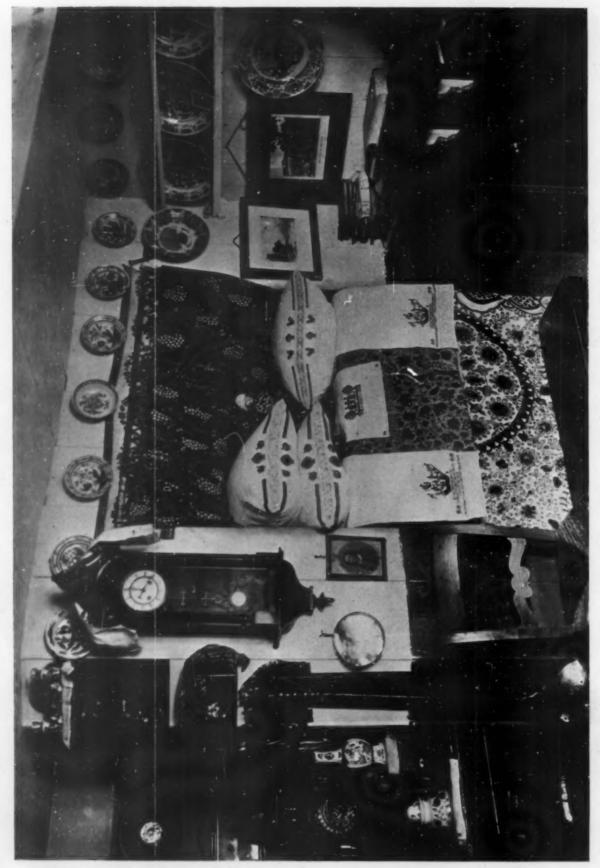
THE HAGUE

thoughts of a day long gone that one would hardly be surprised to meet his great grand-

father there wearing the same hat and peruke, which the old silhouette on the wall has made so familiar, and in his hand the same cane with time-yellowed ivory knob which is treasured as a relic in the corner of the room at home.

Some few gardens bear unchanged the signs of the period to which

they belonged,—a large grass plot or lawn, in the middle a ball-shaped garden-mirror, or,



INTERIOR OF A FISHERMAN'S HOUSE AT MARKEN

failing this, a terrestrial globe on a pedestal; the four corners planted with large trees, the whole fenced by a closely clipped hedge,

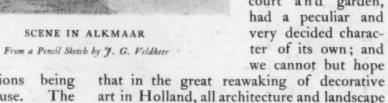
and this in its turn surrounded by architecturally treated bands of blue stone in the style of Louis XIV or XV. One of the best known Dutch gardens of a somewhat earlier period was that of Broek in Waterland, though to give a clear idea of this tasteless effort is not easy. Some neglected shrubs, a few bushes clipped in animal and other forms, in the middle a small flowerbed bordered by a hideous ornamental design in coral and shells - that is all. How it could be described again and again by foreign writers as a fine example of Dutch landscape art is a riddle to the Netherlanders themselves.

Of the really characteristic gardens only a very few neglected examples are to be found. In general they are, as a whole, so overgrown and altered that the original plan is difficult to decipher. In the seventeenth century the ground was laid out according to its size in one or more quad-

rangles, each of these divisions being devoted to some particular use. The entire space was protected by a carefully shorn hedge.

In a somewhat later period, the curved lines so affected by the famous Le Nôtre, designer of the king's gardens at Versailles,

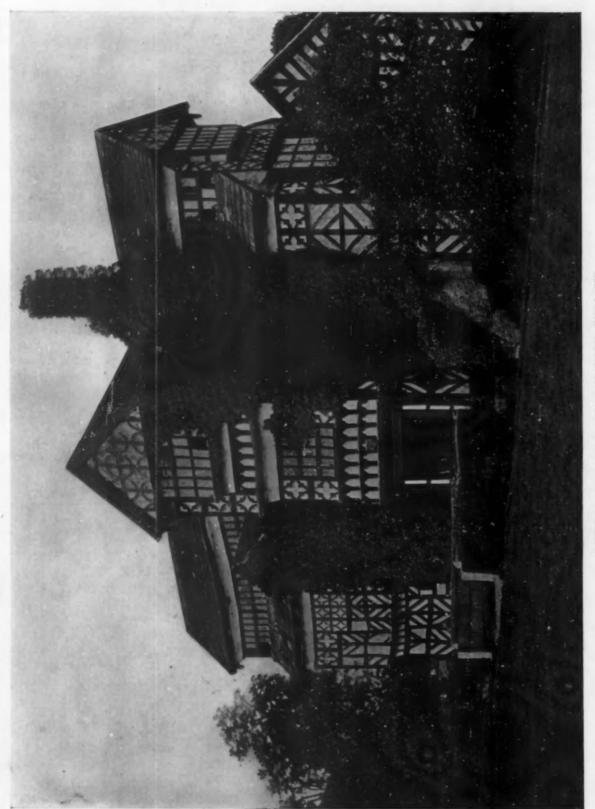
were introduced. At once the whole style of Dutch landscape gardening underwent a change, returning again to the most beautiful period of the Italian school. Besides the preservation of the decorative idea in all its purity, the use of certain lines brought about wonderful light effects which, in union with cleverly introduced plastic groups, gave to the whole a peculiarly charming Unappearance. fortunately the Hollander was not always able to live up to his very genuine appreciation of this refinement. His innate bourgeoisie frequently betrayed him, leading him again and again into the senseless follies of which the Broek garden, before referred to, is such a glaring example. But in spite of all this the Dutch dwelling-house, with its somewhat severe court and garden, had a peculiar and very decided charac-



appreciation.

interior, its inner ter of its own; and we cannot but hope

gardening may have their full share of



LITTLE MORETON HALL, CHESHIRE, ENGLAND

#### AN ANCIENT HOME OF ENGLAND

HAVE wandered over England and have seen old homes and new, but in the far corners of Cheshire under shelter of Mow Cop, on the Congleton Road, stands the house of my dreams. An "olden day" house of surpassing beauty, bringing memories of the long ago, times which we wot not of, yet

the actual house where men and women lived, loved and sufered, as we live, love, and suffer to-day in the old country and the new. The same sun shines, the same moon wanes, and lapwings as of yore circle overhead as springtime calls to the buds to burst and blossoms to bloom.

Little Moreton Hall is said to be the finest specimen of domestic architecture of the character now remaining in England. A grand black and white house, still in-habited in part, and in good preservation. It stands within a

square moat full of water, and you reach the portal of the ancient gateway over an old stone bridge. You can see where the drawbridge hung, and can fancy you hear the bolts being drawn and the heavy key turned in the old lock. Once an avenue led up to the bridge, but is only suggested now; even the trees are dead which sheltered the knights and dames in the long ago. This is a wonderful building, no two lines alike, but infinitely picturesque in its irregularity. The timber is the color of coal and the walls "chequered in black and

white, with trefoils, quatrefoils, and chevrons diapered all over it." I never saw such wonderful patterns or more cunningly devised. By the portal is an old stone horse-block, and in my dream I fancied I could see a knight pause before crossing the little bridge, for his lady, who stood on that very stone,

to tie a love knot

round his arm. Through the gate house you come to the quadrangle, and here the windows which form five sides of an octagon, arrest the attention at once. They comprise two stories, and the top projects over the lower ones. Round the upper tiers you can read with ease the words -GOD IS AL IN AL THING THIS WINDOWS WHIRE MADE BY WILLIAM MORE-

LORD MDLIX.-A good beginning, forsooth, and worthy of a man who built

TON IN THE YEARE OF OUR

such a place. Against the

lower window is a charming record of the very maker himself, who must have gloried in his handiwork as few men can do to-day, when good work is somewhat out of date and quantity triumphs over quality! These are the words:

-RYCHARDE DALE CARPEDER MADE THIES BY THE GRAC OF GOD,

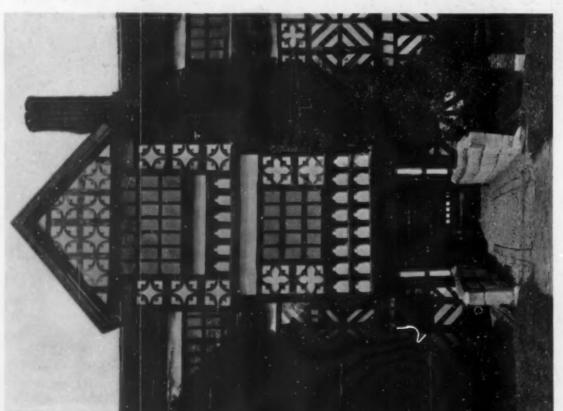
Good old Richard Dale! It all work was begun and finished in such faith "by the grace of God" we should do better work nowadays, and leave a



CHIMNEY-PIECE







THE ENTRANCE FROM WITHOUT

grander legacy to our children and our children's children.

A winding staircase leads up to the long gallery which is the main feature of the building. Just before you reach it, you pass one of the secret chambers which were concealed behind oaken panels. The gallery is sixty-eight feet long by twelve feet broad, the roof being seventeen feet

passes in her left hand and a sword in her right which pierces the world, represented as a globe. She has for her inscription "The speare of Destiny whose ruler is Knowledge." On one side of the long gallery is the withdrawing room, and here there is a beautiful fireplace with the arms of John de Moreton above, who in Edward the Third's time married Margaret, sister and co-heiress of



THE COURTYARD

LITTLE MORETON HALL

high. Here, I would have you know, that Queen Elizabeth herself danced. It is almost entirely circled by windows with the tiniest panes, a triumph of glazier's art, over old oak paneled wainscoting. At the west end on the wall is a figure of Fortune, with a wheel above her head, which is uncommon I know; generally she leans upon it. Round the wheel is her motto "Qui modo scandit, corruet statim," and on the panels at either side

"The wheele of Fortune Whose rule is ignorance."

If you glance at the other end of the gallery you will see another figure on the wall. This is Fate who holds a pair of comJohn de Macclesfield. You can trace her quartering in the shield. As in all very old houses you pass from room to room; there are no passages anywhere, and it is difficult nowadays when everything is contrived for convenience, to realize how they arranged the accommodation.

There is a very small chapel with a separate entrance, with a small room on the north side, probably used by the priest.

The kitchens and butteries are worthy of the house. In one is an old spice chest, with a drawer for every letter in the alphabet; and on the shelves of the ancient dresser are rare old pewter dishes with the Moreton arms engraved thereon. On the outside



AN INTERIOR

LITTLE MORETON HALL

walls are many specimens of curious carving. Figures of quaint billmen in doublet and hose, billmen of Elizabethan age; angels with double trumpets, women (who cannot be counted fair) coroneted with dragons issuing out of the coronal; chaplets of laurel, oak and bay.

In such a house, with memories haunting the very air you breathe, one feels inclined to speak with bated breath, lest perchance you disturb some spirit lurking there, who may have returned to visit the well-known, well-loved spot. It saddens me to pass from such a perfect specimen to see the buildings of to-day. Perchance behind a cherry-tree

laden with soft white blossoms I catch a glimpse of a corrugated iron roof.

Oh! I pray thee who builds in the old world or the new, build beautiful buildings "by the grace of God," and leave behind you sights to be grateful for in the years to come. Let little Moreton Hall rise again from its grave and reappear over the sea; for after all, it is better to go back and imitate perfection than to go forward and offend the eye. A house like this could not be built in a day, but surely we could wait awhile for such a blessed result.

Helen Milman



## UPON SUN-DIALS AND HOW TO MAKE THEM.

FOR ages before clocks and watches were invented the sun-dial was the only timepiece known. Gnomonics, or the art of dialling, was the pastime of ancient mathematicians and astronomers. Herodotus ascribed the invention of the sun-dial to the Chaldeans; but though the crude hemicycle of their astronomer Berosus served as a prototype for several centuries, it remained for the Arabians to elaborate it and to carry the art of dialling to intricacies unreached before or since. As far as history extends backward, we find mention of the sun-dial; and if records had not faded we should doubtless know this form of timepiece to have been in common use yet earlier than the era of those ancient peoples we have mentioned.

In latter-day garden-craft the sun-dial has occupied a hallowed place. With the opening of the sixteenth century and the rapid development of formal gardening from that time onward, its design and construction were much discussed, and the dicta comes down to us in a quaint and quasi-scientific literature. Marvell tells of a gardener who made a dial out of herbs and flowers and

Where from above the milder sun
Does through a fragrant zodiac run;
And as it works, the industrious bee
Computes its time as well as we.
How could such sweet and wholesome hours
Be reckoned but with herbs and flowers?"

It was then that the shepherds would "carve out quaint dials, point by point," and "a true Dyall or Clock, and some Anticke works, and especially silver sounding Musique, mixt Instruments and voyces."

The dial was given a place of honor and the best exposure on the walls of buildings; it enjoyed the fairest setting at the crossing of garden alleys; its shape was wrought into innumerable and imaginative forms receiving the touches of skilled artists; and the aphorisms of poets was the sole language of that otherwise mute witness of passing days and fleeting human lives. Even in France, Italy and other Continental countries, classic pavilions, fountains and great sculptures failed to altogether crowd out the stone disc awaiting the march of the sun, while preeminently in England and Scotland the place

of the sun-dial in garden design has always been supreme. In the latter country the delight in the mathematics of the dial gave rise to the complicated forms upon globes, crosses, cylinders and hollowed hemispheres. The opportunities afforded for variety and beauty of form and for gnomic phraseology have been largely responsible for the favor the dial has enjoyed with our ancestors and for the present efforts to recover all old examples possible and to record their shapes and enrichment, their inscriptions and their story.

Turning now to the construction of sundials we shall confine ourselves to their mechanical side only; and with the object of clearing away some of the puzzling difficulties of laying them out, we shall endeavor to give concisely practical directions unconfused with mathematical theory. There are numerous kinds of dials, many more than we are accustomed to seeing illustrated in readily accessible books or here and there in old-

Base Line
Fig.1

fashioned gardens in this country. There are, for example, horizontal dials and vertical dials, inclining and reclining, erect declining dials, reflective dials, globe, B polar, equatorial, equinoctial, cross,

and window dials. Then there are dials which record the seasons only and others which measure time by the moonlight. But the horizontal and the vertical types of sundial are the most common, the simplest and the most useful; and to the former of these we shall confine ourselves in the present paper.

Concerning materials, it is sufficient to say that any substance may be used so long as it has the paramount qualification of being enduring. As the dial is to measure time, its own equipment should be cœval with it,—should surpass and outlast time, if such a thing were possible. Stone has been most frequently chosen for the dial-face, but smooth gravel with tiles for the hour figures would answer as well, were it not that in such a case the gnomon would have to be impracticably large. Indeed, there is evidence that the obelisks of the Egyptians served as

huge gnomons of dials laid out upon the level ground. In modern dialling convenience of construction and of working is, however, the next consideration in the selection of materials; and it has brought stone and bronze into the most frequent use. That metal is the best suited for the stile or gnomon because the slender proportions required can best be sustained by it.

The object of the gnomon is merely to supply an edge exposed to the sun at a certain

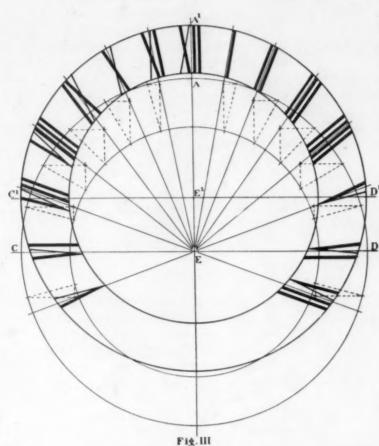
Fig. II

angle with the ground. Figure I shows the method of laying it out. First: A horizontal base line AB is drawn. With a protractor the angle of the gnomon's face is laid off equal to the latitude of the given place the dial is to serve. Assuming the instrument were to be made for use in New York City this angle would be 40° 44" (nearly), the latitude of the metropolis. From the point B this angle is described until it intersects C-a variable distance corresponding to the size of the gnomon desired. From C, a vertical line is carried to the base-line and the triangle thus formed gives the gnomon in its simplest form, and would be ready for use save for " mention hereslight modifications we after. Since only the lower and upper edges are needed,—the former for fastening upon the dial-face and the latter to receive the sun's rays,—the back of the gnomon may be cut away at pleasure or the center may be pierced as freely as a draughtsman's triangle. In fact the variety and beauty of the shapes so obtained constitute one of the most interesting features of the dials of all periods.

The angle ABC, Figure I, then, is the correct one for the latitude we have selected. The next step is to lay out the face of the

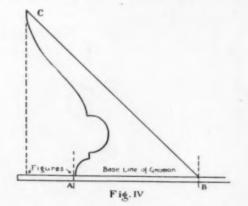
dial. This is shown in Figure II. Draw a horizontal line CD, and at its center erect a vertical. From the intersection E, as a center, describe a circle the radius of which will equal the length of the line BC in Figure I (the length of the gnomon's face). The points C and D upon the circle will be the six o'clock points made by the daily passage of the sun. Inside of this circle another circle should then be drawn whose radius should equal the length of the line AB in Figure I (the base of the gnomon). The two quadrants of the outside circle A to D and A to C next divide into six equal parts-indicated by o, o, o, etc. Do likewise with half of the inner circle and obtain the points z, z, etc. From each of the points o, o, o, etc., draw lines parallel to CD, and from each of the points z, z, etc., draw lines parallel to AE. Mark the points

of intersection x, x, x, etc., and draw lines through them from the central point E. Where these lines cross the circles will be the hour points. In drawing the figures for the hours they should have the same inclination as the lines radiating from E. The half and quarter hours should be made in the same way by dividing the distance between the points on the outer and inner circle, and where the lines from E intersect will give the position for the half hours and quarter hours. The minutes, if one chooses to put them in can be spaced off with the eye, as the distances to be divided are short. lower half of the dial can be laid out in precisely the same manner given above and the hour marks extended to, say, four o'clock



in the morning and eight o'clock in the evening; but for ordinary practical use from six o'clock in the morning to six o'clock in the evening covers all that is needed.

In laying out a dial in this way, no allowance is made for the width or thickness of the stile or gnomon. If a thin gnomon is used, that is, of metal 1/16 of an inch thick, it is scarcely necessary to make any allowance; but if a heavy gnomon is to be employed, having, say, a thickness of 3/16 or 1/4 of an inch, then, instead of the single line AE



(Figure II), there must be two parallel lines the same distance apart as the thickness of the gnomon. In this case, instead of striking the circles from the central point E, two semicircles must be made, having their centers where the line CD intersects the two parallel lines; or what would probably be an easier method would be to cut into two equal parts the preliminary diagrams we have been describing and to place between them a strip of paper the exact thickness of the gnomon to be used.

As the hours about the middle of the day are closer together than those early in the morning or late in the afternoon, it makes a much better looking dial to shift the center towards the twelve o'clock mark and to draw a new circle from this point. The lines radiating from E should be extended to this new circle and the gnomon increased in proportion. That the dial should give the best

results, a practical rule for the length of the gnomon is that the upper tip of its sun edge be directly over the outer line of the border containing the figures of the hours, (see Figure IV). The center of the new circle should not be moved, however, from side to side, but must always be on the line AE midway between the two six o'clock points, as shown in Figure III. In setting the dial, supposing it to be a horizontal one, great care should be taken that it should always be perfectly level, i. e. parallel with the plane of the earth, and that the gnomon should incline neither to the right nor to the left, but should point always to the true north, not the north of the magnetic meridian.

The foregoing is the simplest of all problems in dialling, as the gnomon pointing to the north and casting its shadow upon a level plane surface are the easiest given conditions. When these conditions are changed, mathematical principles may be carried into almost infinite complexity, as, for instance, in the case of the dial-face placed at an unusual angle with both the earth and the meridian, and when it is no longer a plane surface, but a cylinder, a cone, etc. These complexities are accompanied by increased chances of error, for the sun-dial, at best, is not an absolutely accurate recorder of time. Atmospheric refraction, the diffusion of the sun's rays and other circumstances each contribute some form of error, however small. To connect the movements of the dial with our system of clocks, it is necessary to correct the shadow of the sun by means of the "time equation." This may be found at best in the United States Nautical Almanac, and is, as everyone knows, a uniform scale of time occupying the mean between clock time and apparent time (the time of the sun-dial). When the hour of the sun-dial is known, the "equation" will enable one to obtain the corresponding clock time or vice versa. With this reference at hand, the sun-dial can be depended upon as a fairly accurate timekeeper. In setting forth the above directions I do not pretend to be an expert or to know all about sun-dials; but I have gained some practical experience in their making; and realizing the difficulties, mistakes and mishaps encountered in my first efforts to make a dial, I gladly give, for what it is worth, the benefit of my experience. If it save others from the same troubles I have met with, I shall have been amply repaid.

H. R. Mitchell.

OWEVER successful modern inventors May be in adapting various metals to the requirements of building construction, examples of the passing of wood can only be looked upon with regret. The systematic energy of a Steel Trust is, perhaps, a power behind the present clamor for so-called "fireproof" materials, and all efforts to render wood incombustible, without detriment to its native valuable qualities, are shadowed by the increasing scarcity of lumber and its steadily rising cost. For this state of affairs ignorance upon the care of forests and the proper management of timber lands is indisputably a cause. It is known to comparatively few persons that the Division of Forestry recently created under the Federal Department of Agriculture holds out a helping hand to stay the forests' decline. Individuals, large industrial corporations and States are applying to this Division for advice and practical direction upon the best means of cutting and planting timber so as to insure for the future a steady and improved growth. In order to disseminate a knowledge of improved ways of planting and developing forest plantations, woodlots, shelterbelts and windbreaks, assistance in the form of expert inspection, followed by the preparation of working plans, is gratuitously supplied. The results, when sufficiently interesting, are afterward made public.

The fact that the Division and its scanty appropriation are already overtaxed is an earnest that America will soon place herself upon the plane of maturer European countries and guard her forests as zealously as she husbands her wheat-fields and the fish in her waters. The office at Washington is constantly testing timber for commercial use and is carrying on researches of great eco-The effects of fires nomic importance. upon forest growth, the effects of grazing, the relation of the forests to the country's water supply go along with the reclaiming, by means of tree planting, of the non-agricultural lands of the West. But the study of forestry is not solely for agriculture and commerce. It intimately concerns the arts, and particularly that of making homes. Its esthetic import is realized when we search in vain for a more beautiful background to architecture, a more effective shelter from northern winds, than a sturdy forest. And the forests when transformed are the very making of the home's interior. The charm of how many delightful rooms lies in their broad paneling of wood and framed ceilings; for wood is silent while iron is resonant; it is warm when stone and plaster are cold; it readily absorbs artificial color, and as surely will it take on of itself the richest hues of age; it is easier worked than any other material; and its very grain speaks of palpable life that increases year by year. Any steps looking to the increase and preservation of wood should receive universal commendation, for this material,—the closest to our daily lives because the most agreeable to all the senses,—can never be replaced by another.



BURROWES RUSTLESS WIRE INSECT SCREENS

ARE MADE ONLY TO ORDER, TO FIT, TO MATCH, AND TO LAST AS LONG AS THE HOUSE They represent the highest standard of excellence in Window and Door Screens

Illustrated Catalogue and Reference Sheets sent on Request

#### THE E. T. BURROWES CO., PORTLAND, MAINE

A. E. SNOWMAN Manager Philadelphia Offices 707 Real Estate Trust Building

=IVES=

### Patent Window Stop Adjuster



PREVENTS DRAFTS, DUST, BINDING AND WINDOW RATTLING



MANUFACTURED ONLY BY

The H. B. Ives Co., New Haven, Conn.

Residence of Dr. A. A. APPLE, Phila. Wm. Steele & Sons, Architects

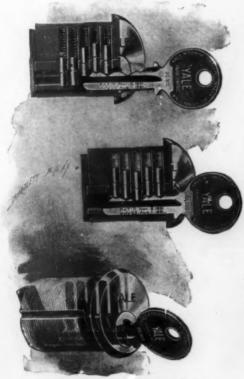
THE BEST SASH CORD MADE



EVERY THREE FEET IS NOW MARKED SILVER LAKE "A



ORNAMENTAL IRON WORK THE W-S-TYLER CO-CLEVELAND-O



THE "CYLINDER" OF A YALE LOCK.

## The Yale & Towne Mfg. Co.

ITS PRODUCTS EMBRACE

LOCKS of every kind and for every use, the most complex and expensive, the simplest and cheapest, and every intermediate grade.\*

BUILDERS' HARDWARE of every kind and quality; and a vast number of special articles used in buildings of every kind.

ART METAL WORK in every school of ornament, in every metal and finish, and in greater variety of design than by any other maker in the world.+

\*"Yale Night Latches and Padlocks" are interestingly described and illustrated in a little Brochure, which will be sent on request.

+"Artist and Artisan" is the title of an attractive Brochure dealing with the origin of Ornamental Metal Work and its present development and uses. It

GENERAL OFFICES:

Nos. 9, 11 and 13 Murray Street, New York City.

LOCAL OFFICE:

630 Witherspoon Building, Philadelphia.

# ROOKWOOD POTTERY CO.—CINCINNATI, O.



Mat Glaze panels for wall decoration to be set in wood work, design freely painted in color, mostly pale green and brown and yellow.

Rookwood
Tiles
are made
any size
from
six inches
square
to twenty
by thirty
inches.

Correspondence is invited with all lovers of Rookwood products.



Mat Glaze mantel facing, design drawn with incised line with spaces filled with color,



Repeating designs, incised, with spaces filled in flat Mat Glaze



Mat Glaze tile, conventional design, to be repeated, painted in flat color, bluish and grey greens and ivory.



The Mat Glaze

harmonizes

in texture

with dull wood

finishes.

Any color

desired by Architects

Decorators

as part of

treatment of interiors

general

can be

obtained.

design

and

Repeating designs, incised, with spaces filled in flat Mat Glaze colors.

### House and Garden Binder



This binder is substantially made of cloth with stiff leather back, holds 12 copies of HOUSE & GARDEN

Every Subscriber should own one

Magazines can be bound as received

ONE DOLLAR



Paper Mili, Steven's Point, Wis.

"Scott's Extra Coated"
ROOFING TIN

Used on this Building

Manufactured by

Follansbee Bros. Co.

PITTSBURGH, PA. Philadelphia, 133 Arch Street

For a Genuine Charcoal Iron Roofing Tin, use "FOLLANSBEE PURE IRON OLD STYLE"



·FORMAL·GARDEN·POTTERY· ·STATVARY·&·BALVSTRADES·

·OF·TERRA·COTTA·
·BRONZE·STONE·OR·CEMENT·COMPOSITION·

·J·FRANKLIN·WHITMAN·&·CO·INC· ·DECORATIVE·SCVLPTORS· ·212-SOVTH-FIFTH-ST· ·PHILADELPHIA-PA·

## For Cottage or Mansion

chapel or church, barn or stable, in city or country, seashore or mountains, North or South, East or West, no building is so insignificant, or none so

pretentious, but that it will pay to stain its shingles with

Cabot's Shingle Stains

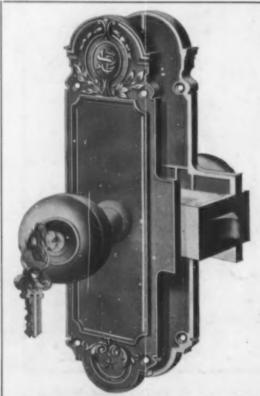


est taste. Anyone can apply them. They preserve the wood ("Creosote is the best wood preservative known,") and their colors are fast, and rich,

soft and beautiful.

Samples of stained shingles, showing mosserees bark-browns, silvergrays etc., with color chart of 64 harmonious combinations, sent free on

SAMUEL CABOT, Sole Manufacturer 73 Kilby St., Boston, Mass. Agents at all Central Points



## CORBIN HARDWARE

OF THE SPECIAL DESIGN ILLUSTRATED, AND MADE BY US FROM THE ARCHITECTS' DRAWINGS, IS USED UPON THE

## Pittsburgh Union Station

DESCRIBED IN THIS ISSUE. WE HAVE EVERY FACILITY FOR WORK OF THIS NATURE. CAN FURNISH INDIVIDUAL DE-SIGNS WHEN DESIRED

### The Corbin Unit Lock

APPEARS ON THE BEST MODERN BUILD-INGS. CATALOGUE ON APPLICATION

## P. & F. CORBIN

NEW BRITAIN, CONN.

**NEW YORK** 

CHICAGO

**PHILADELPHIA**