

# THE FEDERAL ARCHITECT



*Published for the Association  
of Federal Architects*

*April, 1938  
Vol. 8, No. 4*



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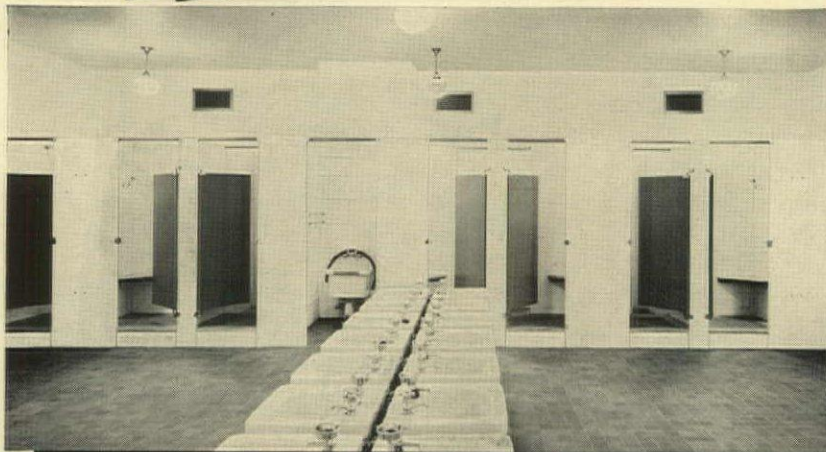


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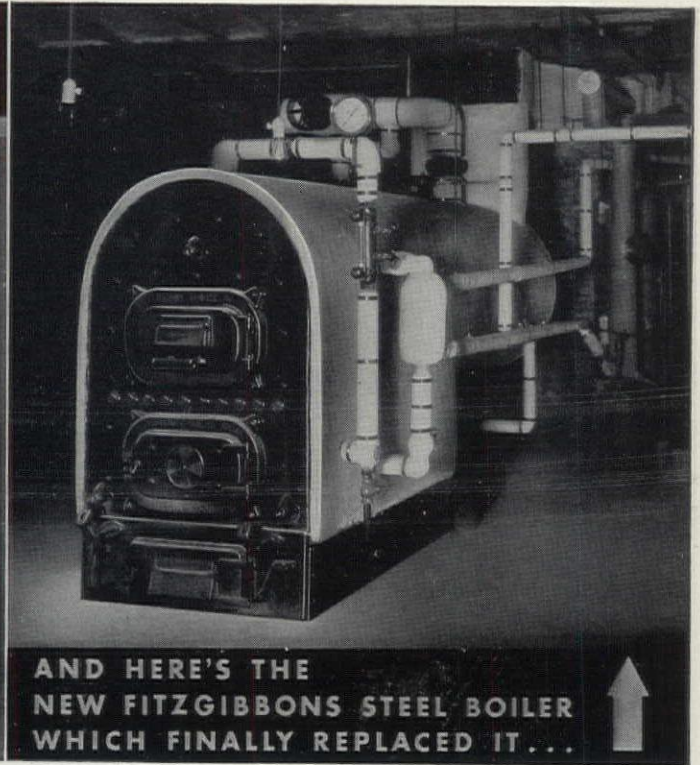
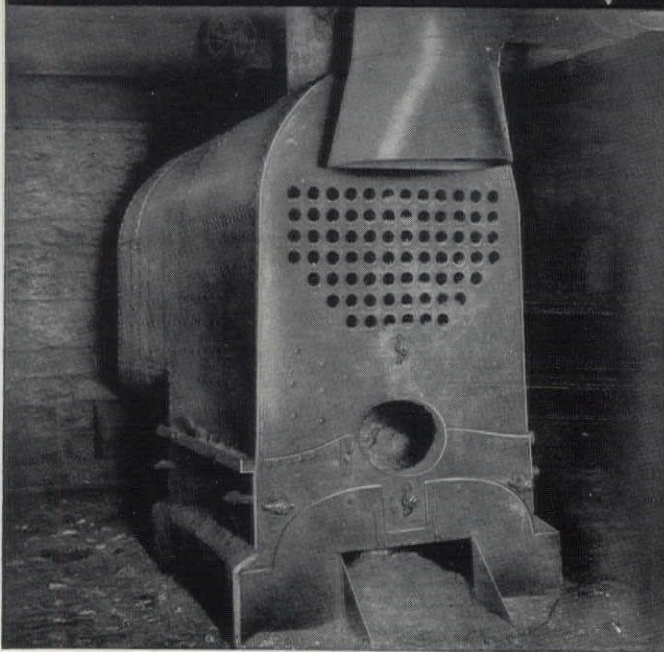
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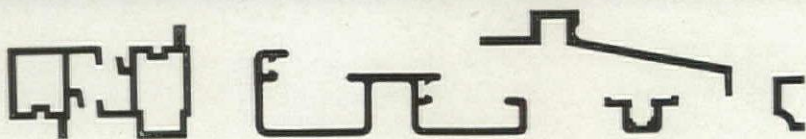
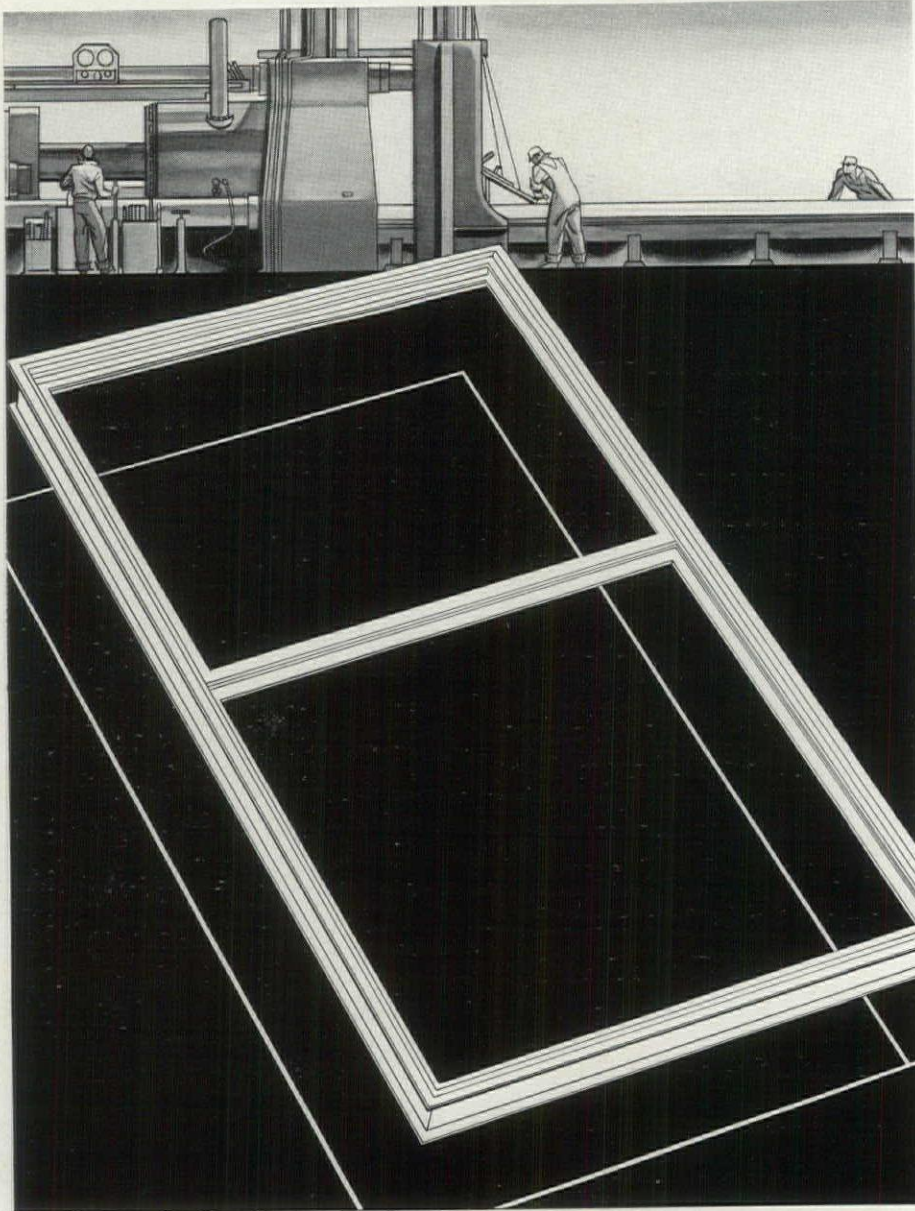
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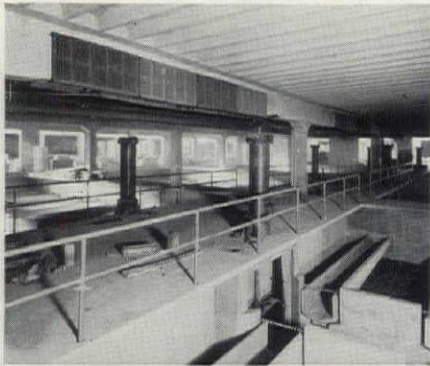
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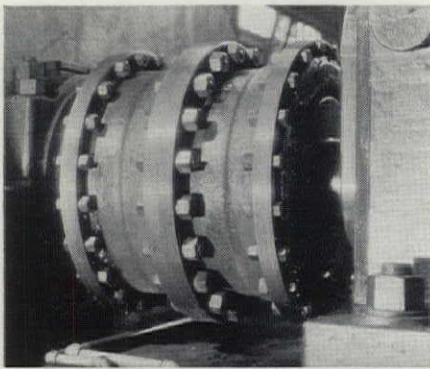
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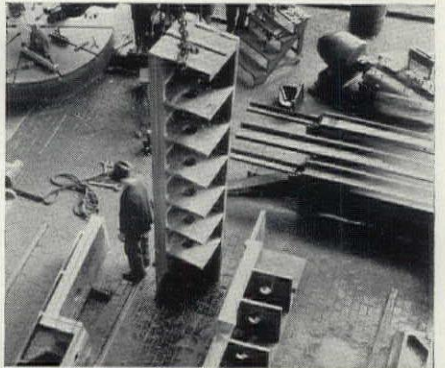


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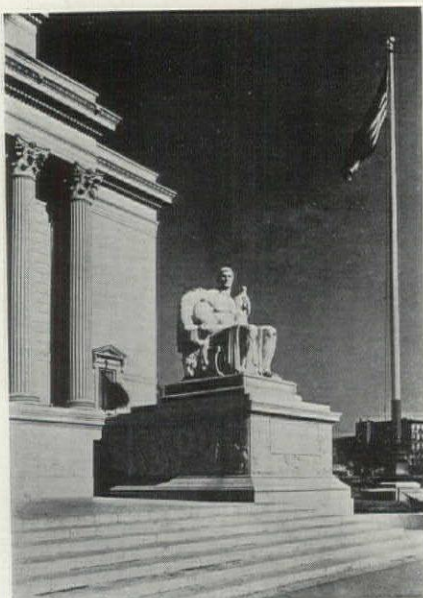


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# THE FEDERAL ARCHITECT

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EDWIN B. MORRIS, *Editor*

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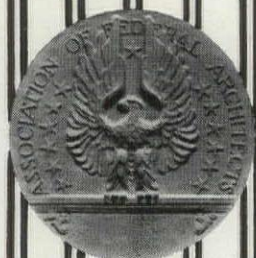
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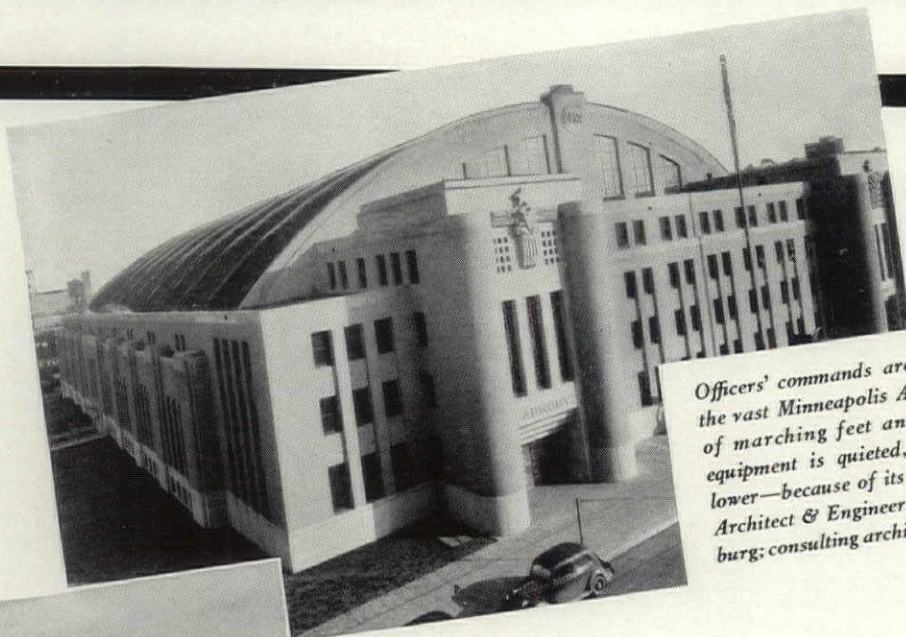


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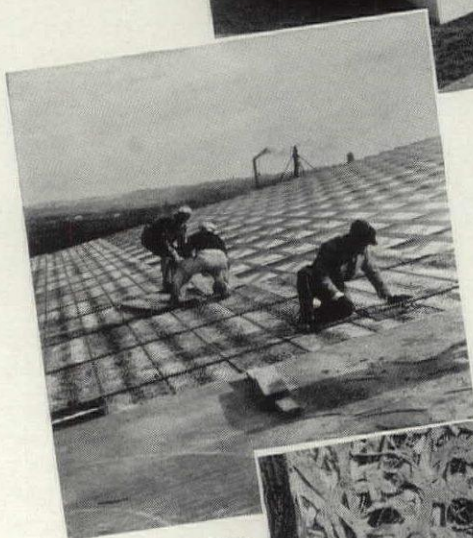


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## LETTER FROM JUDGE WETMORE

1433 Mendavia Ave.  
Coral Gables, Fla.  
February 3, 1938.

Dear Eddie:

Is it possible that the FEDERAL ARCHITECT has some sort of heart ailment that is affecting its circulation? I have not seen my January number yet. Would you mind giving it a shove and start it off in this direction?

Please note change of address. I haven't moved, as I am still several jumps ahead of the Sheriff; but I have given up my post office box. No; not because I haven't spondulixed the Post Office Department. You see, we have been given carrier service. I had felt for some time that we were entitled to this service, and the fight that we suburbanites put up made the authorities realize how easy it was to lick a postage stamp.

Did you ever see a period? I never did; but I know they are something that belongs to kings, because every once in a while I see mention made in THE FEDERAL ARCHITECT of "the period of Louis this one or that one." One of those old guys got tired of having his Prime Minister treat him like a passenger on a tram car, telling him where to get on and where he was to get off; so one day he just ups and says "L'Etat c'est moi" which I am told means I am the whole cheese. We've some of that kind of officials down here. They seemed to think that all they had to do to make it so was to say "Miami c'est moi" and it would be so. But one of those Grand Juries, motivated by curiosity and egged on by the prosecuting attorney thought otherwise, and has indicted the

Mayor and two of the Commissioners, as well as an expert who was hired to investigate the rates charged the consumers by the Florida Power and Light Company. Charges of all kinds have been flying around thick and fast, and I should think, when they hold a Board of Commissioners meeting, instead of answering present when the roll is called they would answer not guilty.

Someone after whom either Minneapolis or St. Paul was named said that we should be temperate in all things; but if the return of the Grand Jury is any criterion it looks as if someone had been over indulging in malfeasance and misfeasance in office. Somehow I am reminded of the story that is told of Joliet prison. It seems that a prisoner was sent there who was such a little runt that no suit of stripes in stock would fit him. So the prison tailor was instructed to make a suit for him. It is probable that it was the only suit that he had ever had made to his measurements, and he was so proud of it that he became offensive to the other prisoners. One night while he slept the suit was abstracted from his cell—probably with the connivance of the guard. Next morning when the runt discovered his loss he put up a sore-eared yell that could be heard a mile. He demanded to see the Warden, claiming that he had made a discovery that the Warden ought to know about. He was so vociferous, insistent and persistent that it was thought he might have discovered some plot to break jail. He was taken before the Warden and when asked what it was that he wanted to see him about, he said "Warden, I have made a discovery that you ought to know about. *There are thieves in this place.*"

The next thing in order will be the trial of these officials, and if they are found guilty I hope they will not be let off with a fine or with a Scotch verdict, Not guilty, but don't do it again. If they are guilty they must be separated from the public service and made to serve the public like the chap in the last line of the following verse that I have tried to quote from John G. Saxe's "College Retrospection," where the poet tells what has become of some of his old college mates. I may not have it literally because my books are in Washington.

"Ah, me; what changes time has wrought,  
And how predictions have miscarried,  
And some have reached the goal they sought,  
And some are dead, and some are married.  
Some on leading journals war,  
And some as politicians bicker;  
Some are pleading at the bar—  
For jury verdicts or for liquor.  
Some were ruined in the war,  
And lost their all in that revulsion;  
Some serve the states for handsome fees,  
And one, I hear, upon compulsion."

The *Miami Herald*, under the caption: WE HAVE WITH US TODAY features the arrival in Miami of the important personages who come here to get thawed out or to indulge in winter sea bathing. When I came here they considered it first page news and gave me a quarter of a page. I haven't seen your name in that column yet, but hope to do so. Don't be



---

# EVERY ARCHITECT SHOULD KNOW

## A NUMBER OF FUNDAMENTALS CONCERNING AIR CONDITIONING AND REFRIGERANTS

**I**F the air conditioning installation is a sizable one involving a duct system, the duct system should conform to the rules published by the National Board of Fire Underwriters in NBFU Pamphlet No. 90 entitled, "Regulations of the National Board of Fire Underwriters for the Installation of Air Conditioning, Warm Air Heating, Air Cooling and Ventilating Systems" (July 15, 1937). These regulations are published by the Board at 85 John Street, New York City, or 222 West Adams Street, Chicago. See Paragraph 191 covering refrigerants and specify condensing equipment for permissible refrigerants.

If the system is a small commercial or air conditioning installation containing not over 100 pounds of refrigerant, design to conform to the "Standard For Air Conditioning and Commercial Refrigerating Equipment" (Subject 207, June 16, 1937)

of Underwriters' Laboratories, Inc., 207 East Ohio Street, Chicago. See Paragraphs 36 and 37 and draw specification for air conditioning refrigerants in accordance.

Should your client desire a unit system containing not more than 20 pounds of refrigerant, Underwriters' Laboratories, Inc., have a "Standard For Unit Refrigerating Systems" (Subject 207, June 15, 1937). Secure a copy of this standard and consult Paragraphs 29 and 30 for permissible refrigerants for air conditioning.



# FREON

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*safe refrigerants*

\* "Freon" is Kinetic's registered trade mark for its fluorine refrigerants.

If you desire to consult Underwriters' Laboratories Report MH-2375 entitled, "The Comparative Life, Fire and Explosion Hazards of the Common Refrigerants," inquire at the reference desk of your Public Library. Or we will mail a copy, postpaid, on receipt of one dollar.

By following these rules, you avoid any possibility of penalty to your client in insurance rates for using refrigerating and air conditioning systems in non-conformance with regulations.

If you would be safe respecting refrigerants, specify the safe "Freon" refrigerants for air conditioning, which meet all the specifications of the National Board of Fire Underwriters and the Underwriters' Laboratories, Inc.

"Freon" refrigerants are non-toxic, non-flammable and non-injurious to foods, furs, books, paintings and other fragile and perishable articles.



a 'traid cat. Miami is no worse than Jackson City used to be. It had a boom a few years ago when the sky was the limit for real estate values, and the demand for post office boxes was so in excess of the supply that a Jewish realtor is said to have paid a box renter several hundred dollars for a twelve month's privilege of having his mail directed to that box. At least that is the tale as told to me. I have no doubt of its truth except in two particulars. The first concerns the religious persuasion of the party in question, and the second the price paid. In other respects it seems reasonable. When the boom burst everything and nearly everybody went flat. Lots out here in the sticks where I live sold readily during the boom for \$5,000 and can be bought now for \$350. I came down here sometime after the boom burst and I found that any man with an honest-to-goodness dollar in his pocket was exceedingly popular and much sought after, as was also his honest-to-goodness dollar. Miami has surely but slowly got on its feet after "taking the count" but values will never get back where they were during the boom.

Miami has a good many advantages and attractions to offer the tourist and the homeseeker. It has the horse, dog and roller-derby races where they can woo Lady Fortune and find out whether she loves them or loves them not; it has all kinds of fishing where they can exercise and develop their propensity for lying; it has night clubs where they can wine and dine and spend their last nickel; it has bathing beaches where the ladies promenade in costumes—if you can call them costumes—so scant that they leave little to the imagination; it has hotels where they can luxuriate so long as the folks back home continue to honor drafts on them; it has a salubrious climate, curative sunshine, and refreshing breezes right off the Gulf Stream which temper the climate both winter and summer, and it has occasional hurricanes to keep things from becoming too monotonous. Miami also has its churches, institutions of learning, fine stores, palatial residences and hovels, and its rich men, poor men, beggermen, thieves—the latter allegedly embracing certain municipal officials, if the recent return of the Grand Jury is any criterion. So you see, there is sufficient variety to suit the taste of almost anybody, from the parson and puritan to the professor, politician or patrician, as well as all the intermediate grades of society. Come on in; the water is fine.

Had a call from Algernon Blair's son last week. He is the contractor for the Miami Beach post office building. Was agreeably surprised to find Richey on the building making an inspection. I don't know what rate of progress is being made, but the building will fit nicely into the surroundings. The site appears large enough to permit of the future extension of the workroom when the time comes, as come it will, because Miami Beach is growing rapidly.

I also ran onto Construction Engineer Brown on the job. He seemed to be very much engaged, but not so much so as to prevent a cordial exchange of greetings.

Please give my affectionate regards to the "Old

Guard," and with best wishes for you always, believe me,

Sincerely yours,  
"THE JUDGE."

## MORE LETTERS



Cincinnati, O.  
March 15, 1938.

Mr. Edwin B. Morris, Editor,  
THE FEDERAL ARCHITECT.

Dear Mr. Morris:

"As the dew from above," the enclosed checks totaling six dollars (\$6.00), represent a one hundred per cent Cincinnati response for the THE FEDERAL ARCHITECT.

All of us appreciate receiving THE FEDERAL ARCHITECT regularly. Judge Wetmore's humor, Changes in Assignments and the recent articles on Concrete and Steel are valuable to all Construction Engineers.

Attached are two snapshots of the New Cincinnati Post Office & Court House, which may be used as the Editor chooses.

Hoping our subscriptions will assist in "brightening up the day and help the old financial situation at 1700 Eye Street" we remain,

Very truly yours,  
CALVIN H. COOL,  
JOSEPH ARAKELIAN,  
OLIVER V. DUKES,  
ROBERT S. HALE,  
Construction Engineers.

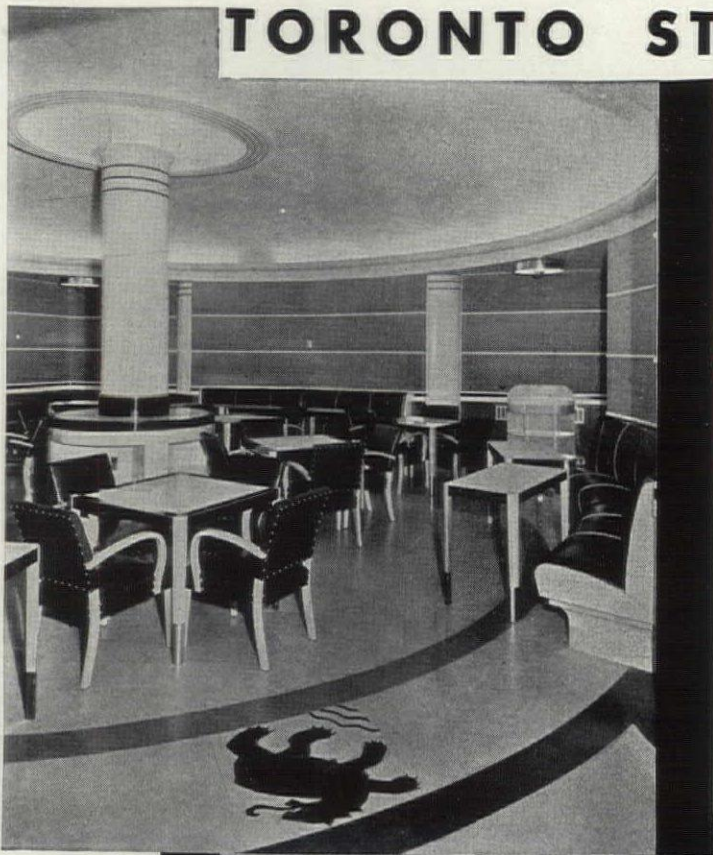
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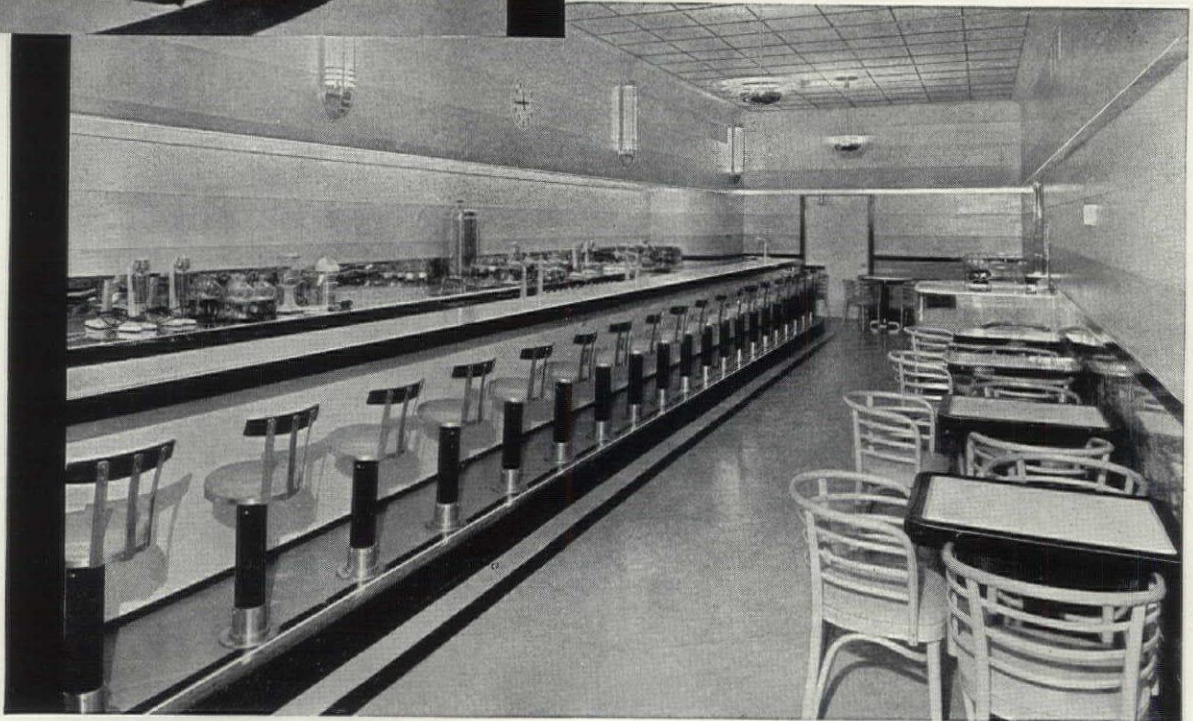


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## BACON'S CASTLE

*Drawing by Rudolph Stanley-Brown to illustrate the article on this house appearing on page 15.*





# THE FEDERAL ARCHITECT

Published for the Association of Federal Architects  
1700 Eye St., Washington, D. C.



■ HENRY SAYLOR, former editor of *Architecture* is always trying to put architecture (the abstract article) on the map. He has just inaugurated a new magazine of the non-advertising-bearing kind now in vogue which you can slip in the outside pocket of your coat and is therefore spoken of as a vest-pocket size.

The idea is, since statistics show that ninety-nine percent of all architects can read, to encourage them to read. This little volume or tome can be carried in the pocket so that when there is a moment it can be opened for perusal. For instance, when a friend is changing a tire you can curl up in the rear seat and learn about Michael Angelo, until the friend is through. Or when the check for luncheon appears, you can suddenly be absorbed in the book until the unpleasant formalities in connection with the check have blown over.

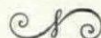
There will be other opportunities. If, possibly, you happen to be drawn into a lecture on the folk lore of the lower Chilean peninsula. Or a little-theatre movement giving *Lady Windermere's Fan*. Or "My Trip to Havana" at the woman's Club.

The technique is simple. You select a non-calorie-counting person of the female persuasion having a large base, shaft and cap and huddle snugly behind her, nursing your overcoat, muffler and hat on your knees. In the midst of these, camouflaged by a program, is the Architects' World. When the lecturer's eyes begin to glaze over in the ecstasy of inspiration you bend forward and lose yourself pleasantly in the little volume, like the Duke of Clarence drowning in a butt of malmsey and have to be nudged in the ribs when the

lecture is over.

We sketch hastily the alluring possibilities of the publication. It is a neutralizer against boredom. The hour in the station because you had read the A. M. train instead of the P. M., the half-hour at the glove counter because the little woman thought she said the stocking counter, and so on. The point is, instead of pacing like a caged lion, you can read and steep yourself in the mellow and soothing aspects of the great profession of architecture.

This little publication furnishes nice possibilities. Henry Saylor represents in a way the cultural side of architecture. He has devoted his life to putting into print the inner part of the profession, to throwing a light on the backdrop against which architectural inspiration functions.



■ THE Painting and Sculpture Section of the Procurement Division have in charge a competition, to be nationwide, for a design to supersede the present Buffalo design for the American five-cent piece.

This is going to be a spirited and interesting contest. We ourselves are a little smug about it, because we have thought out the winning scheme. All we need now is someone to execute the model for us.

Our idea? Give heed, and we are sure you will all, unanimously agree that it is the winning one.

Our plan for the nickel is so outstandingly sound that we are certain it will outdistance all others. In brief it is for a nickel whose salient feature will be that when it is thrown ringingly down on the counter it will purchase a quarter's worth.

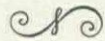
Right there we have put our finger on and are curing the foremost artistic defect of the present coin—the fact that it will purchase



only a nickel's worth.

In drawing, our sculptural *parte* will be simple, in composition, uncomplicated. All lines will lead to one point: that one nickel will buy two packs of Camels, a day-before-pay-day lunch, a pound of coffee, a previous-to-five-thirty admission to the movies. Or lay down four and get a standard table-d'hote dinner with a linen napkin, ripe olives and celery. But we might go on and on.

Stop in some time after we have won the competition and we will explain how we happened to think of the thing.



■ A WEEK or so before the Ides of March we went to the first annual dinner of the T-square Club of the Washington Chapter of the American Institute of Architects. The T-square Club—a title borrowed from an erstwhile Philadelphia organization—is a play club to provide once a year a function at which all architects and men architecturally inclined could foregather in a spirit of abandon and frivolity.

The idea is, we believe, Mr. Louis Justement's. He is the president of the Washington chapter and has fine ideas on the present needs of the architectural profession. He and Gilbert Rodier and Joe Parks, and a score of others put on an event that was full of enthusiasm and mercurial joyousness.

The first great achievement of these men of genius was to break down the tufted and upholstered food ideas of the stream-lined Mayflower Hotel and provide something hitherto unknown at a hotel dinner—viz. and to wit, things to eat.

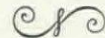
The first thing that the aerial attack on the hotel kitchen brought forth was a vegetable soup like Aunt Lizzie up in Camden, N. J. used to prepare. Following that a Hungarian goulash brought on the table in saucepans with long handles and dished out by one of the guests of known impartiality and containing tender meat from contented cows raised under that system of progressive education producing braised beef. Meter-long loaves of bread, sweet butter, pitchers of half beer and half foam, a salad bowl, cheeses.

After that came a naive and enthusiastic series of stage skits, tied together to recount the life of a certain Percy P. Pencilpusher, from a period twenty minutes before birth to his flowering as a fullfledged architect.

The joined skits from the gifted pen of Gilbert Rodier were joyous in their drafting-room quality. They brought into a reality the laughable memories of past days and nights in school and office drafting room, with many a keen shaft of ridicule.

The thanks of many went to Mr. Justement and his confederates in arranging the evening. There was something important in the spirit of it. Architecture and architects have been rather glum and blue. At this gathering there was a new spirit, a prophetic optimism, a desire to tie things together—like old times.

If the spirit of this could spread—well, the time is coming. It could do no harm.



■ A WHILE ago we went to a Sunday night meeting at the Arts Club in Washington at which Architecture was the subject under discussion. The persons present were all of artistic leanings and talents but with a few exceptions were not architecturally trained. That of course provided a pleasant field day for those who were architecturally trained. While the chosen medium of expression of the architect is the pencil, at the same time he is human enough to like to hear what he has to say on the subject of his profession.

Morris Leisenring conducted the meeting with his customary nonchalant efficiency, spicing it with the Leisenrish sly sense of humor. The discussion naturally veered around to housing, which a good many architects have now begun to think is the present hope of architecture.

We were interested in the remarks of a certain logically-minded lady, who did not approve of "stream-lined" kitchens.

She made a good case. We hadn't considered the subject from just her point of view before. We had thought that the recent U-shaped scheme of kitchen utilities where cupboards to right cupboards to left cupboards in front volley and thunder, was a fairly good scheme, causing the raw materials to move



logically forward emerging finally as the completed and edible food.

The speaker called attention, however, to the complication of parts that resulted. She instanced her search in a strange kitchen for a certain article urgently needed, in the search for which she had to open twenty-four doors.

She unquestionably had something there. Our perfect modern kitchens are over-cupboarded. They become complex filing systems. Manifestly no kitchen mind could have a precise filing scheme behind twenty-four unnumbered and unlettered doors. The assumption is therefore that at least a percentage of the doors must conceal an untidiness of which one would be ashamed out in the open.

As a matter of fact this is an indicator of the eternal cycle of housekeeping. First, the open system in which all the functional devices are frankly displayed, as in the open-work piping of the pre-Centennial kitchens and baths. Following that came the smug modesty of the tongue-and-grooved boarding around tubs, sinks and lavatories. Disgust, waterbugs and ants followed and thereupon a desire again came for open housekeeping openly arrived at. Causing the tongue-and-grooved stuff to disappear and everywhere to appear nickelled pipes with no caves nor caverns for the beetle family.

The arrangement was obviously sanitary, but the mood could not last. The high visibility wore housekeepers to a threadpaper. "Can't we conceal" they wailed, "all the things that ought to be concealed."

Then what? They made built-in tubs, abounding in flush surfaces. Pedestal lavatories, pipeless to the naked eye. Combination tank-and-bowls. Result, no visible water supply. The only pipe you now see in a bath-room is the one the head of the house takes in to smoke while shaving.

The same philosophy of concealment in the kitchen. Pipes, wiring, steel-wool, Dutch-Cleanser, ladles, skillets, silver-polish, rags, potato-ricers, rags, rags, broken toasters, dust pans, string, bags, rags, dust cloths, soap, chamois-skins, canned things all in the cupboards. But outside all is smooth stream-lined and prophyllactic.

That will last a while until the insect and rodent world gets the hang of it. Then it will occur to us that all this stream-lining and con-

cealing is unsanitary. And then we will again go back to the pre-Centennial idea of open housekeeping openly arrived at.

What do you mean, Progress?



■ **WE** had some interest in reading and scanning the recent Frank-Lloyd-Wright issue of the Architectural Forum. Mr. Wright is an entertaining—if somewhat smug—architectural campaigner. He has the front-page attitude. His talk is of great revolutionary changes in plan and set-up, which makes good reading, if one doesn't take it too seriously.

We were especially interested in his house-plan to end all house-plans—a scheme for a five-thousand dollar residence.

This plan to end all plans began with a living-room of ample size with a fireplace at one end. In sitting before the fireplace you were on an axis running from the front door through the living room to a corridor extending back into the bowels of the house.

Sitting there before the fire-place, in addition to being in the way of all traffic through the house, you had a view of all the domestic processes of the house.

On one side of the corridor was an open faced kitchen with no partition separating it from the corridor. On the other side of it was an open faced dining alcove.

Looking and smelling in the direction of this culinary centre, one is informed in advance of the meals to be served. And when one, in this sumptuous scheme of living, is ushered into the dining alcove he is able from his seat to look into the kitchen and be aware of the signs, portents and odors in the kitchen, the course of the soiled dishes removed from the table and all the post-prandial arrangements, educational if not appetizing, which go on in the kitchen.

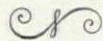
The corridor extends further to the rear. A workable scheme could have been arranged, but possibly it wouldn't have been in the key of this super-plan.

So the bathroom was placed upon one side of the corridor and the bed-rooms upon the other, with the result that the Fuller-brush man knocking on the front door and the casual



caller sitting before the fire-place have a pleasant view of the family dashing from bed- to bath-room and back again.

It is one of those plans that sparkles with originality, and presents a scheme of living which we could be persuaded to approve—for others.



■ WE were walking through the Capitol in Washington one Sunday not long ago and we came across the strange sight of one of the guides standing alone before a certain painting of historic interest, explaining aloud its memorable features, with gestures and studied oratorical effects.

At first, from our distant position, we thought he was practicing his guide's ballyhoo and admired him for his courage in doing it thus publicly.

We soon discovered however that he was at the moment actually professionally engaged, but that the little knot of people he was shepherding around had become disengaged from him due to the fact that they had seen a friend and had flocked over to exchange eager gossip, leaving the guide without his following.

The speaker at length finished his peroration, turned modestly to receive the plaudits of his public, and found no public. He shrugged his shoulders and without shedding a tear, hastily reassembled the truants, his only regret seemingly being for their lost opportunity.



The annual meeting of the Association of Federal Architects was held at the Indian Spring Country Club on April 26th. The following officers were elected:

W. R. TALBOTT, Veterans Administration, President  
NORMAN D. MONFALCONE, War Department, Vice President  
G. E. CHAPPELEAR, Veterans Administration, Secretary  
K. W. HARTIG, Navy Department, Treasurer  
J. J. McMAHON, Treasury Department, Director  
E. C. BACHSMIDT, Treasury Department, Director  
F. J. RITTER, War Department, Director  
JAMES E. ECKLOFF, Navy Department, Director  
FLORIAN A. ELLIOT, Veterans Administration, Director  
J. E. MILLER, Agricultural Department, Director  
H. A. MAGNUSON, Agricultural Department, Director





Through mist and trees and overhanging  
years, this sunshine.

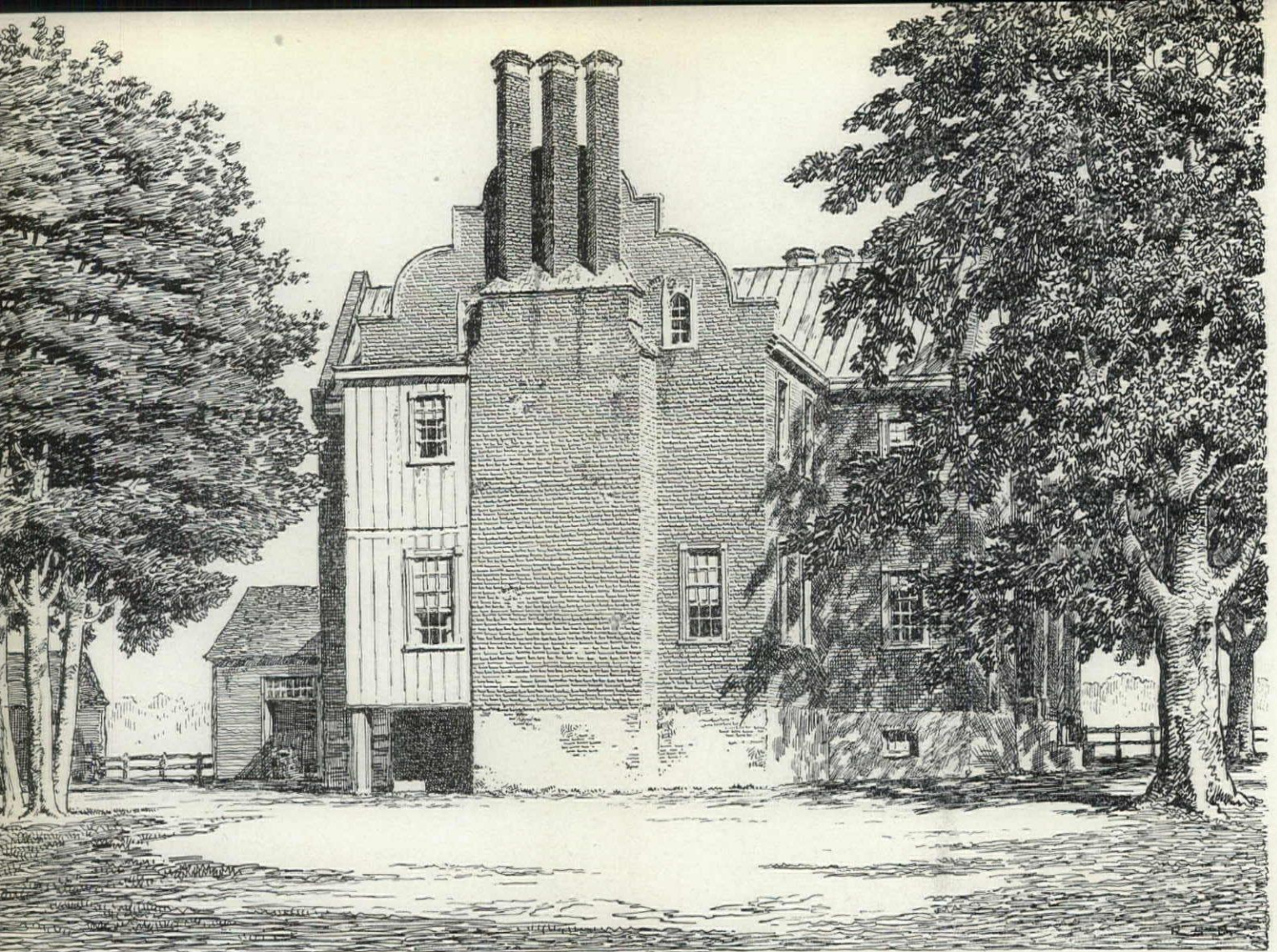
## BACON'S CASTLE *by Katharine Stanley-Brown*

"For yesterday is but a dream, and tomorrow only a vision," and the present as we live it slips away. Like ships that go forward beyond the horizon, like the whirring of wings as the wedged duck fly south, like the fire that flickers to its death, we see our moment pass. How faint and dim that which has already gone. We do not know enough. We search the records, musty and half-torn; we stare at buildings built long, long ago. We ask, we seek, but always the past, the actual past, eludes us even as our own moment eludes us now. If I could stand—one instant would be enough—in this low-timbered hall and see the white-wash fresh; feel the wind from that small casement blow the dark red damask on the southern wall; see Emmet's lady, watch her, blond or brown, as she stood by the window then, what tales my hand could tell! Slim and jimpson perhaps she was, or tall and stately, robed in dignity. I do not know, but surely she stood here, just here, where her dark form did not obscure the light, and watched him take his diamond in his hand and cut the lovely strange uneven lines that have lasted to this day. Each of them is clear, precise and fine. I shall write them all down, although no one knows who Emmet was or who his lady.

The drive to this old place is drenched in gloom. The road is only a rut that makes its way through a quadruple line of old oak trees hung with vines. Gradually through the trees you see the odd old brick mansion called Bacon's Castle, more or less a ruin, but from out the jumbled lines you sense its grandeur, feel its erstwhile happy days. By 1655, they say, it was entirely built, in days when England was full of fine Tudor palaces and homes. Who lived here all the years since then, and loved the twisted stair, the shallow mouldings, the tall chimney spires? I will tell you what I know, but Bacon's Castle is like the Old World, like a crumbling, rook-filled castle in Wales. Its secrets show in its every line and yet they are buried in its walls. All but one, the secret of Emmet and his love. That shines, like the jewels on the hilt of a lady's dagger.

Arthur Allen, patriot, Tory, immigrant, it was he who built this "pile." Newly imported to a sky-swept land, by a magic now quite lost, his men with careful eye cut and piled and plastered wood and stone and mortar into lovely shapes, into old world forms. Who should know if he had a plan, or a master-builder or even a book of lines? Most probably not. In shirt-



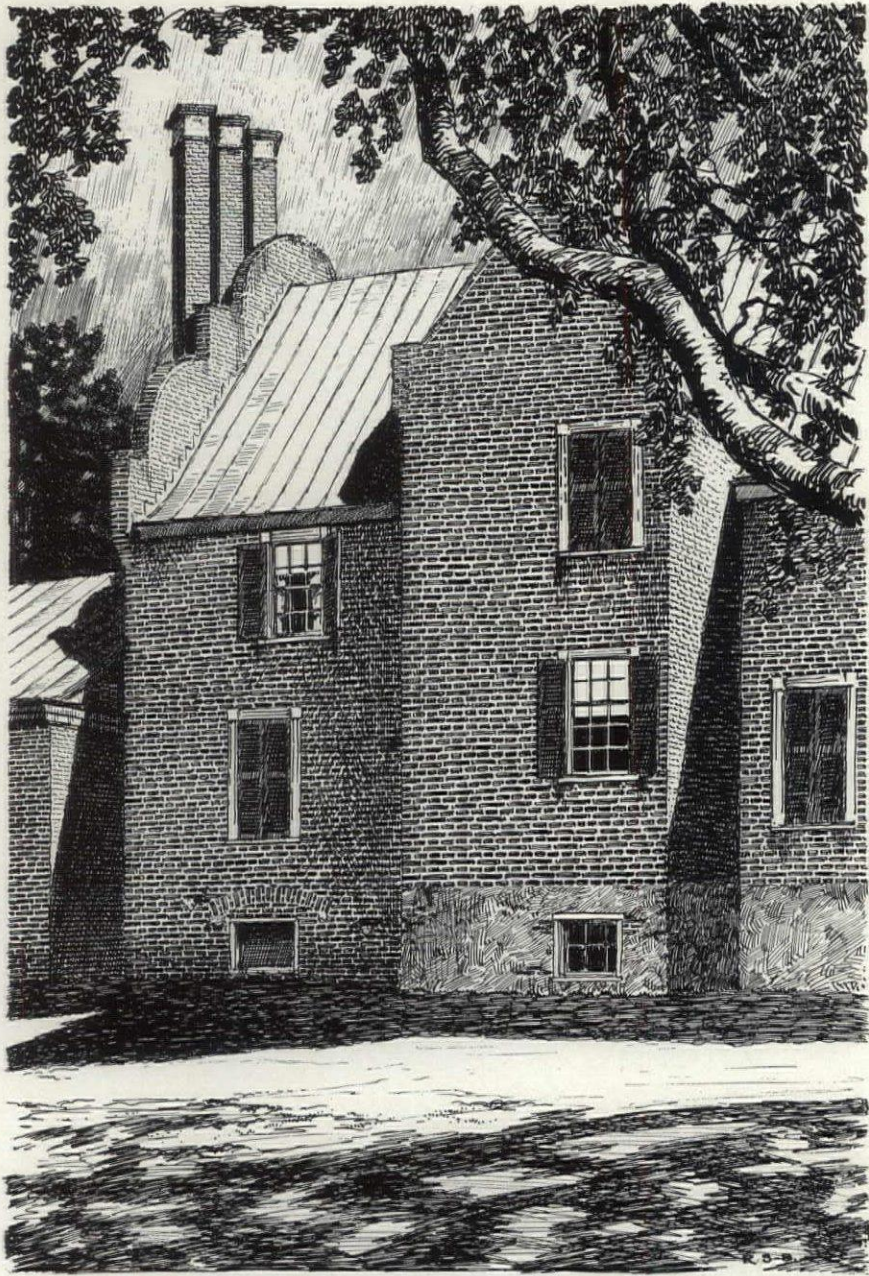


sleeves, with knee-breeches bearing holes, no doubt he sawed and labored with the rest, hoarse at shouting out commands. But look what a forward, zealous, prideful sort of man he must have been! In 1655 in New England they built the clapboard house, snug, like a cottage, against the storm and the Indian. But Arthur Allen, like many a Virginia planter after him built a mansion, red brick and strong, designed not alone as a protection against enemies and cruel weather, but for elegance and fine living. You only need to put your foot over the threshold of the great hall, low-ceilinged, narrow as it is, to feel its power and ancient grace. It has nothing in it now, but cracked plaster and cobwebs, an open hearth, and Emmet's love letter sparkling from the narrow window-pane, but the imaginative eye takes not an instant to fill in the oval oaken table, with its tankards and its book, the high-backed chairs, muskets on the wall, and ladies, clad in leather, clad in silk, surrounded by their lords, a merry throng, a strong, a hearty, an enduring group. Cards or a bout of drinking, sword-play or a wrestling match, cock-fighting, dog-racing, no day in Virginia was quite long enough. "Oh, Lord," as someone else has said, "how peaceful life would be were it not for our pleasures!" And then their work! How hard they must have worked, to hew the timber, build the wretched roads. Make brick and mortar, quarry out the stone. And

what of crops, the wheat, the corn, the oats! Long shares to plow, and endless fields to lease. And wood be chopped to burn, and flax be spun and wove, and food be cooked to eat. A never-ending day. A day of toil and struggle just that one might live. You feel it in the bones of this old house. It stands erect and strong, but bears the scars and stains of years of human lives.

In Tudor England houses built in ways that now look to us "quaint" were simply natural. Gable ends with curves, tall chimneys piled three at a time against the gable ends, stairs in a sort of added porch, and actual square porches themselves were all part of the pattern. A beautiful example of all Tudor characteristics can be found in Knole, Sevenoaks, the seat of the Sackville family. But in America, brick Tudor houses are very rare. The Adam-Thoroughgood House on the Lynnhaven River, Princess Anne County, is perhaps the oldest house in Virginia showing a few of these characteristics now that "Malvern Hill," burned in 1915, which Thomas Cocke built in the late 17th century, is gone. "Fairfield" in Gloucester County, Virginia built by Lewis Burwell in 1692 had the same chimney stacks as Bacon's Castle but no gable ends against its hip roof. It too was destroyed by fire in 1900. The Providence House in Boston was quite like Bacon's Castle and had remains of six chimneys. But it too was demolished, so that





Bacon's Castle is now an extremely rare architectural remain in the United States. It also, aside from an addition in the classic manner against one of its fine gable ends, the introduction of sash windows and the plastering of the front wall of the entrance tower has suffered few changes. Authorities seem to think the south front was once elaborately decorated with moulded and cut brick work but when the entrance was changed from the south to the east of the tower, the whole front was plastered as well as the trim around the second story windows. Inside, much of the paneling and trim is original although the staircase was added later.

Arthur Allen's house stands in Surry County, Virginia, not many miles away from the Old Brick

Church of Isle of Wight County, St. Luke's, which built in 1632, is one of the two buttressed seventeenth century churches and possibly the oldest church in the United States. In 1670 Arthur Allen left his house to his son and heir Major Arthur Allen. In those days it was a large plantation on which even now there remain more original out buildings than on any other Virginia colonial estate with the exception of Shirley and Stratford. When in 1676 a group of Nathaniel Bacon's followers, led by William Rookings, were looking for a stronghold for him, knowing Major Allen's sympathy with the royal cause they seized his house, placed guns in the tower windows and otherwise fortified it. Although they held this house four months, Bacon himself never came there or saw it,



despite which the name Bacon's Castle has always clung to it. Bacon's individual and patriotic efforts to protect the Virginia settlers against the Indians when the English Governor, Berkeley, failed to act resulted in Berkeley's flight but the rebellion collapsed when Bacon died. The old Allen house, Bacon's Castle, was the last place held by the rebels, several of whom were shortly afterwards hung for treason. That Major Allen was not as interested in Bacon's cause as his adherents had supposed comes to light in the records of the Surry County Court House where we read that on July 3d, 1677 Major Arthur Allen sued Mr. Robert Burgess "for that during the late most horrid Rebellion he with others did seize and keep garrison in the plt's house neare fower months."

When Major Allen died in 1710, the house was inherited by his son, also named Arthur, who died in 1725 leaving it in turn to his only son James. Upon his death the property was inherited by his sister Katherine who married Benjamin Cocke. From that time on there seems to be no record of the owners of the old house, nor does anyone thereabouts nowadays recall the names of Emmet, Indy or Nan which are cut upon the window-pane.

You see some memories come, rather faint and dull, as though through tall Virginia oaks, in swamps of vicious growth, all tangled with their vines, one saw between the leaves some tiny bits of sun. Only one picture stands complete, that bright December day, when cold without and warm within, Emmet wrote his love. Almost a hundred years ago, but in perfect wording still. Read it slowly, you will see, the longer lines to Nan and at the top, the tiny loving verse to Indy, written two years later. Were those names the same, two pet names for one wife? Or did the first

wife die, and Emmet, catching in his Indy's eye too many glances sad and wishful toward that so open past, think one September day, "Well do I love her too. And now shall I declare it." I do not know. Even as he wrote: "after both of our heads may have been laid in the dust" . . . "yet these words may be found." Bright flowers of the past, pressed dry beyond recognition, but still colored warm with love.

Inscriptions on a window-pane in Bacon's Castle, Virginia.

"Dear Indy

In storm or sunshine, joy or strife—

Thou art—my own, my much loved wife—

The treasured-blessing of my life—

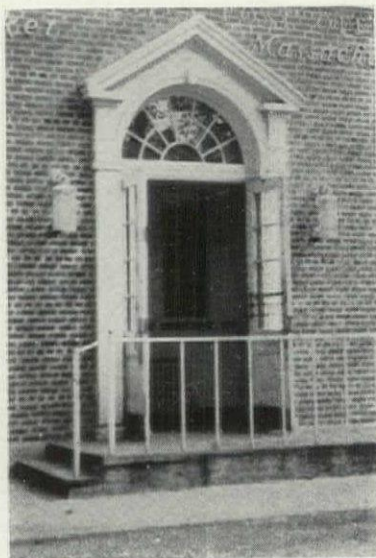
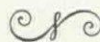
Sep 1840

Em

Thou art but a brittle tablet on which to inscribe a record of human happiness, and yet these words may be found here even after both of our heads may have been laid in the dust, so uncertain is everything connected with human life! We are happy now dearest Nan, enjoying all the blessings of health, prosperity and mutual affection and confidence—Let us make the most of these moments of bright and sunny happiness—Let us cull all the beautiful flowers that now strew our paths and lay them at each others feet and when called to another world—another life, let us obey the summons with resignation, consoling ourselves with the reflection that we have been all to each other which duty or affection demanded, and may the Hope of a happy union in a world where care and sorrow are never known cheer the heart and lighten the sufferings of that one of us who by the death of the other may be left in this cheerless world desolate and alone—

December 1838

Emmet."



*IT is always rather dangerous to make a prophecy as to what is going to happen three months in advance, but we nevertheless believe after glancing over our material that the July number of The FEDERAL ARCHITECT will be devoted to Post Offices*





## LIEUTENANT GEORGE O. VON NERTA

A MULTITUDE of persons concerned with building construction will remember George O. von Nerta, late Supervising Engineer, in the Procurement Division. Few of them would, at a glance, connect the Rupert-of-Hentzau figure in the two portraits herewith, with the grave, courteous, efficiently practical person who used to preside at the Supervising Engineer's desk.

Yet these pictures taken in Konigsberg in 1874 are of the young Prussian lieutenant von Nerta. The memory of the erect, alert figure we knew, corresponds with the handsome close-up picture. Who could forget that steady glance, calm yet penetrating, which appears so strikingly in the photograph and which was also so striking a characteristic of him in later life.

Von Nerta came to America during the construction of the State, War and Navy Building and served as assistant to the construction engineer on the project. He practiced architecture for a while, entered the field force of the Supervising Architect's Office, in 1913 was brought to Washington, made "Technical Officer," and later Supervising Engineer.

He held this latter position until his death in 1935. It was a tribute to him that he was by legislation exempted from retirement, because of his efficient services.





## THE COURT HOUSE AT SMITHFIELD, VIRGINIA

THE Williams House, the original Court House in Smithfield, Virginia, was built in 1750. The court order book of Isle of Wight county has this entry:

"Dec. 7th, 1749, these are justice present. Robert Burwell, Thomas Gale, John Wills, Thomas Smith, John Applewhaite, Hugh Jiles, John Eley, James Burh.

The Court this day taken into consideration to appoint Place whereon to erect a Court House and other Buildings for the use of the County. It is the Opinion of the Court and accordingly ordered that a Court House, Prison, Stocks, be erected and built on the place called Hoggards, near the house of Mr. Joseph Baker and it is further Ordered that John Wills and William Hodsdon, gentlemen apply to some undertaker to Prepare a Plan for the said building and that they make their report to the next Court."

From same Book. "Aug. 1st, 1751. Concerning alterations in Court House, it is ordered that William Rand do erect two chimneys in the said Court House and carry out the circular part flush and he be paid twenty lbs extraordinary out of the County Money."

From 1750, for fifty years, the county courthouse was used for courthouse, clerk's office and the jail. Across Main street was the "courthouse green," which, on court days, was filled with conveyances of all kinds used in those days. The stone steps of the little brick clerk's office was a favorite place for auctioneers to ply their trade in the sale of slaves, the hiring of slaves and the sale of other property. The county seat was moved from Smithfield in 1800.

This interesting example of the architecture of an elder day still stands. It served as data for the architects of Williamsburg when they were constructing the semi-circular rooms of the State Capitol.

In this building is exemplified one of the architectural problems of this country, the preservation of its ancient monument and structures. The Smithfield courthouse was sold to the Government in order that the ground on which it rested might be used as the site for a Federal Post Office, necessitating naturally the demolition of the valued landmark.

As the result of a public subscription the land was repurchased from the Government and the building spared for some years to come. It was a valiant and praiseworthy public act.

The old Philadelphia Custom House and the Decatur House in Washington, both reproduced elsewhere in this issue are other examples of the need for the preservation of historic buildings in the United States.

Historical data furnished by Mrs. Frank B. Simpson of Smithfield, through the courtesy of Congressman Norman B. Hamilton of Virginia.

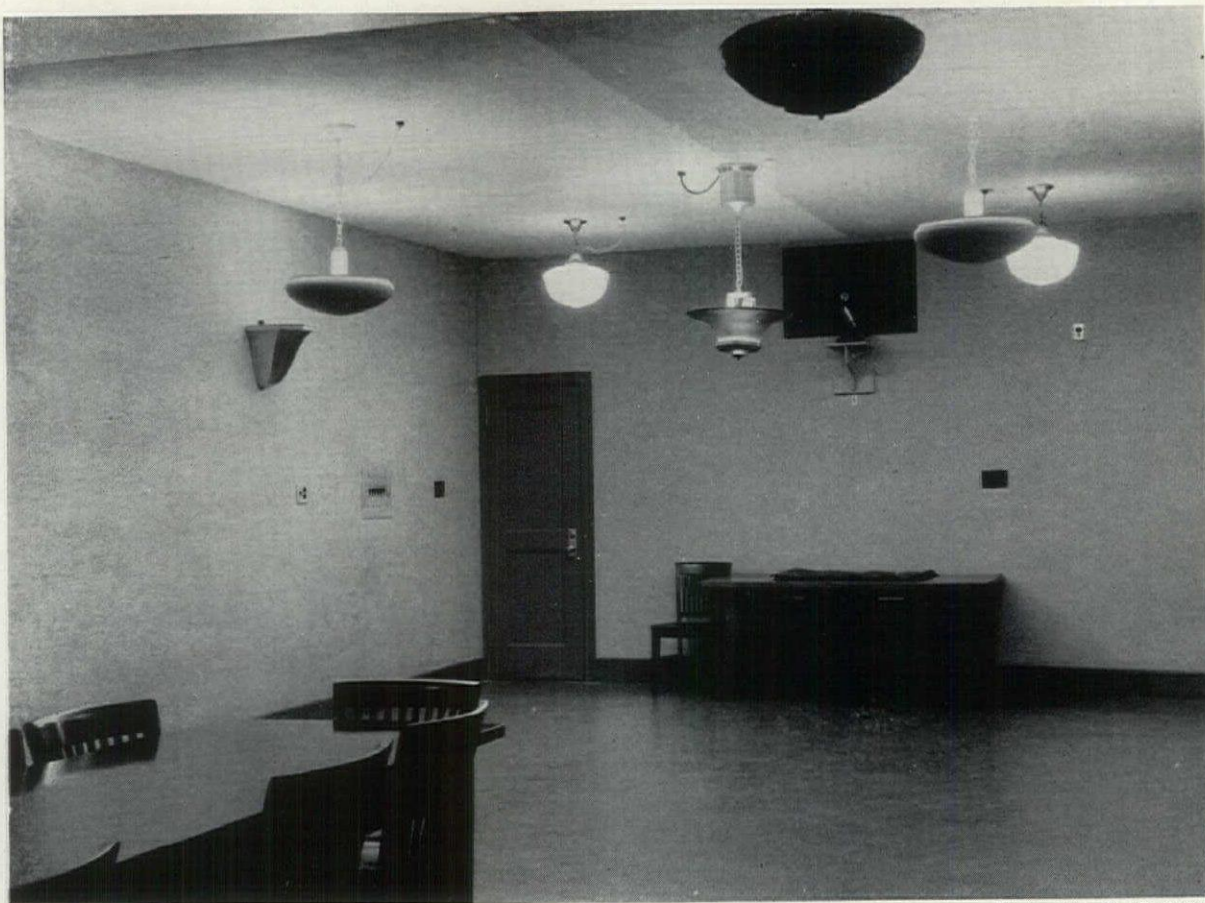




*Photograph by Frances B. Johnson*

*THE COURT HOUSE AT  
SMITHFIELD, VIRGINIA*





*Photographs by Carl Nix*

PROCUREMENT DIVISION  
LIGHTING FIXTURE  
LABORATORY





# PROCUREMENT DIVISION LIGHTING FIXTURE LABORATORY

by ROBERT MAYO, JR.



Early in March of last year the Assistant Director of Procurement in charge of the Public Buildings Branch of the Procurement Division said to me, "I wish you would go to Cleveland"—nothing more. This was somewhat astonishing, and caused apprehension, accompanied by goose pimples. There was a tone of dissatisfaction in his voice, and I thought perhaps this was just his way of presenting me with a passport to the outside world.

Subsequently, it developed that what the Assistant Director wanted was that I should visit the light testing laboratory of one of the country's largest commercial concerns.

Dissatisfaction really was at the bottom of his wish because for some time there had been an undercurrent of criticism of some of our buildings in regard to lighting fixtures and illumination—a most important part of the mechanical equipment of any building, at least during the hours when natural illumination is inadequate or nil. There is no subject so much as that of light and lighting fixtures where each individual feels that his judgment and opinion are the supreme and final word, even though he may not know that there is such a thing as a light-meter for determining intensities and measuring the useful light on a working plane. Therefore, the problem of the illuminating engineer is a very difficult one.

The criticism which has arisen has come principally, I believe, from architects who complained of a lack of appreciation of architectural fitness of our fixtures, although others objected to inadequate intensities or glare, and the Post Office Department, our chief client who also provides the lamps and operates all post office buildings, complained of high current bills and has cut down on the lamp sizes in many instances.

Thus the Mechanical Engineering Section has been on a hot spot, and to some extent very unjustly, because practically none of our critics have been able to see all phases of the subject, nor do they appreciate the financial restrictions under which we operate. Therefore, when I returned from Cleveland I brought with me an intense desire for a room which could be fitted up as a testing laboratory where a line of lighting fixtures could be developed or commercial designs decided upon which would be architecturally pleasing and at the same time economical in the use of current.

A hearty cooperation on the part of the powers-that-be has resulted in a realization of that desire, so that we now have in the Office of the Supervising Architect a room where may be gathered together

the various interests involved and an actual demonstration of a fixture made, together with the figures as to light intensity, first cost of installation and maintenance charges. The walls of this laboratory have been plastered and painted in sections to suit the various conditions met with in our usual type of construction as indicated in the accompanying photographs. The reflecting value of each surface has been determined, and each surface is numbered and labeled. Fixtures are arranged to be attached to plug receptacles in the ceiling, and readings taken of fixtures at various locations and on the different ceilings.

The principal point up for consideration at the moment is the extent to which indirect illumination is to be employed in the future. In recent years, there has been a wave of sentiment passing over the country in favor of indirect lighting and also another one demanding much greater intensities than it has been the office practice to provide. It is natural to presume that these tendencies may have been furthered by the lighting fixture industry and the public utilities with the hope of increasing their business.

The Mechanical Engineering Section has no objection to indirect lighting. It is a glareless and restful light. However, the current consumption and other maintenance costs in connection therewith are much higher than with the direct lighting which it has been our custom in the past to use and on which Government appropriations for maintenance have been based. If the reflecting surfaces are not right as to color or texture, this form of lighting can run to unbelievably high figures, often necessitating an entire revision of the wiring in buildings already constructed with the system of direct lighting.

The following table shows the difference in the various items of costs in one of our small two-story post offices, between our present practice, of using direct illumination with fixtures spaced 10 feet on centers in accordance with the Post Office Department requirements, and the use of indirect illumination with fixtures so spaced as to produce the same intensity as the direct system—15 foot candles on the working plane.

The fixture used in connection with the figures for direct illuminating system was the one shown in the far corner in the photograph of the West End of the Room. The indirect fixture was the one immediately in front of the above noted direct fixture. Operating costs were figured on the basis of 4 hours' use per day, 200 days per year with current at \$0.06 per kw.-hr., which is the average rate at the location selected.



TWO-STORY POST OFFICE BUILDING

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Location	Area Sq. Ft.	No. of Outlets	Total Watt- age	INDIRECT			C & W COSTS		LTG. FIXT. COSTS		ANNUAL CURRENT COSTS		
				No. of Outlets	Ceiling 75%	Ref. Factor 50%	Direct	Indirect	Direct	Indirect	Direct	Indirect	Ref. Factor 50%
Offices 2nd Floor...	3730	37	6850	35	10,500	17,500	\$740	\$700	\$185	\$350	\$326	\$504	\$840
Workroom 1st Floor	3485	36	7200	15	11,250	15,000	720	300	180	150	346	540	720
Tot. Off. & W'kr'm.	7215	73	14,050	50	21,750	32,500	\$1,460	\$1,000	\$365	\$500	\$772	\$1,044	\$1,560
Increase .....		23			7,700	18,700	460			135		272	788
Cost of Lamps per Yr.											\$10.00	\$50.00	\$67.00

Due to the wider spacing of the indirect fixtures in the workroom (the second floor is not affected, due to the small area of the individual rooms), note how the first cost of conduit and wiring decreases and how the current consumption, even with a ceiling of good reflection value, runs up from 14,050 (column 4) for the direct, to 21,750 (column 6) for the indirect system. As the ceilings become discolored from dust and the reflection factor diminishes from 75% to 50%, note how wattage increases from 21,750 to 32,500 (columns 6 and 7). In columns 12, 13, and 14, note how the annual current costs compare, also the cost of lamp renewals.

In the laboratory there are four ceiling sections: two ("A" and "B") are plastered with acoustical plaster; "B" ceiling is left a natural buff color; "A" has had two coats of white casein paint. The other two sections are hard, smooth plaster; section "C" is left a natural pure white; and "D" is painted two coats of lead and oil in a very light cream eggshell finish. Their reflection values are as follows:

- A=70%
- B=40%
- C=85%
- D=80%

Foot candle readings on the working plane were taken of the direct fixture shown in the photograph of the West End of the Room hereinbefore referred to, and also of the indirect fixture referred to in the same photograph. Readings were taken with both fixtures on all ceilings.

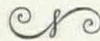
On the "D" ceiling the direct fixture with a 200 watt lamp showed an average illumination of 11.1 foot candles over a 9 foot spread on the working plane.

On the "B" ceiling this fixture shows a drop to 10 foot candles.

The indirect fixture with a 300 watt lamp and mirrored reflector on the "D" ceiling showed an average illumination of 11.6 foot candles, but on the "B" ceiling the foot candles dropped to 7.

A comparison of these figures shows how little the discoloration of the ceiling affects the direct illumination compared with the indirect, and gives a rough indication of the extent to which repainting would be required to maintain a good standard of illumination.

Therefore, the case rests with the two departments mainly concerned, to determine to what extent indirect illumination is to be employed in the future, and for each department to procure the necessary funds to put the change into effect. After the question of the extent to which the indirect lighting is to be used is settled, it is proposed, as funds become available and opportunity presents, to extend the scope of the investigation from general room illumination and fixture design to special requirements met with in our work, such as the illumination of murals and post office workroom cases of various types; also to the illumination of hospital wards, operating rooms, etc., in order to eliminate glare and objections that have been raised to any fixture which has surfaces on which dust may collect, thereby becoming sources of possible contamination.



*The annual architectural exhibit of the Association of Federal Architects will be held during the full month of May in the National Museum, on the Mall, Washington, D. C.*





PYLON AT MERIDIAN PARK

THIS is a reinforced concrete of the most advanced and *de luxe* type. In Washington some twenty years or more ago John Early began making experiments in concrete with the idea of securing increased hydration of the cement so that structural strength could be attained in a very short time, thus permitting the forms to be stripped while the surface was still workable.

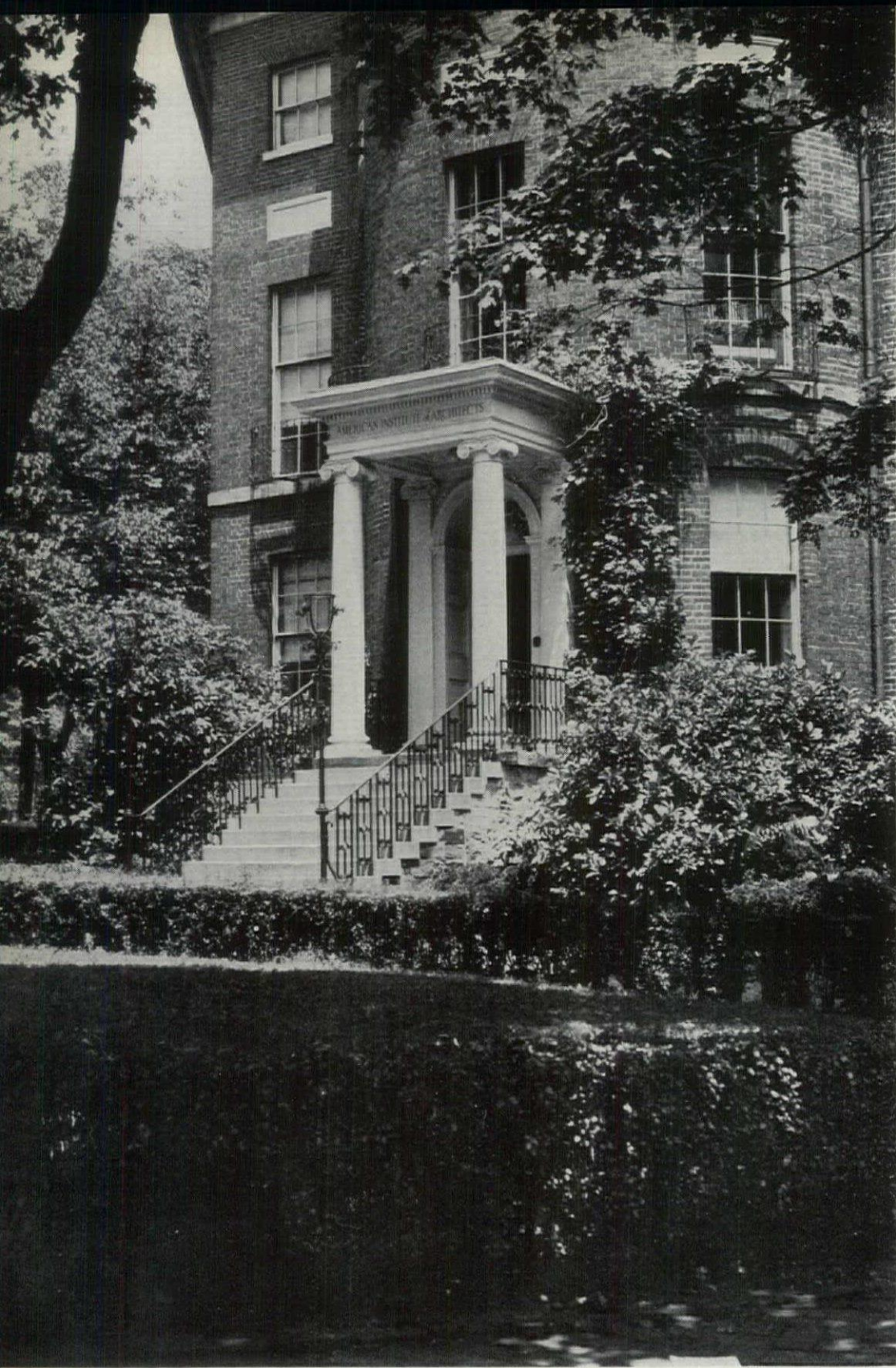
The concrete at Meridian Park was one of the earlier projects which he constructed. A similar pylon to this one has an entrance feature in the archway instead of a fountain. Within the pylon is a grained vault. This grained vault was poured and at the end of twenty hours the forms removed, without crack or catastrophe.

In order to accomplish this the forms were lined with sheet metal to make them waterproof, the aggregate, sand and cement were heated. Mr. Early has simplified his procedure somewhat since that time but his principle has been to strip the form as soon as possible.

While the concrete is still green he wire brushes out all the cement so that nothing but the aggregate shows. This has given him opportunity, by carefully selecting the surface aggregate to obtain beautiful color effects. The replica of the Parthenon in concrete at Nashville is a splendid reproduction of the old temple in archæologically correct colors.

Early has discovered through long study various types of aggregates with which he seems able to produce all the colors of the spectrum in permanent and unfading form.



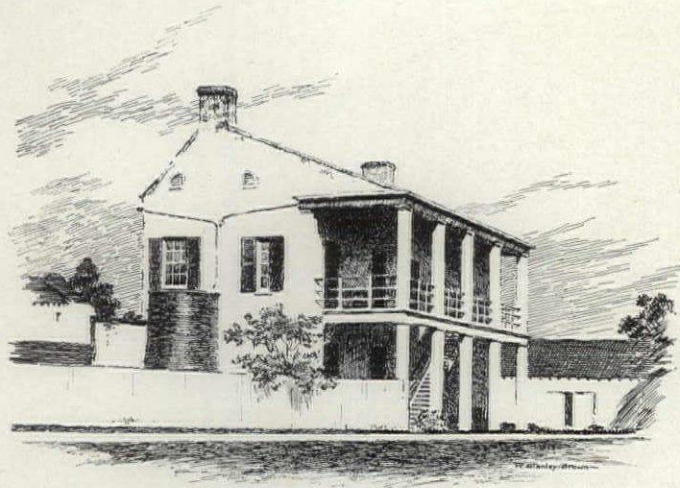


*Photograph by Daum*

OCTAGON HOUSE  
18th and New York Ave.  
Washington, D. C.

Besides obtaining a charming and sentimentally perfect headquarters for itself, the American Institute of Architects, in acquiring the Octagon performed a splendid service to the cause of preservation of historic American buildings. With the life of Strickland's Philadelphia Custom House threatened and Latrobe's Decatur House in Washington, the preservation of historic structures is becoming a difficult and sorrowful problem.





NEW ORLEANS BARRACKS  
from a drawing by Rudolph Stanley-Brown

## APERTIF

### A WORD CONCERNING NEW ORLEANS

by

MOISE H. GOLDSTEIN

*Reprinted from the Octagon*

New Orleans, la Nouvelle Orléans the old city was called, delights in taking into its embrace such congenial guests as The American Institute of Architects, whose visit in April is now anticipated with unusual pleasure.

The city founded by Bienville, the Vieux Carré—the ancient city within the confines of what was once a buttressed wall, almost unchanged since the Spanish domination in 1784, stands aquiver to charm the architects.

Here you will find without number courtyards shaded by magnolia and palm, spots of color seen through recess of darkened *porte-cochère*; balconies and galleries of wrought and cast iron before walls that have the grace of age, and grilled openings with delicately muntined windows. There is a quaint flavor to an architecture that is part French and part Spanish, of the bone and sinew of both nations with flesh of its own—a style truly Creole. There is much discussion whether the wrought iron was imported from Seville or whether it was wrought by slaves under local artisans. Some of the brick were made on the spot and some of smaller dimensions were undoubtedly imported.

Latrobe, as he approached the city in 1819 from the Mississippi River, his boat piercing the early mist, writes of the "amazing beauty" of the Cathedral and the Place d'Armes. The Cathedral is really not so beautiful as it is simple in form and is not much larger than a parish church. It stands between the fine old Cabildo and the Presbytère, and with the two long rows of Pontalba Buildings flanking the square, is the central motif in the first satisfactory civic group of grand dimensions to be found in this country.

Frederick Law Olmsted, the elder, in his *Memoirs of the Slave States* describes his arrival in 1853 at the shore of Lake Pontchartrain, and being rumbled into the city on a little steam train, finding foreign signs and a foreign language and courtyards that made him feel as though he were in the old world. George Cable and Lafcadio Hearn have translated the beauty of the old Quarter into their fascinating tales with

legend that has clung and become part and parcel of such old buildings as Madame John's Legacy, Sieur George's House and the house of Madame Delicieuse.

New Orleans has radiated gradually from the city laid out by Bienville's engineers to include much terrain all the way to the border of Lake Pontchartrain and for several miles upstream and down the curving Mississippi. It was above and outside the original limits of the ancient wall and where the Jesuit plantation stood that, during the Eighteen Forties and Fifties, mansions of the important families were built, with the enrichment of cast iron making an easy transition from house to luxuriant garden. The architects will be shown these homes in the Garden District as well as those in the lower part of the city and toward the Lake where the few remaining lovely and simple plantation homes with their stuccoed columns and sweep of roofs are reflected in the old Bayou St. John.

It was on the banks of this Bayou that Bienville beached his canoe in 1718 in search of a new capital for his colony left stranded in Biloxi on the Mexican Gulf. This explorer made a portage of not more than four or five miles across a tropical stretch of palmetto and cypress when he unexpectedly came to the Mississippi and like the good monk who tasted the grape of Orvieto exclaimed, "*Est! Est! ! Est! ! !*" Exuberantly he let the current carry his light craft down to the Gulf on his way to report the good news to his waiting colony, but at a sharp turn of the Mississippi he came across an English brig whose captain was on a similar mission of setting up a colony near the mouth of the river for his king, George I. Bienville with fine French diplomacy convinced this man that he was too late and that the French had already established a colony there from which he was now returning; whereupon the English turned at a point on the river now called English Turn. One is intrigued by the thought of what might have happened and what might have been the garb and nature of these buildings in the Vieux Carré had the English not been misled by Bienville's white lie, or rather—diplomacy.

*(Continued on page 51)*



Photographs loaned  
by Johns-Manville



*The*  
**FEEL OF AGE, THE**  
**VIRILITY OF YOUTH**

## HOME, THE STATIONARY TRAILER

A CERTAIN homespun philosopher once said that the trouble with America was that "Home, Sweet Home" was an air of first importance but home for most of them was a place to get away from. He thought the saddest sight was a railroad station at vacation time with wretched-faced people rushing from gate to gate, dragging children by the arms. It appeared, from his point of view, that an American citizen had only to see a picture of a bronzed giant reclining before a shapely female beside a wide expanse of water and the urge to travel was upon him.

The philosopher said he himself for years had yielded to the waterlust and having built a home

spent most of his time away from it until he read one day a sentence of Thoreau's, "I have been an extensive traveller," said Thoreau, "in Concord."

The idea of stationary travel seemed important and from then on he did his travelling and seeing life and the world at home. And found he saw more than in his former impetuous rounds.

That apparently is the current idea. People are talking Home, housing, they call it. The love of automobile and of trailer, which will always be a powerful urge, has nevertheless taken more of a background position. Roaming around is and always will be a necessity, but its paramount value must be, by contrast, to build up in the individual and





*The LOOK OF SIMPLICITY, INTERLOCKED WITH A SMART SOPHISTICATION—  
IN MATERIALS, MACHINES, THERMOSTATS AND THE LIFE ABUNDANTLY  
AUTOMATIC.*

the community a conviction as to the value of being stationary—of travelling extensively in Concord.

The over-travelled public is thinking of houses. And with that in the air, never have conveniences for the home and materials for home-building been more finely developed than now.

Heating, lighting, air-conditioning, wall-covering, flooring and all the gadgets of comfort and appearance, have risen high on the curve toward perfection.

The materials for the early American house, which by inheritance has set up in us a feeling of what a house should be, were often non-fireproof.

One of the important strides forward in the matter of home-building has therefore been fireproofing

the non-fireproof. A great impetus was given this idea by the use at Williamsburg of fireproof shingles, identical in appearance with the original weather-beaten and weather-grooved shingles.

It is a satisfaction to architects seeking the comfortable picturesqueness of the old frame houses and cottages to have available pre-weathered shingles, so that picturesqueness may be achieved in a house without the architect thereof lying awake at night wondering when it will catch fire.

The theme of our modern house is to have all the advanced and complicated contributions of science smoothly cloaked beneath a surface of wide-eyed and untutored simplicity.



## UNEXPECTED CONSTRUCTION CONDITIONS

*Being extracts from the diary of Harry G. Hunter during the year 1915, covering a bridge-building operation in Russia at the time of the revolution.*

■ LATE fall, 1916. Am instructed to proceed to Rost-off-on-Don, southern Russia, to erect the largest movable bridge span in Europe for an important railroad.

Sail from New York aboard the Kristianafjord, flying the neutral Norwegian flag. Vessel captured off the Irish coast by the British naval cordon. Prize crew put aboard. Vessel taken to Kirkwall, in the Orkneys, and anchored inside the submarine net. Detained two or three days for search and for examination of all passengers' papers. Released. Radio permitted to operate for one half hour after departure. Decide that it may be desirable to arrange hotel accommodations at Christiania. Send a message to a friend in Christiania requesting him to reserve accommodations at the Grand Hotel against my arrival by boat train from Bergen.

Arrive Christiania about midnight. Proceed immediately to the hotel and find commodious accommodations awaiting my arrival. Deposit baggage in my room and descend to the lobby. There find twenty or more fellow travelers, including high American government officials and emissaries, sitting around waiting for accommodations unavailable in the hotel. By two o'clock all are taken care of, mostly in private homes.

Following day, telephone my friend. Discover my arrival is a distinct surprise to him and arrange luncheon engagement. Over the traditional coffee and brandy, express my appreciation of his courtesy. He denies having made hotel arrangements and receipt of my message. Together, interview the clerk and explain that my friend failed to receive the wireless but the accommodations were nevertheless available. Clerk smilingly reaches for his file and displays a message with the question "Is this the message you sent?" It is. Clerk then explains that the telegraph office was unable to locate the party addressed but, noting that it referred to the hotel, delivered it there. Small wonder. The last two letters of the addressee's name were missing.

Thence to Stockholm, by night train. Arrive early morning. Proceed to Grand Hotel. Attempt to secure accommodations. None available. Finally prevail upon clerk to accept bundle of linen for laundering. Inform him of plans to see the city and return in the evening with desire to stop at the hotel. Return about seven o'clock. No accommodations until clerk is reminded that laundry has not been returned. Then, somehow, accommodations became available.

Begins to become apparent that wartime conditions have taxed hotel accommodations of neutral countries—full of refugees from warring nations. Next stop, Petrograd. Conditions there certain to be no better than Christiania and Stockholm. Therefore, wire the railroad company general office, Petrograd, to arrange hotel accommodations there against arrival. Leave Stockholm; no reply from Petrograd.

Travel to Petrograd by rail around the Gulf of Bothnia via Torneo and Haparanda. Train standing in the customs station on the Russian-Finnish border, about fifty miles from Petrograd. Pass a messenger boy in the vestibule between cars who drolls "Americanski Inzhineer Goonter". Know no Russian but the drolling seems to have a somewhat familiar sound. Conduct the boy to an official of the Russian-Asiatic Bank, a Russian, returning from New York and request information concerning the telegram. Message is for American Engineer Hunter. Advises him that he will be met at the Finland Station, Petrograd, by a party who will be recognized by a handkerchief carried in his hand. Arrive Petrograd at midnight. First person encountered carries a handkerchief. Wrong person, same sign. Encounter individual in elaborate uniform carrying a towel in his hand. Person speaks only Russian and indicates a second person standing further on, also in elaborate uniform and carrying another towel. Latter, my official host, speaks English; former, his chauffeur. Hotel accommodations unobtainable at English-speaking Hotel Europe but are available at a Russian-speaking hotel.

Following morning, call upon American ambassador, David R. Francis. Register address at Rost-off-on-Don. Know of only one American friend in Russia. Inquire his whereabouts. He happens to be in the adjoining room for the moment. Thus renewed a friendship of college days in less than twenty-four hours after reaching the city.

Call at the Petrograd office of the railroad company for which the bridge is being constructed. Conference with officials—some speaking English. Explain possible difficulties of a foreigner entering upon an important undertaking in a position of authority and request that proper instructions issue guaranteeing cooperation of existing agencies. President issues explicit instructions that the American Engineer shall have all equipment, materials and supplies that he requests and that failure of any official to comply with his request shall be grounds for dismissal.

*(Continued on page 47)*



# THE CONIC DWELLING

Appropriate in that territory commonly known as USA  
But often referred to by certain prophets as USONIA

*Reprinted from the CHARETTE, magazine of the Pittsburgh Architectural Club*

RECENT attempts to present a theorem of cantilevering horizontality as an original, ingenious, and indigenous architecture cannot fail to stimulate some very sober thoughts on the philosophy of the enclosure of space. The people of Amonia must very shortly realize that their historic background is being intentionally concealed by these preposterous heresies.

It is with a deep sense of responsibility that we accept the challenge thus presented. Let us seek to penetrate to the heart of the problem as applied to the individual dwelling. Wright conceives his Usonian dwelling to be a rectilinear enclosure of sharply intersecting planes, but this seems to us to be distinctly exotic, having no relation whatever to anything native. What did Walt Whitman say?

*"What is this you bring to America? Is it uniform with my country? Have you not imported this or the spirit of it in some ship? Can your performance companion the open fields and the sea-side? Have you studied out the land, its idioms, and men?"*

Is it not strange that amongst the architects of this continent none has perceived the significance of our heritage? During three hundred years of white settlement of this continent, we have neglected and disregarded our own Indian wigwam. We can now see revealed in the background of Amonian civilization the true and correct inspiration. Do we not desire to build here in accordance with our own best traditions? After all that may be said for eclecticism, we must finally confess our shame in having failed to ground our architecture in our own tradition, the tradition of the native aboriginee.

Imagine, if you can, a clearing in the forest, or a sun-lit Western plain, decorated with the lodges of 1,000 Indians. Then, transfer this picture to another setting, the modern housing development. What do we see? An answer, nothing less, to Whitman's rhetorical question! To be specific, we see a group of cones whose vertices point straight to the sky, reflecting the sun as a myriad of sharpened pencil points turned up. To the architect's mind, this is inspiring; to the layman, it is a new sensation in three-dimension perception.

Psychologists tell us that human beings demand for the satisfaction of the shelter-complex, the mantle or garment thrown about the camp-site, and enclosing the hearth-fire, the spirit of home. This is provided by no other form but the wigwam. No more perfect enclosure of space has ever been discovered. Furthermore, the ground-gripping complex is eminently satisfied by the conical form.

It is necessary here to discuss one general misconception. It is assumed by some that the interpenetration of space by hollow solids to produce room must

admit a maximum of sunlight, etc., etc. This is a great (but paradoxical) fallacy. A dwelling exists for seclusion and requisite protection from elements. Men have found it desirable to cook, eat, bathe, and sleep in comparative privacy, and in comparative security from rain and snow. The sunshine has no business within the dwelling; it belongs without, and society must learn to live outdoors and not indoors, if it is to survive. Our physical being is decadent and decrepit chiefly because of the insistence on this theory of Wright's. "The reality of the building is not in the four walls and roof, but in the space enclosed by them, to be lived in."

Let us now inquire if there are any guides for us in the philosophy of the ancients, whose very remarkable geometrical discoveries are ageless. What form did the classic philosophers consider the most favored of all segments of space? This is not difficult to determine; without doubt it was the cone. Archimedes, who first established the mensuration of the cone, proved conclusively that the volume of a cone is one-third that of the circumscribing cylinder. This furnishes a clue to the mystery of the cone, its density, and relative availability as a structure of economy. Since all the surfaces of a cone are developable, a cone is adaptable to all structural materials. (Mathematically, this truth is expressed in this way: every tangent plane passes through the vertex.)

Analytically, a right cone formed by the revolution of the line  $y = mx$  about the axis of  $x$  is:

$$z = m(\sqrt{x^2 + y^2})$$

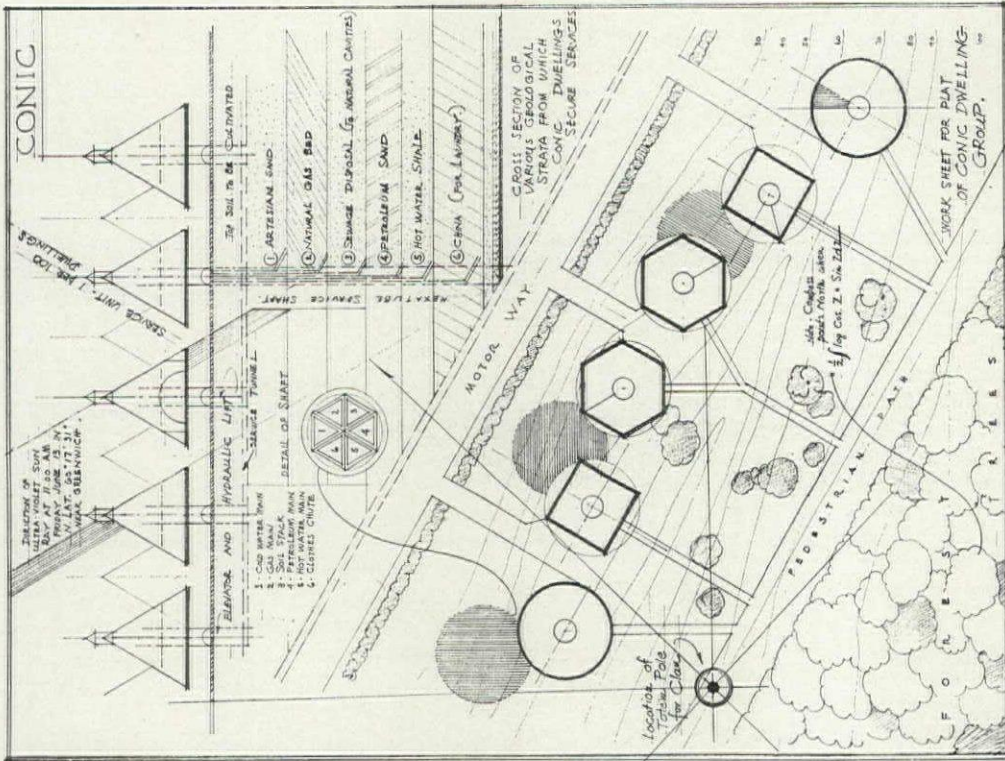
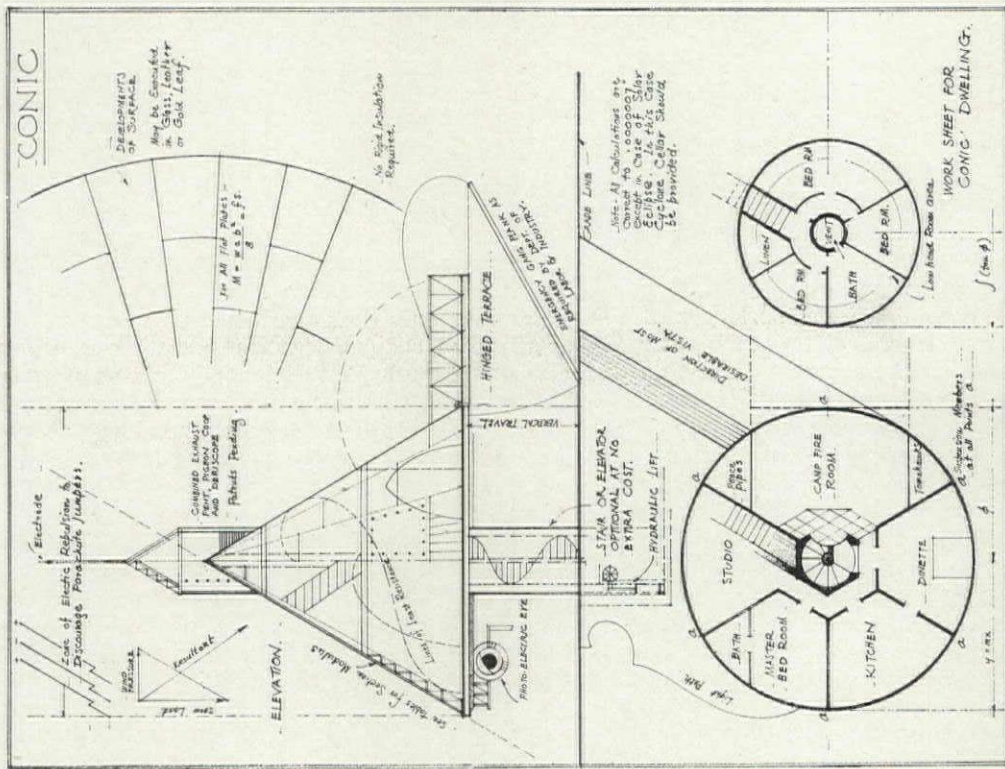
Although this fact has been known to mathematicians for centuries, it has escaped the notice of architects. Not only does this equation reveal new and unsuspected conic properties, but we can now appreciate the truths first set forth by the metaphysician, Menaechmus, that plane sections perpendicular to a conic generator of acute, right, and obtuse cones produce respectively the ellipse, parabola, and hyperbola.

While it is true that Menaechmus produced two distinct solutions of the problem of duplicating the cube by means of conics, we must not forget the discovery of Apollonius, who proved that the three major conic sections could all be produced from one and the same cone, by simply varying the inclination of the cutting plane.

So much for that historically invaluable solid, the cone, whose magic properties may now be applied to our modern problem of enclosing space in the most economical and aesthetically satisfactory manner. In the light of this new principle, we can now see the development of "setback" architecture in its true

*(Continued on page 52)*





# THE CONIC DWELLING

Showing the possibilities for a distinctly American architecture following the Wigwam Theme. Carrying to a more logical and ultimate conclusion the musings of Mr. Frank Lloyd Wright.





## BENJAMIN HENRY LATROBE 1764 to 1820

*Condensed from a talk by ARTHUR L. BLAKESLEE before the Arts Club of Washington, D. C.*

*THE DECATUR HOUSE  
Lafayette Square, Washington, D. C.  
Benjamin Henry Latrobe, Architect*

**H**ENRY LATROBE was born in Yorkshire, England in 1764. His father was a minister and superintendent of the Moravian sect in England; his mother a native of Pennsylvania.

At the age of 12, he was an accomplished draftsman and his parents encouraged him to study such subjects, including architecture, which would develop his talent. He acquired high standing in engineering, mineralogy and geology in addition to the main subject of his chosen profession. He adventured a bit in the Prussian war of 1785 and subsequently traveled in Europe. In 1786, however, he returned to England and became associated with S. P. Cockerell, a celebrated London architect. Two years later, he commenced the independent practice of his profession and was quite successful until the death of his wife introduced new problems. His old love of adventure and his interest in our own democratic institutions influenced him to come to America in 1796.

Because of his social connections he was able to meet President Washington, being introduced by Colonel Bushrod Washington. His first work was to improve the navigation of the James River and his success obtained for him many private commissions. He was appointed engineer of the state of Virginia. In 1798 he visited Philadelphia, at that time the metropolis of the country. The visit turned out to be considerably prolonged because of commissions which were proffered him. He was at length made City Engineer.

In 1803 President Jefferson appointed him Director of Public Works of Washington and placed him in charge of construction of the new United States Capitol, for which Dr. Thornton had made the original design. His work on the Capitol continued until 1811 when because of the impending war with England and the lack of appropriations for building Latrobe severed his connection therewith and secured the exclusive privilege of developing a water system for the City of New Orleans.

After the war and the partial destruction of the Capitol Latrobe was recalled to take charge of the restoration work and in 1815 returned to Washing-

ton, leaving his son, Henry, in charge of the New Orleans project. In 1817 however disagreeable circumstances created by too much interference by politicians, caused him again to resign. He retired to Baltimore to engage in private practice. While there he designed the Catholic Cathedral and other private projects. The following year he returned to New Orleans to take charge of the water works project and while in the performance of his duties was stricken with yellow fever and died in September, 1820.

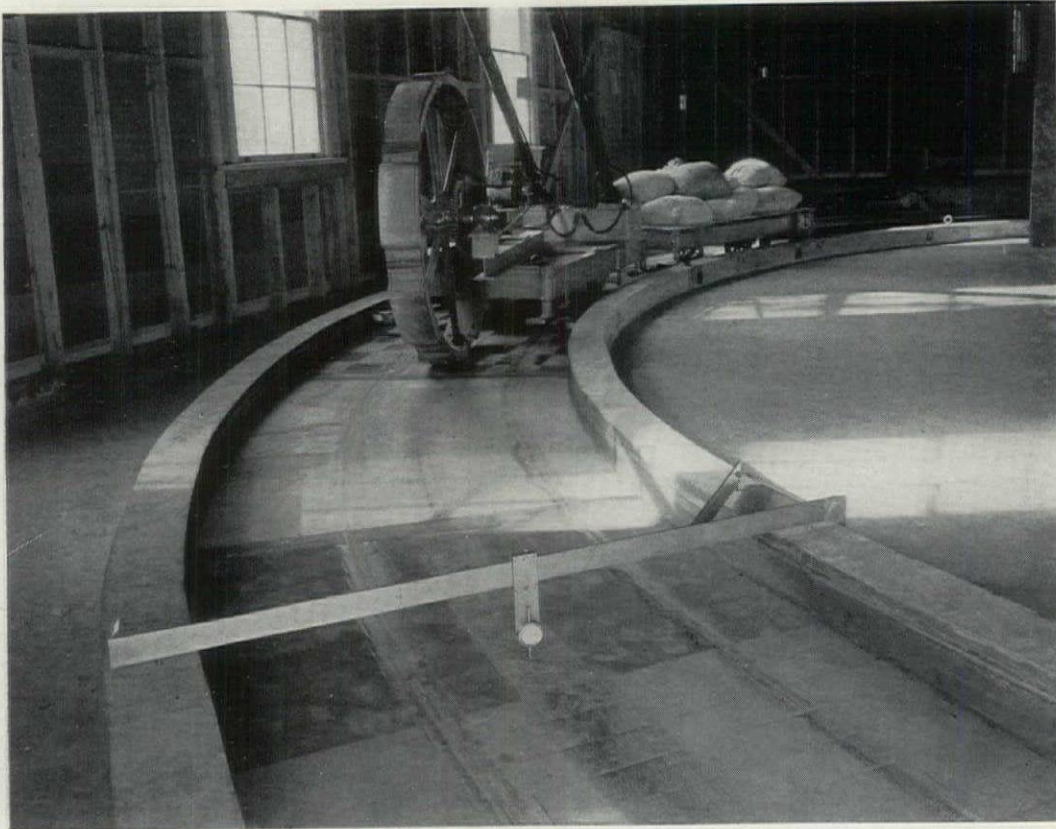
In common with most men who achieved things in this world, Latrobe had many obstacles to overcome. One of his first experiences was, when in sending for his Library which he had left in England, the ship on which it was being transported to America was ransacked by privateers and his books confiscated along with other valuables on board. This left him with only a pocket Vignola—a guide to the classics. Between this little handbook, his memory of the classics and his ingenuity, he was able to design his first commissions. There were in this country, however, a number of publications such as Gibbs, Chambers and other books by such local architects as Asher Benjamin, and while the records do not disclose that he had access to them it is not impossible that these works or similar publications were in the library of Thomas Jefferson or were elsewhere available.

Another obstacle that Latrobe was called upon to overcome developed on the occasion of his visit to Philadelphia. It so happened that at that time the citizens of Philadelphia were having a disastrous experience with L'Enfant who after laying out the City of Washington repaired to Philadelphia to practice architecture. Unfortunately L'Enfant was not an architect, besides he was extremely temperamental and erratic, so much so that his clients were very much chagrined by his attitude and not at all satisfied.

At the time of Latrobe's visit L'Enfant was in disrepute. This reacted to the disadvantage of Latrobe whose name led the citizens to believe that here was just another Frenchman. His friends however had

*(Continued on page 52)*





## HEAVY-DUTY FLOORING MATERIALS

Tests of the Bureau of Standards Conducted  
under the Supervision of W. C. Clark of the  
Procurement Division

Over a long period of years there has been considerable discussion as to the wearing qualities of various types of flooring which are to be subjected to constant hard usage, such usage, for instance, as is given by iron-wheeled hand-trucks of the Post Office Department.

In various buildings one saw from time to time evidences of deep wear, which sometimes required steel plates to be laid upon the worn spots—a re-sounding and otherwise unsatisfactory remedy.

Many materials were advocated as being the positive correction of this difficulty. A missionary would raise his voice to say that in such-and-such a building in such-and-such a city a certain type of flooring had withstood the ravages of heavy traffic for a great number of years and that this flooring should therefore be made standard for all cases where heavy traffic occurs.

At once thereupon another evangelist would state that in another building in another locality an entirely different type of flooring had successfully withstood heavy traffic and that material should be made standard.

A third would then preach upon a third material

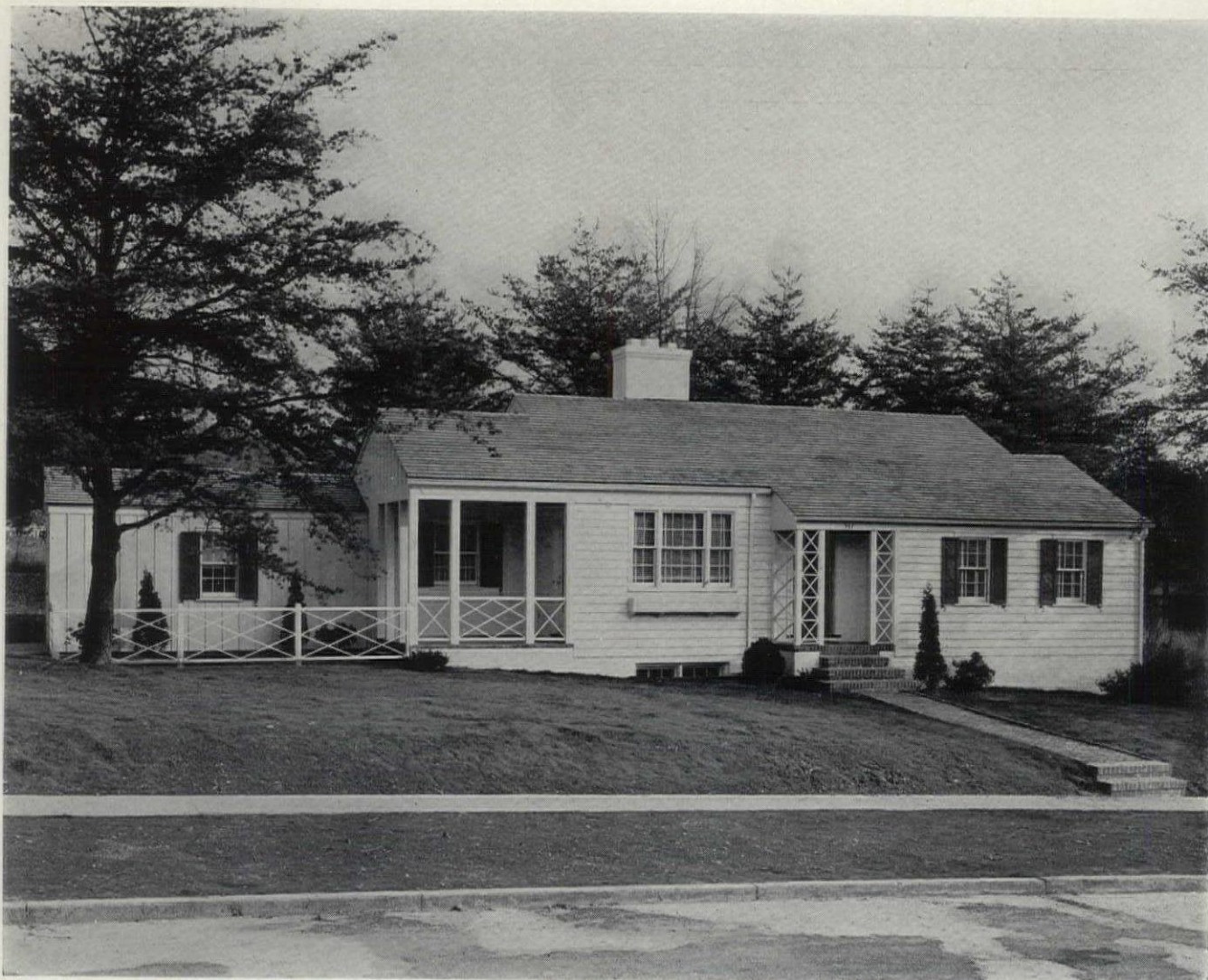
which had stood up under heavy traffic. And each evangelist would discredit the gospel of the others. Eventually there were a score of materials each of which was held by its converts to be without possibility of doubt the All-American material for standing up under heavy traffic.

There being so much sincerity and conviction among the various proponents of the various materials and there being so many triumphant instances where each of the materials had made miraculous records in the resistance to what was termed heavy traffic, it soon became apparent that "heavy traffic" could very well be a variable term and that what appeared to be heavy traffic in a building in Huntington, West Virginia, was not of necessity the equivalent of "heavy traffic" in New York City.

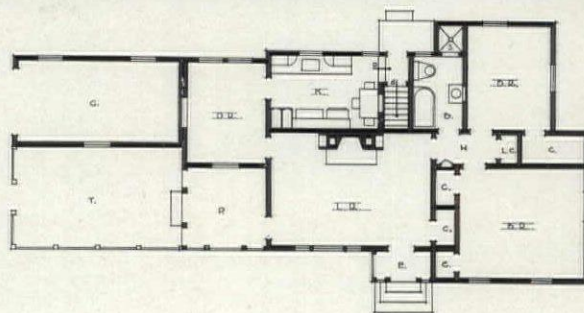
The wish therefore grew to have a constant standard by which such material could be judged, so that the resistance of Material A in relation to Material D could be more exactly set up by having them subjected to the identical wearing factor for the identical length of time.

The need at length became so pressing that the  
(Continued on page 40)

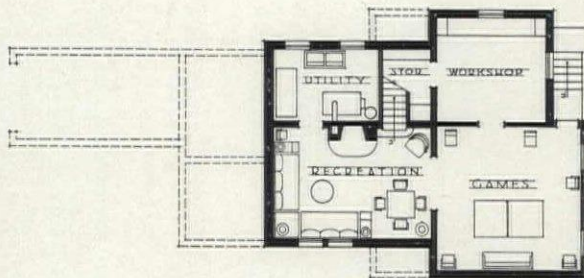




THIS is the house of Mr. Ben H. Dyer of the Construction Service of the Veterans Administration. He is the architect of the house, which was awarded a prize in the recent Better Homes Contests conducted by the Better Homes and Gardens Magazine.



GROUND FLOOR PLAN



BASEMENT FLOOR PLAN





*Photograph by Wm. Plath*

## *The* VAN DEUSEN HOUSE HURLEY, NEW YORK

Messrs. Rudolph Stanley-Brown and F. S. Wilson of the Supervising Architects Office and William Plath of the Post Office Department took a little flyer into the matter of investigating historic American buildings, while on a site-selecting foray.

As far as is known this is the only group photograph ever taken of Mr. F. S. Wilson and a historic American monument and is said to be a speaking, not to say a flattering likeness of each.

The house is the Van Deusen House at Hurley, N. Y., which was built in 1723 and was the temporary capitol building for the state of New York after the burning of Kingston in 1777.

When questioned Messrs. Stanley-Brown, Wilson and Plath stated that they were unable to remember the conflagration at Kingston, but that they were interested in the event.



# SOIL INVESTIGATION

## General

Probably there is no factor which exercises a more far reaching effect upon the operations involved in the construction of a building than the investigation of the sub-surface soil conditions existing upon the site. These conditions determine the type of foundations to be utilized and these, in turn, may influence the type of superstructure adopted; they determine the extent and type of subdrainage system which may be required and the character of waterproofing or dampproofing that are proper for the protection of basements and basement walls. All of these items have important effects upon the cost of the building, not only in money but also in the losses of construction time which may follow the discovery of unforeseen and unexpected sub-surface conditions. It is doubtful whether the expenditure of any other money upon the project yields larger returns than that spent for comprehensive and complete soil investigations.

## Classes of Investigations

Soil investigations are generally either exploratory or confirmatory in character, depending upon the times at which they are made. The first class, and generally the most important in its effects, embraces those investigations which are undertaken for the purpose of ascertaining all available data upon which the design of the building is to be based and which are undertaken in the earlier stages of the development of the project; the second class embraces those investigations which are undertaken after the construction has started for the purpose of verifying the conditions which were assumed for the design of the building.

Very often, the facilities for making the earlier investigations are handicapped by obstructions on the site or by lack of available equipment or appliances, and the investigator must resort to appropriate available methods in order to obtain the necessary data. Such difficulties, however, are not justification for incomplete or incorrect information; on the other hand, they impose upon the investigator, the burden of exercising his ingenuity and best judgment in obtaining as reliable information as possible and in reporting all data in such shape as to present to those who must interpret his notes, the clearest possible picture of his operations, the limitations introduced by the methods employed, and the processes by which conclusions were reached.

Facilities available for making the later investigations are less restricted due to the presence of the contractor upon the work with his equipment and personnel which offer facilities for investigations of more comprehensive scope and nature.

## Reporting of Investigations

Investigations made prior to the design of a building and utilized in the determination of the design and later incorporated into the plans, may have far-reaching effects upon the administration of the contract. The courts have established a close relationship between information supplied upon the drawings and conditions encountered during construction, often in spite of specification provisions which are designed to absolve the owner of responsibility for the accuracy of data supplied upon the plans.

Field reports concerning investigations must reveal all facts developed by the investigations whether or not the facts appear to be directly related to the immediate case. The owner has been held liable for damages arising out of his failure to reveal all of the facts in his possession. Any fact known to the owner's representative is presumed by the courts to be known to the owner and failure to make that fact known to prospective bidders may be interpreted to constitute fraud or constructive fraud in the event that allegedly unforeseen conditions arise during the construction operations. In this connection, inability to establish facts concerning specific items which might have a bearing upon the cost of the work should be reported upon the theory that the reported inability to establish the fact may constitute notice that a latent hazard may exist but its magni-

tude could not be established by the investigation.

The far reaching effects of the preliminary soil investigations cannot be over estimated. The owner's responsibilities under any subsequent contract begin with such investigations. The investigator, as the owner's representative, must recognize the responsibility devolving upon him and must conduct his operations and report all information coming to his attention in such manner as to fully safeguard the owner's interests.

## Identification of Materials

Materials encountered in soil investigations should be described fully and accurately and information supplied which will indicate their locations, characteristics, compositions and densities. The number of blows with a maul of stated weight required to drive an iron rod of stated diameter or a 2 by 4 stake one foot in the material, corresponding information concerning the removal of materials by round pointed shovel, sharpshooter or pick and shovel, and the necessity of sheathing sides of test pits, all convey definite indications of the characteristics of materials encountered.

The utilization of the terms "quicksand" and "hardpan" is to be avoided. If such terms are used they must be clearly defined so as to convey a clear understanding of the particular material to which reference is had.

## Samples

It is always desirable to procure samples of materials encountered in the making of soil investigations. As a general rule, samples should be taken at intervals of depth not in excess of three feet and at the top and bottom of each stratum penetrated. These samples should be obtained in as nearly their natural states as the methods employed in making the investigations will permit. They should be immediately placed in air tight containers, preferably glass, and each container marked in such manner as to locate the precise place from which it was obtained. It is important that samples be not permitted to be exposed to the air long enough to dry out before being placed in containers.

## Location of Soil Investigations

Instructions for making soil investigations usually state the number and approximate locations of such explorations as the designing agency considers necessary. The precise locations of and designations assigned to the individual explorations should be clearly indicated upon a map or site survey which forms a part of the report of the investigations.

## Additional Explorations

Sub-surface strata often vary greatly in their elevations, thicknesses and characteristics within short distances. Abrupt changes in levels are not unusual. When such conditions are revealed by authorized explorations or by other information coming into the hands of the investigator, and he has reason to believe that the information derived from explorations already under way or completed does not present a true and dependable picture of sub-surface conditions upon the site, he should promptly report his conclusions and the reasons therefor to the proper official and suggest such additional explorations as appear to him to be desirable and valuable. Such report should be handled by mail or telegraph in such manner as will cause the least possible delay and expense in completing the investigation if such additional explorations be authorized.

## Test Pits

Test pits are customarily adopted as the standard type of soil investigation for smaller sized buildings, the founda-



tions for which can be designed for relatively low bearing values at shallow depths below the ground surface. This type of exploration yields information of the greatest possible degree of reliability on account of the nature of the operations involved and the opportunity afforded the observer to examine the strata in their natural positions. Opportunity is also afforded for the making of simple tests to determine the bearing power of the soil at the bottom of the pit.

Standard Procurement Division practice is to dig test pits ten feet deep below ground level or the lowest adjacent street level, whichever is the lower. In the bottoms of each test pit, one hole made with a post hole augur is required to be dug five feet deeper. In the event that rock is encountered either in the pit or the hole, it is required that a hole be drilled into solid rock for a depth of two feet below any earthen seam that may appear. Good conservative practice, however, indicates the desirability of extending drillings into solid rock to depths of not less than five feet when there is any question as to the character of the rock stratum or when the height of the proposed building is in excess of two stories.

Many soils will stand unsupported for the full depth of a hole of the size of a test pit. During the operations upon such pits, however, every precaution must be taken to safeguard workmen against caving by the use of shoring or full sheathing as may be dictated by the character of the soil through which excavation is being made.

### Rod Soundings

Where test pits indicate that a rock stratum underlies a site, the elevation of the top of this stratum at intermediate points on the site may be determined by means of rod soundings unless the overlying material be nearly pure sand. A 5/8 inch bar, with or without its lower end flattened to a chisel b't, churned up and down in a hole kept full of water will drill a mud wall hole as it penetrates and can quickly be worked down to the rock surface. Soundings made by this method and well scattered over the probable site of the building would quickly and cheaply reveal any irregularities in the top of the rock surface which might be of such magnitude as to be reflected in a material change in the construction of the foundations for the building.

An alternate method of making such supplementary investigations is to use a length of 3/4 inch pipe washed down by means of a stream of water from the city supply. In using this method, care must be exercised to insure the building of a mud wall in the hole by adequate churning and not excessively rapid rate of sinking.

### Borings

For larger buildings or structures where anticipated unfavorable foundation conditions indicate more extensive explorations to be desirable, borings may be required. The borings may be simple wash borings, diamond drill or full core borings as must be determined for each individual case. In any event, whenever borings are required, it may be presumed that there is some adequate reason why that method of exploration is designated and, therefore, particular care must be exercised in making, observing, recording and reporting the operations.

While the purpose for which borings are made may be primarily to locate suitable foundation materials, the natures, characters and densities of penetrated materials may be no less important to the designer in arriving at a decision as to the type of foundation design. Every incident and detail relating to the operations has some significance and should be recorded and reported for the benefit of anyone who may subsequently be called upon to study and interpret the findings. Such items as the rates of penetration of a casing by a rotary method or under a hammer, the weight and fall of a hammer, the size of the casing and all similar items are matters of importance; the ability or necessity of drilling ahead of the casing is an indicator of the character of the material as is also the fact that the casing must be kept at the bottom of the hole.

The abandonment of holes, the locations of such abandoned holes and the reasons for abandonment are items of great importance and should be fully reported.

When borings encounter solid rock, holes should be drilled into it not less than five feet.

### Test Piles

Test piles may be required either as the sole method of exploration or in conjunction with borings. Their use will usually be dictated by available information which indicates that foundations must be carried by friction piles. The existence of a stratum of rock or other material providing bearing for bearing piles will be just as clearly indicated by borings as by test piles.

In most cases, timber test piles are used. For each test pile, straight, sound, peeled sticks should be selected. The length of each stick and the diameter at tip and butt should be recorded. The penetration of the pile under its own weight, and the penetration under its own weight and the dead weight of the hammer should be recorded. When driving begins, the number of blows per foot or number of feet per blow should be recorded and a continuous record kept for each pile until the driving test is completed. Reports for each pile should be complete as to all observed facts. If a calculation is made to determine the bearing value of a pile, the formula used in such calculation should be stated.

If the test is made with a drop hammer, the weight of the hammer must be determined and the amount of its fall must be known. The operations are greatly simplified if a fall of constant amount is adopted. In no event should the fall be so great that the hammer bounces after striking the pile.

If the test is made with a steam hammer, a single acting type is preferred on account of the unvarying amount of energy delivered by each blow.

Care must be exercised to insure a firm, clean blow being struck by the hammer each time. Broomed tops of piles must be cut off as they develop in order to prevent the cushioning effect of broomed material.

Prior to setting a test pile, it should be graduated in convenient lengths from the tip upward and the graduations clearly marked in order to facilitate measurements to be made during the driving.

Supplementary observations are often highly desirable in order to ascertain the value of skin friction. After a test pile shall have been driven to some intermediate level, cease driving for 48 hours after which time resume driving and continue driving to determine the force necessary to break the friction and the behavior of the pile following the renewal of driving.

When precast concrete piles are proposed to be used, concrete test piles of the same size and shape are often required to be driven. The procedure in such cases is the same as for timber piles but the equipment required is correspondingly heavier and more expensive.

Whenever it is possible to ascertain the locations of permanent foundation construction prior to the driving of test piles, the latter should be located closely adjacent to but entirely free of the areas required for operations incidental to the permanent construction as expensive interferences might result if the latter should encounter a test pile which had been left in place.

### Bearing Tests

Tests for the bearing values of soils are not usually made for buildings of ordinary size and character built by the Procurement Division except as noted below. The observations of the engineer made while making explorations interpreted in the light of his experience and such information as he may be able to obtain relative to local practice or from inquiry as to practices in the community, will be used as the basis of his judgment in establishing a value for the safe loading which may be placed upon the foundation stratum.

In the event that conditions, either existing or latent, appear to have any unfavorable or questionable bearing upon the determination of a safe loading value, these conditions should be reported to the Office for its consideration in determining upon the advisability and methods of further soil tests.

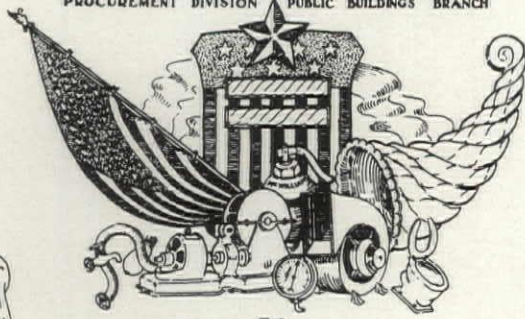
### Ground Water Level

The level of ground water and the characteristics of the

*(Continued on page 53)*



UNITED STATES TREASURY DEPARTMENT  
PROCUREMENT DIVISION PUBLIC BUILDINGS BRANCH



TO  
**LUTHER E. JENNER**  
FEBRUARY 1936

Your code a mass of Uncle's specs  
Your eagle eye did faults detect.  
You saw that pumps performed their work  
They never wites their job did shirk  
That pipes leaked not to spoil the floor  
That fires within the furnace roared.

In short - you are a grand inspector  
Of shoddy work a sore detector.  
For nine and twenty years you've done  
An honest job and rest you've won;  
And so with only words of praise  
We wish you countless happy days.

J. R. H.

**DIRECTOR OF PROCUREMENT**  
*R. E. Jenner*  
ASSISTANT DIRECTOR

**SUPERVISING ENGINEER**  
*W. A. Smith*

**SUPERVISING ARCHITECT**  
*W. A. Smith*

**SUPV. OF ARCHITECTURE**  
*W. A. Smith*

**SUPV. MECHANICAL ENGINEERING**  
*W. A. Smith*

**SUPV. STRUCTURAL ENGINEERING**  
*W. A. Smith*

**ADMINISTRATIVE ASSISTANT**  
*W. A. Smith*

**OLD CROW**

**V. R. G.**

Certificate presented to  
Luther E. Jenner, Mechan-  
ical inspector at San Fran-  
cisco on the occasion of his  
retirement.

WHAT HAPPENS TO FEDERAL  
BUILDINGS UPON DECEASE

Remains of the old Los Angeles build-  
ing upon its dumping ground, with the  
youthful Los Angeles City Hall in the  
distance.



Water color by Park French



## HEAVY-DUTY FLOORING MATERIALS

(Continued from page 34)

Procurement Division deemed it necessary to make an arrangement with the Bureau of Standards by which the two bureaus could jointly investigate flooring materials designed for heavy usage under identical conditions.

The Bureau of Standards thereupon set up a circular track with overhead trolley wires which would propel a car and trailer merry-go-round-wise, the track being arranged so that it could be floored with panels of the various materials desired to be tested. The photograph herewith shows the machinery and track.

The report of the Bureau of Standards includes a set of photographs after the testing machine had made 60,000 circuits of the track. The test was terminated at this time due to the complete breakdown of one panel.

The original plan provided for the measurement of the wear on the different panels of flooring by means of a straight edge and micrometer. During the progress of the test it was found that this method of measurement was not accurate, and it was decided to omit the measurements of the floor during the progress of the test, basing all conclusions on the examination of the floor after completion of 60,000 circuits of the machine.

The wear of the flooring at the completion of the test is graphically shown in photographs by means of a wire stretched across the surface of the floor and the shadow cast when illuminated by a source of light set at an angle of 45° to the surface. The distance on the photograph between the shadow and the wire at any point shows the amount of the wear of the floor measured from the original finished surface.

TABLE SHOWING AMOUNT OF WEAR OF  
THE DIFFERENT FLOORS

Material	Inches of wear	Test Number of panel
Linoleum (1/4" Battleship) .....	.04	18
Rubber Tile .....	.04	20
Strip maple on sleepers .....	.05	13
Treated with one coat of sealer "B" rubbed with steel wool, two coats of undercoater "A" and one coat of finish material.		
Unit Block—Maple .....	.05	12
Edge-grain Maple .....	.05	11
Strip Maple on sleepers .....	.055	15
Treated with two coats of a mixture of 50% boiled linseed oil and 50% turpentine.		
Strip Maple on sleepers .....	.055	14
Treated with one coat of sealer "B" rubbed with steel wool and one coat of finish material.		
Asphalt Blocks .....	.07	6
Concrete 1:1:1 1/2 (liquid hardener) .....	.08	4
Concrete 1:1:1 1/2 (Plain) .....	.09	1
Unit Block—1/4 sawed Red Oak ..	.095	10
End-grain Southern yellow pine...	.10	8B

Concrete 1:1:1 1/2 (Abrasive) .....	.10	2
Concrete 1:1:1 1/2 (Metallic hard'er) ..	.12	5
End-grain Douglas Fir .....	.13	9
End-grain Southern yellow pine (6 annular rings) .....	.13	8A
Magnesite (with wood fiber) .....	.15	16
Magnesite (plain) .....	.22	17
Asphalt Plank .....	.22	7
Concrete 1:3 .....	.70	3

Quoting from a Bureau of Standards report:

"The 20 specimens tested included 5 of concrete, 8 of wood, 2 of magnesite, 2 of asphalt, 2 of rubber, and 1 of linoleum.

"For those interested in the details of construction, complete specifications used in laying these floors may be had free upon request addressed to the National Bureau of Standards, Washington, D. C.

"Concrete specimens 2, 3, 5, and 6 were made of 1:1:1 1/2 concrete 1 1/2 inches thick. Number 2 was given no surface treatment; number 3 had an abrasive aggregate in the wearing surface; number 5 was treated with three coats of liquid hardener after the concrete had set; and number 6 had a fine metallic aggregate or hardener in the wearing surface. Number 4 was made of 1:3 cement mortar, 3/4 inch thick. The photographs show that the cement-mortar finish (no. 4) did not stand up well under this test. The plain concrete (no. 2) was not particularly durable, nor was it much improved by any of the three treatments tried.

"Asphalt specimen 7 was made of blocks 5 by 12 by 2 inches set in 1/2 inch of mortar. Specimen 8 was asphalt plank, 1/2 inch thick. The surfaces of both block and plank roughened quite readily under this treatment, and for this reason they could not be kept clean by sweeping. The plank showed considerably more wear than the block.

"Wood specimen 9 was made of end-grain blocks of Southern yellow pine, 2 1/2 inches thick, set in mastic. Number 10 was the same as no. 9, except that the wood was Douglas fir. Number 11 was quarter-sawed red oak, 2 3/8 inch thick, set in mastic. The remaining specimens were all maple: No. 12, edge grain, 1 7/8 inch thick, set in mastic; no. 13, unit blocks 3 1/2 inch thick, set in mastic; no. 14, plain strips 3 3/8 inch thick, set on sleepers and treated with one coat of sealer, two undercoats, and one finish coat; no. 15, same as no. 14, except that the two undercoats were omitted; no. 16, same as no. 15, except that the treatment consisted of two coats of linseed oil and turpentine.

"The photographs show that the end grain (nos. 9 and 10) and the quartersawed grain (no. 11) wore appreciably under this test. Of the maple floors, there is little choice between the edge grain (no. 12) and the flat grain (no. 13); both stood up very well. Of the three methods of finishing examined, the four-coat job (no. 14) is better than the two-coat job (no. 15), and both are better than the linseed-oil finish. The differences, however, are in the appearance and the ability to keep the floor clean; there is not much difference in the wear.

"Magnesite specimen 17 contained an aggregate of hardwood fiber and was 1 inch thick; no. 18 was 1/2-

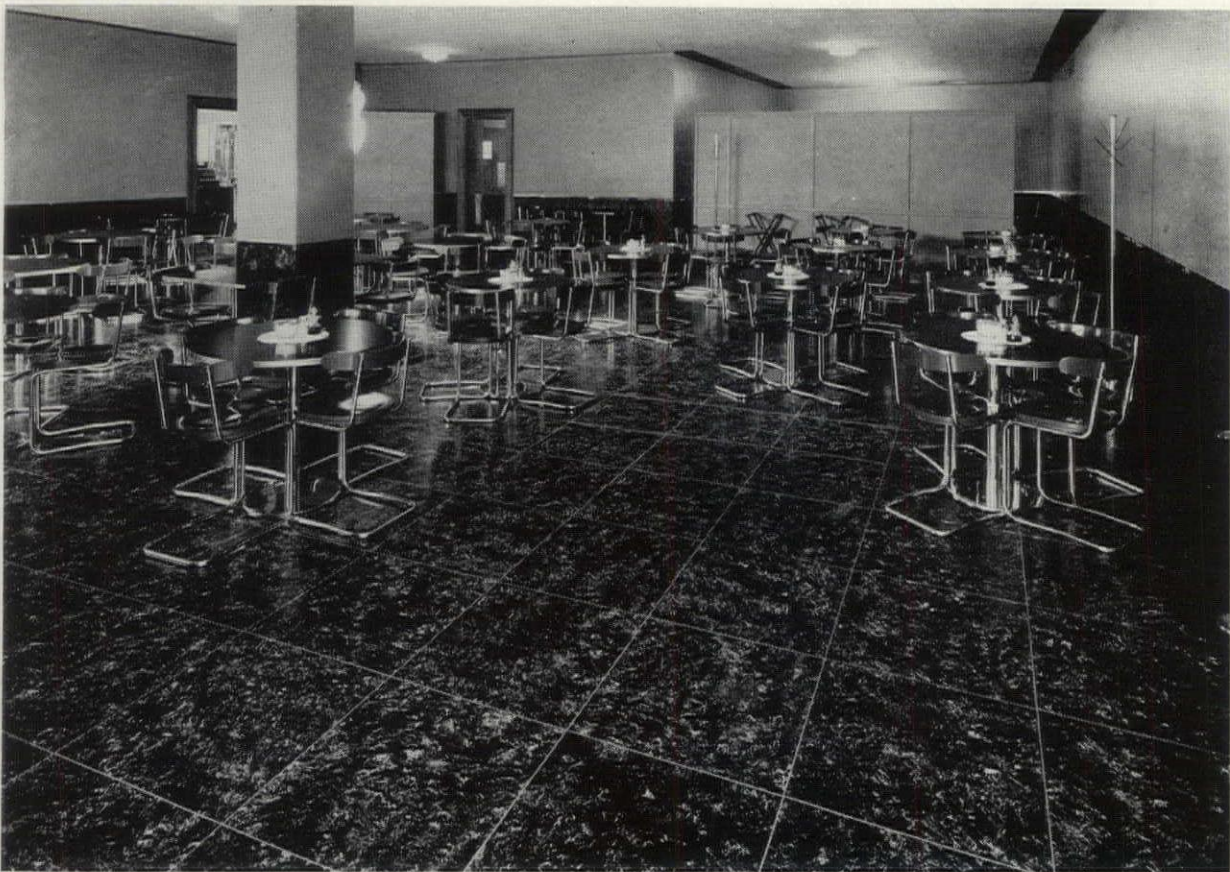
(Continued on page 52)



# Sealex Floors and Walls



get the "Appointment"!



FEDERAL architects have found Sealex Linoleum Floors and Sealex Wall Linoleum ideally suited to the decorative and practical requirements of public buildings.

In the U.S. Supreme Court Building shown above, for example, the cafeteria has Sealex Walls and Floors that not only create a distinctive effect, but also meet the highest sanitary

standards. For Sealex has a perfectly smooth surface easily kept spotlessly clean.

Sealex Walls and Floors both *slash* maintenance costs. They wear for years and years, yet never need costly refinishing.

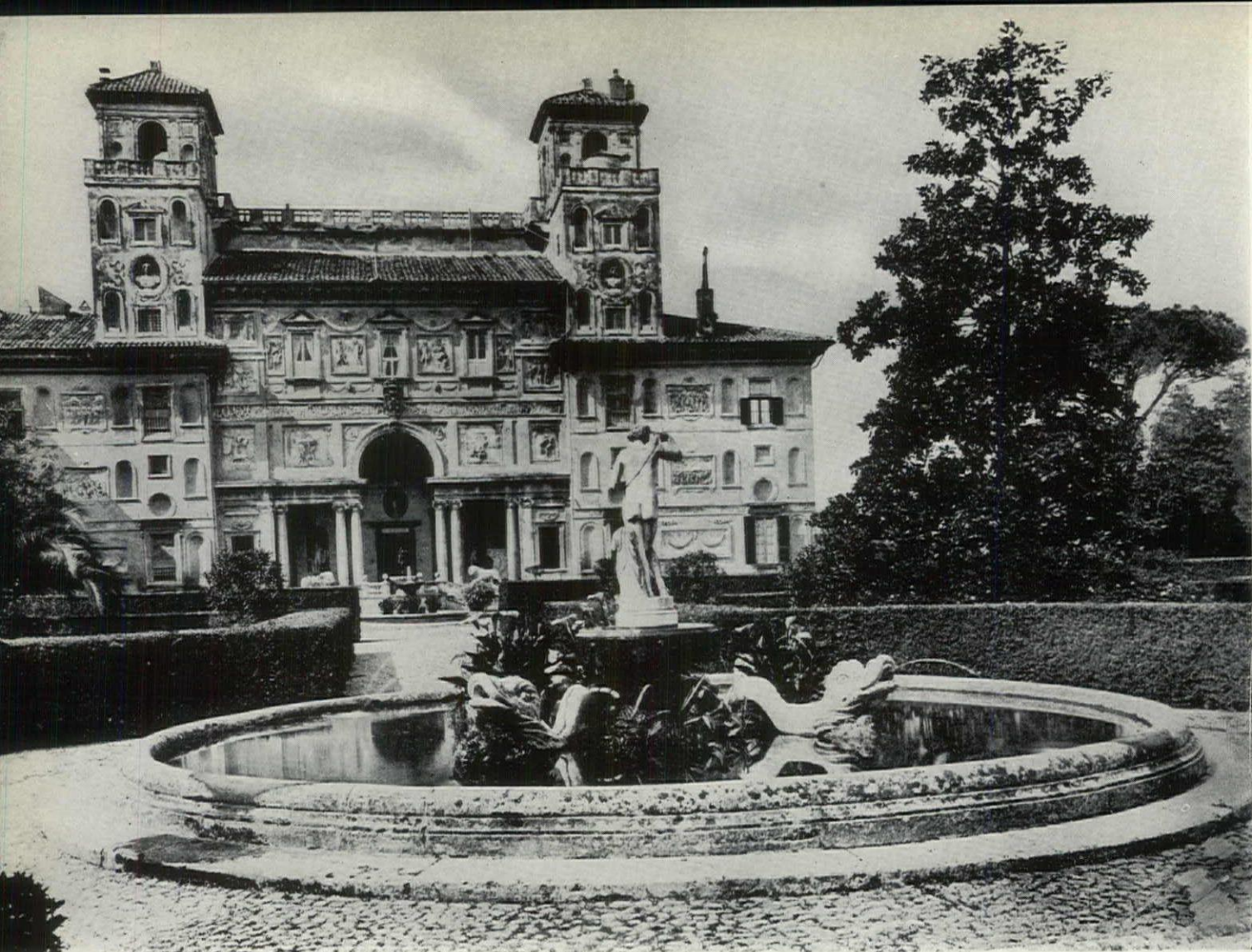
Installed by authorized contractors, Sealex materials are fully backed by a guaranty bond.  
CONGOLEUM-NAIRN INC. KEARNY, N. J.

## SEALEX LINOLEUM

Trademark Registered

*Floors and Walls*

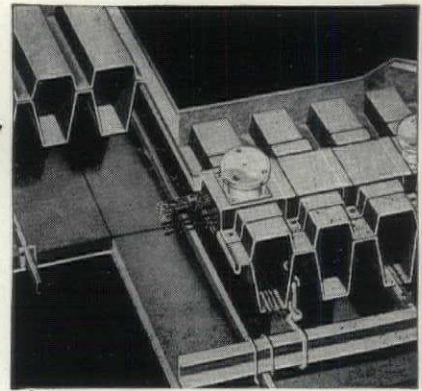




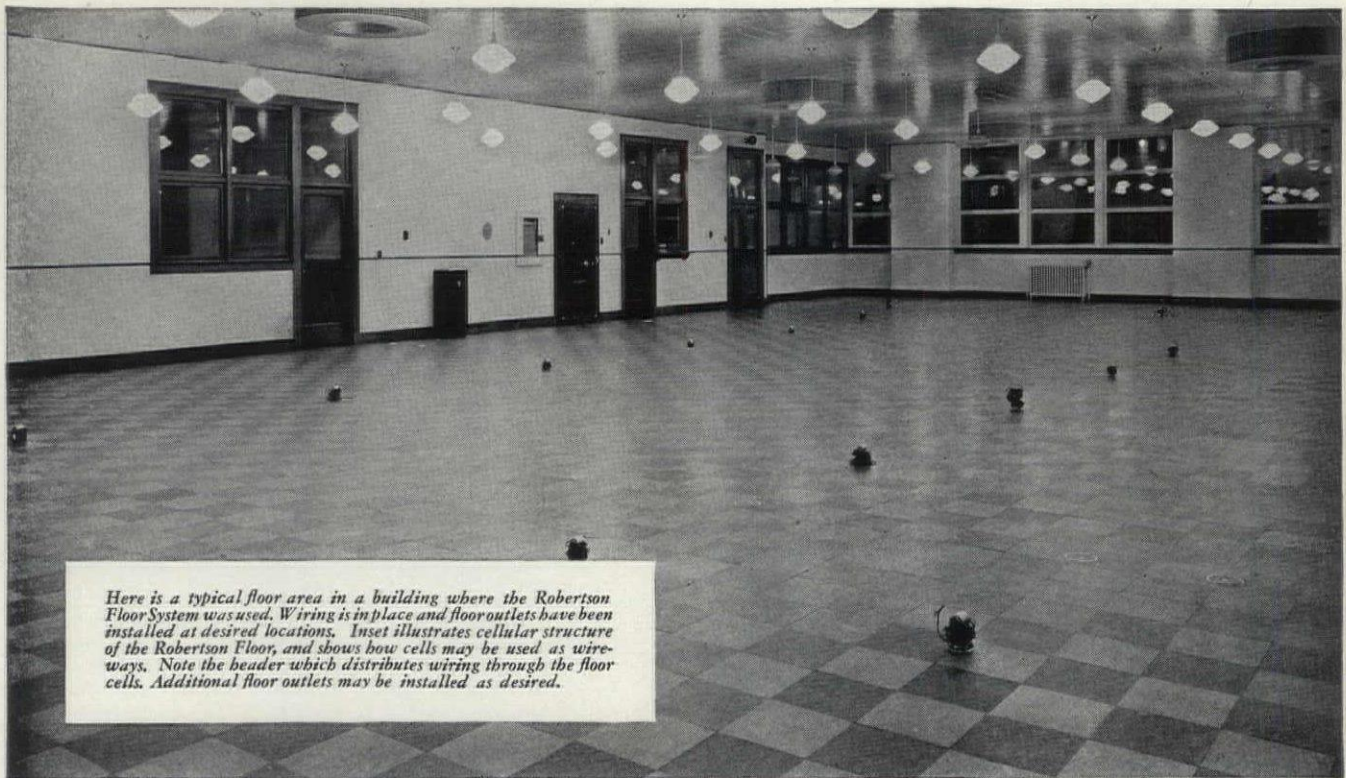
■ **T**HE Medeci palace, a glorious heritage of older day, of the kind which make Europe beautiful, with an intensely sentimental beauty. ■ America has many landmarks similarly beautiful, similarly full of sentiment. ■ The strong effort that is now being made to preserve all valuable historic monuments should receive the support of every architect and every citizen. ■ We have referred in this number to the old Custom House in Philadelphia, the Decatur House in Washington and the old Court House at Smithfield, Virginia—all in danger of demolition.



*Anticipate today*



## THE ELECTRICAL DEMANDS OF TOMORROW



*Here is a typical floor area in a building where the Robertson Floor System was used. Wiring is in place and floor outlets have been installed at desired locations. Inset illustrates cellular structure of the Robertson Floor, and shows how cells may be used as wireways. Note the beader which distributes wiring through the floor cells. Additional floor outlets may be installed as desired.*

**S**TEEL, stone, bricks and mortar are durable materials. You are pretty well assured that the buildings you design today will be rendering satisfactory service ten or twenty years hence . . . as far as their structural features are concerned. But what about their electrical facilities? Will your buildings provide for all the electrical needs the future may bring? Or will new electrical demands, as the years pass, necessitate costly modernization work or even cause complete electrical obsolescence

long before the building's time? By the use of the Robertson Steel Floor, you can anticipate, in the buildings you are designing today, the electrical demands which the future will make upon them. The Robertson Floor offers a new kind of electrical availability. Every hollow cell comprising it may serve as a wireway for wiring distribution. Changes and additions become quick, easy and inexpensive to make. In buildings housing statistical services which involve extensive electrified equipment,

the Robertson Floor is particularly valuable.

This modern floor also provides numerous structural advantages. It is strong, lightweight, compact. Cuts dead weight on floor areas. Speeds up building erection. Reduces fire and accident hazards. Saves money. We invite you to write for free copies of our booklets "New Life for Buildings" and "Wiring Robertson Cellular Steel Floor" which give complete facts. H. H. Robertson Co., 2008 Grant Bldg., Pittsburgh, Pa.

## ROBERTSON STEEL FLOOR SYSTEM



## NEWS - AND OTHERWISE

### THE BRONX HYENA

*An Empirical Formula*  
by W. N. Collier

It may be that some readers were a little bit confused by the equations presented by Igotcha and Hotchacha in their paper published in a recent issue of the *Federal Architect*. With that thought in mind the writer has looked into the matter somewhat closely and desires to submit a few observations by way of clarifying the subject.

Perhaps the chief obstacle encountered by the average reader was in reconciling the hysterics of the Bronx Hyena with his pure d— and y— faces. The authors did not make this so clear as was desirable, or they may have considered it of minor importance. In either case the matter should be explained if an understanding of the subject is to be obtained.

It was found that by expanding the equation  $\frac{X \cdot dy}{X}$

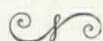
etc., and introducing a common effervescent or two, the equation would break down into a few more easily understood and simple statements. This will be apparent if we let h, r, b, e, o, k, f, a, l, n, i, s, and p represent letters of the alphabet and incorporate them into the equation mentioned, whence we have:

$$(1) \frac{(3 \text{ xtry-DRy}) \cdot h\text{-ic} + (6\text{-ST-eiNs} = (\text{Fat-})) (\text{LAF})}{2} \quad \text{N-i-T-li-F}$$

Disintegrating this becomes:

$$(2) \frac{1 \text{ Ha-Na} + (\text{Sic}) + dr \text{ (bi-L)} + (\text{PAy-d-ock})}{\text{Nxt-Da}} \quad \text{Swr-OFF.}$$

It will be unnecessary to pursue the subject further as the reader will readily see the relation between the two equations given and the hysterical behavior of the Bronx Hyena.



### THE FEDERAL ARCHITECT IN LEGAL DIFFICULTIES

IN THE COURT OF COMMON SENSE  
UNITED STATES AT LARGE

H. G. RICHEY, Plaintiff,

vs.

EDWIN MORRIS, Defendant,

To EDWIN MORRIS, Greeting,—

You are hereby summoned to appear before Judge Will U. B. Good, in this Court, on or before a date to be set by the Plaintiff, to give answer to the Plaintiff's suit and show cause why he, or they, should not have judgment against you for the cause of action hereinafter stated in the declaration; and in case of failure to appear and answer, judgment will be given against you by default.

Witness The Honorable Judge of the said Court, this first day of March, 1938.

By R. U. WISE, Clerk.

IN THE COURT OF COMMON SENSE,  
UNITED STATES AT LARGE

H. G. RICHEY, Atlanta, Ga.  
Plaintiff,

EDWIN MORRIS,  
Washington, D. C., Defendant.  
CASE 7-11-44.

#### DECLARATION.

The plaintiff, H. G. Richey, declares that due to a statement in the *FEDERAL ARCHITECT*, edited and published by the defendant Edwin Morris, whereby he, the said H. G. Richey, plaintiff, was given a name or "handle" not his own, nor suitable to him, applying the "handle" "Albert" in lieu of Harry G., either he, the plaintiff, or ex-Governor Albert Ritchie, has been damaged to the extent of an unknown sum, to be determined at trial. The sum to be collected and to whom to be paid,—Ex-Governor Ritchie or Ex-District Engineer Harry G. Richey, will be left to the jury to decide at time of trial.

It is hereby set forth that the plaintiff has suffered great humiliation and anxiety, together with distress of mind, and either he or the Ex-Governor has been greatly injured in his good name and reputation, and to appease his mind the hereinbefore mentioned sum of unknown amount is demanded from the defendant, together with the cost of all drinks, bribes and other emoluments in connection with the case, (or bottle).

I. WILL GETEM,  
Attorney for Plaintiff.

#### REBUTTAL

This is to certify that there appeared before me, Edwin B. (as in Boston) Morris, who being duly sworn states that he is the Editor of the *FEDERAL ARCHITECT* and does hereby refute and categorically deny the charges, accusations and allegations of the plaintiff, H. G. Richey, who states that his (the plaintiff's) name was incorrectly spelled in the *FEDERAL ARCHITECT* of date of January, 1938.

In support of this refutation and categorical denial the said Edwin B. (as in Boston) Morris hereby states first that there could not possibly have been used in juxtaposition with the said surname of Richey the said given name of "Albert," had the name Albert been used in the said juxtaposition, the *FEDERAL ARCHITECT* cannot be, and is not, responsible for the failure of the parents and godparents of the said H. G. Richey to name the said H. G. Richey "Albert" at the time of his christening, and the refusal of such parents and godparents to conform and agree with the statements and nomenclatures, appearing in the *FEDERAL ARCHITECT* is not the responsibility nor concern of the said *FEDERAL ARCHITECT*, its heirs, its assigns, its cattle, its ox nor the stranger that is within its gates.

#### ENGLISH PLANT FOR CELOTEX

As the result of large business in the British Isles, Celotex Limited, the English branch of the Celotex Corporation has built in London a plant costing approximately \$1,250,000,

Located at the crossing of the Grand Junction Canal and North Circular Road, adjacent to the London, Midland, and Scottish railroad, the plant has transportation facilities to all parts of the world.

It has a large storage area for raw materials, which are unloaded from barges. The cane fiber will enter the plant at one end, progress through the washing, mixing, Ferox processing, and board forming machines to the drying ovens, and finally to the fabricating and warehouse spaces.

A modern, efficient power plant will provide service. The drying ovens will be heated with hot air from a coal fired furnace in the power plant building.

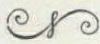


Coal will be landed from barges at a point on the bank opposite the power house. At the end of the property nearest the highspeed highway is located the administration building.



## CONVENTION OF NATIONAL LIME ASSOCIATION

The twentieth Annual Convention of the National Lime Association and the lime industry of the United States will be held at the Netherland Plaza Hotel in Cincinnati, Ohio, on May 9, 10, and 11, 1938.



## WORKING CODE

*Formulated unassisted*

*by H. G. Richey, to Govern Operation of field engineers*

This code is formulated to govern the operations of District Engineers, Inspection Engineers, Construction Engineers, and others engaged in similar positions; both night and day operations. Any person under the jurisdiction of this code, caught in any manner violating the spirit of this code, will be summarily dealt with, by increase in salary.

The term "Engineer", herein used, shall be understood to mean any person engaged to make or assist in making trouble for the contractor.

The term "Designing Architect", herein used, shall mean any person engaged in the preparation of the drawings and specifications, and with sufficient artistic and architectural ability to show on the drawings what is intended not to show or be seen in the actual construction; and to prepare specifications capable of being interpreted in at least three different ways.

The drawings and specifications for a building are to be considered as one combined unit. Any thing shown on the drawings and not mentioned in the specifications or any thing mentioned in the specifications and not shown on the drawings, or any thing not shown or mentioned in either, but intended to be shown or specified by the designer or specification writer, is to be considered as shown and specified.

The drawings are to be considered diagrammatic and are not to be followed, except where space or other conditions prevent deviation from same. Coincidence between the drawings and executed work must only occur in exceptional cases.

All materials shall be the best of their respective kinds. The contractor is supposed to know and provide what is best, irrespective of what is specified or detailed. When deciding as to what is best, the Engineer or Architect has the right to change his mind at least twice a week, and his decision shall be binding.

The Engineer shall see that the work throughout complies with all the rules, regulations, and whims

of all City, County, Parish, State, National and International Departments and Bureaus, and of all officials having or not having jurisdiction.

The Engineer shall see that the Contractor obtains and pays all fees, annual dues, assessments and subscriptions, to masked balls, police balls, meat balls, organizations, unions, and coat and hat checks. The contractor shall keep posted, where same can be seen by the Engineer, a list of all such gratuities.

In order to create additional jobs and hours of labor, Engineers must see that all work is performed by inefficient mechanics and workmen; in order that as large a percentage as possible must be performed, even unto the second and third time. Any mechanic found capable of installing work correctly on first attempt, shall be given notice of violation of rules, and if repeated his dismissal should be demanded.

Engineers must be particular as to acceptance of materials, such as bricks, gravel, stone, etc. If the Engineer does not possess a micrometer, the contractor should be required to furnish one for the use of the Engineer, to check bricks, gravel, etc., as to size.

The Engineer should lose his temper on Monday morning and not find it until Saturday. Smiling, or engaging in civil conversation with the contractor or workmen, may be considered sufficient cause for reprimand or dismissal.

In his final report the Engineer in charge shall make recommendation as to the amount due on the contract, after checking the account with the contractor. Any evidence of satisfaction on the part of the contractor shall be considered a just cause for withholding final payment until further reduction is made.

When making final inspection, District Engineers or Inspection Engineers shall not use a magnet to ascertain if the hardware or fittings are brass or iron. Have the contractor remove the hardware or fittings and file the back surface. This is more effective than using the magnet, takes more time, and creates work for mechanics.

Do not use mirrors to ascertain if the tops and bottoms of doors are painted. Have the doors taken off the hinges and set on edge. It is then not necessary to bend the back or legs in making the inspection and also creates work for mechanics.



## RECEPTION FOR H. G. RICHEY

On March 12th a large number of friends of District Engineer H. G. Richey gathered at the residence of Mr. A. E. Sanderson, Atlanta, Ga., at an evening reception given in honor of Mr. Richey and in view of his retirement from the Government service. Among those present and accompanied by their wives, were Construction Engineers representing the field force of District No. 4, together with representatives of Post Office Inspectors and Custodians in the district. A very enjoyable time was had by all present during which Mr. Richey was presented with a silver bachelor service. In view of his having but recently

*(Continued on page 51)*



RECENT CONTRACTS AWARDED BY THE DEPARTMENT OF AGRICULTURE, PLANS BY BUREAU OF AGRICULTURAL ENGINEERING

Abingdon, Va.—Two laboratories, a shops building, a boiler house and utilities—Abingdon Research Station, on Mount Vernon Highway, Arlington County, Va., Bureau of Public Roads; McCloskey & Co., Philadelphia, Pa.	\$957,500.00
Coshocton, Ohio—office annex—North Appalachian Experimental Watershed Project, near Coshocton, Ohio, Soil Conservation Service; Ang Construction Co., Coshocton, Ohio....	12,800.00
Buffalo, N. Y.—Laboratory Equipment, U. S. Federal Building, Buffalo, N. Y., Food and Drug Administration; Laboratory Furniture Co., New York, N. Y. ....	21,022.00
Boston, Mass.—Laboratory Equipment, U. S. Appraisers Stores, Boston, Mass., Food and Drug Administration; Laboratory Furniture Co., New York, N. Y. ....	11,202.00

CONTRACTS AWARDED BY THE CONSTRUCTION SERVICE VETERANS ADMINISTRATION

Dearborn, Mich.—Boiler House No. 12 and Garage No. 12, V. A. Facility; Cooper-Little Company, 572 Maccabees Bldg., Detroit, Mich. ....	\$170,700.00
Livermore, Cal.—Addition to Infirmary Bldg., No. 12, V. A. Facility; care N. Swenson Co., 355 Stockton Ave., San Jose, Cal. ....	79,700.00
Wadsworth, Kans.—Refrigerating Equipment in Bldg. No. 19; Baker Ice Machine Co., Inc., Omaha, Nebr. ....	32,356.00
San Fernando, Cal.—Infirmary Bldg., No. 41, V. A. Facility; Sarver & Goss, Inc., 1015 W. 4th St., Los Angeles, Cal. ....	186,300.00
Chillicothe, Ohio—Construction of main Bldg. No. 31, V. A. Facility; James I. Barnes Construction Co., Springfield, Ohio ....	403,900.00
Bay Pines, Fla.—Additional buildings and utilities, V. A. Facility; Edward S. Moore & Son, 710 Times Bldg., St. Petersburg, Fla. ....	416,600.00
Lyons, N. J.—Continued Treatment Bldg. No. 53, V. A. Facility; C. H. Johansson & Co., 565 George Road, Cliffside Park, N. J. ....	401,400.00
Roanoke, Va.—Additional buildings and utilities, V. A. Facility; A. Farnell Blair, Lake Charles, La. ....	494,733.00

CONTRACTS AWARDED BY THE BUREAU OF YARDS AND DOCKS NAVY DEPARTMENT

January 1 through March 31, 1938

Alameda, Cal.—improvements at waterfront, Naval Air Station—San Francisco Bridge Co., San Francisco, Cal. ....	\$940,000.00
Mare Island, Cal.—paint and oil storage bldg., Navy Yard—De Luca & Sons, Inc., San Francisco, Cal. ....	139,440.00
Portsmouth, Va.—Cofferdam for building slip, Norfolk Navy Yard—McLean Contracting Co., Baltimore, Md. ....	110,200.00
Pensacola, Fla.—automatic telephone system, Naval Air Station—American Automatic Electric Sales Co., Chicago, Ill. ....	66,156.50
Norfolk, Va.—replacement of hangar doors, Naval Operating Base (Air Station)—The W. P. Thurston Co., Richmond, Va. ....	44,789.00
Philadelphia, Pa.—locomotive cranes, Navy Yard—The Browning Crane and Shovel Co., Cleveland, Ohio ....	43,080.00
Seattle, Wash.—improvements to power plant, Naval Air Station—C. C. Moore & Co., San Francisco, Cal. ....	42,425.00
San Diego, Cal.—galley equipment, Naval Air Station—Mangrum, Holbrook & Elkus, San Francisco, Cal. ....	40,490.00
Washington, D. C.—casting pit, Navy Yard—McLean Contracting Co., Baltimore, Md....	39,267.00

Washington, D. C.—electric bridge crane, Navy Yard—Victor R. Browning & Co., Wilmoughby, Ohio .....	34,990.00
Philadelphia, Pa.—air compressor, Navy Yard—Bury Compressor Co., Erie Pa. ....	30,846.00

RECENT CONTRACTS AWARDED BY PUBLIC BUILDINGS BRANCH, PROCUREMENT DIVISION, TREASURY DEPARTMENT

Chester, Ill., P. O.—construction—Clarence Renigar, 808 North Dean Street, Bushnell, Ill. ....	\$48,000.00
Cape May, N. J., P. O.—construction—Sofarelli Bros., Inc., 161-19 Jamaica Avenue, Jamaica, N. Y. ....	59,678.00
Curwensville, Pa., P. O.—construction—Andrew and Dawson, 17 Adams, Montgomery, Ala. ....	47,215.00
Stoughton, Wisc., P. O.—construction—Carl Westberg & Co., Inc., 6234 South Oakley Ave., Chicago, Ill. ....	42,014.00
Chicago, Ill., P. O., Englewood Postal Station—construction—Henke Construction Company, 200 E. Walton Place, Chicago, Ill. ....	166,004.00
St. Marys, West Va., P. O.—construction—Algernon Blair, 1209 First National Bank Bldg., Montgomery, Ala. ....	41,912.00
New York, N. Y., P. O., Grand Central Annex, East 45th St. and Lexington Ave.—remodeling (except elevators)—Millimet Construction Co., Inc., 988 Bergenline Avenue, Union City, N. J. ....	1,849,000.00
Rocky Mount, N. C. P. O.—extension and remodeling—L. B. Gallimore, 215 Watson Building, Greensboro, N. C. ....	73,400.00
Auburn, Calif., P. O.—construction—Lembke Construction Company, 324 North Third Street, Albuquerque, N. M. ....	50,500.00
Gibson City, Ill., P. O.—construction—Fred T. Scheurman, 209 Jay Street, St. Clair, Mich....	44,900.00
New York, N. Y., P. O., Grand Central Annex, E. 45th St. and Lexington Ave.—an elevator plant—Atlantic Elevator Co., Inc., Erie Avenue and D Streets, Philadelphia, Pa. ....	167,087.00
Alderson, W. Va., Storage Bldg., Dept. of Justice, Federal Industrial Institution for women—extension and remodeling (except elevators)—James I. Barnes Construction Co., Greensboro, N. C. ....	30,450.00
Flushing Meadow Park, New York, N. Y., U. S. Government Building, New York World's Fair 1939—construction of the foundations of the building, including excavation, backfilling, grading, concrete work and construction office of the Government Bldg. at the New York World's Fair 1939—Wood & Hagan, Inc., 70 East 45th Street, New York, N. Y....	64,539.00
Phenix City, Ala., P. O.—construction—L. B. Gallimore, 215 Watson Building, Greensboro, N. C. ....	38,000.00
Luray, Va., P. O.—construction—Algernon Blair, 1209 First National Bank Bldg., Montgomery, Ala. ....	49,358.00
Lancaster, N. Y., P. O.—construction—Mutual Construction Company, 7 East 42nd Street, New York, N. Y. ....	54,626.00
Honolulu, Territory of Hawaii, Q. S.—construction—MacDonald Construction Company, 3829 West Pine Blvd., St. Louis, Mo....	145,700.00
Meyersdale, Pa., P. O.—construction—The Mutual Construction Co., 550 W. Boston Ave., Youngstown, Ohio ....	46,944.00
Tampa, Fla., Appraisers Stores—construction—A. Farnell Blair, Lake Charles, La. ....	95,997.00
Burlington, Iowa, Memorial Auditorium—construction—Peter Kiewit Sons' Company, 1024 Omaha National Bank Building, Omaha, Nebr. ....	403,430.00
Sandwich, Ill., P. O.—construction—Bonded Construction Corporation, 110 East 42nd Street, New York, N. Y. ....	40,518.00

(Continued on page 50)



## UNEXPECTED CONSTRUCTION CONDITIONS

(Continued from page 30)

Proceed to Rostoff-on-Don. Apartment with two servants, ready and available for occupancy. Body guard, under guise of interpreter, in the person of an engineman who had spent two years in America fifteen years previously, assigned for personal use and convoy.

Begin to study Russian. Alphabet, thirty-six letters, based upon Greek. After three months, begin to understand conversation of others; after four months, begin to be able to converse. Remarkable how necessity aids the mastery of a new tongue. During remainder of sojourn, mastery of language becomes sufficient to permit discussion of any subject from work in hand to theories of government with anyone from lowest laborer to highest government officials. Expression not grammatically correct but quite understandable. Russians say a German can never master the language perfectly but an Englishman or American can accomplish it in three or four years.

Construction conditions most unexpected. No equipment; scant and poor materials. Primitive methods must necessarily be adopted though weights to be handled are unprecedented in Russia. Pieces weighing twenty tons must be lifted two hundred feet and placed on tops of steel towers. Follow weeks of preparation—devising ways and means to accomplish the seemingly impossible. Extreme labor shortage—workmen all at the front. There are three million men on the Caucasian front to and from which this railroad is handling eighty-five percent of the traffic. Women, under male supervision, perform practically all work done at ground level; men, incapacitated or unfit for army service, available for work above ground. Require a steam crane of some sort; locate a primitive affair not far distant; requisition it. Weeks follow. No crane. Require five kegs of large nails. Requisition them. Weeks follow. Plenty of letters explaining difficulties encountered but no nails. Situation becomes critical. Little progress to show for weeks of work. Summoned, with all operating officials, to conference to determine upon procedure for expediting the work. Conference convenes. Twenty officials in uniforms of their respective services deplore delays and criticise progress. Time has arrived to register official complaint. The prosecution completes its case. The defense recalls requests for equipment, materials and supplies citing dates and items and concludes with reference to the letter from Petrograd directing cooperation. The chairman excuses himself and calls two of his assistants into the next room. They return in five minutes with assurances that required items will be forthcoming and moving within twenty-four hours. They arrive promptly. Work proceeds with despatch.

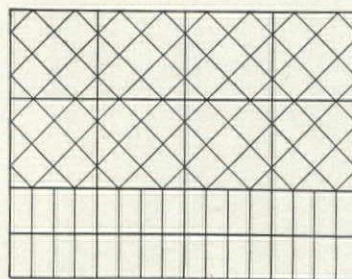
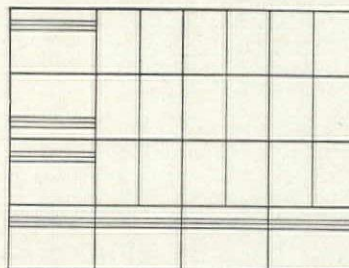
Comes the revolution. No news from Petrograd or Moscow for four days. Everybody under nervous tension from fears and anticipations growing out of the ominous silence. Finally, a short telegram stating that a coup at Petrograd has apparently been success-

(Continued on page 48)

# ANNOUNCING

## a great forward step in modern construction!

### MASONITE PATTERNED CEILINGS



Two of the many smart patterns made possible by MASONITE PATTERNED CEILINGS

• Durable, eye-appealing MASONITE PATTERNED CEILINGS, made of Genuine MASONITE QUARTRBOARD, can now be bought from lumber dealers. Masonite Corporation fully realizes the importance of this announcement to every one connected with the building industry.

It means that smart, modern ceiling treatments can be included in plans for practically every type of structure, large and small. It means that existing homes, stores and offices can be brought up-to-date without any structural change in present ceilings.

Here's the way it works: Lumber dealers can now supply sections of MASONITE QUARTRBOARD, already beveled and grooved. These sections range from 4 x 4 feet to 2 x 2 feet. They are the basic units of MASONITE PATTERNED CEILINGS and are made up in 16 individual patterns. By working out combinations of two or more units, hundreds of distinct ceilings can be executed.

MASONITE PATTERNED CEILINGS are applied with mastic cement over tight plaster, insulation or any solid, smooth surface. Any size or shape ceiling can be cared for—surprisingly inexpensively. Ask your lumber dealer for complete details, or mail in the coupon for pattern sheets and additional information.

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# MASONITE

THE WONDER WOOD OF A THOUSAND USES

A MISSISSIPPI PRODUCT

SOLD BY LUMBER DEALERS EVERYWHERE

MASONITE CORPORATION, Dept. FA-4

111 West Washington Street, Chicago, Illinois

Please send me FREE pattern sheets and more information about MASONITE PATTERNED CEILINGS.

Name \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_ State \_\_\_\_\_



(Continued from page 47)

ful—but giving no details. Tension becomes greater and signs of happy anticipation appear. Next evening, arrive confirmation and details of the affair in Petrograd. The entire population goes wild. Friendly parties assemble in private homes where they share their joys and their fears and consume stores of wines and vodka stored during the days of prohibition. Apparently most of the celebrating is being done privately although the cafes and streets are filled with those feeling the first joys of the new freedom. There is little disorder. Three o'clock in the morning—practically every house is fully illuminated, all *izvoschiks* are busy. There is no sleep during this night.

Follow weeks during which political discussion is the paramount issue of all classes and the personal responsibility of every individual. What form of permanent government should Russia adopt? How long will be required to establish the new government? The American should know but his prophesy of twenty-five years based upon the history of the American and French Revolutions is false because the Russians have studied the histories of both of those revolutions and will be able to avoid the mistakes of the earlier ventures. Local soviets are formed. Universally their first decree—no action will be tolerated that will adversely affect the best interest of the workman.

Find it necessary to discharge three iron workers for failure to obey instructions. Next morning, a foreman excitedly reports that the case had been considered by the soviet overnight. The American engineer had contravened the soviet resolution and a delegation had been appointed to call upon him. The delegation arrives. The situation is reviewed and the American engineer is no longer welcome in Rostoff. Following the ultimatum, facts are recalled—navigation is cut off from Rostoff until the bridge can be opened; Rostoff needs bread; three ships loaded with wheat consigned for the city lie at Taganrog waiting to pass through the bridge and unload their cargoes; the American welcomes the opportunity to return to America and leave the confusion behind him but reminds the delegation that there is no person other than himself closer than America who can complete the project. The delegation withdraws to consider the new situation and finally announces that it will return tomorrow with its decision. And tomorrow never came.

The aftermath of revolution unfolds. Every train from the front is overflowing with deserters from the army. Roofs, rods and vestibules of all trains, freight and passenger, are packed with peasant soldiers returning home to claim their parcels of land before somebody else appropriates them. Efforts to convince the deserters that the war must be won are of no avail. The land must be claimed. Courts cease to function. A murderer is apprehended in a park on a Sunday afternoon. There is no jail in which to incarcerate him and no court to administer the law but justice must be served. The assembled crowd removes the murderer's boots and with them beat out his brains. The body is hauled away on an open cart. Workmen take the necessary steps to insure them-

selves against the loss of the new freedom. In factories and workshops, they set up committees to voice and enforce their demands. First, they procure an eight hour day; later, one hour of the eight is set aside to be devoted to assembly and discussion of current political issues; and yet a little later an additional hour of the eight is set aside for recreation and smoking. All trace of authority disappears—the workman is supreme. In restaurants, cooperative management is established. Tips are abolished. Prices are raised and ten percent is added to all checks for the benefit of the help. Waiters decline a proffered tip.

Ability of native operators to handle the machinery without supervision requires a test. A vacation in the Caucasus will afford them the opportunity. Decide upon a trip to Tiflis, general headquarters of the army on the Caucasian front. Choose the sixteen year old son of a Russian friend as companion. Undertake to travel to Vladicavcase by rail. Train overcrowded by soldiers; impossible to obtain possession of accommodations; share them with three soldiers. Arrive Vladicavcase. Hire a troika for drive over the Georgian Military Road—one hundred miles—to Tiflis. Beautiful drive but traffic conditions difficult because of herds of cattle and horse drawn transport trains, generally manned by Austrian and German prisoners of war, headed for the front. A telegraph line built by prisoners of war parallels the road. At Tiflis, terrific congestion and disorganization. Had planned to travel from Tiflis to Baku by rail. Congestion of railroad traffic by deserters effectively frustrates the plan. Compelled to abandon it and retrace our steps to Vladicavcase thence to Rostoff.

For months, food has been a problem. White bread is practically unobtainable, sugar and many other articles are rationed out by card system, meat procurable once or twice a week, coal so scarce that one tumbler of hot water for shaving is the daily allowance. Restrict sugar consumption to the minimum and appropriate any excess served with coffee and tea for hoarding against possible future needs. The greatest favor to friends is a gift of a pound or two of sugar obtained by any possible means. Inflation is rampant. Prices soar. Money consists of flimsiest paper. Small change consists of postage stamps, without glue, but with the inscription upon the reverse that the stamp shall pass as currency.

The job is done and the homeward journey is welcome. Nevertheless, better see Moscow while the opportunity offers. Arrive Moscow, early morning. Go immediately to English-speaking National Hotel. Hotel practically closed after midnight and only night porter on duty so early. No accommodations available. Thence to Hotel Metropole. Night porter still on duty—kindly, good natured fellow—offers no encouragement. Visit with him ten or fifteen minutes and impress upon him lack of familiarity with the city and necessity of locating accommodations. Finally tell him that it will be worth ten roubles to him if satisfactory room is available by night either in the hotel or other proper place. Whereupon he becomes more interested and suggests "See Mister Brown after eight o'clock." Mr. Brown must be either an Englishman or an American for no other national is referred to as "mister." Leave baggage in charge of the porter and



go to breakfast in the sidewalk restaurant of the hotel. Breakfast about finished; enter the porter, on his way home, to say that Mr. Brown has arrived. Consult Mr. Brown and inform him of requirements. He offers no encouragement but suggests that he will know better about seven o'clock in the evening. Return about seven; no accommodations; possibly something about eight. Tell him that a cot in a hall will be acceptable. Eight o'clock. Mr. Brown has a regular guest who is out of the city for a week and his room may be had for a couple of days. Take it. Mr. Brown is an Englishman—Now, how to recognize the favor and fulfill the promise to the porter. Casually slip a twenty rouble note from the billfold, raise the blotter on the desk, flip the bill under the blotter with the request that the porter be taken care of.

Thence to Petrograd. Return to America through Scandinavian countries is too hazardous because of submarine activity since the States entered the war. Transportation to Valdivostock must be arranged. Speculation in railroad tickets has raised prices to extreme levels. Fare to Vladivostock is about one hundred ninety roubles. A ticket might be procured, but not guaranteed, through an established travel bureau for five hundred roubles. Offer three hundred—no results. Decide to attempt procurement through the railroad offices. After three days, informed that one has been reserved and can be procured at the regular price by calling at the station at a specified time.

In Petrograd, contract bread sickness—an intestinal disorder, caused by coarse bread, to which Americans and Englishmen are particularly susceptible. Consult a physician who outlines the precise course that the malady will follow, writes two prescriptions to be taken consecutively and dismisses the case. Russian custom precludes mercenary relations between patient and his physician—the physician sends no bill but the patient sends the physician a present once or twice a year. How, then, to pay for the service without offending the physician. Follows a long explanation of circumstances with appropriate apologies and a request that the physician name his fee and accept payment. Mutual understanding prevails and the matter is settled without attendant offense.

Leave Petrograd tomorrow. Tonight great excitement prevails as General Kornilov is reported to be marching on the city with Counter-revolutionary forces. Long trip ahead to Vladivostock. Something to read en route is desirable. Besides, a samovar, which is copper and therefore contraband of war, must be gotten by customs at Vladivostock. The Trans-Siberian Express will doubtless reach Vladivostock with the first news of Kornilov's attempt. Better, then, purchase copies of as many newspapers as possible; they may come in handy. Stand in line before seven news vendors and purchase as many newspapers.

En route across Siberia. Eight long days. Good food and white bread abundant after leaving Petrograd one hundred miles behind. Papers all read but not destroyed. Place them in the box containing the samovar immediately under the cover.

Leaving Vladivostock. Customs examination aboard ship prior to sailing. Baggage arranged care-  
(Continued on page 50)

## DAYLIGHT

*Solar heat  
reduced*

*Uniform light  
Diffusion*

## CLAD-CRETE ROOFLIGHTS

*Permanent — Weatherproof*

Installed in Apex Building  
and  
Federal Warehouse  
Washington, D. C.

## MAGNALITE

**Diffusing Glass**

*Type A and B Plain and Wired*

Installed in Agricultural  
Building, Washington, D. C.

UNIFORM LIGHT DIFFUSION

One set of lenses spreads light evenly at right angles to their axes. The other set spreads light in the opposite direction to cover an area the shape of the glass opening.

Total diffusion angles average about 32°.

**AMERICAN 3 WAY-LUXFER PRISM CO.**

517 W. 45th St.      2139 W. Fulton St.  
New York, N. Y.      Chicago, Ill.



(Continued from page 49)

fully—steamer trunk at the back, then the box with the samovar, then the suitcase and, in front, the handbag. Three inspectors begin the examination. The first and second items are thoroughly examined and sealed. The box is opened and the newspapers are exposed. Possibly the inspectors have not seen the latest papers from Petrograd and would like to have these useless papers. The offer is accepted; the inspectors excitedly read of happenings in Petrograd; the inspection ceases; the box and the trunk are quickly sealed without examination. The samovar is safe.

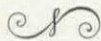
En route across Siberia, discover that an American fellow-traveler has reservations for passage from Yokohama to Vancouver upon the same vessel that I have. He, however, leaves the Express at Harbin to travel via Mukden and Nagasaki, while my route is via Vladivostok and Tsuruga. Arrange between us that the first to reach Yokohama is to claim accommodations for both in the same stateroom.

Arrive first in Yokohama. Steamship office offers a stateroom for two on the fifth deck or a stateroom with a third party on the promenade deck. The fifth deck is unacceptable as is also the third party. Decision is reserved pending the arrival of the fellow-traveler.

Consultation following the arrival of the fellow-traveler results in the decision to accept the stateroom on the upper deck but preferably without the third party. Accordingly, together we visit the steamship office where my companion announces our decision and adds that he snores while Hunter talks in his sleep and besides, he has the itch while Hunter carries vermin, all of which information he suggests be given to the third party who will be welcome if he desires to share the room. The ship sails and there are but two of us in the stateroom.

Late fall, 1918. Vancouver, thence home. It is good to be back again with one's own people.

The experiences are valued but there is little desire to repeat them. At the same time travel abroad has been revealed in its proper aspect. The thrills of adventure abroad lie not in art galleries, cathedrals or lovely scenery but, rather, in the satisfaction that comes of procuring through one's own efforts his food, his lodging and the fulfillment of his every day needs—dealings with his fellow-men of different language, habits and customs. A sense of humor, particularly an appreciation of the grotesque positions in which one often finds himself, and an ability to exercise his wits combine to give the independent traveler a continuous thrill and a feeling of successful accomplishment.



(Continued from page 46)

Carmi, Ill., P. O.—construction—Charles H. Barnes, 312½ Fifth Street, Logansport, Ind. California, Pa., P. O.—construction—Carl Westberg & Company, Inc., 6234 South Oakley Avenue, Chicago, Ill. ....	42,410.00
Augusta, Kans., P. O.—construction—Armagost & Son, 116 S. Belmont, Wichita, Kans.	47,982.00
	43,394.00

Pacific Grove, Calif., P. O.—construction—E. E. Parker Company, 135 South Park, San Francisco, Calif. ....	54,974.00
New York, N. Y., Canal Street Postal Station—construction—George F. Driscoll Company, 548-550 Union Street, Brooklyn, N. Y. ....	574,485.00
New York, N. Y., Canal Street Postal Station—elevator plant, etc.—Atlantic Elevator Co., Inc., Erie Ave. and D Street, Philadelphia, Pa. ....	34,000.00
Concord, N. Hampshire, P. O. & CT. H.—extension and remodeling—D. A. Sullivan & Sons, Inc., 78 Main Street, Northampton, Mass. ....	136,977.00
Chicago, Ill., Appellate Court Bldg.—remodeling, etc.—Thorp-Rogoff Company, 306 S. Wabash Avenue, Chicago, Ill. ....	70,185.00
Corbin, Ky., P. O.—construction—Charles H. Barnes, 312½ Fifth Street, Logansport, Ind.	33,744.00
Hazlehurst, Miss., P. O.—construction—Algeron Blair, 1209 First National Bank Bldg., Montgomery, Ala. ....	36,735.00
New York, N. Y., P. O., 8th Avenue, 31st to 33rd Streets — remodeling — O'Driscoll & Grove, Inc., 247 Park Avenue, New York, N. Y. ....	696,131.00
Newark, N. Y., P. O.—extension and remodeling—Sofarelli Bros., Inc., 161—19 Jamaica Avenue, Jamaica, N. Y. ....	66,746.00
Whitehall, N. Y., P. O.—construction—Sofarelli Bros., Inc., 161—19 Jamaica Avenue, Jamaica, N. Y. ....	52,560.00
Los Angeles, Calif., Immigration and Naturalization Station—construction—Sarver & Zoss, Inc., 1015 West 4th Street, Los Angeles, Calif. ....	351,600.00
Fayetteville, W. Va., P. O.—construction—Algeron Blair, 1209 First National Bank Bldg., Montgomery, Ala. ....	46,958.00
Alamagordo, N. M., P. O.—construction—J. J. Fritch, 304 Construction Building, Dallas, Tex. ....	82,875.00
Norfolk, Va., P. O. & CT. H. (New)—air conditioning, etc. (third floor)—Norair Engineering Corporation, Rear 1114 — 18th Street, N. W., Washington, D. C. ....	42,890.00

RECENT CONTRACTS AWARDED BY THE QUARTERMASTER GENERAL'S OFFICE, WAR DEPARTMENT

Hickam Field, T. H.—Construction of Post Garage and Parking Areas, Moses Akiona, Honolulu, T. H. ....	\$75,900
Hickam Field, T. H.—Construction of Sections B and C of Landing Mat, Tucker McClure, Balboa, Canal Zone ....	378,100
Hickam Field, T. H.—Construction of an Outfall Sewer Line, George Hess, Honolulu, T. H. ....	30,847
Hickam Field, T. H.—Installation of Altitude Valve, George Hess, Honolulu, T. H. ....	1,268
Olmstead Field, Middletown Air Depot, Pennsylvania—Changes in Night Lighting Installation, J. E. Umberger Company, 1007 Cumberland Street, Lebanon, Pennsylvania..	2,511
Fort Monroe, Virginia—Construction and Completion of Ornamental Iron Stairways and Furnishing Structural Iron in Post Hospital, Barnum-Bruns Iron Works, Inc., 632 West 24th Street, Norfolk, Virginia ....	1,946
Sacramento Air Depot—Construction and Completion of Runways and Drainage, Union Paving Company, 310 California Street, San Francisco, California ....	201,500



## NEWS AND OTHERWISE

(Continued from page 45)

won a \$100,000 law suit, and that there were several widows present at the gathering, we wonder how long it will be possible to apply the term "Bachelor" in connection with Mr. Richey.

We have learned that in commenting on the retirement of Mr. Richey, Secretary of the Treasury Morgenthau, stated:

"In leaving the Government service, Mr. Richey can feel confident his contributions to the field activities of the Public Buildings Branch have been of great benefit and the Treasury Department commends him highly on the professional qualities he demonstrated in the performance of his duties."



## APERITIF

(Continued from page 27)

From Convention meetings the members will find refreshment of one sort or another in wandering again and again through the Vieux Carré, a stone's throw from the hotels. Throughout the Quarter there are amazing antique shops—all sorts of book-stores—a French Library—the Place d'Armes—the French Market, recently restored—restaurants, pastry shops and boutiques. The scene is a lively one.

In the early hours of the morning may be heard the inimitable cries of vendors of fruit and vegetables—the chimney sweep with his "Ramanay!"—the sylvan flute of the scissors-grinder. Towards dusk there will be in the air the scent of camellia blossoms and roses; occasionally your nostrils may even dilate and titillate to the rich aroma of a Sazerac cocktail or the minty sweetness of a Planter's Punch. The essence of the Ojen or Gin Fizz is too delicate and elusive to penetrate long distances; you must cross the threshold to the very bar to inhale this fragrance.

You will see here the Café Maspero, and rendezvous of Jean Lafitte the pirate and the smugglers from Baratavia, and you will find famous restaurants and modest ones in the like of which Johnson described the tavern chair as a throne of human felicity where discourse may be had over food prepared by a master.

These and other distractions we trust will not interfere with sessions and serious business. We feel almost contrite in the thought that we may seem to be luring you to play vagrant. What has been sketched here so rapidly are merely the *apéritifs* or at most the *hors-d'oeuvres* and are by no means to be considered the *plat-du-resistance*. *Ma foi!* we had almost overlooked mentioning the unexcelled fishing in the bays and open waters so close that it is a mere matter of minutes to reach them from your hotel.

MOISE H. GOLDSTEIN.

# AMERICAN RADIATOR

## announces a new type of Home Heating!

**THE ARCO THERMO SYSTEM PROVIDES AIR CIRCULATION—YES! But not from Room to Room!**

A small, silent fan driven by compressed air blows across a copper finned radiator through which warm water circulates. This system not only can warm a room under normal conditions in from three to six minutes, but it *keeps the air moving*—eliminates stratification and maintains even temperature with but 3° difference between floor and ceiling.

## The ARCO THERMO SYSTEM

**T**HE Arco Thermo System uses a new principle of heat distribution in rooms. With a new unit concealed within the walls of every room it brings to homes instantaneous circulation of warm air, without the disadvantages of ducts.

**Thoroughly Tested**—Rigorously tested in competition with every other type of heating system, the Arco Thermo System provides advantages not found in many other systems, yet its cost is far below those which give comparable comfort results. Here are some of its unique features:

1. Instantaneous heat from positive heat source in each room. No lag between thermostat's call and heat delivery.
2. Positive air circulation in each room—without ducts.
3. No air recirculated from room to room.
4. Eliminates "Cold 70" and stratification, keeps floor and ceiling temperature from varying more than 3° F.
5. Completely automatic operation.
6. Units are installed flush with wall—need no floor space.
7. All copper piping resists corrosion, cannot rust. Easily installed in old as well as new homes.
8. No headroom sacrificed for ducts in basement. No weakening of structure.
9. Domestic hot water supply from indirect heater, an integral part of boiler.

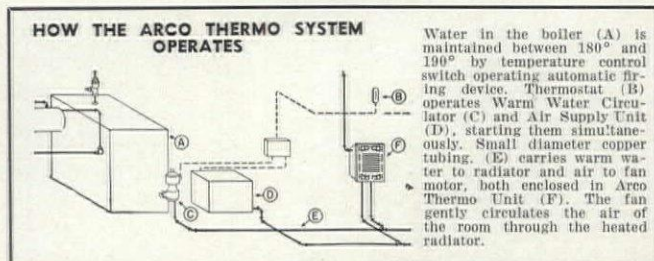
**Operating Economy Assured**—The Arco Thermo System heats only about one-third the amount of water as the average warm water system. A new fast-acting thermostat relays instantaneous calls for heat. Thus quick pick-up and fast low cost heat are assured.

**Comes Complete**—Includes an American Radiator Ideal Boiler; complete heat units for every room, including grilles; Arco Copper Fittings and Pipe; Warm Water Circulator; Air Supply Unit; new fast-acting Thermostat—everything you'll need.

Mail coupon today for installation guide which explains the system in detail, shows all component parts and piping diagram.

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**AMERICAN IDEAL**  
RADIATORS BOILERS



## AMERICAN RADIATOR COMPANY

DIVISION OF AMERICAN RADIATOR & STANDARD SANITARY CORPORATION

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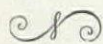
## THE CONIC DWELLING

(Continued from page 31)

perspective. The skyscraper architecture of recent years has been a harbinger of the cone principle. How better can we prepare the open spaces to receive sunlight than by making all our buildings conical?

We could go further and cite the abortive "Dimaxion House," a model of which was exhibited some years ago, as an approach (however unconscious) to the true conic dwelling. But we must reserve for another paper the technical solution of the "conic"; how it will stand on one center foundation with a hollow shaft or center pole carrying all vertical communications; how this shaft is the axis of the cone and the nerve-center of the organism; how from it we can suspend the horizontal planes and areas which bound space from below.

Suffice it to say with regard to the diagrams, that they do not pretend to illustrate a full-blown architecture. The work sheet for the plat shows the calculations and site-problems met with in mass housing groups; there is a detail of a single dwelling; there are also some calculations showing the structural solutions of the suspension theory and the developable-surface theory.



## HEAVY-DUTY FLOORING MATERIALS

(Continued from page 40)

inch plain magnesite. Both of these specimens showed wear to such an extent as to indicate their unsuitability for this kind of service.

"Specimen 19 was ¼-inch battleship linoleum. This showed very little wear. There was a tendency to creep in the direction of the traffic, but the movement was not sufficient to break the bond between the linoleum and the concrete subfloor.

"The first sample of rubber tile (no. 20) could not be made to stick to the concrete. It was finally taken up on November 14 and replaced by sheet-rubber flooring ¼ inch thick. The second sample of rubber tile (no. 21) adhered somewhat better, but it caused a great deal of trouble, tiles having to be replaced every few days. The results indicate that rubber will withstand the service fairly well, if some adhesive can be found to hold it to the concrete."

## CHARLES W. OWENS

Charles W. Owens, Construction Engineer, Public Buildings Branch of the Procurement Division, died at Birmingham, Ala., Feb. 2nd, 1938, after an illness of several months. Mr. Owens was born at Wilson, North Carolina, in 1887. He graduated as Civil Engineer from the North Carolina State College in 1912. Up to his entering the Government service he was employed as Engineer on railroad construction and Resident Engineer for the North Carolina State Building Commission. Mr. Owens entered the Government service in 1931, and during his term of service supervised construction on various post office buildings. He leaves a wife and two children.

## BENJAMIN HENRY LATROBE

(Continued from page 33)

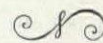
great faith and confidence in his ability and it was through them that he procured the commissions to design the building for the Bank of Pennsylvania, and a new building for the Library.

His success in these projects prompted the City officials to offer Latrobe the position of City Engineer and the work of designing a new water-works for the City. Despite considerable opposition on the part of the citizens he was given this commission, the completion of which caused him to be hailed as a genius. During his sojourn in Philadelphia, he made a design for the Bank of Philadelphia but the structure was not built until after his death.

Latrobe's experience in connection with the Capitol was to a man of his experience and accomplishments rather disappointing. He came to this country a trained architect, having already acquired recognition in the profession. However, he took over the work with the understanding that he would faithfully carry out Dr. Thornton's design. This requirement was naturally irksome as Dr. Thornton was not a trained architect and had no especial qualifications for the profession. To be placed in a position where it was necessary to carry out the ideas of an amateur must have been distasteful.

Latrobe had been preceded by Hoban, Hallett and Hadfield, the former an Irish Architect whose design had been selected for the White House. The other gentlemen had been recommended by persons of note for this work. Each endeavored to introduce changes and modifications to Thornton's plan and design with the result that the services of each were discontinued. Upon taking charge of this work Latrobe unfortunately fell into the same error. However, after a number of disputes with Dr. Thornton which the President was forced to arbitrate, Latrobe finally settled down to the business at hand; that of carrying out the design of Dr. Thornton. Some changes were found to be essential as the work progressed and Latrobe was permitted to exercise a certain amount of judgment and discretion in the execution of this work, particularly in connection with the Senate Chamber and the Hall of Representatives.

The advent of Latrobe marked a distinct turning point in the history of Architecture in America. The extreme simplicity of artistic expression of the earlier days of the Colonies had gradually developed into more and more richness of expression as the Colonies became wealthier and there was a tendency to go forward with enrichment and ornamentation to such an extent that it might eventually have lead into a rococo period. This trend however was stemmed by the influence of Latrobe, who by his studies of the classics remains and his association with Cockerell, was imbued with classicism and the greatest achievement in Latrobe's career was the introduction into this country of a conservative influence which had its effect in restraining the tendency of the time.





## SOIL INVESTIGATION

(Continued from page 38)

water table are intimately associated with the character of the soil in such manner as to influence the provisions that must be made to insure dry basements. In general, conditions which cause ground water to envelop the foundation walls for any considerable period of time will require the building below ground level to be waterproofed; while conditions which expose the foundation walls to occasional dampness for limited periods produced by water percolating down through the surrounding soil require that the building below ground level be dampproofed.

The natural combinations in which various classes of materials appear in nature are so numerous and varied that the promulgation of hard and fast rules is impractical and undesirable. On the other hand, generally applied measures employed in clearly defined cases are indicated in the following table:

Material Surrounding Basement Walls	Material Supporting Foundation Walls	Ground Water Level	Protection Provided
Impervious; as clay	Impervious; as clay	Below foundation	Dampproofing with exterior tile drains
Pervious; as sandy	Pervious; as sandy	Below foundation	Dampproofing only
Impervious; as clay	Pervious; as sandy	Below foundation	Dampproofing only
Pervious; as sandy	Impervious; as clay	Below foundation	Dampproofing with exterior tile drains
Impervious; as clay	Rock	Shallow; on rock	Dampproofing with exterior tile drains
Pervious, as sandy	Rock	Shallow; on rock	Dampproofing only
Any material	Any material	Above basement floor intermittently for periods not over 10 days	Waterproofing with under-floor tile drains
Any material	Any material	Above basement floor continuously or frequently for more than 10 days	Waterproofing and basement pressure slab

The foregoing table is to be considered as a guide furnished for the aid of field investigators in arriving at their conclusions in reporting field studies in connection with which their recommendation should be reported. The designing office will review all data submitted for each particular case and may either concur in the recommendations submitted or modify them as an analysis of all factors indicates to be desirable.

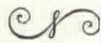
### Sub-Drainage Systems

Where the provision of sub-drainage systems, either exterior or interior or both, appears to be indicated or to have possibilities of adoption, the availability of means for disposing of collected water must be determined. Locations and elevations of available storm sewers, their adequacy to handle storm water during excessive rainstorms without back pressure and their free discharge during periods of floods in streams into which they drain, are matters of vital importance in the determination of the necessity or desirability for providing sumps and sump pumps for insuring the adequate operation of the system.

### General Information

No soil investigation is complete without a review of building practice and experience in the community in which the building is proposed to be constructed. Information regarding structures which have proven to have faulty foundations may be distinctly valuable particularly when the foundation design conforms to what would be good practice in other places. Difficulties experienced in the construction of other buildings as they are remembered by persons, including workmen, who were connected with them may serve as a guide or a warning in the design of the proposed building.

By way of summary, the soil investigator should attempt to procure all information of whatever sort that might be of any value to the designer in determining upon all features of the proposed building so that the resulting design may be as economical as possible and efficient and satisfactory in operation.



## DEATHLESS-REMARKS SECTION

1.

Stanford White was at one time showing visitors about his office and one of them said with courteous interest: "How many draftsmen do you employ, Mr. White?" To which the great architect replied: "One hundred and ten—one hundred in the drafting-rooms and ten in the toilets."

2.

To Jack Frost, of Bennett, Parsons and Frost is attributed the following: When he was a young draftsman in a certain architectural office, someone asked him how he was getting along with a drawing that had been assigned to him. "It's almost finished," he replied, "I have it all in my head, all I have to do is draw it."

3.

Anonymous: "I wish you fellows wouldn't make so much noise; I might not hear it strike five o'clock."

Head-draftsman stuff: "When a man is absent from his board, I place my hand on the seat of his

chair. If it is still warm, I know he has not been gone an unreasonable length of time."

4.

"Mr. Erskine, you were an hour late in returning from lunch today." "I know, sir, but I will make it up. I'll work harder this afternoon."

5.

H. H. Richardson's three indispensable requirements for good architecture: (a) Get the job, (b) Get the job, (c) Get the job.

6.

Adin Lacey, of Philadelphia, used to run his hand with loving touch along the polished granite base of a building, asking "How'd you like to collect six percent on that?"

7.

"He didn't carve a career for himself as an architect, he chiselled it."



## MORE LETTERS

(Continued from page 8)

Springfield, Mo.  
March 9, 1938.

Editor, FEDERAL ARCHITECT.

Dear Mr. Morris:

Your easy-to-take reminder via the penny anti route blew in today.

Months ago sending you one fifty went down on my sometime in 1937 list. Then personal difficulties, which eventually forced me "on leave," came along. My return beat your card to the job by only a few days.

So here is that elusive one fifty. Sorry the contract is in the overtime so long.

Very truly yours,  
H. W. OLMSTED,  
Construction Engineer.

Woodstock, Vermont.  
March 9, 1938.

Editor,  
FEDERAL ARCHITECT,  
Washington, D. C.

Sir:

Congratulations on your splendid publication.

Very truly yours,  
JACOB SCOTT FRIOU,  
Construction Engineer.

Downers Grove, Ill.  
March 8, 1938.

THE FEDERAL ARCHITECT,  
Washington, D. C.

Dear Mr. Morris:

There is inclosed herewith, my check for a two years subscription to the FEDERAL ARCHITECT, which I enjoy receiving regularly.

I find your publication very interesting and wish to extend my best wishes for its continued success.

Very truly yours,  
RAY G. BERGSTROM,  
Construction Engineer.

Staunton, Illinois  
March 9, 1938

Mr. Edwin B. Morris,  
Washington, D. C.

Dear Mr. Morris:

Your "Fullerizing" notice of payment "dew" had such a wordy tang that, with complete breakdown and tears for past offense, I am no longer able to hold out. Hence, order for \$1.50 is promptly despatched.

Evidently, an issue during the summer of 1936 contained an article on "brickwork." I was absent at that time. I would appreciate your check of back-numbers to see if you can supply me with the issue containing the article mentioned.

Kindly accept my sincere wishes for the continued success of your magazine. It affords good reading and a source of reference.

Sincerely yours,  
JOHN V. SHIELDS,  
Construction Engineer.

Oneonta, Alabama  
March 8, 1938.

THE FEDERAL ARCHITECT,  
Washington, D. C.

Dear Mr. Morris:

They say that Hell is paved with good intentions. At present I cannot vouch for that statement, but sometime in the future, if PWA and WPA contractors continue to bid on and obtain Post Office contracts, and I continue as a Construction Engineer, I will drop-up some night when you are dreaming, and tell you exactly what material is used for the paving down below.

The material used is hardy Class A, B, or C concrete, and is most likely "good intentions," and when I arrive I'll probably find a section of Main Street with my name on it.

My intentions towards THE FEDERAL ARCHITECT have been good, and I have certainly enjoyed it since being in the field; it is, I might say, the tie-that-binds we sojourners to activities and news of the Office.

Here's my check for past, present and through the 1938 subscription year.

Very truly yours,  
WM. L. WEST, JR.

Greenfield, Ohio  
March 10, 1938.

THE FEDERAL ARCHITECT,  
Washington, D. C.

Gentlemen:

Our door being wide open we were glad to welcome not only your foot but the entire ensemble in yesterday's mail. Thanks for the memories as presented in your Philadelphia Number, which, while excellent in every respect, made us a bit nostalgic.

I use the editorial "we" advisedly, as Mrs. James also reads the FEDERAL ARCHITECT from cover to cover, omitting the specifications for steel inspection, only. The latter article was fully worth several years subscriptions and has long been awaited.

The enclosed subscription for two years will probably bring me up to date, I hope, I hope, I hope.

Not only is our concrete all wet this particular March weather, but our sewer trenches, manholes and sump pit, also.

Yours sincerely,  
ALFRED R. JAMES,  
Construction Engineer.

U. S. Court House,  
Philadelphia, Pa.  
March 9, 1938.

Mr. E. B. Morris,  
Editor, FEDERAL ARCHITECT,  
1700 Eye Street, N. W.,  
Washington, D. C.

Dear Ed:

Our door happened to be open, so something or somebody pushed in with two feet, together with your gentle reminder.

About this dew (due) business; I understand that there is a very special brand that comes in bottles.



Shelton, Washington.  
March 11, 1938.

THE FEDERAL ARCHITECT.  
Washington, D. C.

Dear Sir:

The little post card came in this morning's mail, and I read it through with pleasant thoughts to the last line and there stopped and stared.

Concrete all wet and our specifications do not encourage too much wetness. Let me hasten to say that my whistle is not all wet too; I may be reeling a bit, but the liquor store closes rather early of evenings and does not open till noon, and it is not yet noon. Besides, I don't know whether I could fish out the price just now.

One bag mixers. When one of those things comes onto a new building job, even a little post office building, what should one think? Is the construction engineer too easy to let it stop there on the site, or is he too dumb to take out his watch and time the mix and line up the whole force on how to mix it; is the contractor a would-be crook, or is he too dumb to be without his governess? Yet some contractors are supposed to have real mental caliber, some of them are.

Well, the mixer starts up and grinds away and after awhile turns out some concrete, or maybe some concrete, a little. It reminds me of grandmother's little coffee grinder nailed up on one of the logs of the kitchen wall—if you grind long enough, you get grounds enough to brew a cup of coffee. And if you keep at it long enough, you can finally pour a concrete wall or floor. And that is just what happened last night; at 4 A. M. this morning I turned in, happy that another floor was poured to make the world safe for some more of Uncle's postal boys.

There ought to be a law—or could the cement manufacturers' association institute a kindergarten for contractors, and construction engineers, on how to utilize their product? At low cost.

Oh well, I don't hold it against you personal, even if I do right now resent your crack about wet concrete. But fresh ink is wet too, and to help get another supply of it, here's the check you asked for, and may you get the money on it before some creditor grabs it first.

Very truly yours,  
D. G. McCULLLEY.

Upper Darby, Pa.  
March 16, 1938.

Mr. Edwin B. Morris,  
FEDERAL ARCHITECT.

Dear Mr. Morris:

The first requisite for a good building is a good set of plans and specifications, second, a capable contractor; the ability of the Construction Engineer comes third. Incidentally, the plans and specifications for Morrisville are unusually good even though it is a small job, and the contractor is excellent. Being assigned to a job like this is a pleasure.

Carrying on our conversation, I have always believed that in a large architectural organization, young

(Continued on page 56)

## MINNESOTA DOLOMITIC LIMESTONE

A sound durable  
stone, produced in  
color shades of

**GRAY, CREAM,  
BUFF, and PINK.**

*Fine and Coarse  
Texture Stone*



Ample production  
and milling facilities  
for any project.

**MINNESOTA DOLOMITE ASSOCIATION**  
Mankato Minnesota

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(Continued from page 55)

draftsmen who show promise should be sent out on typical construction for a year at least, even if they only stand around. Working entirely in the office, they get the idea that buildings are constructed with pencil on paper although actually they are built brick on brick. If they learn that a four inch pipe is more than five inches in diameter outside of the connections, that it is difficult to put two things in the same space, and that besides the finished work a mechanic must have room to use his tools, they will have learned a lot. Also plans and details are used by men out in the open where it is windy and sometimes dirty, so it is advisable to use lots of ink and not spare the blueprinting. Beautiful fine details to small scale on the tracings are often a headache on the job.

I first went to Morrisville in the latter part of November but I believe it is beautiful around there in the Spring and Summer and there are many old buildings and points of historic interest in Bucks County. I hope you can come around then.

Very cordially yours,

FRANK CAPLAN,  
Construction Engineer.

Pocomoke City, Md.  
March 9, 1938.

THE FEDERAL ARCHITECT,  
1700 Eye Street,  
Washington, D. C.  
Gentlemen:

Although suffering from a most serious alphabetical de-arrangement (not enough V's & X's and too many I. O. U.'s) and as one who has been watered with the dew of Hermon, so free and freely, I hasten to forestall any visits of a brush salesman and inclose a money order for \$3.00. This should balance me for past waterings, since May 1935, and leave a few drops for future absolutions.

Wishing you continued success, I am,

Very truly yours,

C. A. WARTHEN,  
Construction Engineer.

P.S. How about giving the field hands a page or two sometime.

Editor,  
THE FEDERAL ARCHITECT.

Sir:

The comments of Gene Goodwin, Mechanical Engineer of the Procurement Division, regarding the heat of the Southwest, and which appeared on Page 12, of the October 1937, FEDERAL ARCHITECT, are indeed interesting, but I fear that the gentleman must have been out that way during the rainy season when things were damp.

Had he been in the vicinity of Seminole, Oklahoma City or El Reno, Oklahoma, during the real hot, dry summer time, he probably would have seen a condition similar to that shown on the crude drawing attached (showing trees inviting dogs). Most of the dogs turned up their noses and kept on going.

Very truly yours,

WM. L. WEST, JR.,  
Construction Engineer.

I am all out of it myself, hence I feel somewhat dry, likewise the concrete. Two engineers had a few words as to the proper water ratio, so in order that a good time might be had by all, the water was left out of the mix.

Now—in order that your day may be brightened, to say nothing of the night, and that the recession has now reached the elevator hatchway; I fought my way to the P. O. M. O. window and herewith inclose a small ticket from the same, in the sum of 1½ Pesos, for two year's subscription.

Excuse my neglect, but my intentions (don't say it) were good.

Like the sunlight and the dew, all three kinds, I cannot do without the FEDERAL ARCHITECT.

Sincerely yours,  
DAVID McCLELLAND,  
Construction Engineer.

Rusk, Texas  
March 10, 1938.

THE FEDERAL ARCHITECT,  
Washington, D. C.

Dear Mr. Morris:

I am passing the "BUCK" herewith from "ME to YOU" correcting the Defects and *OMISSIONS* in my moral contract, as noted in your reminder of March 7, 1938, and my this *piece offering* allay, to some extent, the pangs of my guilty conscience.

Very truly yours,

HENRY S. HINES,  
Construction Engineer.

Atlanta, Ga.  
March 8, 1938.

Dear Morris:

I send you my check for \$2.00 to keep the Recession from getting THE FEDERAL ARCHITECT. It would be too bad for a publication so unique in its get-up, and second only to National Geographic Magazine in its printing to fall a victim of a one horse recession.

On page 12, January issue, you said something about Max Dunning's trouble in wrapping up a duck, Max is a piker. When I left Washington in 1923 it was simply impossible to wrap a bundle of laundry so it would not look like a quart. Later the makers got on to the situation and changed the shape of their bottles, after the grave necessity had passed.

Sincerely,

H. C. RUSSELL.

Sandstone, Minnesota  
March 11, 1938.

FEDERAL ARCHITECT,  
Washington, D. C.

Gentlemen:

I have always looked forward to receiving your magazine and now that I am located in the wild and desolate lands of Minnesota, it is certainly a treat to read each issue, particularly the personal touch in such articles as the letters from Mr. Wetmore and other older members of our organization. Any articles from them certainly would be appreciated, particularly by us younger members.



It is hoped that we may be able in the near future to receive our magazine on a monthly basis.

With best wishes for a bigger and more frequent FEDERAL ARCHITECT, I remain

Very truly yours,  
H. D. MORRILL.

Neillsville, Wis., Post Office,  
March 10, 1938.

Editor Morris,  
Washington, D. C.

Dear Sir:

I am really ashamed to have waited so long to be reminded of my duty to the FEDERAL ARCHITECT, through a postal card knocking at my door.

The growth in matter, illustrations, mechanical make-up and in editorial merit, made by the FEDERAL ARCHITECT, is as amazing as it is pleasing.

I am attaching a check which attests to my interest in and appreciation of this publication.

Very truly yours,  
WILLIAM W. COOKE,  
Construction Engineer.

Panama City, Fla.  
February 17, 1938.

THE FEDERAL ARCHITECT,  
Washington, D. C.  
Gentlemen:

There is enclosed a P. O. Money Order for \$3.00 for my subscription to THE FEDERAL ARCHITECT for years 1936, 1937, and 1938, which I have neglected to forward heretofore.

I wish to express my appreciation of your kindness in sending THE FEDERAL ARCHITECT to me, as I have read and enjoyed each and every number that I have received to date.

Very truly yours,  
CARL W. SCHWEIZER,  
Construction Engineer.

Washington, D. C.  
February 10, 1938.

Mr. Edwin B. Morris,  
THE FEDERAL ARCHITECT.

Dear Mr. Morris:

The January 1938 issue of the FEDERAL ARCHITECT arrived on my desk this morning and as usual I turned at once to Judge Wetmore's letter to the "Eddi-tor."

His statement that he once received a telegram addressed to the "Supreme Architect" reminds me of an interesting fact that I uncovered during my brief stay in the government service and which you may wish to use in some future issue of THE FEDERAL ARCHITECT.

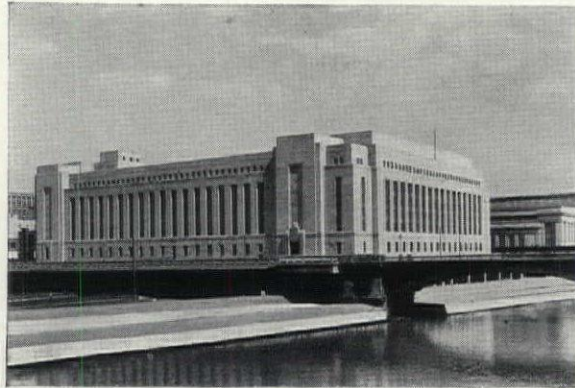
Have you ever seen the original plans of the State, War and Navy Building which are now reposing in the files of the Buildings Branch of the National Park Service? They are interesting examples of a day gone by when plans were drawn with different colored inks on paper similar to the Wattmans cold-pressed paper of today. I believe that the drawing which indicates the valves and piping of a self-flushing W. C. to be installed in this building would put Rube Goldberg

(Continued on page 58)

**NEW PHILADELPHIA POST OFFICE**  
**Equipped Throughout**  
**with**



**STEEL**  
**SHELVING**



Order your requirements from

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PHILADELPHIA

Manufacturers of Steel Shelving, Lockers,  
Storage and Wardrobe Cabinets

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48-29 32nd Place Long Island City, N. Y.



(Continued from page 57)

to shame. That however is beside the point. In the lower right corner of each drawing appears a neatly lettered signature which reads,

A. B. Mullett  
Supervising Architect

This appears on each drawing except one. On this, in a facetious moment, the draftsman has changed the title from "Supervising" to "Suprising Architect."

Very truly yours,  
J. SHADLEY,  
Architectural Representative  
The Tile Manufacturer's Association, Inc.

Marysville, Ohio  
March 20, 1938.

The Editors,  
THE FEDERAL ARCHITECT.  
Gentlemen:

Enclosed find check for \$1.50 to help keep the Recession from the ante-room. I hope it doesn't bounce back and that THE FEDERAL ARCHITECT will continue to be as interesting in the future as it has been in the past.

Certainly enjoy every article in the magazine especially the letters from "The Judge." Keep up the good work!

Very truly yours,  
ROY B. O'BRIEN,  
Construction Engineer.

Bonnors Ferry, Idaho,  
March 14, 1938.

THE FEDERAL ARCHITECT  
Gentlemen:

I am enclosing my check in the amount of \$1.50 for a few more issues of your splendid magazine.

I am sure the results of your ability on THE FEDERAL ARCHITECT can only be surpassed by the clever salesmanship shown on your recent New Years card.

Very truly yours,  
MADISON NICHOLS.

Bamberg, South Carolina  
March 30, 1938.

THE FEDERAL ARCHITECT,  
1700 Eye Street,  
Washington, D. C.

To the Editor and other Contributors:

Just as THE FEDERAL ARCHITECT comes as the dew from above, here comes \$1.50 for two years subscription, and hoping it will brighten up your day as much as each issue of the Architect brightens up so many hours of the Field Force, and may this subscription add another anchor to the ante-room door of the waiting Recession.

It is regretted that this magazine containing so many useful and interesting items can not come along more often, in that each issue is so eagerly looked for.

Articles contributed by the genial Judge Wetmore are so very refreshing that oftentimes his articles are read over and over, and thoughts revert to our national drink, (not RYE, SCOTCH or GIN) but the

drink which necessitates a pause for refreshment. Such thoughts are truly in keeping with many refreshing articles submitted by his goodself.

Now that we have another of his type, the Little General of Construction Mr. H. G. Richey, recently retired District Engineer, from the 4th District, it is eagerly hoped that he too will contribute many interesting and refreshing articles, which he is so capable of doing.

Very truly yours,  
CHARLIE ELMORE,  
Construction Engineer.

*We sent out a card asking permission to put our foot in the door and ask for a Construction Engineer contribution, in spite of the fact that the FEDERAL ARCHITECT goes to all Construction Engineers free as the dew.*

Ketchikan, Alaska.  
March 24, 1938.

Maester Federal Arcytec:

Ven aye get yur latter talling me aym all vet or someteng aye get yust so mad some vet hen vat come tru Mississippi flood. Yu bet aym all vet cuz har is dis kontry ve get 14 feet rain in vun yar. But dis ent vat mak me so mad too. Its ven a faller come and stick his foot in my door and say scuse plez—ken aye come in. Mebbe yu dunt know but op in des kontry venever yu get vun foot in door its yust so same yu come in to stay for long time. Und so ve vant yu for stay long time.

Deres anodder teng vat yu say it comes to all des enyineers as de dew from above. Yee Viz—vat yu fallers know about dew? Ay ben hare saxteen monThs and ve have vun bunch of dew dat measures 12 enches in twenty for hour or saxteen sunshiny days in sax months den yu know vat it means to hav dew. Aye tal yu aye see salmon viggling op des main strit tenking dey vas going out to sea.

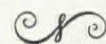
Mebbe yu tenk from dis ve ban planty dumb. Vere yust so smart sum dese city fallers. Ven ve finish a svell new church op har vit fine decorations new carpets, new benches new boiler in de basement and new belfry ve has got no money for a bell. And vat in hall is a church vitout a bell. Its yust so same as a salmon vitout a tail. So Lars Hanson he ban a smart fallar he say "Vy in hall cant ve hook a vistle in de belfry ven ve has got such a nice new boiler!" So yu see vat smart fallars ve are.

Yu bet yu. Ve ban planty smart. And des is vy ve has got all de best tengs to read, and all de best fish to catch and all de best vedder for to get a bath vitout buying a tub. And des is vy aye vant to be sure aye help yu to send me Fedral Arcytec for two yar enyho.

Only next time ven yu come dis vay it maks no never mind ef yu sell Fuller brush or straw hats ve vill hav de door open and de pantry full.

Aye hope yu tenk of someteng besides de dew in yur next comunkashun. Yurs—vebfooted.

GEORGE GEIB







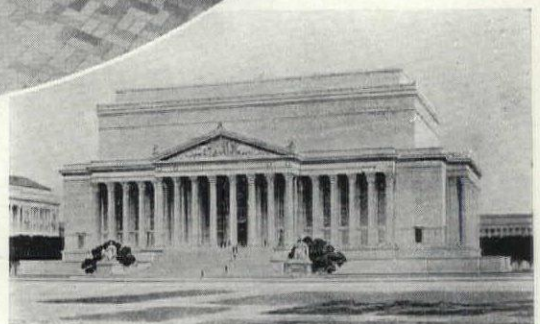
*Leading architects  
in every locality  
consistently use  
mounted tile*

by the

# SPARTA CERAMIC COMPANY

110 E. 42nd St., N. Y. C.

*The FEDERAL ARCHITECT* • APRIL, 1938



The above illustrations show an interior view and an exterior sketch of the Archives Building, Washington, D. C., designed by the office of John Russell Pope, of New York, N. Y.

E. Sparta, Ohio

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## CHANGES IN ASSIGNMENTS

Stanley G. Greene,  
Washington, D. C.

James L. Megaro,  
Washington, D. C.

Gilbert Brooks,  
Washington, D. C.

Lewis R. Madison,  
Washington, D. C.

Lewis A. Mason,  
Washington, D. C.

Murray M. Davis  
Atlanta, Ga.

H. G. Richey, Retired,  
Eff. 3-1-38.

E. J. Quinn,  
Atlanta, Ga.

Gordon S. Barber,  
Chicago, Ill.

Thomas H. Farrington,  
San Francisco, Calif.

John A. Ackerman,  
Sandwich, Ill.

Francis C. Allein,  
Luray, Va.

William J. Ashley,  
Pasadena, Calif.

John J. Austin,  
Short Hills, N. J.

Ralph C. Bauer,  
Flushing Meadow Park, N. Y.

Ray G. Bergstrom,  
Downers Grove, Ill.

Herbert A. Blogg,  
Ada, Ohio.

Lester W. Bosley,  
Bethesda, Md.

Guy W. Bradford,  
Florence, S. C.

Oscar O. Brattebo,  
Delta, Colo.

Harry S. Braun,  
Appalachia, Va.

William E. Brown,  
Rockport, Mass.

Ralph S. Bubb,  
Mobridge, S. Dak.

Hugh A. Campbell, Jr.,  
Bethesda, Md.

Frank Caplan,  
Portland, Me.

Robert Coltman, Jr.,  
Flushing Meadow Park, N. Y.

Walter L. Cronin,  
Curwensville, Pa.

Chas. W. Davis,  
Hazelhurst, Miss.

Ernest G. Davis,  
Cape May, N. J.

Harold H. Dewhirst,  
Meyersdale, Pa.

Reginald L. Dicks,  
Burlington, Ia.

Roy S. Eyre,  
Whitehall, N. Y.

Wm. E. P. Farnham,  
Danville, Pa.

Ward H. Fisher,  
Fayetteville, W. Va.

Jacob Friou,  
Northfield, Vt.

Maurice Gay,  
Woodsfield, Ohio.

B. H. Graff,  
Pacific Grove, Calif.

Hiram A. R. Gray,  
Dover-Foxcraft, Me.

Edgar L. Grover,  
Oxford, Ohio.

Frank L. Hawkins,  
Kansas City, Mo.

Paul H. Heimer,  
Concord, N. H.

Joseph T. Henthorn,  
Norfolk, Va.

Thomas L. Hews,  
Kansas City, Mo.

Henry S. Hines,  
New York, N. Y.

Benjamin S. Hirschfeld,  
Washington, D. C.

Edward J. Holahan,  
Abingdon, Va.

Roy J. Janis,  
St. Marys, W. Va.

William M. Javins,  
Wayne, Mich.

George L. Jensen,  
Kansas City, Mo.

Wm. S. Johnson,  
Augusta, Kansas.

James J. Kerley,  
Clyde, Ohio.

Guy T. Kuntz,  
Amarillo, Texas.

Harry D. Lackore,  
Anacortes, Wash.

Raymond Lavercombe,  
St. Louis (Kirkwood), Mo.

Jacob Don Levin,  
Bradley, Ill.

William McLaughlin,  
St. Louis, Mo. (Kirkwood).

Carl E. Miller,  
St. Louis, Mo.

William A. Miller,  
Bethesda, Md.

Wolf Mueller,  
Alderson, W. Va.

Clinton J. Muncie,  
Forest, Miss.

John J. Murray,  
Mahanoy City, Pa.

Cecil E. Myers,  
Chicago, Ill.

William Nichol,  
Alamogordo, N. Mex.

F. S. Nicki,  
Abingdon, Va.

William Oehrle,  
Newark, N. Y.

James D. Owens,  
Burlington, Ia.

A. Earl Patterson,  
Lakeview, Oregon.

William T. Pierce,  
Topenish, Wash.

David M. Platt,  
New York, N. Y.

Percy L. Rice,  
Kansas City, Mo.

Jerre T. Richards,  
Chicago, Ill.

Clarence R. Rogers,  
Summerville, Ga.

Irving N. Sauerbrun,  
Williamsburg, Ky.

Louis J. Schoefer,  
Tunkhannock, Pa.

Carl W. Schweizer,  
Tampa, Fla.

George C. Seibert,  
Lexington, Ky.

Emil C. Seiz, Jr.,  
Hawkinsville, Ga.

Merrick G. Shawe,  
New York, N. Y.

E. H. Somers,  
Corbin, Ky.

John B. Stobo,  
New York, N. Y.

Grady C. Stone,  
New York, N. Y.

Edwin J. Stotler,  
Latrobe, Pa.

Ernest L. Strickland,  
Chester, Ill.

L. E. Tull,  
Gibson City, Ill.

Edward P. Voegelin,  
Morrisville, Pa.

Ricardo F. Wallace,  
Prattville, Ala.

Ralph L. Warren,  
Honolulu, Hawaii.

Edward F. Webb,  
Carmi, Ill.

Albert J. Wersebe,  
Ware, Mass.

Charles R. Wilson,  
Newton, N. C.

Laddis A. Ziernicki,  
Clinton, Tenn.

Discontinued

Arthur W. Beaumont,

Elmer F. Cummings

William C. Fuller

Fred W. Haering

Resigned

George L. Cadenhead

Set E. Giem

Rudolph Geo. Rodighero

Chas. J. McDowell

Lynton R. Newhall

William J. Redden

John H. Roach

Sully A. Ross

David L. Schwartz

Richard L. Sorsby

John S. Strachan

Lewis D. Yood

Discontinued

Paul M. James

Luther E. Jenner, Retired

John S. Lane

Dale Lemon





LINCOLN TUNNEL

Under the Hudson River Between New York and New Jersey

Tile Contractor  
 Dei Turco Bros., Inc., Harrison, N. J.

Designed and Constructed by  
 The Port of New York Authority

PRINCIPAL DATA

Length of first or south tube, portal to portal ..... 8215 feet  
 Length of tube under river approximately ..... 4600 feet  
 External diameter of cast iron and cast steel shell ..... 31 feet  
 Width of roadway ..... 21½ feet  
 Maximum depth of roadway below surface of river ..... 97 feet  
 Glazed Tiles for side walls of south tube over 200,000 square feet  
 Colors of tiles used, light cream for the body, blue for the borders

The Lincoln or Midtown Tunnel illustrated above is one of many outstanding installations of Romany glazed tiles. We are justly proud of our record on this job, and although the requirements were exacting and the inspection critical, not a single piece of tile was rejected.

# United States Quarry Tile Co.

## CANTON, OHIO





UNITED STATES POST OFFICE, LAKEWOOD, NEW JERSEY

Treasury Department Procurement  
Division, Public Works Branch,  
Louis A. Simon, Supervising Architect.

Pozzi & Filice,  
Builders.

One of the fine small Post Offices recently erected. The beauty of design and colorful Terra Cotta well made and well set has brought enthusiastic appreciation from the public.

Window and door treatment and main cornice of Atlantic Terra Cotta. Four Abbochrome (mottled glaze) colors were used; two shades of green and two shades of light gray. The letters in frieze of main cornice are green on light gray field.

All pieces made with closed back providing improved structural stability. No filling required, eliminating that expense.

All joints ground after firing resulting in uniform width of mortar joints and accurate setting.

We shall be glad to send to architects who may be interested samples of the colors used.

# ATLANTIC TERRA

MAKERS OF AMERICA'S BEST KNOWN TERRA COTTA

101 Park Avenue, New York City  
Page 62

Southern Branch: ATLANTA TERRA COTTA CO., East Point, Ga.  
The FEDERAL ARCHITECT • APRIL, 1938





U. S. POST OFFICE, LAKEWOOD, N. J.

This interesting photograph of the main entrance shows the result of efficient manufacturing methods and careful workmanship in erection.

# COTTA COMPANY

MAKERS OF AMERICA'S BEST KNOWN TERRA COTTA

101 Park Avenue, New York City

The FEDERAL ARCHITECT · APRIL, 1938

Southern Branch: ATLANTA TERRA COTTA CO., East Point, Ga.

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# "Ground and Polished" is the Key to Carrara's Perfect Finish



*A striking foyer installation of Carrara Glass designed by Architects Miller and Yeager. Note the accurate reflections, which only a mechanically ground and polished glass can provide; the shaded Carrara, simulating fluting, which has been used for the piers; and the rich, satisfying elegance of the material when combined with aluminum trim.*

ONLY a structural glass with a mechanically ground and polished finish can be classed as top quality. And that's why you can be certain of getting nothing but the very finest structural glass when you specify Carrara. For every piece of Carrara Glass produced, whatever its thickness or color, is mechanically ground and polished to a true, brilliant, mirror-like finish.

This finish assures a finer, more striking execution of the architect's carefully planned designs. For it provides a material which has the lustrous, brilliant beauty, and the accurate reflective qualities so important in creating arresting effects. A material so true of surface that lippage at joints is eliminated. And a material whose permanence, sanitation and easy cleaning assure an exceptionally

long life of beauty and usefulness.

Whether using structural glass for toilet room walls and partitions, or for ornamental purposes in any type of building, specify Carrara . . . and be sure of top quality. And write for our free booklet "Carrara, the Modern Structural Glass," which contains helpful information. Pittsburgh Corning Corporation, 2254A Grant Building, Pittsburgh, Pa.

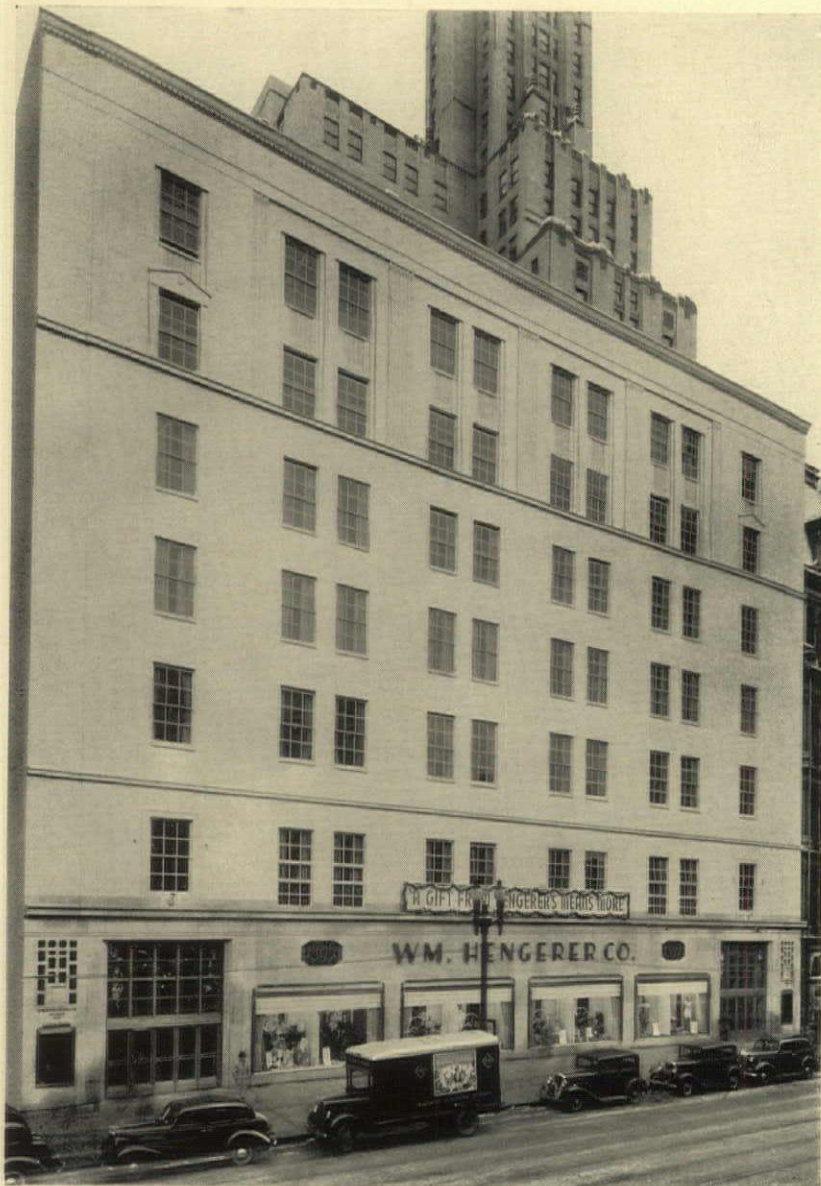
Distributed by  
**PITTSBURGH PLATE GLASS COMPANY**  
*and by W. P. Fuller & Co. on the Pacific Coast*

Manufactured by  
**PITTSBURGH CORNING CORPORATION**  
*Also Makers of PC Glass Blocks*



*Carrara*  
THE MODERN STRUCTURAL  
GLASS





## HENGERER BUILDING

*Buffalo, New York*

STARRETT & VAN VLECK, *Architects*

JOHN W. COWPER CO. INC., *Builders*

The Hengerer Building is entirely faced with large size terra cotta ashlar and trim from the top of the first story cornice to the roof.

All Terra Cotta is extruded, solid back and is face planed.

The color is a light pearl gray dull glaze.

# FEDERAL SEABOARD 1888 1938

For over half a century the FEDERAL SEABOARD TERRA COTTA CORPORATION has pioneered in the production of ARCHITECTURAL TERRA COTTA in the form demanded by the Period.

*Modern Architecture demands color.* Federal Seaboard Terra Cotta offers the architect an almost unlimited range of colors and textures.

*Modern Architecture demands large, flat surfaces.* Federal Seaboard Terra Cotta offers the architect ashlar of unusually large dimensions, face planed to produce a straight surface entirely free from waviness.

*Modern Architecture demands dignified decorations.* Federal Seaboard Terra Cotta offers the architect decorations in relief, by the application of polychrome in glazed colors, or, where absolute flatness is desired, polychrome may be applied by the use of stencils.

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The Department of the Interior Building  
Washington D.C.

**BUILT TO ENDURE**



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Wired Throughout with*

# CRESCENT ENDURITE WIRE AND CABLE

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