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THE ENTRANCE TO THE PRIVATE GROUNDS OF "AROHEAD"
To possess an ideal home, and especially one for the summer, careful attention must be given to the selection or the making of a suitable setting. If the setting for it has to be created it should be done with the view to having it harmonize with the finished house, the plans for which, of course, have been previously drawn. But if it is to be selected the selection naturally precedes the building—and the house is therefore made to compose with its surroundings. In the former case it is designed by the architect, and in the latter the design is suggested by Nature—more or less radical changes may have to be made in the original suggestion when final drawings are made to have it more fully conform to the builder's taste. In building a city home it is better, and more necessary, to create the surroundings, but when it comes to the matter of a home for the summer only, when one desires to get away from the commercial side of life for a few months, the natural setting is most desirable and
most frequently chosen. On Lake Tahoe, that beautiful body of water that helps to separate California from Nevada, is located "Arohead," the summer home of W. S. Tevis, Esq. Here one finds a natural setting that, for the purpose of the home, comes very near to the ideal. It, of course, has been somewhat altered by the builder, but in general appearance it remains the same as it was before the invasion; and with a well and an appropriately designed house set amid such surroundings the whole has been converted into one of the prettiest homes in America—a home situated among stately pines, with a background of snow-covered mountains, and facing the most beautiful body of water in all this rugged region.

Entering the grounds of "Arohead" from the Hotel Tallic, one passes first through a little rustic gate of undressed pine and twisted willow, and then enters upon a graveled path that winds gracefully through well kept gardens and over rustic bridges, spanning miniature streams of crystal clearness. The scene before the visitor has been suddenly transformed from the wild, uncared-for forest into a well pruned, well kept grove of Nature's trees, the more enhanced in beauty by velvety lawns and masses of flowers. The whole scheme at first glance gives one the impression that he has suddenly dropped into far-off Japan, for the garden in general design is truly Japanese. Upon closer inspection, however, it is found that no bamboo enters into the creation, but that the materials used are "native born," and that in the thatched roofs and bark-covered outbuildings the idea belongs more to the Aztecs than to the Japanese.

Passing on, following this path, and approaching the house, the visitor finds that the way lies through pines so thickly matted that scarcely a glimpse of the building can be had until a point only a few yards distant from its broad, inviting veranda has been reached. The outline of the house can be but dimly traced, and therefore each feature of it must be studied in detail rather than the whole in general. This view, however, is sufficient to afford a realization of how well the rustic effect has been carried out, and also to prove that its designer had the eye and the skill of a true artist.

The house was built largely of materials obtained from the surrounding forest, finished with an exterior of shingles. Along the entire front extends a wide veranda, the roof of which is supported by columns made from the trunks of trees with the bark left on. The whole is stained to give it a soft brown color and trimmed in delicate cream. This produces an effect in color that harmonizes well with the deep
green and rich brown tones of the forest, and at the same time admits, with good taste, the profusion of flowers that everywhere abounds—the delicately tinted hydrangeas, the brightly colored nasturtiums and the old-fashioned petunias and morning-glories.

The veranda, broad and long, and with its protecting awnings, forms one of the most inviting places for summer lounging to be found anywhere. It is decorated with Indian rugs, matings, baskets and vases, which give it a charming effect, while everywhere, as if to provide the finishing touch, bloom various kinds of bright-hued flowers. There are also easy chairs, made of hickory and willow, a table to hold books and papers, and at each end a comfortable hammock, to complete the creation and give to it an air of home. One may spend many a pleasant hour here reading or writing, and meanwhile enjoy the refreshing breeze that comes from the lake—a glimpse of whose glistening water, with the snow-covered mountains looming up beyond, can be had through the intervening grove of pines.

The front door that leads from the veranda into the hall is a single solid panel, and is provided with the old-fashioned knocker. The same panel scheme is made use of for the finish of the hall walls, which, being decorated with a few well selected Japanese pictures, produces a very satisfying effect.

The house is two stories in height—the lower floor being taken up by the hall, living-room, dining-room, and the necessary service rooms. The dining-room, as one enters, lies to the left of the hall, and the living-room to the right. Both are very large and well lighted, each possessing, in addition to smaller ones, a large French window opening out upon the veranda, and each room is provided with an appropriate fireplace.

The dining-room is comparatively plain in finish and simply furnished. The chairs are of wicker, with seat and back cushions covered with cretonne. The table is of oak. The fireplace, which occupies the space between two windows, has a mantel of Colonial design, and on the wall above it hangs a single trophy of a hunting expedition into the neighboring mountains,—the head of a Rocky-mountain sheep or "big-horn."

The living-room is somewhat more pretentious, and is in every way designed and furnished to afford comfort. Numerous easy settles are built into the walls, and the large fireplace, built of rock-faced gray stone, is often brought into use to enhance the comfort of this cheerful retreat after a day spent in hunting and fishing. The second floor is devoted exclusively to sleeping apartments and the necessary bath-rooms—all most charmingly appointed.
A VIEW OF THE RUSTIC GARDEN

THE RUSTIC GARDEN LOOKING TOWARDS THE LAKE
THE LOG TEA-HOUSE ON THE GROUNDS OF "AROHEAD"

THE SHORE OF LAKE TAHOE AT "AROHEAD"
House-parties are the rule for a large portion of the summer months at "Arohead," and to provide individual sleeping quarters, a number of guests' cottages are built near-by. In design and workmanship these correspond with the main house, and each is complete within itself.

Mr. Tevis and his four sons, all young men, are ardent lovers of out-door life, of fishing and of hunting, and it was for this reason that "Arohead" was built on the shore of Lake Tahoe. This lake abounds with almost every variety of the "finny family" that inhabits fresh water, and is a well known resort for all followers of the genial Izaak Walton. In the surrounding mountains, various kinds of game, both large and small, are to be found, affording excellent opportunities therefore for sport, which sometimes is of a very exciting nature. Mr. Tevis has his own private boat house on the lake, and in addition to a number of row boats of various sizes and kinds for various purposes, a modern, high-power gasoline launch. By this means delightful excursions are made to the many points of interest along the lake's shores. In short, "Arohead," as a summer retreat is unexcelled and has but few equals. A house an example of all that is artistic in the builders' craft, of a design that melts into the environment as if it had grown there; a site naturally most beautiful, yet enhanced in beauty by the blending of the several motifs into one harmonious whole by the art of the landscape architect; a lake, celebrated throughout the world because of its crystal beauty, and surrounding snow-capped mountains. All this in combination would suggest a fabric of fancy. But the invigorating tonic of the pine woods, the cool breezes from the snow-capped mountains, the silvery flash of the speckled trout, lured by the gaudy fly of its liking, all of which have been so recently experienced and seen, prove it to be the tangible realization of a presumptuous dream.
SUBURBAN life about Baltimore is made very attractive by the beautiful country which borders the city on nearly every side. In fact, so many sites for the villa on the outskirts or the country seat further removed are available that one finds it difficult to choose among such a variety of charming landscape which needs little artificial adornment to enhance its picturesqueness. Whether the home seeker goes north, east or west, stretching away for miles he will find a region admirably adapted for his purpose. There are sites on commanding hills, in quiet wooded valleys, or on the sides of gently sloping eminences. If he is content with the modest home with its acre or so of ground, or if he wishes to construct his mansion in a park and to have his fields and gardens, he has an abundance of spots from which to choose. This is because Baltimore, unlike most of our larger cities, is not hemmed in with a row of small towns just beyond its borders. Even an hour’s ride from the heart of the community brings the visitor into the country itself. Thus it is that such a large number of people have made permanent or summer homes for themselves outside its borders and the love of suburban life has been developed to a marked degree.

Perhaps this fondness for the country which is such a trait of Baltimore people is most strikingly shown by their interest in clubs of this character, for there are no less than six of these organizations whose membership is composed of persons who reside in the city or near it. Considering that Baltimore has a total population of less than 700,000, the number of such clubs is remarkable, but the largest of these, The Baltimore Country Club, has the reputation of having a more numerous membership than any other similar association in the United States. The correct definition of a country club is one that is devoted not merely to certain sports but to the enjoyment of country life and has the facilities for such enjoyment by reason of its location. The Baltimore Country Club truly answers to this definition. Located outside of the city, but only an hour’s ride by trolley
car from the business portion, it has no less than 160 acres entirely at the disposal of its members. The golf player finds an eighteen-hole course, the tennis player can select from a dozen courts. There is a cricket field that has a national reputation. Five minutes' walk from the club brings one into field or woodland if he would stroll amid the quiet of Nature.

Immediately about the building are terraced lawns where those who prefer to sit and enjoy a quiet smoke or chat can do so. Indoor athletics are also provided with the bowling alleys, squash courts, swimming pool and billiards. Yet this place, though just outside of the city, as we have already stated, is in the midst of rural surroundings and such scenes greet the eye from every point of view.

Less than three miles from the city limits of Baltimore, the club house is approached through one of the most artistic residence communities which has been laid out in the United States, for Roland Park may well be called a model suburb, since it is devoted entirely to the homes of permanent dwellers and practically all business and industry are excluded from it. The home of the Baltimore Country Club is situated on the edge of the Park and on a hill which commands a view of the countryside for miles around, including not only portions of Roland Park but of the beautiful country seats which are situated in this section.

Approaching the club house, one is reminded of scenes in England, since the principal avenue to it is inclosed on either side by walls surmounted with hedges. The front of the Country Club grounds is also inclosed by a massive wall. Entering through the gateway, the visitor is directly opposite the main entrance, but cannot get an idea of the dimensions of the structure since it is partly hidden by the grove of trees in which it stands. The exterior of the building, which is three stories high, is principally of shingles, the entire club house being of frame construction. Messrs. Wyatt & Nolting, the architects who designed it, followed no particular style, planning the structure especially for the purposes for which it is intended. Many American country clubs are much larger, more pretentious and more costly, but it is doubtful if any are as appropriate in design and as complete in their appointments as the one described. Extending nearly the entire front of the building is a spacious porch, the roof of which is upheld by Ionic columns, two of these framing the approach to the door. From each end of the house project wings, while to the rear has been attached a
very capacious bay window which has a delightful outlook over the valley below.

The main doorway leads directly into what might be called a general lounging-room or main hall which is fifty feet in length and twenty-five feet in width, finished in hardwood and in rich dark colors. At the left of the lounging-room is the office for the transaction of club business, while directly in the rear is the bay to which we have referred. This is utilized for a dining-room and is large enough to accommodate over 100 people seated at small tables. At the right of the lounging-room is a parlor for ladies, while at the left is the club library—a most attractive spot on rainy days, with its easy chairs, files of newspapers and periodicals. This apartment extends nearly the entire width or depth of the club house and is one of the most popular rooms. An angle staircase just back of the office connects with the second floor, a large portion of which is devoted to an assembly hall utilized for informal dances, banquets and other functions at which a large number of the club may assemble. Connected with this is what is termed the Turkish room, appropriately decorated in dark red and used as another lounging-room where members can enjoy light refreshments, and the men who care to do so can smoke between dances and at other times. Another section of this floor is reserved for the ladies exclusively, including a parlor, also a locker-room for those who desire to indulge in athletics. The roof of the bay referred to is on a level with this floor and from it another very fine view of the surrounding country can be obtained, so it has become a sort of roof garden, which is very popular on warm summer evenings. The third floor is divided into sleeping apartments for members of the club who desire to remain here during the summer season or at other times.

Really the building contains four stories devoted entirely to club purposes, since the hill upon which it stands slopes to the rear at such an angle that the basement is practically another story. This is divided into a large café and lounging-room for men, and a swimming pool which is eighteen by thirty-five feet. With the exception of the billiard and pool tables and swimming pool, all of the indoor pastimes of the club are located in other buildings. It has been found necessary to erect a large annex, which has just been completed. This is devoted entirely to athletics, the lower floor being occupied by bowling alleys and squash courts and the upper floor being fitted out as
The Baltimore Country Club

VIEW IN THE MAIN DINING-ROOM

A CORNER IN THE READING-ROOM
The Baltimore Country Club

THE CLUB HOUSE FROM THE BOTTOM OF THE HILL

THE CRICKET CLUB AND GROUNDS—TENNIS COURTS IN FOREGROUND

FROM THE CLUB HOUSE VERANDA LOOKING TOWARDS ROLAND PARK
a locker-room which contains over 600 lockers of the most improved type. On this floor also is a very complete set of shower baths. As bowling is one of the most popular sports with the club members, this building is a great convenience. It is designed in harmony with the club house proper, being of frame construction and the exterior covered with shingles.

The members of the Baltimore Country Club boast of their golf links and with good reason, for few in America equal them as measured by the standard of the golf expert. The character of the land, rolling and hilly, is admirably adapted for the course which, as stated, is of eighteen holes and 5,371 yards long, with numerous hazards provided artificially and by Nature. Ample opportunity is given for driving, since many of the tees are on eminences, so that the player has an opportunity to show his skill in long distance work. For example, the course to the first hole covers 354 yards, but the drive is from the top of the hill on which the club house stands and is 125 feet above the first putting green. The distance from the fourteenth to the fifteenth holes, however, is no less than 575 yards. The links are notable for the care taken in keeping them in condition. Especially is this true of the putting greens, which are 100 feet square and are as smooth as sod can be rolled and cut.

The brief reference we have made to athletics gives an idea of the policy carried out by the club regarding pastimes, but it is also a social club and the club house proper is almost entirely devoted to this feature, being designed to give the necessary facilities for indoor gatherings of the members, dinner parties, dances and other functions. Consequently, the activities of the club are so diversified that it is extremely popular with not only residents of the city but those who have homes in the outskirts.

Since the idea of organizing the club was conceived by Messrs. William H. Buckler, Clymer Whyte and Edward H. Bouton ten years ago, the membership has increased to about 2,250, at the present time, of whom nearly one half are women. The club owns no less than 160 acres of land and leases an additional area partly for its golf-course. The value of its property, including the various buildings, is nearly $250,000 at the present time. The personnel of its members comprise men well known in business and the professions, and needless to say the society contingent of Baltimore is almost entirely represented.

The officers of the club at present are: Dr. Joseph S. Ames, President, Thos. H. Symington, Vice President, G. S. Jackson, Treasurer, and C. I. T. Gould, Secretary. Directly in charge of the club house and grounds is Douglas C. Turnbull, the Executive Secretary.
The Use of Portland Cement for Modern Dwellings

BY SEYMOUR COATES

PORTLAND cement, when properly mixed and intelligently used, forms one of the most valuable and lasting of building materials. The enduring and other desirable qualities in concrete and stucco have been recognized for a great many years, but only within the last decade has it been considered of a sufficiently mobile nature to employ to any considerable extent in domestic architectural work. In recent years, however, great strides have been made in this direction, and to-day a monolithic residence, practically fire-proof, is no great rarity. In this form of house, the moulds are set up, filled with concrete, rammed and allowed to set. When this is accomplished the forms are raised and the process repeated until the highest point of the structure has been reached. Air spaces are provided in various ways which prevent the moisture absorbed on the outside from being carried through to the inner surface and making the house damp. These air spaces also insure the more equable temperature of the house at all seasons. In localities subject to earthquakes, iron or steel rods or heavy wire is embedded at intervals horizontally as well as perpendicularly in the concrete to make the structure less liable to crack in the peculiar racking movement of an earthquake. Buildings of this character withstand such disturbances with less damage than almost any other form of construction. This method is in many places so expensive as to almost seem to be prohibitive, but the results fully warrant the cost. With reasonable care such a building is of unlimited life and, instead of deteriorating, actually improves with age. To verify this, one has but to look at the many examples of early Roman work which to-day are in a perfect state of preservation, after nearly two thousand years' exposure to the elements. These works were executed with a very crude mixture of materials, but the efficiency cannot be doubted. The careful tests and analyses which are continually being made in the laboratories of the industrial world, enable the manufacturers of Portland cement to maintain to-day a uniform quality of product and to know that each barrel will, if properly mixed and handled, produce the same results. Certainly a great advantage over the ancient methods.

A more common method of employing cement is in the form of stucco. This may be applied to a structure built of stone or brick or one having a
THE BEVILLE HOUSE, HOLLYWOOD, CALIFORNIA. STUCCO ON METAL LATH

HOME OF FRANK W. EMERY, ESQ., PASADENA, CALIFORNIA. STUCCO ON METAL LATH

RESIDENCE OF L. V. HARKNESS, ESQ., PASADENA, CALIFORNIA. STUCCO ON METAL LATH
The Use of Portland Cement for Modern Dwellings

HOUSE OF M. PAUL DE LONGPRE, HOLLYWOOD, CALIFORNIA. STUCCO ON METAL LATH

HOUSE OF H. T. KENDALL, ESQ., PASADENA, CALIFORNIA. STUCCO ON METAL LATH

HOUSE OF D. M. SMYTH, ESQ., PASADENA, CALIFORNIA. STUCCO ON METAL LATH
wooden frame and covered with metal lath. We say metal lath, for rarely can a satisfactory job be secured when cement is used on wooden lath. The cement sets quickly, causing the lath to buckle, thus loosening their fastenings. Various finishes may be given the final coat of stucco to meet the taste of the architect or desire of the owner. To obtain a smooth surface, finish under the wooden float. If a rough or sand finish is wanted use the burlap or carpet covered float. Where a "spatter-dash" finish is desired the final coat is thrown on with a trowel or a large stiff-fibered brush, while a "pebble-dash" finish is obtained with a final coat of one part Portland cement, three parts coarse sand and pebbles not over one-fourth inch in diameter thrown on with a trowel. The stucco form of construction has lent itself readily to the development of the so-called Mission style of architecture, which is particularly prevalent on the Pacific Coast where the Jesuit and Franciscan padres first established their missions, building their places of worship and their dwellings of sun-dried bricks and covering the walls carefully inside and out with a mortar made of hydraulic lime, which in time became very hard and impervious to water. This hydraulic lime seems to have been not unlike that used by the early Romans in their concrete work. Another method of construction is to cast the concrete into blocks and lay up the entire wall of them just as stone would be used. The blocks are cast with apertures through them, which when placed one above the other, provide the air space required. The face is moulded to represent the several finishes of stone such as rock-faced, hammer-dressed, cut stone, etc., producing, when laid up, the coursing or random effects as may be desired.

The architectural features of the old Missions as a rule are marked by a restraint and freedom from ornamentation which is most satisfying. In a few instances, however, the designs were more ambitious and elaborate. In all cases the execution of the work, the facilities at hand being considered, seems to be beyond criticism. The long series of arches of the ambulatories, the buttressed walls, the low belfries in some, the pierced façades in others, all bespoke a high order of artistic feeling and a keen appreciation of picturesque values. The roofs being covered with heavy half-round red tile and the exterior walls being washed with white or a soft yellow, made the group of buildings landmarks for miles around, while the glint of the sunlight from the gilded cross set high above the most elevated gable or tower, flashed out to the bands of natives that beautiful message of "Peace" which had been for centuries traveling to the ends of the earth, and which was for the first time reaching them in a manner they could more readily comprehend and appreciate.

Such were the Missions. To form from this material a style of residential architecture without grafting on it features and details of varied and ornate character was hardly to be expected. Hence, in the designs which have been evolved by the architects of the West we find houses of the "Mission Style" with the detail and feeling of Spain, Mexico, Italy, France or far-off India, as the fancy of the owner or architect may have dictated, or the environment may have suggested. How correct all this may be from a technical or an esthetic view-point, we leave others to discuss.

Our purpose has been to show to the prospective builder, the possibilities in this beautiful style of house by presenting examples of what has already been done along these lines. The illustrations show houses of great variation in cost, showing that in that respect at least it is an elastic proposition.
The Small House Which is Good

The Country Home of Mr. A. W. Lord

BY SAMUEL HOWE

IN these days the small country house is much talked of and much enjoyed, yet a really successful one is rarely built. This building of a house, small in its dimensions yet liberal in its accommodation, is a rather difficult problem. Few approach it in a serious spirit. Many of the workers skilled in great affairs leave it alone trusting to luck, cutting down some stray plan, rehearsing some larger set of working drawings, and letting it go at that. Once in a while a man takes hold. And the result is easily seen.

That Mr. Austin Willard Lord, of the city of New York, found in the designing of a small cottage for his family an interesting problem a mere glance at the plans and elevations will reveal. It has paid to study the needs of the occasion, the every-day requirements of the family. There is in this house a certain modesty and a restraint without the humiliating discomforts of “features.” It is a healthy plan. There is so much in it. The entrance is at the back of the house, thus preserving the sacredness of the piazza from sudden intrusion. The piazza is of liberal dimensions; comfort is seen in the width of the approach and in the general construction. Note the scale of the piers; they are not make-believe pillars of any order except the old-world order of simplicity and of good taste. Fifty years hence may find it as it is to-day. It may be toned by age, creepers may partly cover the frame, shaping the shadows and softening the outline, but they are not required to conceal the remains of a composition cap, or a decaying base-board. Look at the shingles, there are but sixteen courses from the ground to the eaves. This is just about the proportion of the covering of the old Colonial houses and cannot well be improved upon. In this case the ordinary length of shingle is used, doubled at the butts and a quarter inch strip of wood nailed under so as to give a heavy shadow and emphasize the width of the shingle. The eaves project three feet, giving ample covering to the walls as well as a shade to the up-stairs rooms. There are three bath-rooms in the house, one of which is in the attic. Two bedrooms are also in the attic. All the walls of the house are tinted.

The plans are figured, showing the all-important inches of the building, the proportion of the openings, how they center, and the seriousness of everything. The views portray its picturesqueness.

The house was built some years ago when material and labor were much lower than they are to-day. The house is supposed to have cost about five thousand dollars. Built to-day it might well cost seven thousand dollars and be no better.
The Entrance is at the Back of the House

The Piazza is of Liberal Dimensions

The Living-room with a Glimpse of the Dining-room

First Floor Plan

THE COUNTRY HOME OF MR. A. W. LORD, ARCHITECT

Second Floor Plan
The Small House Which is Good

Second Floor Plan

The East End of the Parlor

The House Five Years Later

Corner of the Parlor Looking into the Library

The House just after Completion

THE HOME OF E. H. MAY, ESQ., PASADENA, CALIFORNIA
A House Built for $4,500

WALTER P. CRABTREE, Architect

Laid down on the lines of the Colonial period, this house possesses a charm and simplicity which belong to that type of architecture which our forefathers knew so well how to build. The arrangement of the first floor gives easy access to the various rooms. In laying out the scheme of this house the object was to design a dwelling that should be above all else, domestic, personal and livable, and convenient in its arrangement.

The lot upon which the house was erected, which is sixty feet by one hundred and sixty feet, is situated on the west side of the street and has a number of fine trees and to save two large ones at the front the walk curves around them instead of going in straight from the street with the tradesmen's walk branching off from same to the rear door, which adds a charm to the grounds.

On entering the hall an impression of spaciousness is received resulting from the vistas through and glimpses into the several rooms on this floor.

This is one of the essentials in the planning of a successful house and is a most legitimate method of creating the effect of more room than the exterior design would indicate or which the actual area covered ordinarily conveys. In every small house problem, it is to this question that the architect can best afford to give thought and study, for it is effects of this nature with which he is familiar that render his services most valuable to his client, and enable him to secure the greatest value for the money expended. True, his knowledge of materials and construction, and his services of supervision are

First Floor Plan

Second Floor Plan
FOR $4,500

A GAMBREL ROOF HOUSE, BUILT FOR $4,500
equally important to the client, and save for him, under usual conditions, several times the amount of the architect's fees. But, in the economical planning and the consequent saving in space and materials, lie a most vital value to the client.

There is no formal reception-room, but a sunny, comfortable living-room full of light and warm in coloring with a cozy chimney-nook, around which the family may gather on winter evenings, with bookcase built in under the two high projecting windows. This room is as it should be, the largest room in the house, and has a large bay window overlooking the street. The dining-room, which is light and sunny, is of large dimensions and has a bay with four large windows on the southern exposure. The den, which is at the rear of the house, is shut off from the main house and has a southwestern exposure.

Connecting with the dining-room and kitchen is a large, well arranged butler's pantry, containing a proper complement of cupboards, drawers, shelves, etc., and leading from the kitchen is the kitchen pantry, or cool room.

The kitchen contains the usual appliances and has abundance of closet and pantry room.

The stairs are arranged so as to be used from the kitchen as well as from the front hall, doing away with a back staircase. The cellar stairway is reached conveniently from the kitchen and also from master's portion of the house.

A feature of the second floor is the large family chamber overlooking the street, connecting with the bath-room and child's room.

This room has two very large closets and a cozy window seat built at the south window. The other two chambers are corner rooms giving cross ventilation, and of good size, each with a large closet.

The attic was arranged for two rooms, one for the maid at the rear and a spare room at the front. These rooms are connected by a finished hall so that one would have the idea of entering a third story rather than an attic.

The cellar contains the furnace and range coal bins, servants' toilet, vegetable cellar, with vegetable bins and shelves, and laundry containing three apartment
wash trays. A flue for the laundry stove is carried up in the fireplace chimney. The cellar extends under the whole house and has a cement floor.

The whole of the exterior is shingled with the best red cedar shingles, dipped in shingle stain of a soft rich, brown bark color, with trimmings painted a rich cream color, giving a very pleasing effect, nestled in among the trees as it is.

The interior trim is of brown ash in the reception hall stained a rich golden oak color, and the balance of the first floor was finished in hard pine, stained different tones of brown, dull finish, the darkest in the living-room and toning down to lighter brown in the den. These stains can be procured from reputable dealers, and, while inexpensive, give very pleasing effects to the rooms, bringing out the beautiful open grain of the pine as it does. The second floor is finished in cypress, finished partly natural and partly stained, excepting the family chamber and bath-rooms which are finished white enameled with the room side of the doors, which are birch, stained and finished a rich mahogany, as used in old Colonial work.

The attic rooms are finished in pine. The flooring throughout was of rift sawed best Georgia pine, stained and waxed.

The plumbing is of the best throughout, being all brass nickel plated and open work. A wash-bowl was placed in the passage between reception hall and kitchen, and is not shown in these sketches.

The linen closet is so arranged that the top drawer, which is about three feet from the floor, opens into the bath-room as well as into the hall and is for towels for the bath, thus saving the space required for a closet for this room for towels.

The heating is by a hot air furnace with registers of the stamped steel pattern, in each room, finished to match the hardware and lighting fixtures.

Electric lights with fixtures of tasteful design are used throughout, but the house is also piped for gas.

This house was completed the first of August, 1906, and cost $4,500 including the building, electric wiring, heating, plumbing and gas piping, papering, painting and decorating, grading, hardware and lighting fixtures, in fact everything complete, ready for occupancy.
IRDS are the gardeners’ best friends. Of this fact most people are aware; yet the few rather than the many understand the extent of their help in raising each year’s crop.

When the writer was a boy on the farm, birds were loved in a way and their songs were appreciated; but in their relation to crops they were regarded as enemies rather than as helpers.

The red-winged blackbird was thought of as the robber of planted corn, not as the devourer of cutworms; robins, thrushes, purple grackles, and many others, were regarded as cherry thieves, not as the slayers of worms and insects innumerable, that mar fruit and cause imperfect vegetables; the kingbird was looked upon with favor because he killed the flies that bit us—which was a small matter, not because he killed the flies that sting fruit, lay eggs in it, and make it “wormy”—which is a very large matter.

One who begrudges birds the little fruit which they may eat in the fruit season is apt to forget that the fruit season is very short, while these helpers are working for him the year round. In the winter the woodpeckers, chickadees, nuthatches, and brown creepers, are literally cleaning up his trees—gathering insect larvae and eggs from trunk and limbs, bark creases and knot holes. In the spring, when leaf and flower-buds are bursting, when all foliage is tender, and insect larvae begin to devour, warblers, greenlets, and kinglets, come from the South by hundreds to search every delicate crevice and cranny of leaf, bud, and blossom; and were it not for these mighty pigmy hunters, our trees, fruit, and vegetables would literally be at the mercy of insects.

Then, all summer long there remain with us blue-birds, wrens, robins, grosbeaks, kingbirds, flickers, orioles, thrushes, catbirds, all of which, while incidentally building nests and rearing young, spend most of their time protecting our trees, fruit, and vegetables.

The greater portion of the food of these birds consists of noxious insects; and when a bird is not nesting or singing or sleeping it is usually searching for food.

It should be noted also that most birds feed their young entirely upon insects; and the open mouth of the hungry bird is proverbial. Most of our common birds raise two broods a year. Think of the number of insects necessary to feed from twelve to sixteen young wrens, or eight to ten young robins. Young birds grow so rapidly that the amount of food they eat is simply astounding. I have held my watch on a mother oriole for hours while she fed her young, and she would come with food every three or four minutes, very seldom failing to come within five. When young birds fill the nest this process goes on with only short intervals from early morning until evening.

The important question for every one, however, is, how shall the birds be induced to gather their insect food in his particular garden?

A number of suggestions will here be made, but the first, and the most important is, give the birds water. Last spring I took a wooden chopping bowl, placed in the bottom of it a chunk of sod from the roots of which I had washed most of the dirt, filled it with water, and set it on a post about two feet high which I had driven down in the middle of my back lawn. My flower and vegetable garden were only a few paces away, and both lawn and garden were surrounded with trees.

There was scarcely a day during the summer when birds did not come to drink and bathe. The post was made about two feet high to protect the birds while bathing, from the cats; and they liked the sod in the water, as it made a good safe bed for them to bathe upon, and the longer spears of grass sticking above the water gave them confidence.

The reflection from the surface of the water, like that from a mirror, could be seen for a long distance, and this bird bath became the center of bird life for the whole neighborhood. Robins came hopping upon the lawn to it; kingbirds descended from the clothes line; the flicker shot down from his nest in a near-by trunk; orioles came from a neighboring orchard; grosbeaks crossed the road from their nest in an adjoining yard; catbirds ventured from a clump of shrubbery a block away; bluejays darted in, now from one direction and now from another, without revealing the locality of their home; bluebirds dropped down occasionally as though out of clear sky; and all the while the wren, whose nest was in a box in a corner of the yard, seemed to consider this his private bath.

These birds in coming and going visited every part of the yard—trees, garden, bushes, fences.

It would have been best for the garden had the bath been placed on a stake about two feet high
right in the middle of it; but I placed it in the lawn for the pleasure of watching the birds. Robins would almost invariably hop across the lawn to the bath, picking up half a dozen worms and beetles as they came; the kingbird would sit on a wire clothes line and dart out every few moments to capture an insect; the orioles would stop, either coming or going, in two plum trees to feast on caterpillars; the bluejays would often perch on near-by posts, or even on the rim of the bowl, to watch for the movement of insects in the grass, and every few moments they would dart down to seize them; the flickers found a table spread with their favorite dainties in an ant hill a few rods distant; the familiar clicking notes of the grosbeak were heard for some time as they fed in the box-elders, before descending to drink or bathe.

Birds are always in search of food. The necessary thing in securing their services for one's garden is simply to place in or near the garden what will attract them to it. They will do the work as they come and go. And it is this coming and going process that is important, for it brings many birds to one's help. Some, to attract birds, put up nests for them—for wrens, martins, and bluebirds. This means is effective in attracting these particular birds; but it probably does more to keep other birds away than to attract them. This is especially noticeable of the bluebird. It is true that where any birds are heard and seen, other birds are apt to be attracted, as though to see what is going on. An extreme case of this attraction is seen when a snake, cat, squirrel, or jay assails some nest. All the birds of the neighborhood are gathered at the cry of the victims. But it is also true that among birds there is a general understanding that wherever a bird builds its nest, a certain area around that nest belongs to the owner. I have seen the kingbird, whose nest was in a solitary tree, attack every bird that approached. I have seen robins unceremoniously hustled out of trees where bluejays had their nests; and not long afterwards I have seen bluejays hustled out of trees where robins had their nest. To be sure, the bluejay is an egg-eater, and that fact would account for the attack upon him; but the robin never molests a nest, and the attack upon him is due to the fact that the region for some distance around a bird's nest belongs to the birds that built it, and every other bird is regarded as an intruder.

I once placed in my back yard, close beside a bird bath, a home for a pair of bluebirds. The result was that the bluebirds thought they owned the yard. Many a fracas did I see between them and other bluebirds that happened in. To the jay that came to the bath to drink, the male bluebird gave no peace, but kept him busy ducking his head to save it from his strokes. And a robin that, after bathing, rose in lumbering flight to the top of a high

1—The wren plunges; 2—The grosbeak came from an adjoining yard; 3—Bluejays darted in; 4—The catbird takes a bath; 5—Orioles came from a neighboring orchard.
Birds are the Gardeners' Best Friends

post, the bluebird plunged into and actually knocked to the ground.

If the bath is put out early in the season the birds will discover it and build their nests in various places in the neighborhood convenient to its use.

In connection with the bath it is of great importance to erect two or three high posts, and between two of them at least to string a tight wire or rope. Simply by focusing my camera upon the top of a high post placed in the middle of my back yard, I have secured the photographs of half the birds that entered the yard during a season—robin, wrens, bluebirds, thrushes, jays, catbirds, flickers, orioles, grosbeaks, and kingbirds.

These posts serve as perches from which the birds watch for insects moving on the ground, in the grass, or among the leaves of vegetables. The kingbird will one moment dart into the air to take a fly, and the next, descend to the ground to seize a beetle. The bluejay may be seen cocking his head now on one side now on the other, and every few moments dropping to the lawn to take an insect. Who has not seen a red-headed woodpecker perched on a post by the roadside, and wondered what he was doing there? I one day held my watch on one for five minutes, and during that time he descended to the ground for insects five times, and took one in the air as do the flycatchers. He was simply using the post as a perch for observation. Such posts in our gardens give the birds twice the chance to see the injurious insects which they otherwise would have.

If one thus attracts birds to his garden he will find that they soon learn to be on hand when any plowing, spading, hoeing raking, or weeding is going on; for it is when the soil is disturbed that worms and insects are brought to the surface; and in approaching near to the worker to secure them, the robins especially, become almost as tame and bold as chickens.

Black-billed cuckoos, kingbirds, orioles are all very active in destroying beetles, grasshoppers, sawflies, spiders, weevils, caterpillars, ants and click beetles, the larvae of the latter being among the most destructive insects known. The grosbeak is the particular enemy of the potato beetle, while the robin, the house wren, the bluebird and catbird are all shown to subsist mostly on animal matter, the greater portion of which consists of insects.

A careful examination of the stomachs of numbers of these birds has been made by the United States Department of Agriculture and the results of the investigations are contained in the "Farmers' Bulletin" No. 54 on "Some Common Birds in their Relation to Agriculture."

From the facts set forth therein, it is safe to say that seventy-five per cent of the food of the birds noted in the Bulletin consists of insects, most of which are harmful to our gardens.
T H E great advantage which is gained by fall planting is that the tree, being well established in its new quarters, is ready to start into growth in the spring at the time when spring stock is being brought into the garden. The success or failure of fall planting is to a large degree dependent upon the care that is taken to protect the tree during the winter that follows. An abnormally dry and windy winter is likely to be fatal to newly set trees, unless they are planted early, in well-drained soil, and mulched to prevent alternate freezing and thawing near the surface.

Earliness is essential to the success of fall planting; the trees must be in the ground well in advance of freezing weather—preferably a month. The first of November may be taken as the latest practicable date that is safe for planting the hardiest trees, shrubs and vines in the North. For perennials, October 15th is about the limit. No matter how carefully the transplanting may be done there will be an appreciable amount of injury done to the small roots of the trees, and early planting has to offset the damage; there will be ample time for the broken surfaces to heal over—to callus—even if they do not make some new growth before the winter cold strikes deep. Another advantage is that the soil will settle around the roots and trunk during the late fall and winter, which means that there is less likelihood of drying out in the early spring drought.

The farmer, who has a large number of crops to harvest in the fall, may find himself too busy to attend to planting during the early fall months, and he is therefore justified in laying the work over till spring, but the owner of a country estate, where planting is done on a smaller scale, must consider that he is much more likely to be rushed with work in the spring. The planting of the vegetable garden by the end of September, and it can be taken as a safe rule that fall planting should be done during the first half of October. The tender stone fruits, on the other hand, do not become sufficiently established in their new quarters to withstand the winter. All trees that start into growth very early in the spring are best planted in the fall; and to give specific examples, beech, birch and larch, unless planted at the earliest opening of spring, rarely live, yet present no difficulties in fall planting. Also elms, maples, oaks and thorns are safe subjects for fall planting.

By fall planting we are made independent of the weather conditions of the following spring. Neither excessive drought nor excessive rains disturb us. Has any one ever known a normal spring? Is it not usually wet and late or dry and windy? In the former case, trees and other plants suffer from exposure before there is a chance to plant them, and if they encounter a drought soon afterward they are likely to die either that summer or the following winter. Many nurserymen believe that more spring-planted stock is killed by summer droughts than fall-planted stock is killed by winter cold. Spring planting is the customary thing; therefore we do not notice its failures. Fall planting is a new and improved way; therefore its failures are conspicuous.

There are two pitfalls in this matter of fall planting: (1) the danger of getting unripened stock, and (2) being too late in the season. In order to guard against the one there is danger of running foul of the other. Of the two evils I think I would run my chances on being too late.

The trees should stand in the ground until the foliage begins to fall. That indicates that the season's growth has ceased and the tree may be moved without risk. In the effort to move the trees early, the leaves are sometimes stripped off before they are properly ripened. The exact time of ripening cannot be named for any particular species nor indeed for any particular season. The weather of the spring and winter—both warmth and moisture of the soil and even the exposure—are all factors that control this ripening of the wood. However, speaking for the North, trees are generally ready for digging by the end of September, and it can be taken as a safe rule that fall planting should be done during the month of October, the earlier the better. The wide-awake gardener will place his orders during September, and if possible visit the nursery to make a personal selection. The nurseryman has a full stock in the fall, and a much better selection can be made than will be possible in the spring.

One final caution: Don't plant in the fall on wet land, but make plans for a system of drainage and have all ready to plant in the spring.
Up-to-Date Bath-Rooms

By CHARLES JAMES FOX, Ph.D.

ONE of the most characteristic features of modern domestic architecture is the almost universal adoption of the sanitary bath-room, not only in public buildings, hotels, and elaborate residences, but even in the most modest private houses. For a first-class modern bath-room, several things are quite essential: spaciousness, light, ventilation, open plumbing, and last and most important, inorganic, non-absorbent, washable floors and walls. In addition to these requirements of modern sanitary ideas, every American housekeeper takes pride in the neat, attractive and even decorative appearance of the bath-room. The small, dark, musty bath-room of a few years ago with the unsanitary wooden floors and wainscoting, which absorbed moisture and dirt of all kinds, is now a thing of the past. Its place has been taken by the bright sanitary bath-room of the present day, which adds materially, not only to the general comfort, but to the healthfulness, of the entire family.

In addition to light, ventilation, and spaciousness, necessary in all rooms of the house, the most important considerations in the modern bath-room are the open plumbing and the tiled floors and wainscoting. In modern sanitary plumbing, the use of wooden trimmings has been almost completely abolished. As a porous and organic material, wood absorbs moisture and dirt; and this foreign animal and vegetable matter in decomposing becomes the breeding ground for countless numbers of micro-organisms.
from the simple germ of decay to disease germs possibly dangerous to human life. This fact makes a wooden floor or wainscoting a most unsanitary arrangement for a bath-room.

It is impossible to keep a wooden floor, that is being constantly spattered with water and dirt, in a sanitary condition. It can be washed so that it will look bright and clean, but this is simply because the germs that are bred in the wood itself and in the cracks between the boards are not visible to the naked eye. Scientific investigation has demonstrated that the decay of wood and the peculiar musty odor arising from old wooden floors are due to a germ, called "anaerobic," because it lives away from air and light. No amount of scrubbing will remove these germs as they live inside the wood itself, and the very washing supplies the moisture which is necessary to the existence of the microbe. Neither will washing, cleaning nor ventilation eradicate the peculiar musty odor, which it causes. To avoid this offensive microorganism, and for other sanitary reasons, the use of an inorganic floor in the bath-room is to-day regarded as absolutely essential.

Of the inorganic floor coverings, tiling, marble and cement are the most usual. Marble, however, is not an absolutely non-porous material. This fact has been demonstrated by an experiment, whereby a lighted candle on the opposite side of a marble slab, an eighth of an inch thick, was blown out by a strong bellows. As a carbonate of lime, marble is not absolutely sterile as far as germs are concerned. Modern scientists have discovered that bacteria of all kinds are vegetable organisms and it is well known that lime is an essential to all vegetable life. This fact, together with its expense, virtually excludes marble from use as floors and walls in hospitals, where an absolutely germ proof material is necessary.

Cement floors, even apart from their non-decorative appearance, are not to be used in a bath-room, because cement wears rough, and the small recesses thus formed in it, become filled with dirt and foreign matter of all kinds, which it is virtually impossible to remove. Consequently a cement floor is never thoroughly sanitary.

The ideal covering for the floors and walls of

Decorative colored wall tile for bath-room
bath-rooms is the baked clay tile. Tile is absolutely non-absorbent and germ proof. It is the most durable of all flooring materials, because it is baked harder than marble, slate or other natural stones, and even the steel nails of the shoe, so destructive of all other flooring materials, cannot scratch it. It can be made in such a variety of form and color that it lends itself to the most artistic and decorative designs. As an absolutely non-absorbent material all dirt or other foreign matter spattered on a tiled floor can be easily removed by the most superficial washing. A modern bath-room with a tiled floor and walls could be quite safely flushed out with a hose. In fact, tiling is now regarded as so absolutely essential on the floors and walls of bath-rooms that those who practice false economy by purchasing some cheaper substitute feel obliged to have at least an imitation tile, whether it be of paper, rubber or metal. These imitation substitutes for tile are nearly always very unsanitary, because they cover up and hide dirt and dust which inevitably works its way under them. When applied as a covering to a wooden floor, they prevent the evaporation of the moisture and dampness absorbed by the wood and thus cause it to rot.

But even the modern tiled bath-room is going through a series of improvements, which are making it still more sanitary and attractive. A few years ago, even a tiled wainscot in the bath-room was regarded as quite a luxury. To-day the tiling of the entire wall up to the ceiling is looked upon as necessary. Of course the initial expenses of a completely tiled wall is greater than wall paper or paint, but in the end there is a saving, because both paper and paint have frequently to be renewed, especially in a room subjected to such extreme changes of temperature and so much dampness as the bath-room. Another improvement in the tiled floor is the adoption of the rounded or so-called "cove base" tile for the skirting or base-board of the wall. These cove base tile abolish the corners formed by the union of the floor and wall, and which become hiding places for dirt that is not removed by careless washing. The rounded tiles are frequently called hospital tile as they are used extensively in these institutions where
every human device is employed to prevent the breeding of disease germs.

Other improvements in the bathroom are made by taking advantage of the decorative properties of tiling. The somewhat glaring monotony of the white wall tile, often too suggestive of the hospital, may be relieved by the use of a colored border, or of panelling encased in colored glazed or unglazed tile. The colored tile are just as non-absorbent, washable, germ proof and sanitary as the white glazed tile, and they are generally far more decorative. The colored or tinted decorative tile shows off to great advantage the modern plumbing fixtures, which are in themselves an important decorative feature of the bath-room. When the bath-room is too long, too narrow, too small, or otherwise out of proportion, its defective appearance can often be remedied by a skillful use of a pattern in colored tile. The floor of the bath-room is usually covered with white unglazed or vitrified tile or with ceramic mosaic. The mosaic work can be laid out in most artistic and appropriate designs. In the floor, as in the wall, there is no reason why advantage cannot be taken of the decorative properties of colored tiling. Designs of infinite variety may be secured by clever combinations of varying forms and colors; while most artistic effects may be procured by employing the several surface finishes, such as glazed, satin dulled surface, and the vitreous or unglazed tiles of slightly raised design are frequently used for borders, and are particularly effective in combination with the smooth surfaces of tile generally used for the body of the wainscot or wall.

One of the latest devices is the Roman or tiled pool bath, which is built down below the floor line as a kind of diminutive swimming pool. The expense of this unique innovation, however, will probably prevent its general adoption in houses other than those built by persons to whom expense is not a consideration.
It depends very much upon where the house is situated whether September is a busy month or not. Mid-summer and mid-winter bring virtually the same duties to the Northern and Southern housekeeper, but the spring and autumn months require a shifting of the scale. It has become customary in many sections of the country to look upon September as the semi-annual cleaning season—the time when the house must lay aside its summer garb and don its winter robes. This is a mistake, however, for if the cleaning is done little by little, day by day, there will be no need for a semi-annual domestic upheaval, and it is far better to postpone the hanging of heavy curtains and draperies as long as possible. Warm days (sometimes the warmest) will come in September, and it will be desirable to have the windows open and free circulation of air.

And then, too, why shut out the out-door world when it is most attractive and appealing?

Perhaps, though, a little fire will be necessary night and morning and on rainy days, and under any conditions this is the time to attend to the flues, to have the chimneys swept and the furnace tested. During the summer the birds sometimes build their nests in the chimneys, storms displace bricks and pipes rust on account of dampness and disuse, and frequently slip from place—thus, much inconvenience if not danger is avoided by the pre-thought of early inspection.

But, apropos of open fires, have you tried burning crushed coke in a grate? Use it the same as coal and you will find that it makes a delightful fire, short-lived to be sure, but sufficient to take the chill off the air, and furnish a few hours of enjoyment.

When the chimneys and flues are inspected have the electric wiring also carefully gone over by an expert in order to make sure that the insulation has not worn off or become impaired, or other damages accrued while the house has been unoccupied.

It is well also to have an eye to the roof before equinoctial storms come to discover the tiny holes for you and inartificially decorate the wall or ceiling which was repapered or repainted during the summer.

It is in September also that the awnings should be taken down and stored away for the winter season, as the autumnal winds and rains do them much injury and the sunlight is not sufficiently intense to make them a necessity. See that they are perfectly dry before they are laid away and that they are carefully folded.

At this same time the weather strips around the windows and doors should be inspected and put in perfect condition. A little forethought now may prevent a hard cold for some member of the family in the early winter.

In some localities window and door screens can be taken out toward the close of the month and the glass enclosing a south piazza may be put in place, but in most parts of the country this too can be safely left until October, when the storm doors and windows can be put on at the same time. It is well to economize labor and let the seasons arrange the calendar as much as possible.

A marked additional growth will be attained by plants and shrubs if the ground is kept well stirred about the roots—the fall growth will be very material.

If budding was neglected during last month, it should, by all means, now be given attention. The buds on the young growth are well formed and the sap flows freely in the stock. Spring budding is seldom successful as the buds are rarely sufficiently matured for the purpose.

Sow lawn seed during the month and have a good lawn started before the winter months. If seed are sown now the lawn will be free from weeds and the grass will be up and started early in the spring before the weeds appear.

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September is, perhaps, the most trying month of the year on the lawn. It is also a month when the gardener is apt to give it less attention than any other. In order that it may have a rich green velvety appearance during all the fall, it must have plenty of water and frequent mowings. If rains are not ample, have recourse to the hose or such irrigation methods as may be convenient.

The old-fashioned larkspur is very much neglected when its utility and reliability is considered. It is quite hardy and resists both cold and heat remarkably well. The flowers remain perfect on the plant so long that it seems a pity to cut them, yet they are almost as desirable for tall bouquets as gladiolus. Their cultivation would amply repay if grown only for this purpose.

The double dwarf is a very handsome variety, but perhaps the favorite is the hyacinth-flowered type. This latter variety produces great hyacinth-like spikes of large double flowers set closely together. The colors are bright and rich in this variety, and, if planted separately, desirable masses of several shades of pink, blue, purple, and red will be shown.

While the larkspur is a valuable spring-sown plant, blooming quickly and profusely, yet the most beautiful specimens of annual larkspur are grown from fall-sown seed. If the seed are sown in September, the plants get well started before the winter months, and, being hardy, are ready to begin their growth early in the spring, and, consequently, come into bloom before the summer months.

Pansy seed should be sown in September for early spring blooming.

The hibiscus, peachblow, makes a charming house plant for winter. The flowers are immense, yet beautiful and fragrant. If you have them bedded out, pot and take in before frost. They will bloom all winter.

Perpetual-blooming carnations are highly valued for their constant bloom and delicate fragrance. They flower freely during the fall in the garden, and if taken indoors, and kept in a light, cool room will produce an abundance of lovely flowers during the winter months. Keep the buds picked off of those intended for winter bloom and take them in before hard frost. They are not entirely hardy.

(Continued on page 7, Advertising Section.)
THE EDITOR’S TALKS AND CORRESPONDENCE

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

COLONIAL HOUSES

The simple lines and dignified proportions of the Colonial house as exemplified in the New England and Southern types, are always beautiful and as adaptable to the requirements of life to-day as in the days of the Georges. Much information relative to correct detail to be embodied in a Colonial house in process of planning, may be gathered by the prospective builder beforehand and thus enable him to more clearly outline his ideas to his architect. Beautiful examples of pure Colonial houses are from time to time published in the pages of magazines, also illustrated articles showing examples of rare doorways and window motifs, as well as much detail from the interiors of these perfectly constructed and wonderfully satisfying houses.

Some of the work of Grinling Gibbons is still to be found in many of the fine old houses in New England, and much from the hands of his disciples. Cornices, mantels, door and window frames, beautifully carved, supply designs which no latter-day artists have been able to improve upon. The Colonial mantel pieces especially, have been largely reproduced by mantel firms and are on the market to-day, procurable and ready to be set in place. The prices are wonderfully reasonable and the matter of having them match perfectly with the woodwork of the room is easily arranged. Where they are to be enamelled, they are finished in three coats of flat lead ready for the last coat, and, in this way, the same tone for the finish is insured throughout the room.

A very perfect type of Colonial house will shortly be published in the pages of this magazine. Every detail of this beautifully planned and executed house breathes the true old-time atmosphere which makes it adaptable to the surroundings in which it has been created, and it is hard to realize that it is of recent construction so easily arranged. Where they are to be enamelled, they are finished in three coats of flat lead ready for the last coat, and, in this way, the same tone for the finish is insured throughout the room.

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When a modified Colonial house is planned, a much wider choice in design, arrangement and finish is permissible, though too radical a departure from the acknowledged pure form, should be avoided. In the many houses of this type to be found throughout the country, and particularly in the smaller residences, one realizes that the jig-saw and the turning lathe, have gotten in their pernicious work. A preponderous use of Palladian windows and fan-shaped glass for front doors is also a mistake. Simplicity should be the keynote of the modified as well as the pure Colonial. A small and inexpensive house built on Colonial lines may be extremely dignified and attractive; whereas, if too much detail is shown and the ornamentation runs to the ornate, the house will stand for all that is most objectionable in architecture.

FINISH OF THE INTERIOR

For the wood finish of the interior, the pure Colonial house more frequently runs to the ivory enamel showing an eggshell glass used in combination with mahogany, than to any other wood finish, although in certain beautiful rooms of these old houses—particularly libraries and dining-rooms,—oak was often used. Where the best effect is desired with the least expense, white wood or poplar is suggested as the choice for the standing woodwork, as this wood takes an enamel admirably and also shows up well under mahogany stain; it certainly gives the maximum of results at the minimum of expense. Three coats of flat lead should be specified for use under the enamel and the tone used for the enamel should
Colonial houses. 'The mahogany stain may be obtained in various
tones, from the rich purple red, which some of the old mahogany
furniture shows, to the tobacco brown of the San Domingo mahog-
any. Any of these shades are harmonious with the ivory enamel.
The mahogany stain should be used for doors throughout the
house, the ivory white for the standing woodwork.

Where oak or any stained wood is to be used for the standing
woodwork in any of the rooms of the Colonial house, a rich dark
stain, resembling the color wrought by time, on oak, ash or chest-
nut is recommended. The finish of this wood over the stain may
be either a rubbed wax effect or preferably a perfectly dead finish,
as this latter treatment preserves the idea of natural wood.

FLOORS

Where the floors are finished for rugs they may be of oak, maple,
or any other hard wood; these should be carefully finished in the
first place and much trouble in future will be avoided. Where the
wrong treatment has been given a floor it is absolutely necessary
to thoroughly cleanse the old finish, there are varnish removers on
the market which will do this successfully. After this has been
done the floors may be treated as new. If wax is to be used there
are excellent prepared wax finishes; these can be applied regularly
and well rubbed in with a heavy polisher. Where the floor is to be
waxed a stain may be used if desired, or the wood will be left in
the natural color, and the repeated weekly applications of the wax will
gradually darken the floor. If a finish in the nature of a varnish
is decided upon, there are several excellent ones on the market;
high or semi-gloss, or an effect closely resembling wax may be
secured. If the floor to be finished is of oak the best paste filler
should be used, followed by a single coat of stain. When this is
thoroughly dried the first coat of floor finish, wax or varnish can be
applied. Where a varnish is used two coats are required over the
stain and three coats if the wood is left in the natural color. Maple
and hard pine floors do not require any filler, they should be treated
with this exception in the same manner as advised for oak.

FIGURES AND INTERIOR HARDWARE

Some of the leading hardware firms have made a special study
of correct Colonial hardware, and supply excellent reproductions
as well as original and entirely appropriate designs along these lines.
Where the doors have been stained mahogany, an attractive effect
is to use the glass knobs throughout, set in the dull or polished
brass. Suitable effects in central lights are supplied by designs after
the old-fashioned chandelier, with side lights in form of sconces,
and for mantels and tables, candelabra are appropriate. Even at
the risk of repeating myself unnecessarily I would impress upon the
prospective builder the necessity of making a careful study of the
appropriate in the fittings for his house. To the architect, the
client whose ideas have been formed along the right lines, the work of
and must be taken advantage of. With tile floors and walls, in a
bath-room fitted with the most approved and up-to-date plumb-
ing, beautiful as well as sanitary effects may be obtained. In the
service department of the house tiling is again exceptionally attrac-
tive and advantageous to use for wainscot and floors. If, however,
for any reason a wainscot and floors of wood are preferred for the
butler's and kitchen pantries, these may be finished in the natural
color with a tough and durable varnish which is unaffected by heat
and moisture. If yellow pine or maple is used for this woodwork, a
clean, clear effect in color is obtained as both of these show shades
of yellow. The walls of the service department may be painted in
oil as this finish is readily cleansed and is practical. In planning
the kitchen the windows should be set high, allowing tables, shelves
and sinks to be placed below them.

HEATING APPLIANCES

While there is no single effect in a room more thoroughly decor-
ative than an open fireplace, in these latter days there are but few
houses to be found which depend upon them for heating the house.
The radiator has become a fixed factor in the home, and while
these may be most unattractive features, they seem an absolute
necessity in the home, and while these are so arranged that they may be adjusted under a seat, in a corner cabinet, or set in
some especially designed or built in piece of furniture. This is a
matter that the architect can take in hand, and working with the
manufacturers, entirely do away with the objectionable feature,
insuring only the delightful warmth and comfort that steam or hot-
water provide.

CORRESPONDENCE EXTerior COLOR FOR HOUSES

I note in your Correspondence Department that you give much
advice as to the interior color scheme for the house. Having
availed myself of your services in this line in the past, I wish to
express my complete satisfaction with the results and ask a further
favor. I realize that sufficient consideration has not been given
to the outside color of my house as it is not attractive. I have
used a combination of red sandstone with brown clapboarding,
(Continued on page 7, Advertising Section.)
Garden Correspondence

CONDUCTED BY W. C. EGAN

VARIEGATED LEAVED SHRUBS AND YELLOW-FLOWERED BEDDING PLANTS

As a subscriber to House and Garden I take the liberty of asking a few questions to be answered through the columns of House and Garden.

What is the best four or five variegated leaved shrubs? Please name them in their order of merit.

What are the best dozen or so of yellow and orange flowered bedding plants (annual or perennial) that will keep up a succession of bloom from frost to frost? I want to plant my formal garden all the way from "frost to frost.

What should be the width and height of a pergola that is to be 100 feet long and that flower or have bright autumnal tints? Will tufted pansies do as well in America as in Europe?

Is the design to be a classic one, or one of Spanish feeling? Perhaps rustic? Is it to be located in the full blaze of sunshine, or is it to be built under spreading trees? Are both sides to be open, or is one side against a wall or building? All these things would in some measure affect the design as well as the proportions. Without more definite information would say to place the rows of columns about twelve feet apart, and about ten feet apart in the row, and not to exceed nine feet in the clear to soffit of beam which carries the cross timbers.

To make a gravel walk where the natural soil is not of a decided sandy nature, the space used should be excavated to a depth of five to eight inches and be filled in with coarse cinders, broken stone or bricks, or very coarse gravel. Roll it well or tamp it. This is to insure perfect drainage in wet weather. If broken brick is used, the pieces must be small or they are apt to be heaved up by the frost. Have a slight crown in the center; on top of this put about two inches of gravel, rolling it frequently, endeavoring to compact and solidify it as much as possible. Much depends upon the nature of the gravel. Some packs readily, while others roll under the feet. Sometimes an inch of gravel for the first year works better. Continuous travel finally makes a good walk. Paved gutters must be used where there is any stretch with a steep gradient.

As to a list of small trees possessing autumnal tints, it might be well to state that some, like the sassafras and the liquidambar, that generally color beautifully in the fall, in most sections, fail to do so in other locations. Sometimes, in a nursery row of hard maples, one or more will color finely, but I know of an instance where one chosen in an Eastern nursery when in color in the fall, for its brilliancy and sent to me, has failed ever since to show any disposition to color.

The following list should prove hardy with you, and produce the effect you desire, either in flower effect or leaf coloring.

Acer Tataricum var. ginnala, foliage colors in the fall; Sassafras officinale, foliage colors in the fall; Chimonanthus Virginita, white flowers; Syringa Japonica, cream-white flowers; Pyrus baccata, white flowers; Pyrus floribunda, rose colored flowers; Pyrus Toringo, pink colored flowers; Pyrus Schiedeckeri, deep red colored flowers; Pyrus Neidhardtiana, deep red colored flowers; Pyrus Spectabilis, deep red colored flowers; Pyrus Parkmanni, deep red colored flowers; Pyrus Iornis Bechelbi, double rose-like flowers; Cerasus Japonica rosa pendula, rose colored flowers.

The English thorns might do well with you; if so, you would find some pleasing forms among them. In addition to the above there are some flowering shrubs which when grown to a standard make handsome small trees. The common snowball and Prunus padus, the European bird cherry, is suitable. Its white flowers in June are pleasing, and the fruit is relished by the birds.

So many considerations enter into the correct proportions to give to a pergola, that your question is a difficult one to answer specifically.

Is the design to be a classic one, or one of Spanish feeling? Perhaps rustic? Is it to be located in the full blaze of sunshine, or is it to be built under spreading trees? Are both sides to be open, or is one side against a wall or building? All these things would in some measure affect the design as well as the proportions. Without more definite information would say to place the rows of columns about twelve feet apart, and about ten feet apart in the row, and not to exceed nine feet in the clear to soffit of beam which carries the cross timbers.

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(Continued on page 10, Advertising Section.)
SUGGESTIONS FOR THE MONTH
(Continued from page 123.)

THE GARDEN

To Editor House and Garden: In your Suggestions for the Month (July) you advise the plowing (under) of the strawberry bed and claim that it will then be ready for new planting in the fall. It seems to me that Kellogg's method of mowing the bed, letting the trash dry for about three days and then, during a brisk wind, burning it right on the bed is a better plan for a bed not more than two or three years old.

A. D. C., Humboldt, Iowa.

Answer: There is no disposition to discount the Kellogg method as referred to by our correspondent. On the contrary, it is commended where its use is practicable. It is only an adaptation to the cultivated berry-bed of the methods practiced in sections of the South where the strawberry grows wild, in abundance, in the old "sage-fields." In those sections it has, from the time the memory of man runneth not to the contrary, been the custom to burn over the fields in the early fall.

The suggestions in the July issue obviously referred to strawberry beds in city or suburban gardens where police regulations, or surrounding conditions, would not permit the plan of "burning-over."—Editor Suggestions for the Month.

CORRESPONDENCE
(Continued from page 125.)

a green roof, and gray trim. The effect does not satisfy me. Could you make me some suggestions as to color in doing over this house?

R. F. D. of Kansas.

Answer: You do not state the shade of brown chosen for the body of your house; if a russet or golden brown is the color this would not harmonize with the red sandstone. Since the foundations are of this stone, I would suggest that a moss green color for the body of the house with ivory trim would be your best choice, the roof in a shade of reddish brown which will harmonize perfectly with the red sandstone, being deeper in color, but as I have said, harmonious. I am glad to know that this Department has been of service to you in the interior of your house, and am pleased to supply suggestions for the exterior whenever requested.

DECORATING A COLLEGE ROOM

I wish to decorate and furnish a college room in Hall at Cambridge for my son’s occupancy in the coming year, would you make me some suggestions. I send you a rough draft showing the size of room, position of windows, etc. It is on a southwestern corner. The windows you will observe are large and the room 16 x 19. There is a small bedroom opening off which has cherry woodwork finished in the natural, this I will leave as it is. Kindly advise me as to wall covering for this room also. The furniture I will use here is mahogany, but as the room is small I will not require much decoration. The larger room has oak woodwork which is now an objectionable golden oak with a high gloss; I have obtained permission to change this and will do so under (Continued on page 8.)

Fall Housecleaning

When you clean house this fall, have your home decorated with Alabastine and make it brighter, more cheerful, more sanitary and more healthful for the long winter season. The dainty Alabastine tints make the walls lighter and the rooms brighter. Alabastine is the only durable wall coating. It will not flake or scale, and best of all, when once applied, the room can be re-decorated without the bother, confusion and expense of washing and scraping the walls.

Walls decorated with Alabastine afford no breeding place for moths and insects. Alabastine is the only sanitary wall coating.

comes in many different tints that can be combined in an endless variety of shades. Many beautiful color combinations can be made with Alabastine to harmonize with the woodwork and furnishings of each different room, while making the decorative plan for the whole home entirely harmonious.

Alabastine comes in 5-lb. carefully sealed and properly labeled packages, and is sold by dealers in paints, drugs, hardware and general merchandise, at 50c the package for white and 52c the package for tints.

The book, "Dainty Wall Decorations" contains designs in colors for every room in the house, showing nearly 100 different combinations and color schemes, and containing many practical suggestions for home decoration. The book will be sent to any address upon receipt of 10 cents, coin or stamps, and is worth far more to any home-maker. Write today for free tint cards and other valuable information. Special color suggestions for decorating new buildings furnished free on request.

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Building greenhouses is more than a carpenter’s job—one must have had experience to really know how.

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Interlocking Rubber Tiling

Particularly adapted for Court Houses, Banking Institutions, Church Aisles, Hospitals, Libraries, Business Offices, Restaurants, Vestibules, Elevators, Kitchens, Laundries, Pantries, Bathrooms and for Steamships and Floating Property generally.

ORIGINAL MANUFACTURERS
New York Belting and Packing Co., Ltd.
91-93 Chambers Street, New York City

Your advice. I would like suggestions for wall treatment, draperies and furniture.

College Room.

Answer: Your letter with the diagram so clearly explains the situation that I hope I can be of practical assistance to you. To begin with the large room I would suggest that you cleanse the oak of its present finish; use a varnish remover to do this successfully. Do not have the wood filled but restain, using a dark brown that is almost black, finishing in a dull finish. Cover the wall to the height of seven feet (I note that the ceilings are ten) with dark green grass cloth, a sample of which I send you. This you will find to harmonize well with the red color of the woodwork. For the upper wall from grass-cloth to ceiling line use a paper showing large conventionalized magnolia blossoms in crimson, with heavy stalks and leaves of green against an ivory ground. This will bring in the Harvard color which I presume will be acceptable. The ceiling should be the same shade of ivory as the background of this paper. The joining at the ceiling line to be covered with a three inch mold of white, treated as the ceiling. The joining of the paper and grass-cloth to be covered with a railing heavier and wider than the picture rail, of the same oak as the standing woodwork, and treated in the same way.

This will give an excellent place for steins, photographs and pieces of copper and glass, and such decorations as may be appropriate. The furniture of this room should be on Craftsmanlike lines, heavy and plain, and finished in the same way as the woodwork. I will supply you with the address of a firm from whom you can obtain the unfinished furniture, and have it finished to match the woodwork. One or two East India wicker chairs with loose cushions should be used in this room, and a built in window seat in the square alcove. The window should be large enough to supply a comfortable lounging place. The comfortable mattress which is used on this should be upholstered with dull green upholsterer's velvet-cloth; this is a cotton velvet which withstands the hardest service and really improves with age, as in changing color; it simply shows a softer tone. The pillows on this should be covered with the crimson to match the blossoms of the paper. The rug may be of crimson and green, or of the two tones of either color. A green curtain should hang in the doorway leading to the smaller apartment. As it will be difficult to reconcile the cherry woodwork with the crimson in this room, I would suggest a plain wall covering of fibre paper in a shade of neutral yellow brown which harmonizes well with the natural cherry of the woodwork. This to be finished with a narrow frieze showing a conventionalized landscape design. Curtains of a tone between the color of mahogany woodwork and the cherry will harmonize with the wall covering.

TREATING THE INTERIOR OF A CAMP

Would you advise staining the woodwork of a camp in the Adirondacks which is left in rather a rough state, showing the tool marks, or would you leave it in the natural color? This seems very white and crude now. The wood is birch. I presume it will darken with time and yet I feel it impossible to make a livable room with the bald look that this gives. Could I stain without using (Continued on page 10.)
Is it pure air that heats your home?

Keeping your rooms warm in winter does not necessarily mean that you are heating your house hygienically. What kind of air is the important question. Is it fresh and pure and constantly changing like summer atmosphere? Or is it dead and vitiated—the same air heated over and over again.

Steam and hot water systems simply heat the air of the room without making any provision for ventilation or fresh air supply. Ordinary furnaces on account of their construction cannot supply an adequate amount of fresh air and must fill the house to a greater or less extent with an overheated, lifeless atmosphere that is the cause of many winter colds and headaches.

The KELSEY WARM AIR GENERATOR

fills every room in your house with an ever changing, even distribution of fresh warm air; and it does this with less fuel consumption, less wasted heat and less dust, dirt and repair expense than any other heating system.

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In writing to advertisers please mention HOUSE AND GARDEN.
Horses

Wealthy people, the kind that subscribe to *House and Garden*, living in the suburban districts of our large cities, must have horses for driving and station work. Your advertisement published, as we will publish it, will attract the attention of buyers. Special rates and several other inducements will be sent upon request.

JOHN GILMER SPEED, Editor.

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**GARDEN CORRESPONDENCE**

(Continued from page 126.)

**PLANTS FOR BORDERING A WALK**

The main walk in my vegetable garden is formed of gravel and is one hundred feet long and six wide. I want to grow something along its border that will produce effect most of the season, and at the same time give me some cut flowers. What can I use?

C. W. B.

You have a splendid opportunity for fulfilling your desires.

In August or September plant a line of Spanish iris—three inches apart in the row—on both sides of the walk and six inches from the edge. Ten inches back of this planting put a row of the English iris, same distance apart in the row. In the fall, or early in the spring, sow a row of poppies in between the iris. Back of the English iris, but only a couple of inches from them, sow a row of the dwarf Tom Thumb nasturtiums, and back of them—say six inches—plant a row of gladioli. Then in front of the Spanish iris, half way between them and the walk, sow a broad row of portulacca which will not start until warm weather sets in. The result should be as follows: In June, the Spanish iris will be in bloom and will spread over the space left vacant by the iris, and the portulacca will enliven the scene with its brilliant colors. After blooming time the nasturtiums will be in bloom and will spread over the space left vacant by the iris, and the portulacca will enliven the scene with its brilliant colors, while standing back of all will be the gladioli. The latter will probably need staking. The Spanish iris generally shows itself late in the fall, and its onion-like tips remain green all winter, but the English iris remain dormant until spring. A loose litter of strawy manure should be thrown over them in winter. Inverted V shaped troughs made of eight or ten inch boards placed over the space will carry them through the winter splendidly.

By the above arrangement you will take up but two feet space, each side the walk, and have a continuous display from June until frost and six varieties of flowers for the house all summer.

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**The Economy of CADILLAC**

"Upkeep"

The Cadillac, because of its wonderful efficiency and simplicity, in mechanical construction, its minute mechanical accuracy, its per- fect balance at every point, is, without exception, the most economical in operating expense of all motor cars. To bring you right down to solid facts on this point, we have prepared a book entitled "The Truth about the Automobile and What It Costs to Maintain One" giving unbiased opinions and actual experiences and expenditures of the Cadillac owners. Full of interesting performances and live information. Free, if you write at once.

CADILLAC MOTOR CAR CO., Detroit, Mich.


Model C-$2,000

any finish as I object strongly to the varnished look of woodwork.

Adirondacks Camp.

Answer: I would advise a stain for the birch in your camp as it will take some time for this to darken perceptibly. If you will send me a stamped and self-addressed envelope I will be glad to give you the name of firms who will supply you with information in regard to their goods, any of these would give you satisfactory results. I would, however, advise you against using a stain without finish as you can obtain a perfectly dull varnish which is not perceptible when applied; it, however, holds the stain and acts as a preservative to the wood, and makes it much easier to keep in good condition as this finish can be wiped with a damp cloth without injury. Shades of forest and moss greens, soft browns, and grays are obtainable on birch, and give most satisfying results.
A FIRE-RESISTING CEMENT

A new fire-resisting cement has lately been subjected to a careful test in Germany, and an official protocol has been issued concerning its behaviour, bearing the signatures of several architects, engineers and other experts. The trial was conducted in a wooden house built for the purpose, the walls and the roof of which, and an iron girder supporting the roof, were coated with an inch thick layer of asbestic. The structure was partly filled and surrounded outside with a mass of shavings and wood chips soaked in petroleum and the whole was set alight and allowed to burn for about three-quarters of an hour. The fierce conflagration was then extinguished by means of hose, when it was observed that the asbestic showed no sign of either cracking or peeling. When it was at length chipped off in various places, both the iron and wood of which the structure was composed were found perfectly intact.—The American Contractor.

FIFTEENTH NATIONAL IRRIGATION CONGRESS

An advance copy of the Official Call of the Fifteenth National Irrigation Congress has been received by House and Garden. It is issued from the Headquarters of the Congress at Sacramento, California, and announces that this important convention will be held in that city September 2-7 inclusive. The document recites the purposes of the Congress, invites the appointment of delegates by organized bodies of all kinds and announces special railway rates over all railway lines to California. An Interstate Irrigation and Forestry Exposition, the California State Fair and special harvest excursions over California are among the entertainment features promised those who attend.

The purposes of the Congress are declared to be "Save the forests, store the floods, reclaim the deserts, make homes on the land," and all who are interested in these objects or in any of them are invited to participate in the deliberations and thereby contribute to a wise direction of National policies and development of practical methods of conserving and developing the great natural resources of the country.

The Interstate Exposition of Irrigated Land Products and Forest Products will...
Our Heating Boilers
and Radiators
are made for the home
where the Architect
and Owner demand
uniform heat in all
weather.
The efficiency of our
apparatus makes this
always possible.

MILLS SAFETY BOILERS

THE H. B. SMITH CO.
Factory, Westfield, Mass.
728 Arch St., Philadelphia

If you will send a two-cent stamp
to pay postage to the Mennen Chemical
Co., Newark, N. J., they will send you,
free, one set of Mennen's Bridge Whist
Tallies, enough for six tables.

THE OAK SUPPLY

It is commonly supposed that there is
almost any amount of oak timber in
this country. Though it is seen that the
demand for oak lumber is steadily
increasing, especially in the interior-
finish line, and for several forms of
cabinet work, it is thought that there
is enough for any consumptive require-
ment for many years to come.

That there is a good deal of oak left
in this country is beyond question.
The vigorous opening-up of Southern
resources has enlarged the horizon of
supply, but it is probable that there is
prevailing an exaggerated estimate of the
grand total, and too much confidence
in the prolongation of the supply. It is
as necessary to look backward in arriving
at just conclusions as to look forward
into new fields. We should not overlook
the fact that the magnificent oak forests north of the Ohio river, in the central part of the Northern oak States, have largely disappeared. The oak of Ohio, Indiana and Lower Michigan had been nearly exhausted before the country had reached its present development in population and the industries which are yearly consuming increased quantities of oak lumber. It can plainly be seen that within the past five years there has been a great increase of demand for oak despite the two years of depression which have intervened. This is more especially noticeable in the demand for such product as goes into house finishing, namely, plain and quarter-sawed red oak and quarter-sawed white oak. So large and urgent has been the call for red oak that the supply has been rapidly depleted, and what there is left has fallen into strong hands. Operators can now very nearly indicate the duration of the Wisconsin red oak supply, and the term limit is not many years in the future.

It is probable that within five years the amount of red oak remaining in Wisconsin will scarcely be enough to affect the market in any degree. In the meantime, the remnants of Indiana, Ohio, Michigan and Southern Illinois oak will have disappeared, except in small holdings on farms. The great bulk of supply will thereafter be south of the Ohio river.

Southern resources for oak are mainly to be found in the States of West Virginia, Kentucky, Tennessee, Arkansas, Missouri, Northern Mississippi, and Northern Alabama. There is oak in all the Southern States, but the alluvial bottom lands of the rivers must furnish the great bulk of lumber to go on the market.

There are no statistics to show how much oak has been cut and marketed from the States north of the Ohio river. But we do know that there was never a better growth or more to the acre than abounded in Indiana, Ohio and Southern Michigan. These were the banner oak States. Kentucky and Tennessee have produced a large amount of oak, and are among the partly denuded States. The supply of those States, like that of West Virginia, will be verging toward exhaustion, while that of the States north of the Ohio river is being completely wiped out. Thereafter the main supply must come from the lower

(Continued on page 15.)
Poultry

You must advertise, if you want to do so profitably, in a magazine which circulates among people who own their own homes, and who are in consequence, interested in everything that goes to make the home a success; and as we publish only practical articles on this subject, every issue of House and Garden will be bought by possible customers of yours. Our special heading for Poultry Department will make your advertisement attract attention. Special rates on request.

House and Garden

Poultry Department

1006 Arch Street, Philadelphia, Pa.

The Best Sash Cord Made

Silver Lake A

Every foot is stamped in red Silver Lake "A"

Porch

A Reputation
Built on QUALITY alone

Porcelite

Has no competitor where the best Enamel Finish is required.

or specifications see Sweet's Index, Page 196. or get the Porcelites Book Brand is copyrighted. Made exclusively by the Porcelites Co., Makers of Enamels and Varnishes - Philadelphia.

REFERENCE TABLE

OF

WOOD FINISHES

The Unique Wood Tints manufactured exclusively by the Chicago Varnish Company are applicable to the least costly as well as expensive woods. These stains show the various natural shades as produced by time and weather, as well as such coloring as is appropriate for use in houses where the modern style of decoration prevails.

DEAD-LAC

To preserve the color and the wood it is necessary to protect them against dampness, dust and smoke. Most varnishes produce an effect of very high gloss-to which many object. Where a dull finish is desired, the Chicago Varnish Company has offered Dead-Lac. For the past several years this varnish has met the requirements of the artistic architect and his client. Dead-Lac is a true lustreless varnish and has received the unqualified endorsement of the highest authorities. On a surface protected by this finish it is very hard to discover any treatment whatever, as it in no wise obscures the delicate lights and shades of the natural or stained wood. It is very durable and does not spot with water; in fact it may be wiped off with a damp cloth with perfect impunity.

SHIPOLEUM

Where a gloss finish is desired over the stained or natural wood, Shipoleum is recommended where paleness is not essential (in which case Hyperion or Palest Crysolite is advised). For the service department of the house where the wood is often left in the natural color, Shipoleum should always be used. Three coats over the natural wood will give the most satisfying results. This varnish is thoroughly tough and durable and is unaffected by heat and moisture. Although it is used in the highest grade of work, it is invaluable for hospitals, laundries, stables, etc. It is easy to apply and dries rapidly.

EGGSHEL-WHITE AND IVORY EGGSHEL-WHITE ENAMEL

Where an enamel finish is desired for the standing woodwork, this product supplies an eggshell gloss finish in the soft ivory tone seen on the woodwork of the really old Colonial houses, or, may be secured in the pure white. This enamel supplies an effect heretofore obtainable only by careful polishing at the hands of skilled workmen. With Eggshell-White this is obtained by simply spreading the material with a brush. It is therefore a most economical as well as a most exquisite finish. Chicago Varnish Company's Flat Lead should always be used for under coats excepting in bath tubs.

SUPREMIS AND FLORSATIN

These two floor finishes made by the Chicago Varnish Company are recognized as the most durable as well as the most beautiful on the market. Supremis is a gloss finish; Florsatin has the full beauty of effect the requirements of the architectural finishes and booklet on the treatment of floors. These will supply you with full information in regard to the products of the Chicago Varnish Company.

If you are contemplating building or remodeling, write to Margaret Greenleaf, Consulting Decorator of the Chicago Varnish Company, 32 Vesey Street, New York. Send, if possible, a rough draft of your floor plans, stating exposures and dimensions of rooms; also character of wood to be employed for floors and standing woodwork. You will receive complete suggestions for wood finish, wall treatment, drapery materials, tiles and fixtures for use in your house. Send ten cents to cover postage for "Home Ideals," a booklet prepared by Margaret Greenleaf for Chicago Varnish Company.

The Chicago Varnish Company's address in New York is 32 Vesey Street; in Chicago, 31 Dearborn Avenue.

Does The Dealer Know Better Than You What You Need In Your Home?

If not, you owe it as a duty to yourself to insist on getting what you ask for when you try to buy an advertised article. You are attracted by the advertisement in this magazine; you read it and make up your mind that the goods advertised are what you want. You enter a store to make your purchase. Be true to your conviction and get what you ask for.

Avoid Substitutes.
Mississippi and its tributaries. The world's demand for quarter-sawed oak is now being largely drawn from that part of the country.

There are some special considerations involved in the oak question. We must understand that the demand is not confined to this country. There is a growing requirement in Europe and in the British Provinces. The entire civilized world is to depend on the American supply, when, as a matter of fact, there is no more here than will be required for domestic consumption. If the finest oak area in the world, that in the States north of the Ohio river, has been denuded, while the growth of the country's population and its industries was in its incipient stage, what will be the effect on the remaining supply, now that the requirement is to be measured by present and future population and industrial development? It is only within recent years that oak has been consumed, on a large scale, for furniture and interior finish. Simultaneously with the growth and establishment of demand for oak, other important cabinet and finishing woods have shrunked in supply, some having nearly disappeared. We have seen the rise and fall of the walnut vogue. The fall came simply because the supply was so nearly exhausted that it could not longer furnish the material for a large manufacture in the lines of cabinet work and finish. Cherry followed, and introduced the taste for the lighter tints in interior furnishings. Birch is now considerably in request, because it can be finished in the lighter or darker red shades, as an accompaniment of mahogany and cherry. Maple is being employed for like results. But cherry, birch and maple will not last many years. They are now in such limited supply, and so difficult of procurement in adequate quantity for extensive cabinet lines, that they simply afford a diversion from the monotony of oak. The truth is, that oak is the only remaining wood which can be employed in a large way for furniture and hard-finishing purposes. Thus we can see that the demand for oak, though large and growing in recent years, is to be much greater and rapidly increasing from the present time onward. It, thence, follows that the supply in the South will be depleted much more rapidly than was that north of the Ohio river.
MR. BILLY SANDERS, THE SAGE OF SHADY DALE: HIS VIEW OF THE NEGRO PROBLEM AND ITS REMEDY. Having known the negro for nigh unto sixty years, what Mr. Sanders says about the problem and its remedy is worthy of attention. It wouldn’t be far from wrong to say his view is that of three-fourths of the Southern whites.

LITTLE CHILDREN ON THE SNAP-BEAN FARM, an editorial by Joel Chandler Harris. Perhaps no one knows better the heart of the child than does Mr. Harris; certainly none writes of children with more exquisite appreciation or with more sympathy.

IN THE WAKE OF LUCRETTIA BORGIA. Louise Closser Hale, author of "A Motor-Car Divorce," writes, with whimsical humor, of an auto tour through the most picturesque part of Italy. Beautifully illustrated with drawings by Walter Hale.

HOW BRER RABBIT RAISED THE DUST. An Uncle Remus rhyme, which tells how all de creeturs went a-courtin’, and how Brer Rabbit won the hand of Miss Meadows’ gal. Illustrated by J. M. Condé.

FIVE MEN WHO HAVE MADE EPOCHS: III.—WEISMANN. M. A. Lane in discussing the life and works of the great zoologist, applies his doctrine to the two great menaces, the “yellow peril” and the “negro problem.”


The growth of oak production in the South promises to be one of the phenomenal experiences of American lumber history. This prospect should enhance the value of oak lands. Sagacious lumbermen are seeing that which is coming, and many are buying up oak areas. This movement is bound to increase.

There is this to be said in respect to oak-timbered lands: They are invariably areas good for agriculture after the timber is cut off. For this reason denudation will go on with relatively greater rapidity than on lands covered with the softer woods. It was this that cleared the forests north of the Ohio river, and it is the same influence which is rapidly denuding the maple lands of the Northern counties of Lower Michigan.

When the tide of emigration shall set strongly towards the alluvial areas of the lower Mississippi and tributaries, the hardwood forests will melt away before the onslaughts of the farmers.

For this reason those desiring large holdings of Southern oak and other hardwoods will need to secure them within a very few years. Having purchased the lands, they will have both the timber and the richest agricultural areas in the country, and thus doubly insure themselves a good prospect of profit.—Northwestern Lumberman.

INTEREST AROUSED IN THE IRRIGATION CONGRESS

The greatest interest is being aroused in California and adjoining States in the various features of the coming National Irrigation Congress to be held in Sacramento in September. This session of the Congress will differ materially from preceding ones, not only in the scope of the work planned, but in the character and extent of auxiliary features. Sacramento is preparing to welcome the immense attendance which these attractions are sure to draw to the city and which is already foreshadowed by inquiries from everywhere concerning arrangements and accommodations.

Not only is the city ready to take care of all who come, but is planning to royally entertain her guests and visitors during the continuance of the Congress and incidental events.
WASHINGTON'S GIFT TO ALEXANDRIA

The notice in the “Sun” of the large amount which had been realized by Boston upon £1,000 given by Franklin to that city in 1798 has led to a comparison of the work done there with the work done here by £1,000 left by Washington to support a free school in Alexandria. Franklin left £1,000 each to Philadelphia and Boston as a fund to assist young mechanics to enter business.

Washington in 1785 invested £1,000 Virginia currency to aid in the education of the sons of widows or other indigent persons in the town of Alexandria. Both funds have now been in operation for over a hundred years. According to the published statement, Franklin’s fund has realized $500,000 for the benefit of Boston. Washington’s fund has led to other investments and the continuance of free schools in Alexandria for 113 years, and as the result of it about 10,000 children have been educated up to 1871, and since that time at least 1,000 children per annum, increased at this date to about 1,800 children per annum, have had free tuition. One fund was put at one kind of interest, the other at another kind of interest. It would be a problem to determine which has been more effective. — Baltimore Sun.

THE CURSED TOWER OF THE RHONE

The Cursed Tower is an architectural curiosity. It is almost as far out from the perpendicular as is the tower at Pisa, and is far more impressive, because it stands upon an isolated crag which drops below it sheer to the river in a vast precipice. Anciently, before it went wrong and its curse came upon it, the tower was the keep of the Benedictine nunnery of Soyons. Most un-gallantly, in the year 1569, the Huguenots captured the abbey by assault; and thereupon the abbess, Louise d’Amanze (poor frightened soul!), hurriedly embraced the Reformed religion, in dread lest, without this concession to the rather decided opinions of the conquerors, still worse might come. Several of her nuns followed her hastily heterodox example; but the mass of them stood stoutly by their faith, and ended by making off with it intact to Valence.—Thomas A. Fanvier, in the Century.

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ANNOUNCEMENT FOR OCTOBER

TAPESTRIES—WHAT THEY ARE

ROMANTIC were the days when Arras flourished, and art and industry walked hand in hand. This is the period from which was drawn the inspiration of William Morris, who inspired so many. In those days, history and literature and religion were wonderfully pictured by the weaver of tapestries. A series of articles on tapestries from ancient Egyptian and Peruvian to Greek and Roman, from Coptic to Arras, from Arras to the Gobelins, begins in the October issue of House and Garden. The author of the series is Mr. George Leland Hunter, whose erudition and expert knowledge of the subject do not prevent him from turning picturesque phrases that are easy to read and that linger in the memory.

THE SIMPLE SANITARY WALL

Mrs. Claudia Q. Murphy points out that we are learning better methods of doing things to-day than formerly, and that the new ways of securing the newest and best effects are really the best ways. She insists that sanitation in the house is not synonymous with ugly or inartistic things but, rather the contrary.

TWO PAINTED PANELS

Mr. Samuel Howe describes two panels painted on cypress wood which are rather remarkable, inasmuch as the grain of the wood itself is made to enter into the scheme of the picture and become a part of the drawing itself. Mr. Russell Hewlett is the designer and the painter. The eight or ten panels required to complete the decoration of the room for which they are intended tell a continuous story.

THE CURTAINING OF ORDINARY WINDOWS

The importance of making windows decorative features of a room cannot be overestimated. How to effectively lower a too high window; how to give an effect of width to a window which seems too narrow for the room; sash curtains and how to make and place them; curtaining the casement window, are a few of the points which will be illustrated by pen drawings, covering the various styles of windows most frequently found in ordinary houses.

LIGHTING THE HOUSE

Mr. Richard Morton follows the progress of the art of house lighting from the days of Socrates down to the present time; from the primitive wick suspended in the nut oil of a Grecian lamp to the really marvellous electric lighting effects of the present day. The proper placing of lights is considered, as well as how the best effects for special purposes are to be attained.

HOUSE FERNERIES

How to select a fernery for table decoration and then how to keep it in a healthy, growing, vigorous condition are things most housewives would like to know. Miss Jane Kift tells not only this, but how to prepare it, what kind of soil to use, and what plants are suitable. At this time when the decorations for the fall and winter are being prepared, the advice and hints given will be particularly useful.

A UNIQUE LONG ISLAND HOUSE

Surrounded by elm trees, in the most picturesque section of Flushing, L. I., there is, we are told, a small residence to which one is at once attracted because of a quaintness and originality which is lacking in the majority of houses. Simplicity has been the keynote of both exterior and interior and the carrying out of this dominant idea has resulted in an individuality that is as charming as it is unusual. Mr. John P. Benson is the architect, while Miss Sarah E. Ruggles briefly describes his achievement with all the charm of one whose subject is familiar and to whom the theme is one of constant delight.

"HILL STEAD"

When Col. Albert A. Pope acquired the fifteen farms which now comprise his estate in Farmington, Conn., and proceeded to convert them into a homogeneous whole he could have only faintly dreamed that the ultimate success of his plans would be so complete, so satisfying, so artistic. "HILL STEAD" is not a "show-place" but the mind seems to rest upon the beauty, consistency and sobriety displayed, as on a well composed and harmonious picture. Messrs. McKim, Mead & White were the architects of the house in which the spirit of the early nineteenth century has been delightfully preserved. In its decorations and furnishings the house seems almost perfect. Mr. J. Eastman Chase has told of it in detail, and a careful study of the pictures illustrating the article will repay each reader.

THE STABLE AND KENNEL—A NEW DEPARTMENT

In this Department the domestic animals commonly kept on a country place will be dealt with in a practical fashion. The department is to be conducted by Mr. John Gilmer Speed which is a sufficient guarantee that it will receive proper treatment. He will not only write on the various types of animals but will give counsel as to the purchase, keep, training and treatment of them. His expert knowledge will be at the disposal of all readers of House and Garden.

SOME FURNITURE OF TO-DAY

The Editor says, that the opportunities offered to-day to secure artistic and substantial furniture were never before equaled. For instance, one firm makes only Colonial and Historical reproductions; another will supply in Mission shapes all the various pieces, unfinished, that they may be stained to correspond with the finish of the room. Another house prides itself on its hand-made furniture and while the simple designs are not always the inexpensive ones, they are frequently the most pleasing. Illustrations add interest to the expressed ideas.

A STUDY IN DECORATIVE WOOD WORK

The wonderfully delicate, graceful and classic designs found in the hand-carving of the eighteenth and early nineteenth centuries as preserved in the Colonial houses and buildings both North and South, tell of patient, honest labor and a love for the artistic and beautiful. In the study of this work, Mary H. Northend presents some illustrations of rare specimens of the kind and gives some new data about this old work.
THE PRUDENTIAL CHANGES ITS PLAN OF DOING BUSINESS

The Prudential Insurance Company of America has just announced an important change in its plan of doing business, and it is issuing a new life insurance policy, which the Company states is unexcelled in its attractive features. The Prudential will issue policies on a non-participating basis exclusively hereafter.

Former United States Senator John F. Dryden, President of The Prudential, in discussing the subject, said:

"During the last two years the insurance business as transacted in this country has been subjected to thorough and searching investigation and has been made the object of considerable legislation in the various States.

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"The Company has watched the trend of events, and after most thoughtful consideration, the directors of the Company decided that all Ordinary business written on and after August 1, 1907, be issued on the non-participating plan. This will give the best life insurance protection at the lowest cost consistent with safety.

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"The public is to-day looking for life insurance at lowest cost and for a policy in which the dividends are anticipated, and The Prudential is issuing a policy which meets this demand. The new policy has been put in such plain English that it can be understood by any one, and every rate, value and feature is absolutely guaranteed. The policy, furthermore, is sold at a reduced rate, which will make it popular.

"An entirely new feature, which we believe will commend itself, is that the loan value of the policy may be used automatically to keep the insurance in force should the policyholder be unable to meet the payment of premiums, the length of time, of course, depending upon the number of years during which

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New Departments in the October Issue of House & Garden

The domestic animals commonly kept on a country place will be dealt with in a fashion so practical that readers, whether of long experience or new in such ownership, will alike be interested. Of these animals the horse is probably the most important and as the department is to be conducted by

Mr. John Gilmer Speed, author of the standard book, "The Horse in America," it is unlikely that this section will not receive proper treatment. Mr. Speed was born on a Kentucky farm, where all kinds of farm animals were bred, and has himself been a breeder of horses, cattle, dogs, and chickens ever since attaining manhood. He will not only write on the various types of these animals but will give counsel as to the purchase, keep, training and general treatment of them. His expert knowledge will be at the disposal of all readers of House & Garden.

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"It is always the aim of The Prudential to deal liberally with its policyholders and while this Company will not issue dividend policies in the future, all dividend policies now in force both on the Ordinary and the Industrial plan, will be carried out the same as if the Company had continued to issue participating policies. All Industrial policies issued since the beginning of the present year have been on the non-participating plan, and there will be no change in these policies at the present time.

"The Company will be pleased to send a specimen of this new policy to persons who will write to the Home Office, Newark, N. J., stating age and the amount of money they would like to invest in life insurance each year.

"We look upon this new policy of The Prudential as one that will become popular because of its unusual and attractive features."

THE IMPERIAL PALACES OF JAPAN

There are thirty palaces belonging to the imperial family in various parts of Japan, but the present Emperor has never occupied more than three or four of them, and some of them he has never seen. There is a stock-farm at Nikko belonging to the mikado, and tour-
ists are always amused at a large, oddly painted sign which advertises milk from his cows for sale. The Emperor seldom leaves the new palaces at Tokyo, which are more modern and comfortable than any of the others and were only completed in 1888. They consist of a labyrinth of one-story buildings, all connected by covered passages and surrounding beautiful courts. Their architecture is of the ancient Japanese style, with high roofs at sharp angles and heavy gray tiles, and the interior of most of them is finished in the native fashion, with partitions of sliding screens and floor matting which the inmates use for beds, chairs and tables, as it happens to be necessary. But several of the rooms have French furniture of ornate and expensive workmanship, much of it being rosewood, handsomely carved and inlaid. The apartments occupied by both the Emperor and Empress are furnished in that way. Both prefer to sleep in a modern bed and sit on a chair before a table, with knives and forks and china when they take their meals, but the Emperor is understood to wear the native dress, except on occasions of ceremony, and when the Empress retires to the privacy of her apartments she throws off her close-fitting waist and corsets and puts on the more comfortable kimono.—The Churchman.

THE SCULPTOR’S PROFITS

ONE of the most puzzling problems is to ascertain the ratio between artists’ fees and the cost of works at different periods. An attempt of the kind has been made in Berlin, apropos of the memorial of the Emperor William I. For that work the Reichstag voted a sum of 4,000,000 marks, and the expenses, it is believed, will not exceed that sum. Professor Reinhold Begas has received one-fourth of the amount, but as he has not furnished a debit and credit account—nor should he be expected to prepare one for the public gratification—it cannot be ascertained whether he has gained or lost by his great work. It may be well doubted whether his commission was as profitable as Rauch’s when he executed the fine memorial of Frederick the Great, which is so prominent an object in the Unter den Linden. The payment was arranged differently. During the twelve years he was engaged on the work he

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AN INVENTOR'S QUICK WORK

The invention of the Hotchkiss magazine rifle, now the standard rifle of the United States Navy, occurred under circumstances known until now to only a few of the Hotchkiss Company. The gun was invented by the late B. B. Hotchkiss in 1877. In that year Mr. Hotchkiss was en route from Vienna to Bucharest. He was accompanied by his wife. While on the train he fell into conversation with a Roumanian officer who had very pronounced views in favor of a magazine rifle. At that time, it should be remembered, there was no such thing as a magazine rifle in reality, at least not a military piece. Military men simply had ideas, and prophesied as to the future. The Roumanian officer argued the necessity for a magazine gun in a most forcible manner, and only discontinued his remarks when the train stopped at a station for dinner. Instead of rising, Mr. Hotchkiss complained of having no appetite, and requested of the Roumanian that he do him the honor of escorting Mrs. Hotchkiss to dinner. No sooner had the Roumanian left the car than Mr. Hotchkiss seized a newspaper lying on the seat, and in less than thirty minutes drew in detail the design of the present

received 3,000 thalers annually, and he was therefore able to devote himself to his task without anxiety. On the completion of the memorial he received 20,000 thalers, so that in all he obtained 168,000 marks, which was a fourth of the total cost. But the money, amounting to over 28,000, was mainly for his own services, while Professor Begas has had heavy disbursements. Schlüter, the sculptor, was paid 2,000 thalers for his design for the memorial of Frederick I, or the "Reiterbild des Grossen Kurfürsten," which is so prominent an object on the Lange Brücke, near the Schloss, in Berlin. About the same time he was entrusted with the superintendence of the enclosure of the royal palace. He received from 800 to 1,000 thalers yearly, but whether that was for sculpture alone is uncertain. It is calculated that he was rewarded with 11,000 thalers, or 33,000 marks, which would be about one-eighth of the cost of the most excellent example of German sculpture in the beginning of the eighteenth century. — The Architect.
Hotchkiss magazine rifle. The paper, a copy of the Paris Figaro, is now in the office of the Hotchkiss Company in Paris, and on its margin are the complete detail drawings. Under the drawing is written: “This is a magazine rifle. Make it at once. B. B. H.” Mr. Hotchkiss mailed the newspaper to the Paris works from the same station, as the wrapper still shows, and before the Roumanian and his wife had finished eating joined them at the table. In three months the rifle was put to test and won against all rivals. In designing the piece the details on the margin of the Figaro were rigidly adhered to.—Artisan.

QUEER STORY ABOUT A CHURCH

IN connection with the Church of St. Raphael, where the recent marriage between Hélène de France and the Duke of Aosta took place, there is a story not generally known. It was built with the moneys of a converted Jew named Raphael. Just after the building was completed, Raphael had a dream that he would die within a week after the consecration of the place of worship. As a matter of course, he endeavored to delay the consecration by fair and unfair means, until a priest, with the help of a licensed victualler from the neighborhood, who procured a bottle of absolutely pure wine, consecrated the edifice. Then he told Raphael, who took to his bed and died three days afterward.—Saturday Review.

IRRIGATION CONGRESS TROPHIES

THE list of costly and beautiful trophies hung up for competitive exhibits of irrigated land products and forestry at the coming National Irrigation Congress at Sacramento, is growing. It contains at present a larger number of unique and intrinsically valuable prizes than have been offered in any contest of a similar character ever held in the West. Each trophy is the gift of an individual or association interested in the progress and prosperity of the country. Each is a work of art exquisitely wrought from designs especially made for this occasion. The beauty of the prizes to be awarded, and the local pride of competitors in the contests, are stimulating the liveliest interest in this feature of the September meeting.

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Discriminating, home-loving persons are enthusiastic in their praise of this, the most elaborate, practical book on wood-finishing ever published.

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The illustrated chapters of this book contain much valuable information for those about to build, for those who desire to alter or improve their homes, and for all to whom an attractive and comfortable house and garden at moderate expense is a matter of interest. The reader of this book will be able to talk to his architect intelligently on matters of style and design, can better judge the possibilities and value of a piece of land, can advise his builder, and can select his furnishings and decorations with more than ordinary taste, or use those he has to better advantage. And the delights of a garden, big or little, are brought nearer his reach.

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