

The American Home

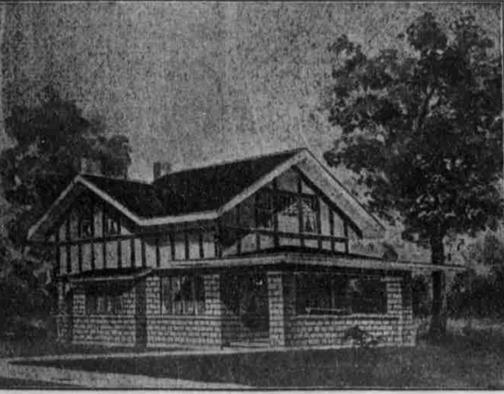
WILLIAM A. RADFORD
Editor

Mr. William A. Radford will answer questions and give advice FREE OF COST on all subjects pertaining to the subject of building for the readers of this paper. On account of his wide experience as Editor, Author and Manufacturer, he is, without doubt, the highest authority on all these subjects. Address all inquiries to William A. Radford, No. 24 Fifth Ave., Chicago, Ill., and only enclose two-cent stamp for reply.

To any one alive to the developments in the building world there is nothing more striking than the steady growth of the quality idea during the past ten or fifteen years. Where formerly home builders were satisfied with makeshift construction and with the cheap though gaudy effects in building there has come to be a general demand for the best grades of material and the most thorough workmanship united to form substantial, permanent structures.

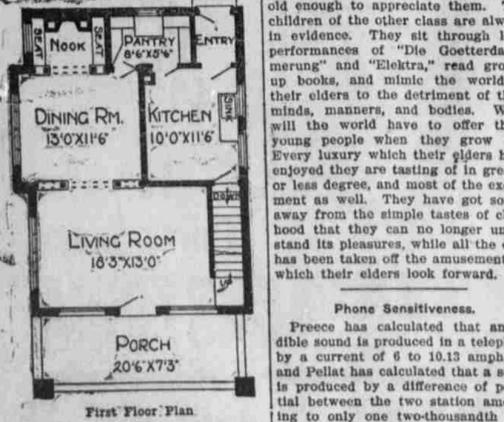
Take the medium-sized dwelling house, for instance, such as the average family requires; a generation ago \$2,000 would probably have been the top figure considered proper for its cost. Today no one would think of spending less than twice that amount if he would build with an eye to permanent use or future sale.

The increased cost of labor and materials has had something to do with this, it is true, but not so much as is sometimes thought. No; it is the added comforts and the higher standard of quality all the way through that have brought this about. Modern plumbing and fixtures, modern heating systems, modern lighting, cemented basements, permanent fireproof roofing, hardwood floors; all these, which are the luxuries of yesterday but the necessities of today, mark the advancing standards of building; and the general building public now realize what the carpenter and building contractors have known all along—



that quality building is the only kind which pays.

As a natural companion to this idea of quality building there has developed also an increasing demand for permanency and enduring qualities in building work. The demand for fireproof construction has become more and more insistent every year until now houses which may be considered fireproof, at least as far as the outside fire hazard is concerned, are very common. The building of a home almost always requires saving and sacrifice on the part of all in the family, and it is quite natural that they should



want to build as securely as possible so that all their labor and savings may not be wiped out in flame.

The development of Portland cement during recent years has done more to help along this fireproofing campaign than any other single factor. At the prevailing prices of the material entering into concrete construction, viz., Portland cement, sand and gravel, substantial fireproof houses are being put up at a cost only about ten or fifteen per cent. greater than for ordinary frame buildings of this same design and size.

The accompanying design shows a very attractive, well-built house, planned on thoroughly modern lines and constructed in such a way as to be as nearly fire resisting as any house could well be. Concrete blocks are used for the foundation and first story, while the second story is of cement plaster on metal lath. The roof is of dark green slate. It can be easily seen that a house of these materials would be in no danger from adjacent buildings if they should be on fire. It is interesting to note in this connection that statistics show three-fourths of our enormous fire loss

TINY JOB MARVELS

SOME OF THE WONDERS SHOWN AT ENGLISH EXHIBITION.

Curiosities Which Attract Most Attention Are the Model of a City in Miniature, Little Gardens, Dwarf Trees, Etc.

The Japanese section of this year's exhibition at Shepherd's Bush is nearly complete, says the London Express.

Three Japanese gardens are among the most picturesque features of the exhibition. Two of them are large enough for many people to walk in. The other is pushed about on wheels. It contains pine trees from 100 to 150 years old, but it is all on a large table, the wheels of which run on rails.

The oldest tree in this perambulating garden has grown at the rate of about one-eighth of an inch a year for the past 150 years. It is now 18 inches high, and it has been in one family all the time.

There is a mighty rock with the gnarled roots of a forty-year-old maple tree gripping it. The rock is about six inches high, and the tree less than two feet. It is covered with lovely tinted pink leaves.

There is in this table garden a grove of bamboo trees, perfect in proportion and bursting into leaf.

A mountain made of silk is one of the marvels of which the Japanese workers are proud. It is a picture of Fuji Yama, Japan's great mountain, covered with snow, glistening with white at the summit, and shading through shell pink, mauve, purple and blue downward to the base. The mountain fills one side of a hall, and is made up entirely of the cocoons of silkworms, delicately dyed so as to reproduce the astonishing beauty of color which has made Fuji Yama a sacred joy to every son and daughter of Japan.

Ten persons were engaged for a quarter of a year making a model of Osaka, the Manchester-Venice of Japan. The completed model occupies a table several yards square. It shows the whole city and suburb of Osaka, a town of 1,200,000 inhabitants.

There are, on the table ground, 300,000 tiny houses in 40 styles of architecture. They are about a quarter of an inch high. Every one of Osaka's 1,200 factory chimneys is there, and so are the blossoming cherry trees—infinitely smaller than snowdrops—in the gardens of the suburbs.

There are microscopic boats going up and down the many canals which thread the city, tiny models of warships and liners in the miniature harbor, and tinner sailing boats with masts, of which about ten might be made from one wooden match.

The Japs have not been content with bringing real trees from Japan; they have made trees on the spot. In the great entrance hall, before the wonderful Red Gate of Nara, with its crimson pillars and beams, and splashes of emerald and peacock blue, is a short avenue of giant coniferous trees. Their bark, branches and foliage are real, but they have been "made up" on the spot.

Every branch, laden with its evergreen spines, is different from every other branch, and challenges nature to look more natural.

Room Built to Display Portrait.

Mrs. William M. V. Hoffman exhibited to her friends on Independence day a recently finished portrait of herself which she had in mind when she directed the construction of her home in Tuxedo, N. Y. The portrait did not exist when the great apartment was being adorned, but she had it in mind as an ideal. It was to be the sole pictorial ornament of the room, and the color scheme of the walls and furnishings was to harmonize with it.

For several years she had observed the styles of various well-known portrait artists without finding what she wished, but finally she saw the work of Mile. Marie Louise Michaels, formerly of Paris and now of New York, and gave her the commission. The work is a pastel, yet handled so broadly that it has unusual carrying power, and combines the strength of an oil painting with the delicacy of the lighter medium.—New York Herald.

Unappreciated Thrift.

Benjamin Franklin was fortunate in possessing a very thrifty wife, but on one occasion her saving ways shocked, instead of pleased, her husband. Mrs. Franklin had for a long time until she was able to give her husband a fine china cup and silver spoon for his special use at breakfast, says Home Notes.

When Benjamin Franklin saw these unaccustomed luxuries he said reprovingly: "You see how luxury creeps into the family in spite of principles." And directly the meal was over he went into his warehouse and wheeled a barrelful of papers home through the streets for fear lest the neighbors might hear of the china cup and saucer; he was getting above his business.

Industrious.

"What is your present occupation, my poor man?" asked the housewife in the wayside cottage. "Collecting rents mum," responded Gritty George, with a low bow. "Collecting rents?" "Yes, mum, de rents in dis old suit. If yer'll give me a needle an' thread I'll collect some more an' make meself presentable."

His First Impression.

The city man had broken through the ice and the old farmer had pulled him out just as he was nearly strangled.

"And, mister, that be ten feet of water in that pond," informed the rescuer. "Dear Mrs. Jones: Your husband cannot come home today, because his bathing suit was washed away." "P. S.—Poor Jones was inside the suit.—Modern Society.

INDUSTRY AND MECHANICS

INDUSTRIAL AND MECHANICAL NOTES.

It has taken eighteen years for steamships to lower the transatlantic record by a single day.

The Chicago and Alton railroad is testing automatic stokers on thirty-six of its largest engines.

Russia's wheat crop of 783,000,000 bushels for 1909 was the largest ever produced by any country for a single year.

A big Pennsylvania anthracite mining company is turning its accumulations of coal dust for years into briquettes.

From 8,000 to 10,000 of coal slack and pitch briquettes are manufactured and consumed in the city of Belfast, Ireland, each year.

The cultivation of tobacco in Spain is prohibited, a company which has a monopoly in dealing in it paying the government about \$35,000,000 a year.

The New York public service commission will make an extensive investigation of concrete as a deadener of noise on elevated railroad structures.

The highest viaduct in the world recently was opened in France. It stands 144 feet above a river, took eight years to build and cost about \$500,000.

The soil and climate of Formosa have been found so well adapted to the castor bean that a company has been formed to plant 200 acres and erect an oil mill.

It is said that enough horsepower goes to waste in the rivers and streams between Austin and San Antonio, Tex., to run all the industries in the state.

After exhausting research an English architect has decided that the leaning tower of Pisa was built at the angle it stands today as a feat of structural bravado.

While in the valleys of Abyssinia are grown sugar cane, cotton, rubber and other tropical plants, the uplands have excellent pastures and cornfields, such as may be found in England.

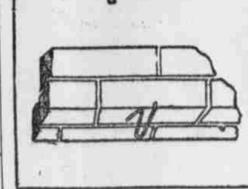
In British Columbia platinum is found in many alluvial gold workings as a by-product, but its separation is attended by too many difficulties to be practical except in a few instances.

A patent has been granted an Ohio man on a washboard with a convex metal rubbing surface, slightly roughened, so that even a light pressure of clothing passed over it will give the same results as hard rubbing over the ordinary flat, corrugated board.

IMPROVED BOND FOR BRICKS

Becomes Fast in Mortar and Adds Much Strength to Walls—Made of Galvanized Iron.

A new and improved brick bond has been invented by a Philadelphia man. At first glance it looks like a weird sort of hairpin, but anybody who understands building can appreciate its merits in that glance. It is made of galvanized iron wire and is strong enough to withstand great strain. Laid across the top of a row of bricks it becomes fast in the mortar, which works its way around the crimping, and makes it practically impossible for the bricks to spread. The hook feature of the bond is at once a preventive of the separation of the inner and outer walls and a time saver for the inspector, enabling the latter to tell at a glance how many bonds have been used. The bond is laid so



Wire Bond for Bricks.

that the hook hangs over the side of the brick, and it also enables the bricklayer to tell how many bricks have been used. This bond also obviates the necessity of chipping bricks when building a "leader" row, saving much labor and annoyance.

SHIP AS WEIGHING MACHINE

Load of Vessel Ascertained by Apparatus Called Porhydrometer—Very Accurate.

How the load of a ship can be quickly ascertained without actually weighing it was demonstrated in London recently by Edward Beresford at the Temple Pier by experiments on a two hundred ton barge.

The apparatus used is known as a porhydrometer, and consists of a float placed in the water, which is admitted up a pipe fixed in the center of the vessel. As the load is increased the vessel naturally sinks deeper into the water, and the water in the pipe rises to a greater height, and the float thus raised throws a lever out of balance. A sliding weight enables one to bring it into balance again, and the position of the weight on a scale shows the amount of the load. The porhydrometer was sufficiently accurate to show the weight of a man stepping aboard the barge.

Pure Titanium.

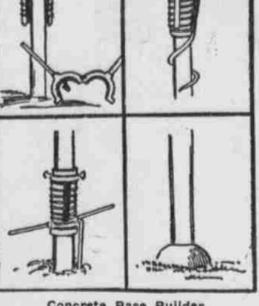
"Titanium chloride reduced with sodium, yields pure titanium as a metal resembling polished steel. It is brittle when cold, but at low red heat can be forged like iron. Though very hard, it can be shaped with a file.

CONCRETE AS BASE BUILDER

Instrument Invented by Washington Man Is Decided Improvement on Method of Construction.

Concrete bases for telegraph and telephone poles are not new, but the instrument invented by a Washington man and here shown, is a recent improvement on the method of constructing these bases. Where a wooden pole has rotted at the base or an iron pole has worked itself loose in soft ground the trouble can be remedied by excavating at the base and filling in the hole with concrete, giving the pole a firm foundation.

Heretofore this has been an expensive operation, but the appliance here described reduces the expense considerably.



Concrete Base Builder.

A body portion, made in two semi-circular sections, clamps around the pole. Extending below is a strong spiral spring that encircles the pole, and the whole is revolved by a double handle. When this instrument is fixed in place and turned around, as a corkscrew would be turned, the spiral loosens the earth around the pole and pulls it up on the withdrawing. The concrete can then be poured in the excavation and the pole will stand firm for many years.

STAINS WOOD WHEN GROWING

Louisiana Man Invents Process Whereby This Can Be Done—Unusual Colors Obtainable.

The idea of staining wood as it grows seems revolutionary, but a Louisiana man has invented a process by which this can be done. By this method any light wood can be made



Coloring Injected Into Sap.

practically any darker color or dark wood made still darker, though it will be difficult to lighten the natural shades. It also obviates the necessity of dyeing mahogany or other woods of this nature. A bucket of coloring fluid is hung just below the branches of a young tree, or any tree that is in good, healthy condition. A hose runs from this bucket to a point near the base of the tree and here the bark and some of the fibers are cut out and the coloring matter applied to the pores thus exposed. As the sap flows through the tree the stain is circulated with it and the wood changes its color to any shade desired. The possibilities of such a process are almost unlimited, and some very unusual colorings can be obtained in this manner. The expense of dyeing the wood later is also saved.

COLOR OF SEA DUE TO SALT.

Some Parts Are More Salty Than Others and It Is These Which Are the Bluer.

In its deepest parts the sea is intensely blue, but where it is shallow it is a bright green color. This prevails until soundings cease to be struck. Some people ascribe the blue to the reflection of the sky, and say that if the green water which is found nearer land were piled up in a basin as deep as that which holds the blue, it would be the same color. But the true cause of the difference between the two is the quantity of salt which the water contains. Some parts of the sea are much more salty than others, and it is these which are the bluer.

A Conundrum Tea.

Of all the novel and interesting ways of entertaining one's guests I think the Conundrum Tea party took the best, for one given recently was the talk of the town, for several days after its occurrence.

The guests were 26 in number, filling two tables and as two sisters were the hostesses, one presided at each table. Everything in the way of china and floral decorations were simply perfect. At each place was found a card with the name of the person who was to occupy the chair, but besides the name, there was a conundrum. Each guest had the privilege of guessing her own first and if she failed it was passed on to the next person.

Torpedo Boat Without Funnels.

It is stated from Italy that one of the construction companies of that country has succeeded in building a successful torpedo boat without funnels. The products of combustion are discharged from the vessel by the means of electric ventilators, no smoke whatever being shown. The operation of getting up steam was conducted on the trial trip quite as rapidly as under ordinary circumstances.

Hints For Hostess

TIMELY SUGGESTIONS for Those Planning Seasonable Entertainments

Plenics. What does that name recall to your mind? Visions of spiders, ants, toads and other horrid insects not invited? Piles of cake, with only enough bread to go around once—the salt forgotten—so the hard boiled eggs were a "drug in the market." The coffee bottle leaked—so half the quantity was wasted and you went home hungry declaring it was the last picnic you would ever go to.

Well—picnics can be made most delightful. First of all the party must be thoroughly congenial, all well acquainted, even one stranger is apt to make things somewhat formal, but of course this all will depend on the person. Ten or twelve is a good number. The place to go to must not be too far away and if possible should be near water—if only a small stream. The girls should meet and decide upon the lunch—each one knowing definitely what they are to furnish. One will bring the sandwiches, another the cake, pickles, olives, cheese, crackers and jelly, with sugar for coffee and salt being divided between two more. Potatoes to roast and butter falling to another. Corn if in season makes an agreeable addition.

To one may fall the responsibility of seeing that the dishes, coffee pot and table linen are provided. All these little items are carefully talked over. Paper napkins can be used and plates for each one cut out of white stiff paper, with quotations written around. If liked, smaller plates can be made for butter. Small pieces of soft paper should also be provided with which to hold the potato, for they are to be roasted. To the girl who furnishes the sandwiches I will tell her just how. Get a can of corn beef, remove any gristle, chop very fine, then make a dressing, like for cabbage salad. One egg, lump of butter, salt, pepper and mustard, with one cup of vinegar, diluted with water if too strong, is a good rule, boil until it thickens, being careful not to let it curdle; pour this over the meat and mix thoroughly with a spoon.

The bread must not be too fresh, but not dry. Cut in thin slices, spread with butter, then the meat. Cut off the crust or not, as you like. To look pretty, these sandwiches can be tied with ribbons in piles of a dozen, pack in a covered paste board box which can be thrown away, saving one basket to carry home. The hard boiled eggs can be left in the shell and each one ornamented with a quotation, or taken out of the shell and wrapped in tissue paper. Cabbage or salmon salad or any kind that is liked can be

LANGUES OF FASHION

Butterfly motifs are extensively used. Wide stitching is again in vogue for girls. There has been a revival of silver filigree. Some of the chiffon veils are hem-stitched on all four sides. Parasols and stockings match the gown, whether the shoes do or not. White wash ribbons are fast replacing the colored ones for lingerie.

Some Girls' Dresses



THE first is a simple sailor dress

suitable for either linen or serge, the plain skirt is turned up with a deep hem; the blouse is slipped over the head, therefore no fastening is necessary; white drill or linen collar and cuffs are worn. Materials required: 4 yards 44 inches wide.

In the second we show a useful gymnasium dress;

the tunic is drawn in at the waist by a belt, and is trimmed with braid at the lower edge, so also

are the collar and cuffs; these are of white cloth.

About 2 inches of the knickers show below the skirt. Materials required: 5 yards 46 inches wide, 1 dozen yards braid.

The third would also be a good style for gymnasium;

it has two wide box-pleats down back and front, and is slightly drawn in at the waist by a band which is crossed in front. Materials required: 5 yards 46 inches wide.

To Keep Centerpieces.

A large tube or roll of art cardboard or heavy paper, covered with linen or embroidered—over, rather, covered with linen that has been embroidered—will keep centerpieces and like embroideries from showing the wrinkles of careless use. Bookcloth lines this tube, and the whole is fastened and bound with inch-wide satin ribbon, which ends in strings wherewith to fasten the tube after rolling. Place a sheet of blue tissue paper between each two pieces after laying them within; this will keep their color from turning yellow if they are laid away for any considerable length of time.

Jinx's Narrow Escape.

"Jinx broke his leg yesterday, I hear." "Yes, I saw him do it. I declare, it looked to me like he tried to do it!" "I am sorry. He had promised to come over to the house and hear my little girl recite this evening." "Ah, that supplies the motive."