

# NORTHWEST ARCHITECT

VOLUME VII

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NO. 2



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# Northwest Architect

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December, 1942

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## When the Fighting Stops and the World Starts to Rebuild, Have We Architects the Vision Required to Create Adequate Longtime Works?

*TO UNDERSTAND* any of the arts expressing the twenty years following our American War Between the States, 1861-1865, one must first correct a false impression persistently built up by current commercial advertising, popular novels and the movies.

"The Gay Nineties," is a misnomer. The Nineties were Brown. It was the Eighties that were Gay. The United States had just recovered from the "panic" of 1873 and, as in our 1920's, was recklessly riding to another and more bitter economic disaster in 1893. Architecture is prophetic and is always the first of the arts to foreshadow social and economic changes as well as the flowing genius of the people.

*THE 1890's were to be a period of reconstruction, of self-searching, which resulted in collective reform action in every field, called "movements."*

The 1890's saw the rise of Elbert Hubbard and his religion of honest craftwork. Theodore Roosevelt was cleaning up the politics of New York City. Honest Jacob Riis was cleaning up its slums. Billy Sunday was well on his way toward "saving" the soul of the nation. The Chautauqua as adult education for the common people was in full flower. University Travel and popular study of Europe's Art and Architecture took thousands of school teachers and housewives "Across the Pond" every year.

*WE shall therefore expect to find the lighthearted, colorful and prosperous 1880's becoming discouraged by the "hard times" which followed the World's Fair at Chicago, and by 1893 ready to be taken in by the specious pseudo-scholarship of decadent academic Parisian Architecture.*

The Chicago Fair of 1893, in its more general relations to the growth of the nation, was a flowering of the 1880's but in the pessimism of its architecture, it forecast the beginning of those sterile times whose period announced motto was, "The best that you can do is a good copy." And this blight lasted for forty years.

**A**ND SO we believe that the tremendous volume of current laboratory work in materials and construction must now be quickly integrated to an architectural expression that will satisfy the hearts of the American people. It is for this reason that the still living and unspoiled buildings of the era from 1872 to 1892, despised alike by the Conservatives of 1900 and the Moderns of 1940, are worth serious study, if we, who are to state the quality of America in Architecture, shall not fail.

H. W. FRIDLUND, Editor

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# MR. MILLER'S GOOD GINGERBREAD\*



1890

**L**OUIS SULLIVAN, the father of our "Modern" Architecture, first found himself in the decorative embellishment of the Chicago Auditorium, and that was 1890. It was the very year in which this house was designed. If we think about all the houses that were built in America for fifteen or twenty years before this time, we begin to see that Sullivan's philosophy and Sullivan's ornament were not the new invention of a mind seeking to be original, but the brilliant and personal exposition of a living tradition which an imported and snobbish architectural aristocracy all but succeeded in destroying.

Last month THE NORTHWEST ARCHITECT looked at one of these houses built in 1874, and this issue will outline the record of American thought during the next sixteen years.

Here is another house built in Oak Park by Dr. Gray to be his home. Feeling and preference in building patterns have already changed greatly, but we still have a plain continuity of what is genuine, traditional and American. This dwelling is a logical development of that Gray home of 1874. The plan is similar but its expression is new. When built it was "up to date," attracted favorable comment. People said, "I want a house like Dr. Gray's." But the world was moving so fast that in a brief six years its style would be dated, its fashion unwanted.

Today this old photograph begins to tell us a different story. The perspective of fifty years shows solid values beneath these quaint manners. Here is something we lost and must win back—The Building Speech of the Natural American.

## True Tradition

It appears to me that this building contains the

\*Written by William Gray Purcell especially for NORTHWEST ARCHITECT.

seeds of all the elements now thought desirable and a number that we are only beginning to see as essential to a functional expression of the Whole Man in his own living world. Looking out on "Modern" design which all must now appraise, we see, in this house, that Architect Charles C. Miller established:

- A. Unusual emphasis on plate glass, in areas four to five times that of the Gray house of fifteen years before.
- B. Cleanline Mass—the house has become a self-contained geometrical unit and its parts are disposed in well subordinated sequences.
- C. Joyful ornament as unselfconscious decoration, is now much freer in design—and more of it. The elements and patterns are organic and functional with respect to their material and processing, in decorative content, and in relation to the structural system of the whole. We have here a true flowering of the substance of the building.
- D. High Ceilings. The eleven- and twelve-foot ceilings which then were common provided the atmosphere in rooms which was to reappear a quarter of a century later in the high ceiling living rooms of today.
- E. Open Plans appear as only a beginning, but rooms are larger, openings between rooms wider and, with the coming of "steam heat," sliding doors between rooms are disappearing.

In analyzing and reapplying what we find in these houses to what we resolve to do for a better future we must acknowledge by such actions that "tradition" is only incidentally a continuity of appearances, and often not that at all. Tradition is the Inheritance of Skills. It is the continuity of the craftsman's work, not succession to personal property. Tradition is not



copying—it is learning. It is *never* found in measured drawings, it is always found in sharp tools and enthusiastic hands. Tradition has nothing to do with looks—whether “looks like” or “never saw the like.” It is concerned with the actualities, with the kind of intentions that are able to lift themselves free of Old Pavements.

### Style in 1890 Was a “Natural”

At that time there were no professional decorators. Architects were largely practical men drawn from business or the trades. Draftsmen were more like members of a craft, experienced arrangers who followed close to a definite local tradition, but they did not follow it in the sense of producing a consciously Colonial or Queen Anne house. There was really a very large amount of freedom for invention and a willingness to build forth a project from some favorite plan of the client. There is a surprising unity of style between all of these houses and looking back upon them as an opportunity to live graciously, they were in no sense as bad as later arbiters of taste have wanted us to believe they were.

“Gingerbread” was made fun of when the public’s views on Art were forcibly changed after 1893, but this pre-Columbian design had the germs of a really charming type of decoration and embellishment. The houses were certainly more fun to live in than the conventional New England type, especially as everyone wanted to take advantage of the newly available plate glass in large sizes, and architects were ready to make windows as large as possible with plenty of them.

### Seeds of Sullivanesque

Examining further the design details of this Gray house, look at the unfolding and voluted wings of the turned porch posts. In such development, of decorative construction into constructed decoration, we find exactly the approach of Sullivan. As with him all these forms and patterns, made from wood, are very candidly and happily designed as in the nature of wood. There is not a suggestion of stone architecture anywhere. Note the uninterrupted continuity of double squares making up the porch rail. In another five years you will see Frank Lloyd Wright using such undisturbed continuities of squares, cubes, spheres—all natural, simple, Froebel patterns.

This cornice is no classic stone entablature colonialized into wooden facias and detail, but a rain water trough and its supports exfoliating in simple joy through various shapes of wood that the mill bench man and job carpenter understood.

### Promised Land of the 1940’s

Is there any connection between such a naïve work as this and the important, self-satisfied content of contemporary youthful experiment in architecture? There is indeed but the cycle is yet to be completed. Sullivan and his men were the sole bridge over the forty

years of Bozart-Colonial wilderness. They are the link between the Natural Man of 1880 and his feelings about his buildings, and the dawning of our new day, since 1933, in which man’s architectural spirit, for a brief period has again become free. How long our young men can keep it free is a question. In the architectural schools and prosperous offices the living growth is already calcifying and a Book of Patterns ready for the archivist.

It is significant that the Chicago Auditorium, which seemed so revolutionary, but was thoroughly enjoyed by everyone except the architects, was in fact designed by a man who was looking back to the immediate past at the very time that he was making his four decade leap into the future.

It is also one of those ironic coincidences that “Colonel McCosmick” and his facist legions should be operating their Chicago brown house from a “World’s Architectural Competition” building of 1933, in which the winning design was the last assault of dying reactionary architecture. Well, not quite the last, perhaps, for Thos. Jefferson’s just completed Memorial to Architect John Russel Pope, in Washington, and in the same city the new white marble Warehouse for the Sold Coreage\* of World’s Art Mellons, are both mere token thrusts of an already lifeless architectural arm.

When these two honorific political packages were built the first World War in Architecture was already over.

### Emotional Outlet Essential

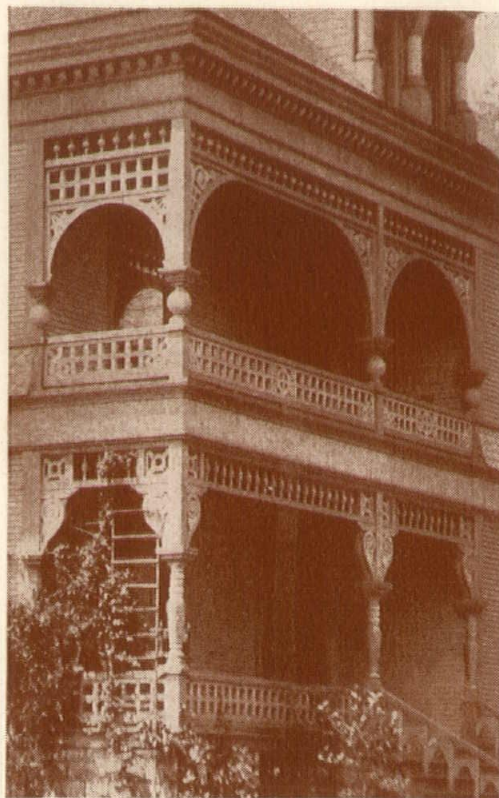
It is not true that we live in an era that does not like ornament and wants only the assembly surfaces and forms of buildings, untouched and speechless, except for gesture by construction.

A caller said the other day, “Isn’t it interesting that the seasonal continuities of design in wall paper and in women’s dress fabrics move in parallel?”

Everywhere except in architecture our world is filled with beautiful pattern and color. And no sooner does the sensitive woman move into one of these new ultra slick, stilt-styled, precious-pose interiors than she seeks for material that will provide a shock absorber between such hard reasoned idea-scaffolds of self-conscious design, and the living flesh and hungry spirits of her family and friends. Men and women want to do their living at least within sight of that Source, Mother Nature herself; the very Substance from which they came into their existence and continue in it.

Nor is it because architects don’t want decorative detail and good living color for their buildings. It is because they are afraid of it. They are not hum-

*\*Or say, “Traded Treasures” or just plain “Purchased Collections” name them yourself, but such Museums are a dead weight on the living impulse to beauty in the heart of the people. Art is something you DO—not mere Possessions. Beauty’s need is a self-starter, not more poppy seed.*





ble enough to ask good capable designers to help them. "Things designed by a single mind are mostly 'sports' which must perish quickly. No art that is only one man deep is worth much. It should be a thousand even deep!"

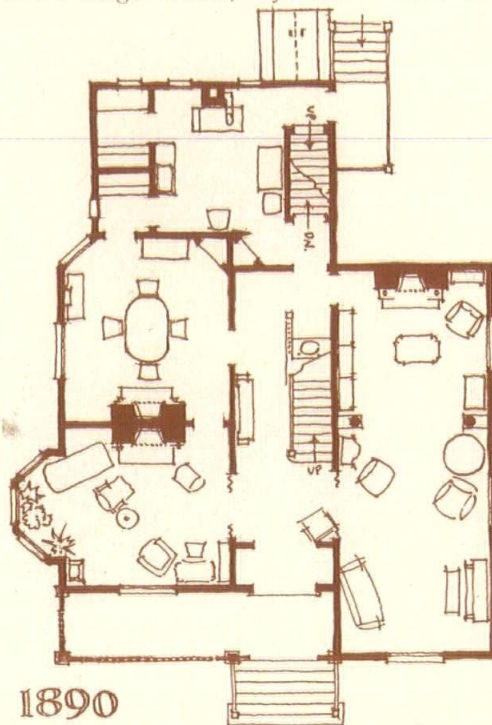
During the 1920's while architects were so Important being Architects it was the designers of women's clothing, shop window dressers, theater stage artists, and department store specialty designers, who forced the Prix de Rome ring, in the Architectural profession, flat up against the wall of "moderne." And there they remain complexed by their defeat and always sidelining back toward the conscienceless comfort of the good old classic days. They have not found, and on that course will not find, the way that leads to the world of organic, time indigenous, truly ex-foliating, natural architecture.

### What Is Color and Ornament?

Timid tinting of experimental building walls is not "color" and arty modelers' plaques pasted on door jambs are not integral architectural decoration. As for mural paintings, only a few of the thousands produced are entitled to the label—too many of them are transcribed newspaper comics using our buildings as a billboard. The formal Architecture of Timid Taste in public buildings and the now fashionable swing jazz "murals," mutually destroy one another with little artistic loss on either side. Some good snappy outdoor advertising painted on the exterior of the New Oregon Capitolfallas State House should make plain dairy citizens west of the McKenzie Pass feel happy. The sale of the space might even pay for an adequate Mental Hospital. After that would be time enough to go ahead and finish the Capitol Building. In most states billboards of colorful Outdoor Display Advertising screening the State Capitol would lift the spirits of the citizens, help business, reduce taxes, and take our minds off the politicians. You saw the pictures of the forty-eight State Capitols in *Life* last summer? Shocking, wasn't it?

### High Hatting Our Heritage

The spiritual devastation wrought by forty years of condescending architecture detailed by drawing board designers who scorned both the materials and the men who were to build their designs, was illustrated by an experience I had in 1916 with John S. Bradstreet's best wood carver.



Purcell and Elmslie required little squares of carving on the arms of certain special chairs, and a wax model was supplied as a guide. I explained to this gentle old craftsman that I didn't want him to make a copy in wood, but that he was to really whittle a similar pattern with a feeling that would seem right to him. The first two trials he submitted had to be rejected. The third was also lifeless. When I tried to explain again what we were aiming at, there were tears on his cheeks.

"No use; I know *exactly* what you want, but I can't do it any more. I wish I still could, but for years I have been only asked to duplicate miles of Jacobean foliage, French scrolls, Colonial mantel piece consoles, until all the life has gone out of my stroke. All I can do now is 'sandpapered patterns.' These expensive Goddamned club rooms and library ceilings have sucked all the blood out of me."

### The Uses of History

And so must we now go back to this funny style and all this jig saw and turning-lathe gingerbread?

It's the same old question!

When Sculptor Gutzon Borglum, Architect H. P. Berlage, of Amsterdam, and I, protested the Greek memorial to Abraham Lincoln in 1911. . . . "What

would you have us do, build a log cabin?"

If our true working relation to the past doesn't soon clarify in the architect's mind and if we can't learn to cease this nonsequitur arguing with the inevitable logic of forward marching Ideas, the public who are getting fed up with the contemporary iron rations, will cook themselves a little gingerbread and enjoy it. Indeed they are doing so and leaving the Architect out of their plans.

My object in reviewing these old works is of course not to find patterns which would provide some quaint effect, or seem to add a factor of aristocratic inheritance to designs for our new buildings, but rather to lift our spirits above the unworthy struggles of fashion, of intellectual excitements and the welter of uncompleted aesthetic experiments. By really filling our hearts with a deep knowledge of natural unself-conscious men and their ways, we architects, as the channels of our day, must try in every way to let the *all* of us as a people flow as unhampered as possible into the works entrusted to us.

WILLIAM GRAY PURCELL.

**"IT IS LESS THE DIFFICULTY** of solutions of the secrets of nature, than our mental limitations that prevent our philosophical progress."

"Our greatest hindrance to intellectual progress seems at times to be the question of vocabulary. Limiting words and concepts stand in the way. We are unable to read between the lines."

"Once the barrier (set up by the professional thinker) is down, and we explore new fields, we shall meet objects and qualities of objects for which we have no names. Do not let this lack of definitions bother you, for you will have a rationalist following in your footsteps who will define all and create a terminology and classification before night falls." "The Incurable Romantic"—Roderick Peattie—1941, pages 264-5.



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December 19, 1942

Greetings, Architects:

We miss seeing a lot of you men at your regular "home front" posts these days, but we know you're serving in the way you can do the most toward putting Adolph and Tojo where the climate is hot. We know, too, that lots of you have given up your homes, have left families behind, and have made other personal sacrifices in order to help in the big job ahead.

Wherever you are, or whatever you're doing, we want to stop in to say "hello" and to extend best wishes for a happy Holiday Season, along with our sincere hope that this war will come to a just and speedy end.

We look forward to the day when you will be back again at your old stand.

Sincerely yours,

*F. C. Reinhard*  
Frank C. Reinhard, Dept. Mgr.  
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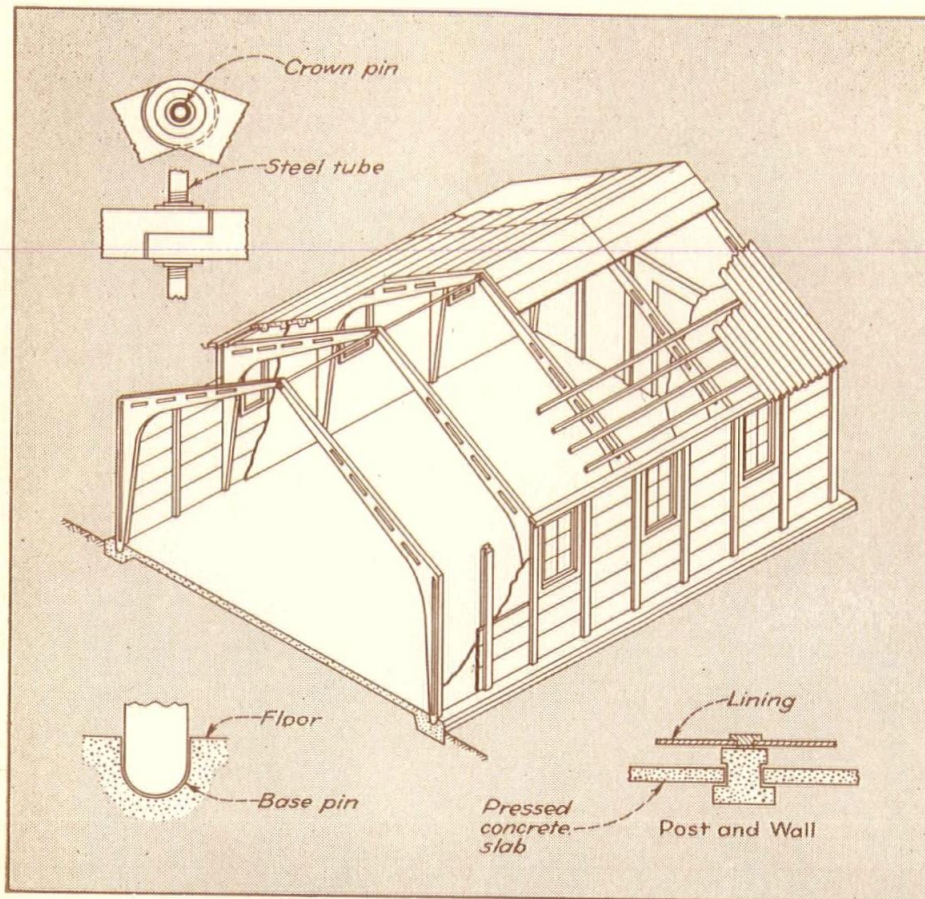
# British Prefabricated Wartime Huts

REPRINTED BY SPECIAL PERMISSION OF  
ENGINEERING NEWS RECORD

Successful types of one-story concrete and wallboard huts designed for mass production by British organizations were shown at a recent exhibition in London.

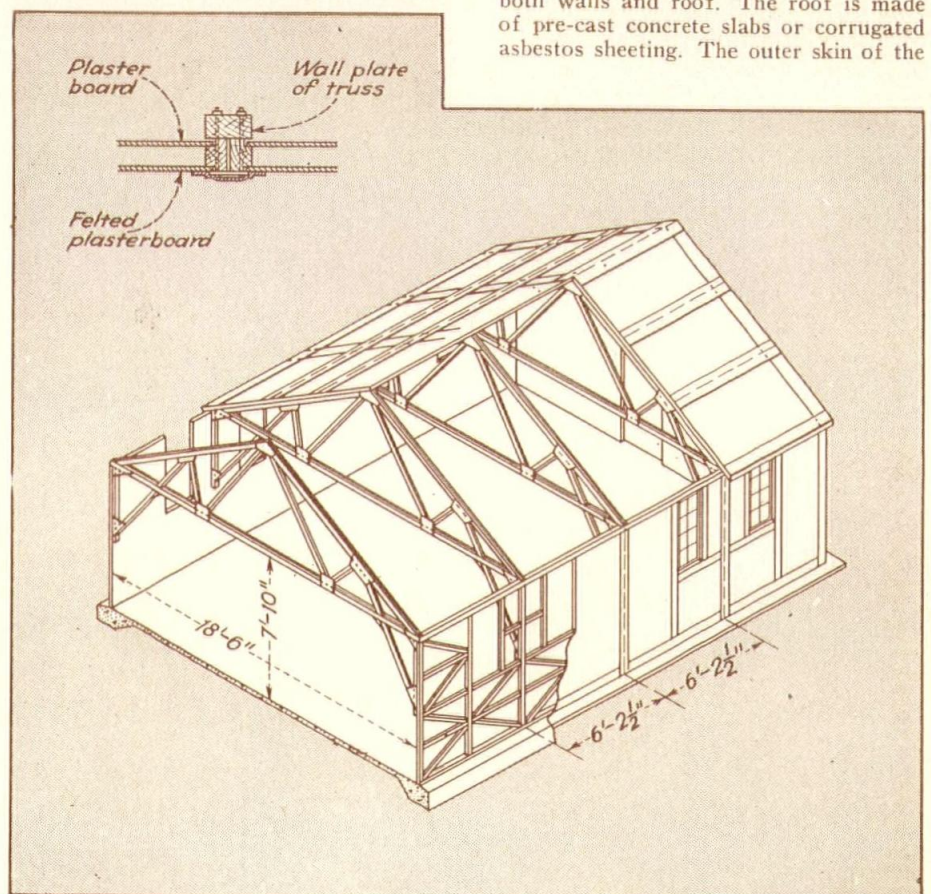
All the types correspond in size to the British government requirements for the rectangular clear-span standard hut—60 ft. x 19 ft. 1½ in. open floor—which can be subdivided as desired for use as factory, storage building, dormitory, dining hall, etc. All types employ prefabrication to the largest possible extent, are designed to save strategic materials like steel and timber, and can be erected with a minimum of skilled labor on a simple, concrete foundation.

The BCF clear-span type has been designed by the British Concrete Federation with special regard to the saving of reinforcing steel. Different types of concrete are employed, all units are standardized, use of steel and timber is practically limited to doors and windows. In one of these the typical concrete post and roof beam replaced by one curved unit—the portal reinforced concrete frame—which reaches from the bottom of the walls to the center of the roof where it is joined to the opposite portal frame, thus forming an arch supporting both walls and roof. The roof is made of pre-cast concrete slabs or corrugated asbestos sheeting. The outer skin of the



Above—British Concrete Federation type hut has a three-pin portal frame of reinforced concrete, which carries the roof and walls. The walls are made of externally, pressed concrete blocks, the inner lining of which is plasterboard or other similar material. The roof consists of asbestos-cement or concrete slabs covered with felt.

Right—Ministry of Works and Buildings hut design provides a roof supported on wood framed panels, covered on the outside with felted plasterboard and on the inside with plasterboard only. Roof trusses are of framed timber with plywood gussets and knee braces bolted to side panels. The roof is of wood framed panel construction similar to the wall panels.





# Designed for Mass Production

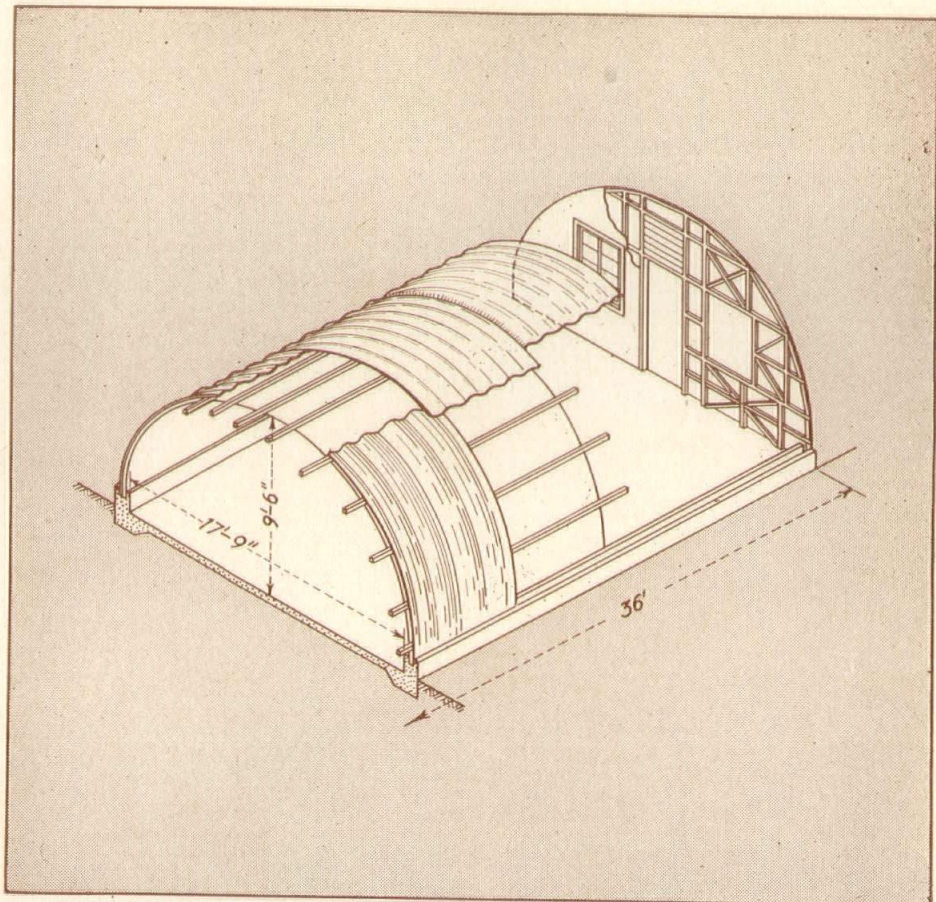
walls is made of precast concrete slabs bedded with mortar, the inside covered with any suitable wallboard.

The MOWB (Ministry of Works and Buildings) hut consists of precast units which are covered on both sides with plasterboard protected on the outside with roofing felt. The roof is built of light, timber trusses covered by plasterboard units.

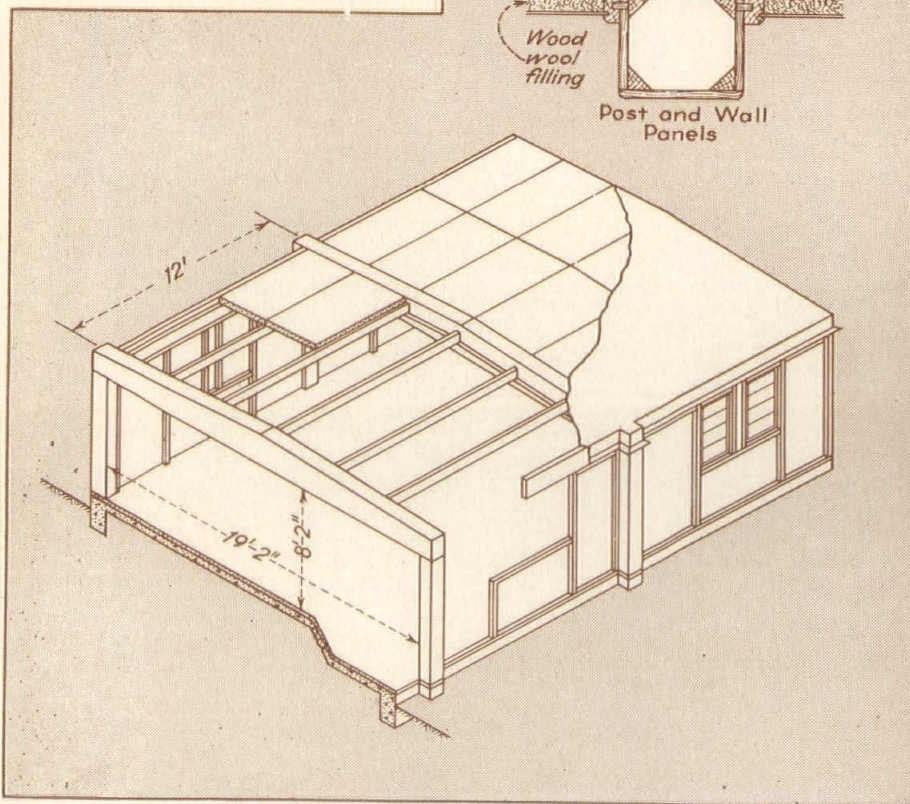
Another type, known as the Seco hut, is built of a framework including plywood and timber blocking pieces. The wall and roof units are made of asbestos sheets with a wood wool and cement core. The roof is covered with roofing felt.

Use of curved asbestos sheets is the feature of the Turner hut. This is built of molded corrugated sheets of asbestos that are bolted together and lined on the inside with flexible asbestos sheeting. The hut has the special advantages of good insulation and easy transport.

A new device that has been incorporated in the BCF hut is a window sash and frame of concrete with a minimum of reinforcing steel. The weight of the reinforcements is about 8 lb. against 40 lb. in a comparable steel window, a saving in metal of over 32 lb. per window.



Above—Curved asbestos-cement corrugated sheets are used to form the arched roof of the Turner hut. At the spring line the corrugated sheets are raised on a concrete trough to 9 in. above the floor. The entire hut is lined with flexible asbestos-cement sheets.



Left—Posts and roof beams of plywood construction feature the Seco type hut. Wood wool slabs carried on wood purlins between plywood beams and covered with felt are used for the roof. The walls are of wood framed panels, filled with wood wool between sheets of asbestos-cement.



# On the Cover --- Gingerbread that Grandmother Enjoyed --- 1884

This home of an early lumber baron on the coast of Northern California is still occupied and perfectly preserved. It is a treasury of architectural philosophy and history. One would not expect to find what is perhaps the most perfect example of the General Grant period in the redwood wilderness. Unfortunately I am unable to give you the name of the capable designer, but his work has all the vigor and unity of the best folk art.

As a basis for the study of ornament and of functional organic design, this distinguished building has a unique merit.

You can't copy it!

One must either understand its significance and thus profit by the wealth of ideas with which it is saturated, or just pass it up as a curiosity. Well . . . if we praise the wrong things or overlook the gold in our hands, embarrassment need not trouble our heaven for the great works of art have always been missed by the generality of contemporary criticism in literature, art and music. I will hazard the prophesy that in another twenty-five years, when the American heart has gotten hungry enough for the leaves, flowers and fruit, now conspicuously absent from our stark and argumentative architectural branches, the young men of that day will be thinking long about this house, will be wondering how they may become as skilled as this forgotten architect.

## For Our Friends

### The Building Contractors, and Dealers in Building Materials

#### Some Quaint Notes on Costs

**I**N looking through the dusty records for pictures and data about that old Gray home, I ran across a red leather covered memorandum book. In it were records of fishing and camping trips, of groceries and shirts bought for Chippewa friends in the North Woods, personal loans, banking and business receipts and a complete record of this house building project from first estimates to financing and final accounting.

To our 1942 yard stick, these prices, paid and receipted for, seem simply unbelievable. I recall Grandfather saying to old Zuman when he paid him, that it seemed a lot of brick work for the money. But the old mason just grinned and said he was satisfied.

The house was started April 1, finished October 15, five and one-half months. It was sold in 1906 for \$25,000.

As a youth my most vivid impression of this building operation is of dozens of carpenters all over the lot, straddling great squared timbers, with augers and chisels making notches for the joist and square morticed holes for the studs. The latter were 2" x 6" (yes, two full inches by six real inches) and twenty-four feet long! They ran from sills to roof plate.

I believe this to have been the last heavy framed residence in Oak Park. Beginning about that time,

plank sills set in cement, "two by four" studs that were 1 3/4 x 3 3/8, and floor by floor framing, became the rule all over the United States. These building habits were largely fathered by "The American Builder" and similar trade magazines, which were scorned by the architects, but which had a very great influence in unifying both design and construction throughout all the states from coast to coast.

The influence of these contractors' journals gradually faded as public interest in art and architecture became more intellectual. By the turn of the century the architectural press was taking over the direction of public taste and professional habits.

Another delightful experience in watching the building of this Gray dwelling was the great white cubes of limestone for the foundations above grade, with their neat draft lines for edges, all looking so solid, and giving so strong an impression of that basic quality of things being "built" together.

A great deal of woodwork inside and out was hand dressed on the job and the house was always filled with masses of beautiful curly shavings from the plane, and redolent with the odors of fresh pine and oak. The whole enterprise seemed alive. You could see its needs being cared for. The building showed all the minor intimate qualities of Nature's growths from the soil.

And these are the final bills, December, 1890:

1. Excavating (Schultz).....\$	20.00	14. Hardware and Sheet Metal Work (Hugh Gair).....	200.00
2. Surveying .....	12.00	15. Street sidewalks, in place 132' of sawed sandstone slabs, 5'-0" wide.....	180.00
3. Dressed Stone Masonry Foundation (Christopher-son, Knise, and Kussicke)...	530.00	16. Fencing, in place—280' of ornamental wrought iron picket fence .....	280.00
4. Stone Cistern, 300 barrel...	75.00	17. Grading, Filling and Lawn (Wm. Ingalls) .....	255.00
5. Lumber and Carpenter Labor (Bedard and Morenci)...	4,250.00	18. Street Work, 133' of stone curb .....	320.00
6. Plumbing (Williams).....	350.00	19. Barn, 24' x 32', 2 story, contract complete with two coats of paint (Arnold)....	500.00
7. Sewer Connection.....	60.00	20. Architect Charles C. Miller .....	200.00
8. Plastering, Cement Floors, Cement Walk.....	1,100.00		
9. Painting, Glazing, Paper Hanging (Peebles).....	763.00		
10. Brickwork, Three Chimneys 50' high, Nine Flues (Zuman)	225.00		
11. 6 Finished Fire Places with Mantels, Tile Work and Grates .....	300.00		
12. Electrical Wiring, so described (Wright Elsom)....	112.00		
13. Furnace, installed complete	233.00		

Real Estate, 1 acre, 132 x 333 ..... 4,750.00  
 \$9,965.00  
 \$14,715.00  
 (Carpets are listed as part of construction!—\$350.00)

#### Cost of House Estimate

Contractor's estimate 40000.00  
 Stone foundation 4000.00  
 Plumbing & Glazing 600.00  
 Chimney & Plumbing 500.00  
 Plastering 900.00  
 Masonry & Grates 200.00  
 Furnace 200.00  
 Architect's fee 75.00  
 Actual 75.00  
 Survey & Map 60.00  
 Grading 20.00  
 Fencing 100.00  
 Barn 500.00  
 Gas & Water 150.00  
 42500

Estimated cost of the whole \$48,000.00  
 all us \$6000.00, survey  
 Set \$9000.00 + \$2000.00 = 13,000.00



# Construction Industry to Absorb Much of Postwar Employment Adjustment

Stabilization of employment will be a major responsibility of the construction industry in the postwar adjustment period, according to Dan W. Kimball, president, Associated General Contractors of America.

Pointing out that construction employs more men than any other industry, Mr. Kimball said:

"Men can be more quickly re-employed by the construction industry than by any other, because of a high degree of mobility, freedom from need of re-tooling, and the opportunity for employment of a large proportion of untrained or semi-skilled workmen."

The construction industry believes that the nation has a great future, and foresees the following post-war building needs:

One million new homes *a year* for many years after the war.

Rebuilding of poorly planned cities and run-down urban areas.

Large scale projects to improve whole sections of the nation by providing irrigation, flood control and development of water power.

Expansion of the entire American transportation system—highways, railways, waterways and airways.

New building for new industries born of wartime technological advancement.

The greatest market for post-war housing will lie in the moderate-cost, urban home, built to sell at \$2,500 to \$3,500, Mr. Kimball predicted. On the basis of a 110-billion dollar national income, homebuilding will represent 7 per cent of America's total economic activity.

"Obsolescence, due to wartime invention and development of new products will greatly stimulate the need for new industrial, commercial and institutional construction," he said.

The path for new developments has been opened by the pressure of wartime necessity, said Mr. Kimball, explaining that new materials for all types of construction are today having their first genuine opportunity.

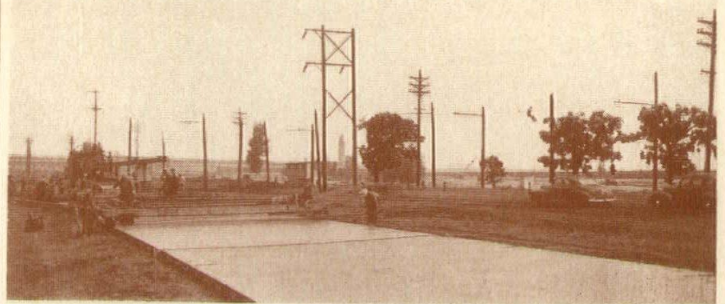
"Overly stringent building codes are now being revised; realty taxation is being moderated; blighted areas are now available as cheap land to be converted to new social and economic uses," he said.

Calling for more attention to post-war planning problems, Mr. Kimball said:

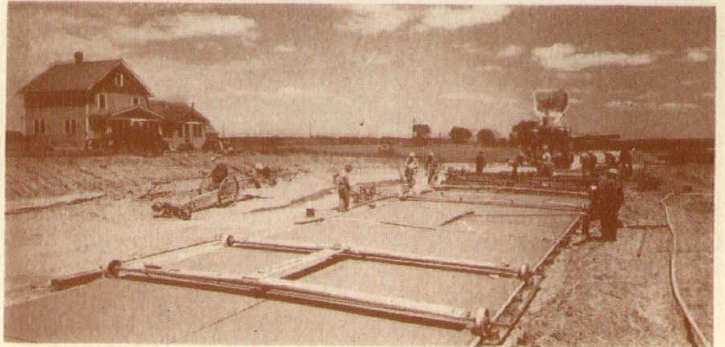
"Programming of a policy for public works projects, whether in housing, institutional or utility construction, should have immediate action in order to meet the shock of post-war readjustments, regardless of how near or far removed may be the date of victory."

*"I didn't run after you when we were courting," said Mrs. Browne.*

*"No," replied her husband. "A trap doesn't run after a mouse, but it catches it."*



Access Road to Northern Pump Company, Marshall Street to North City Limits.



Access Road to Wold-Chamberlain Training Center, 34th Ave. South and East 56th Street to T. H. No. 55.

Contractor: A. Anderson & Sons, Inc., Minneapolis, Minn.

## CARNEY NATURAL CEMENT used in paving the Roads to Victory!

Access roads connecting important Defense Plants and Training Centers with trunk highways are short cuts to victory in today's war of all-out productive effort. These new paving projects provide quick movement facilities for men and machines.

To make roads that will withstand the pounding of heavy traffic, the State of Minnesota includes Natural Cement for Blended Concrete in their pavement specifications. For Blended Concrete is doing a dependable job on vital highways throughout the Country. It stands unexpectedly heavy loads—it holds tight under quick-changing weather conditions—it resists the deteriorating effects of salts and acids.

For these superior values, Blended Concrete with Carney Natural Cement is used on important new access highways. Blended Concrete proves itself better in every way. It has greater plasticity, better placement and less bleeding. It is easy to finish. The completed job is tough, resilient, and remarkably resistant to frost action.

### OTHER CARNEY PRODUCTS

Carney Masonry Cement, Carney Natural Cement, Rockwool, Industrial Insulation, Insulation Cement, Rip-Rap, Cord Rock, Crushed Stone.

**CARNEY**  
**BUILDING**  
**PRODUCTS**  
**MANKATO, MINNESOTA**



# News OF THE MINNESOTA ASSOCIATION OF ARCHITECTS

## REGISTRATION FEES

December 31 is the last day for payment of registration fees. All architects and engineers who have not paid their registration fees are urged to do so by December 31, 1942. This is the last date without penalty.

## WHERE IS SO AND SO NOW?

Eino Jyring, Hibbing, and Mark Hayes, Minneapolis, two Minnesota architects, are in service in Africa. Their pictures were recently published, showing attendance at a Minnesota Day celebration. Boy! Are our men getting around.

★

Robert F. (Bob) Palmer is now Resident Plant Engineer for the U. S. Maritime Commission at Belair shipyard, South San Francisco. Prior to this Bob was located at Tacoma. Thanks for your letter, Bob.

★

Bill Townes and Al Meinecke are with Smith, Hinchman and Grylls at Eau Claire Ordnance Works.

★

It's now Captain Bob Kurtz, Nebraska Ordnance Plant, Fremont, Nebraska.

★

Stowell Leach as far as we know is still in Pine Bluff, Arkansas.

★

Lyle Nelson has returned to Green Bay, Wis.

★

Capt. J. C. Taylor, U. S. Army, and Lt. Larry Bakken, U.S.N., spent a short leave together in Minneapolis recently. Cliff is stationed in Colorado and Larry in New York as of this writing.

★

Tom Schefchik is Director of Rentals for OPA in Duluth.

★

Mnesicles, Alumni Association of Alpha Rho Chi, recently at the home of Elmer Magnuson.

★

Austin Lange is now Lt. Lange, U.S.N.

★

Editor's Note: Drop a postcard to H. W. Fridlund, c/o Area Engineer G.O.W., P.O. Box 3391, St. Paul, and let him know where you are and what you are doing. You'd be surprised how many people will be glad to know.

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## ART GUM CRUMBS & THUMB TACK HOLES

By Ken Fullerton

An old hand was loosened from the Army service, but Uncle had to take care of him so assigned him to checking over some reports submitted by some slightly confused but zealous social service field workers. His reports follow:

### 1st Report

To: Social Service Hdqtrs.

Subject: Personnel needs night school.

The group of field workers which have been checked show need of training in composition. The following are examples from their case reports:

"— woman and house neat but bare."

"Couple breaking up home, friends helping."

"Until a year ago this applicant delivered ice and was a man of affairs."

"Milk needed for the baby and father unable to supply it."

"Woman has no job to be mentioned."

"Couple have been completely stripped. Now are barely able to get along."

"These people are extremely cultured. Something should be done about their condition."

"Couple's only source of income is four boarders, all out of work. They owe \$600."

"Man is aggressive—has nine children."

SNAFU. Sgt. Y.

### 2nd Report

To: Social Service Hdqtrs.

Subject: Personnel still unpolished.

More misleading quotations:

"Applicant took job as janitor in home for working girls—lasted three weeks."

"— roomer pays no board as he usually acts as god-father."

"Sophie is married to a sailor and her whereabouts are unknown."

"Applicant and wife are illegally separated."

"Woman is ailing—eyesight poor—does housework when able to find it."

"Apartment crowded and untidy. Saw evidence of



girl without clothing. Woman says they are delicate family and must have steamed apartment with eggs and oranges."  
 "Applicant has one child, Lillian, who is three months old and owes 12 months rent."  
 "Applicant is typical real American. He is father of eight children."

SUSFU. Sgt. Y.

### 3rd Report

To: Social Service Hdqtrs.  
 Subject: More.

"Woman still owes \$45 on a funeral she had recently."  
 "Man hit by automobile—speaks broken English."  
 "This woman is ill. She is being treated. The gas has been turned off."  
 "Woman says husband has illness that sounds like arithmetic." (I think she means Arthritis.)  
 "Family's savings all used up—relatives have helped."  
 "Applicant's wife is a lady and hardly knows what it is all about."  
 "Woman taught bridge and suffered a broken leg."  
 "Applicant and family got \$14 from neighbors for moving from former address. Saw mother and child—evidence of father."  
 "Good type American family, appear refined—but intelligent."  
 "Woman is willing to struggle if given an opportunity."

TARFU. Sgt. Y.

To: Sgt. Y.  
 Subject: Field worker reports.

Concur with your reports but do not understand your sign-off symbols.

To: Social Service Hdqtrs.  
 Subject: Sign-off symbols.

Army stuff: SNAFU—Situation normal all fouled up.  
 SUSFU—Situation unchanged — still fouled up.  
 TARFU—Things are really fouled up.

\* \* \*

### PASSING THEM ON

Things that you should have read.  
 INVITATION OF THE YEAR.  
 "Mr. and Mrs. B. request the pleasure of Captain Green's company for dinner at . . ."

Reply:  
 "Except for five men on leave and two sick, Captain Green's Company accepts your kind invitation for dinner. There will be 197 of us."

\* \* \*

### SOME WIFE!

Thanksgiving the maid slipped and the turkey went skidding to the floor in front of all the guests assembled. Quick like, she said, "Never mind, Nora, take it back to the kitchen and bring in the other one." The liar!

\* \* \*

She often compares me to Clark Gable too! Seems to prefer Gable.

\* \* \*

She says all I do is sit around and suffer with my rheumatism. What the helese can you do with it?



Tested in the most rigorous of climates—proved by performance in 250,000 homes—Balsam-Wool Sealed Insulation, applied by the Famous Minnesota System—is the SURE way to insulate. Write for information about the DOUBLE advantages which Balsam-Wool provides.



### INSULATING INTERIOR FINISH

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### WOOD CONVERSION COMPANY

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### Heatilator Co. Syracuse, N. Y.

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850 Cromwell Ave.

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### ELECTRIC BLUE PRINT CO.

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 312 Minnesota St.      GA. 2368      St. Paul, Minn.

Pat was determined to pass every tavern on his way home. He passed three when along came his favorite lounge. He was pretty shaky, even had his outstretched hand against the door and then got a good hold of himself. He was safely past now, by 100 yards, and was handing out the personal congrats: "Well done, Pat, me boy, y' did it, 'twas a fine sacrifice—come back and I'll treat ye."

\* \* \*

Betcha Santa Claus is the only guy that can run around all night with a bag and not get the razz!

(Continued on Page 15)



# PAINTING — Two Coats or Three Coats

The thickness of the coat whether provided by two thick coats or by three thinner ones, determines to a great extent the durability of exterior paints, according to a recent report by Dr. F. L. Browne of the U. S. Forest Products Laboratory, Madison, Wisconsin.

When modern paints of high opacity are used, the thickness of coating needed for good durability is much greater than that required merely to hide the wood, according to Dr. Browne.

Two-coat painting where either one paint is used for both coats, or a combination of special primer and conventional prepared paint for the finish is employed, often gives rise to short-lived paint jobs because the necessity of building satisfactory film thickness has not been fully appreciated by paint manufacturers, painters, and paint users, he explains. Two-coat systems consisting of a special primer and a finish paint made for application in thick coats are less likely to be applied too sparingly.

Experimental data demonstrate a superiority of well-designed special primers over self-priming for painting such woods as Douglas fir and southern yellow pine, Dr. Browne adds, but they show also that primer and finish paint should be designed carefully for use together because a primer may give good results with some finish paints and prove incompatible with others.

"The two-coat system of house painting during the past decade has passed from a practice ignored or condemned by the industry to a recommendation made by a majority of paint manufacturers," Dr. Browne points out. "Some of them advocate it enthusiastically whereas others accept it in public but regard it in private with misgiving or disapproval.

"Much painting with two-coat systems has been thoroughly satisfactory and much of it has proved seriously lacking in durability. The successful work demonstrates that a substantial economy is realizable from the practice. The unsuccessful work demonstrates that the conditions necessary for satisfactory two-coat painting are not yet understood thoroughly by all manufacturers and users of paint.

"Accepted practice formerly required a minimum of three coats for initial painting and two coats for repainting. In the course of long experience and competition, paints and painting procedures were adjusted so that three coats would supply sufficient paint to ensure satisfactory results but would avoid any wasteful excess of paint.

"Serious rebellion against these standards began about 1920 when a boom in house construction following a long stagnant period found labor costs far higher than they had ever been before. To meet the demand for two-coat initial painting, painters had to invent a new technique of application in which the full amount of paint previously applied in three coats was put on in two by greatly reducing the spreading rate of both coats. The new technique was one of painting in thick coats. The economy was effected entirely in labor, not in material.

"The greatly diminished spreading rates, however, involved the further requirement that the paint for both coats be unusually high in content of total pigment so that the consistency would be favorable for application in thick coats without running and sagging and without wrinkling during drying.

"We may call this technique of initial painting the two-coat system with self-priming. When done honestly by painters who had mastered the technique, it proved far more than a temporary expedient and compared favorably in durability with good three-coat work. When done incompetently, the shortcomings were usually apparent before the painter could escape responsibility for them. As a result the practice spread beyond the field of speculative building and gained wide acceptance."

Study of special primers overthrew the traditional theory that priming paint for wood should be low in content of pigment and high in content of volatile thinner to promote deep penetration into the wood, Dr. Browne says.

"Deep penetration, in fact, proved to be wasteful and even harmful because it consists of vehicle alone, separated from the paint film, and isolated in the cavities of wood cells beneath the painted surface. Useful penetration is limited to the filling with paint, that is, with pigment and vehicle together, of those wood cavities that open directly into the surface on which the paint is applied.

"When used according to the self-priming technique, ordinary house paints penetrate wastefully and can be improved by restraining undue penetration. One means of controlling penetration is the incorporation of bodied oil in the vehicle. Another means that seems to be less widely appreciated is formulation with a high level of pigmentation favoring application at low spreading rate — that is, in thick coatings.

## One-Coat Painting Next?

"The logical development of two-coat initial painting is one-coat repainting. So far there seems to be little commercial exploitation of the possibility on the part of paint manufacturers although one maker of a two-coat system recommends it to some of his customers but does not yet print it in his label directions. In practice much one-coat repainting has been done for many years. When repainting is done at reasonable intervals, before the old paint starts to crumble or flake seriously, one generous coat of highly pigmented paint such as is suitable for the finish paint of a two-coat system is sufficient."

In the series of exposure tests at the Forest Products Laboratory, the three-coat jobs with self-priming were materially more durable than the two-coat jobs, as was expected from the difference in the estimated thickness of the coatings, Dr. Browne says:

"It should be pointed out, however, that the two-coat jobs, even without the benefit of special primers with controlled penetration, held gloss uniformly just as long as the three-coat jobs or the two-coat jobs with special primers. Uneven gloss and spotted chalking are caused by inexcusably scanty application of paint and do not require special primers for their correction.

"The most durable coatings by far were those done in three-coat work with aluminum primer. This proved true with each of the eight finish paints. The average durability of fifty months is nine months greater than the next best average durability recorded and fifteen months greater than the durability with self-priming.



Mica primer improved the durability of three-coat work by five months on the average, but flake lead impaired the durability slightly.

"Substitution of a suitable unpigmented priming oil for the priming coat of three-coat work may leave the durability practically unimpaired even though the film thickness is somewhat reduced. A slight saving in cost of material for the paint job might be effected in that way, but there is serious risk of early development of conspicuous alligating.

"The durability of the two-coat jobs with the different special primers varied greatly, from twenty-six to forty-one months. Five of nine special primers with controlled penetration made two-coat jobs equal or superior in durability to the three-coat jobs with self-priming, even though the estimated film thickness of the three-coat jobs was materially greater. Undoubtedly still better durability would have been obtained if these primers had been used for three-coat work or if the finish paints had been designed for and applied in thicker coats to build up the film thickness to that of the three-coat jobs with self-priming."

\* \* \*

#### ART GUM CRUMBS "

(Continued from Page 13)

#### QUESTIONS:

1. Smith met Jones, his old college pal, after twenty years, at a Minnesota reunion:

"Well, well and . . . and who is this fine young lady (10 years old)?"

"My daughter."

"Why, I didn't even know you were married—what's her name?"

"Her name is the same as her mother's."

"Then it must be Glenda."

How did Smith know?

2. When it's May in Peru, what month is it in Iceland?

3. Two children reported to the kindergarten registrar. Claimed they were born the same day—had the same dad and the same mother. Said they weren't twins. Did they fib? (Don't answer—same day different year—'taint right.)

4. Cow wandered out onto a trestle and was threatened by an oncoming train. Figured she had better chances by running toward the train than away therefrom. Some cow, or was she rational? Could be. Howcome?

\* \* \*

Boy was I mad last night! I was in a phone booth talking to my girl when along comes a dame and wants to use the phone. She kept rattlin' the door and raisin' such a fuss that . . . finally we had to come out.

#### ANSWERS:

1. Minnesota is co-ed.

2. May.

3. Two of triplets.

4. Cow just a few feet out. Train 75 yds. away but coming.

#### WILLIAM J. SULLIVAN

William J. Sullivan, 59, well-known Duluth architect, died at Phoenix, Arizona, recently, following an illness of some years. Mr. Sullivan was born in Mankato and lived most of his life in Duluth. He graduated from Cornell University and was a partner in the firm of Holstead and Sullivan. At the time of his retirement in 1936, he was associated with H. N. Orrfalt as the firm of Sullivan and Orrfalt.

Among his outstanding structures were the Denfield High School and the St. Louis County jail.

#### GEORGE T. WARNER

George T. Warner, well-known Northwest distributor, passed away early in December at the age of 52 years. Mr. Warner was well acquainted with architects and contractors in this territory.

He was active in boys' work, was an officer of the Minneapolis Optimist Club, a member of the Automobile Club and the Minneapolis Civic & Commerce Association.

#### ANOTHER IMPORTANT WAY THAT WOOD IS HELPING TO WIN THE WAR

As war production is stepped up to record high levels, American ingenuity is playing a greater and greater role. Shortages of materials have challenged the best brains of our industrial world and have resulted in inspiring new products and methods.

While some parts of the normal building business have been curtailed sharply, other types of construction have been expanded to provide adequate wartime facilities.

Early in the year, members of the National Door Manufacturers Association retained the services of a leading firm of architects (Graham, Anderson, Probst and White), to work with them in perfecting a projected wood sash unit which would be suitable for industrial construction. This was announced in the summer. Shop drawings and details were made available to every millwork manufacturer who wished to produce the unit. Thus, the war effort has been speeded, and the benefit of this important design was made readily available throughout the country. Over 500 inquiries have been received by National Door Manufacturers Association, indicating the widespread interest in this development.

Already, many structures have been erected, using the wood unit, to replace the metal products which were no longer available. They include vital manufacturing plants such as Youngstown Sheet & Tube Company, Foote Bros. Gear & Machine Corporation, Columbia Steel Works, United Engineering & Foundry Company, Daybrook Hydraulic Corporation.

They also include many important projects directly in the service of our Armed Forces—such as the U. S. Navy at New Haven, Conn.; the U. S. Marine Base at New River, N. C.; the Casper Air Base in Wyoming; the Aviation Mechanics School at Amarillo, Texas.

The widespread use of this product is increasing. Not only does it provide outstanding advantages, but it is also conserving critical materials. It is another of the many examples of wood's important role in the winning of the war.

#### CECIL ODLIN PASSES

Cecil Odlin, Minneapolis architect, passed away recently.

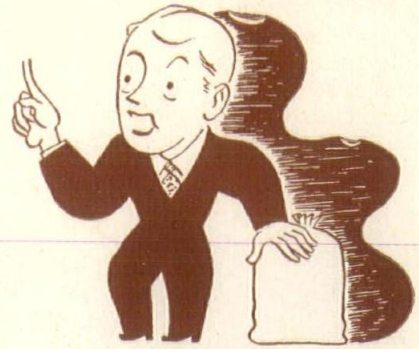
#### STATE BOARD ANNOUNCES REGISTRANTS

The State Board of Registration announces that the following men have been granted licenses in Minnesota: Walter J. Huchthausen, Air Corps, Allington Field, Texas; George B. Townsend, 1437 Marshall Avenue, St. Paul; Archie H. Hubbard, Eau Claire, Wisconsin; Charles Altfillish, Decorah, Iowa.



## SPEAKING

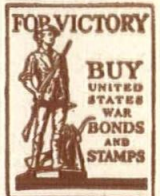
**OF SPECIFICATIONS,** are you familiar with the U. S. Government Specifications SS-C-181b for masonry cements? The Type I specification is not so difficult to meet; but the Type II specification—which covers masonry for general use—is the most demanding on record. The best recommendation we can offer for Hawkeye



Masonry Cement is that it meets the Type II specification. This superior product is consistent with the policies of an organization which, for more than thirty years, has established a record of dependable performance with Hawkeye Portland Cement.

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## CONSTRUCTION IN A POST-WAR WORLD

The postwar world will probably see new developments affecting antipathies of organized labor to new materials and new methods of construction.

Already war construction, through the OPM stabilization agreement, has set a new pattern of uniformity throughout the country of working conditions and a reduction of formerly prohibitive rates of pay for overtime work and shift work. In the stress of urgency of war, new methods are being prosecuted including both on site and off site prefabrication and production line assemblies of construction.

The urgency of war has also tempered jurisdictional disputes between unions and is now forming a pattern for more harmonious on site labor relations in the future.

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