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L. S. BUFFINGTON, Architect

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FORGOTTEN BUILDERS--THE NATION'S VOICE

EVERY CULTURE contains within itself its own doom, unless it pays as much attention to the education of the mass of mankind as to the education of the exceptionally gifted people. Intellectual progress does not stem from the genius of a few individuals, but rather from the whole social framework of "custom thought" which circumscribes the greatest individual genius.

"Mathematics for the Millions." Lancelot Hogben, F.R.S., page 289, in part.

BY WILLIAM GRAY PURCELL, A.I.A.

"Why build these cities glorious If man unbuilded goes? In vain we build the world, Unless the builder also grows."

E ACH week a teacher, born at old Rostov-on-Don, comes here for a visit. He got his fundamental schooling in the Ukraine, his Ph.D. from one of the foremost foreign universities, and like all the Russians has a great facility with languages.

American citizen for twenty years, he knows our land and people, but Europe and its varied folk is his teaching field. He knows what they did, when and why. We look out over the garden and valley, review the victories of his fatherland and speculate on postwar problems of the World. Our discussions, more often than not, are naturally about History and Architecture.

He is a scholar who has been long trained to think accurately and his mind is keen. His useful material is a web of facts as wide as the Lands and as long as the Years. But nothwithstanding all this specialized experience and research, his daily urge is to prepare his students toward realization of a happy and satisfying life.

My humanitarian friend sees his important colleagues clever with the puzzles of old academic shards, nostalgic about the glow of some theoretical past. Here and there an obscure Mr. Chips seeks to build scholarship with knowledge concerning the men of his day, but high faculty names must stand circumspect, and the Past asks no uncomfortable questions. Under such mastership, the potent ancient records spawn impotent theses not applicable to our work or lives. College boys and girls, in a fog of half legible lecture notes, wangle credits and whirl away on thought-free enterprises.

THE HORIZON IS AHEAD

Youth wants to push on. For them, search, and not research, makes the road. Education "can't tell *them*," it *can* draw them out, but only if it is "going somewhere." It should draw them on. History is meaningless unless past events are seen again purposefully. The pragmatism of Old China's culture related to the good earth, not the sterile prefabrications of New Europe's city pavements, will implement the coming soldier-made epoch, now dimly foreseen. Not more tools, but more skills; fewer buttons and switches and "more fences to paint."

THE EVIDENCE OF LIFE IS MOVEMENT

It has been for me a matter of many satisfactions—but I trust no self-satisfactions—that in 1893, a time when few citizens, and practically no American architects, could see any sense in the work of Sullivan and Wright, the power and poetry of their work appeared plain and delightfully engaging to my spirit. On that impulse I resolved to be an architect. The golden Transportation Building, filled as it was with wonderful trains and engines, vehicles of all the ages, steam automotive tractors and every sort of ship, was fascinating enough to a boy of twelve, but when one dull March day in 1895 I walked into my Aunt's sitting room and saw on the mantelpiece the now familiar *pensketch of Wright's first Oak Park studio which was to be built that summer on a corner of the block in which I lived, a vitalized sunshine energized my human chlorophyll and it has remained green and growing ever since.

COALS FROM PINE KNOTS

It was my good fortune to spend the most impressionable days of my youth in the age-old Ojibwan forest to the south of Lake Superior. There I learned to respect the capable minds of common men, and distrust too much reliance on books. There I saw buildings and tools being made out of a wide variety of naked materials to meet needs on the spot. Effective action crystallized in forms of obvious logic. Birchbark and a boat;

^{*}See this drawing, Plate 38 "In the Nature of Materials—The Buildings of Frank Lloyd Wright, 1887-1941." Henry Russell Hitchcock. Duell, Sloan and Pearce. 1942.

white pine and paddle; buckskin on one's feet; the scythe and cradle against grass on the lake shores or a patch of grain in the clearing; wood stoves and wood to split; iron pump handles and splashing poplar pails—it was a building world that was a long, long way from drawing boards. From this early condition I later was able to see the draftsman's world as the servant of construction. When I went to Cornell University my concept of the fine art of building gave no trails along which I could follow popular architectural idolatry toward the all-prevailing French ateliers.

JOURNEYMAN DRAFTSMEN

The men who made the working drawings for America, following what Mr. Beard calls that Second American Revolution which came to a truce in 1865, were also builders little touched by Beaux Arts catechisms. They somewhat resembled the journeyman printers who, with the possible exception of the barbers, alone continue a tradition which formerly supplied pioneer America with carpenters, tinkers (who were also plumbers), cobblers, wheelwrights, clock makers, locksmiths, gun smiths, and the blacksmiths who shod the horses and repaired the farm tools.

The journeyman draftsmen were a jolly crowd, more often than not hard drinkers, drifting from one office to the next in a restless quest for romance and adventure, carrying with them the gossip of the building world and a homely philosophy of life which reached their architectural work only indirectly. Traditional draftsmen they were, but the tradition was a working influence and habit within themselves. It was a true tradition of their own "school" with scant intellectual bent and no especial scholarly interest in research.

In 1902 I worked beside several of these men in the office of E. E. Roberts (1865-1943), Roy Hotchkiss (1870-1935), and Guy Henderson (1865 and still living in Oak Park in 1940). There were others with Henry Ives Cobb when I was in the construction office of the Chicago Post Office Building, 1903, but only one or two in the large office of John Galen Howard, Berkeley, California, 1904-05. Most of the latter's staff of two dozen men were the conventional products of the Beaux Arts system by then in full flower in all American Colleges.

TRADITION IN KNACK

The typical journeyman draftsman would occasionally thumb over books on architecture or look at the pictures in the *American Architect*, but when at work he used his stock-in-trade patterns. Being entirely sure of themselves, these professional draftsmen went banging along with planning detail and general organization, usually very well thought out in relation to the conventional demands of clients.

"Up to date" on what was "the thing" in materials and conveniences, they were adept, facile, and practical, but unimaginative planners, convinced that their idea would "build," stay built. The bad construction of the period was due, as in our day, more to the economic pressure of speculators who wanted more than their money would buy, than to lack of technical knowledge.

Usually a project would be a natural development of some similar building, preferably one they had themselves done. If the project was out of their line, then the nearest thing to it in some building they knew was used as the point of departure. The last resort was a plan or design in a book or magazine. They had a natural contempt for any one who copied, wanted the pride of designing the thing themselves and would have looked down on the designer who reproduced "authentic" forms from measured drawings or photographed details.

If you will turn to the pictures and plans of American buildings published in the Architectural Magazines of the 1870's and 1880's, you will see an appearance character common to all. Of course that is true today and in its broader outlines it is the voice of the people speaking in their building, but through this atmosphere of the time you can easily follow the patterns of this craft of the journeyman draftsman.

THE SERIOUS NINETIES

It is interesting to study the reaction of a mind like Roy Hotchkiss to the work of Sullivan and Wright. Hotchkiss, who was employed by E. E. Roberts, a good businessman, was really the architect in that office. He was characteristic of this race of self-educated draftsman designers. Although Wright's work was far from popular in Oak Park where Roberts and Hotchkiss had their office, as early as 1902 when I worked under him Hotchkiss was taking over Wright's forms and patterns as rapidly as he could digest them; at first with his long span porches twenty-five or thirty feet between posts and no intermediate supports, then with wider and wider cornices, flatter roofs, broader doors and windows with less height, long groups of windows all alike, and so on.

Hotchkiss, like many another, was by no means copying. He saw something of the force of what Wright was trying to do and he was continually reorganizing his work progressively from plan up. While limited in imagination, he was clever and ingenious. He succeeded in producing not only acceptable buildings considerably in advance of the average work of the times, but had an experience that got these buildings built in a very direct practical way at low cost. Oak Park and vicinity is filled with his buildings, some of which are occasionally mistaken by the casual observer to be from the hand of the Master himself. Thus a school, office building or dwelling would occasionally come close to being creditable performance. The handicap was due in part to the character of Roberts' clients. In general they were the type of people who could be led but a very short distance from the conventional approach to living, and no distance at all toward any really creative departures.

By 1898 Sullivan was well known and Wright and his buildings had become a leading topic for heated argument in our now architecturally historic town of Oak Park. The local draftsmen were all flavoring their work with snappy details from Sullivan and Wright and the first generation of draftsmen educated in Wright's offices, Charles E. White, William Drummond, Walter Burley Griffen, Marion Mahoney and John S. Vanbergen were beginning practice for themselves. But that is well into another chapter.

JOURNEYMAN DE LUXE

One of these early modern-age draftsmen who lifted his professional field to the dizzy heights where frenzied finance swooped and whirled was F. W. Fitzpatrick.

He will be remembered by very few architects. Indeed, at the time he flourished forty years ago he was publicly unknown to the Profession of Architecture, in spite of the fact that he claimed to be "The winner of more competitions for public buildings than any other architect," a claim that was possibly true. The significant point is that although he was responsible for the plan and appearance of a large number of public buildings, his name seldom appeared either in the architectural press, or signed as architect upon the prize-winning drawings.

In public architectural competitions he made a practice of offering his services to practicing architects for the design, let us say, of a court house or library. This offer on very elegant banker's stationery included a book of his prize-winning designs and a list of his previous successes for architect-clients. When he had won the commission—apparently he usually did—his services were ordinarily terminated at that point, and he departed to some new enterprise. Occasionally he was retained as chief draftsman for the project.

The well-known architects of that day, who were so eager to secure his profit-garnering services, nevertheless looked at him over their shirt fronts with professional condescension. But Fitzpatrick, who looked like Sir Walter Raleigh, was a good-natured philosopher and remained untroubled by the anomalous position he was supposed to occupy in the profession. He was no doubt fortified by the thought that it was his succession of client associates who were in real need of face saving.

SALESMAN ASCENDANT

It was perhaps as late as 1920 that I last received one of his elaborate brochures setting forth a list of buildings and of prominent firms with which he had been associated, soliciting collaboration and giving much evidence in assurance of successful results.

Now discounting the socio-professional implications of Mr. Fitzpatrick's position as an architect, he must have been a first-class designer according to the standards of the day, for the juries in many of these competitions were the elite Sons of the Beaux Arts, hand-picked by that old Pennsylvania pirate, who for many years was the undisputed Czar of Institute Authorized Competitions in this country.

In 1900, Fitzpatrick had won the Chicago Post Office competition for Henry Ives Cobb, at that time really a coryphaeus in the architectural world. By June, 1903, the completed steel work of the building filled an entire city block, with a central tower some twenty stories high. A couple of small two-storied, clapboard, shingleroofed dwelling houses had been built within one of the uncompleted mailing rooms to serve as executive headquarters of the building operations. Their second floors were given over to the necessary drafting departments. In these sweltering cubicles, with towel in hand to temper the flow of his hay fever, Mr. Fitzpatrick was directing the completion of the working drawings and decorative details of the building, dispensing, the while, a flow of architectural philosophy, of unusually sound sense, and a jovial raillery at the foibles of the self-important architects with whom he had worked. I found him a most entertaining, versatile, and capable architectural fashion expert, as practical in plastering on the French Renaissance sugar as any of the Prix de Rome boys from Paris, and with a profound respect for Louis Sullivan.

FORGOTTEN MASTER

But without question the most distinguished and capable of these journeyman draftsman-architects was Harvey Ellis. His name was known to everyone who read an architectural magazine from 1880 to well past 1900, for his remarkably fine pen drawings. He carried on the pen and ink tradition of the English masters of the nineteenth century, but with a method which enabled him to express with sensitive feeling the difference in essential qualities between a wide variety of building

materials. No American graphic artist had a more perfect technical language in architectural rendering.

He worked for some years in Buffalo and St. Louis, but is best known—where known at all—as a designer for Inventor-Architect Buffington of Minneapolis who in 1887 first conceived the construction principle for tall buildings in which the enclosing walls are carried by a fabricated structure, usually of steel.

In men like Fitzpatrick and Ellis, the line between architect and draftsman disappears except for the fact that practically all of their work is credited to employing architects who were often men of little or no creative ability. Although a very large number of buildings conceived by Ellis were built and his designs copied all over the country, he will be remembered as a graphic master by those that remember him at all, because his "employers" were unwilling to give credit to the mind that was making their reputations through buildings from his designs. Ellis' concepts were not graphic art. He was a true Art of Building man, and the projects which he so vividly portrayed were organized to build and to serve effectively.

Ellis' drawing of Buffington's first 30-story skyscraper in 1887 on which Buffington rested his basic patents, shows a building which anticipated Sullivan's Waińwright Building in St. Louis, in being a unit from sidewalk to roof and with no forced values in the general design treatment to make it appear as if of solid masonry. The rough-face ashlar walls are but color and texture in the only material then practical for exterior curtain walls; it was that or face brick.

Ellis deserves a monograph recording his distinguished career. Many of his drawings were reproduced in the Western Architect from March, 1912, to September, 1913.

NIGHTSPOTS BY GAS LIGHT

In reviewing the work of these designers of 1870 to 1900 and the kind of America they were called upon to express, I would like to recall here certain qualities of architecture and decoration which made up the atmosphere of the famous Chicago restaurants of those days. Kinsleys in dark wood, perhaps cherry which was then plentiful and deservedly popular, and the Palmer House restaurant in white with colorful hangings and equipment, both carried an atmosphere of spaciousness and aristocracy which our contemporary work seems to miss. The reason for this may lie in the fact that in an unself-conscious way these old 1880 restaurants were closer to the really dignified quality of the entire social atmosphere rather than, as now, expressing a small and noisy portion of society.

Design, drawing board, sophistication, and selfconscious but not socially digested current theories concerning the aesthetics of pattern, form, line, or color did not stand between the people who used the room and what had been done with the appearance of things by the builders.

ART IN ACTION

A drawing or even the best of photographs of Kinsley's or the Palmer House would not convey to us today the living qualities of these dining rooms. The current pictures held up to us of "the gay nineties or the brown seventies" by drama and novel is not accurate. "To have great poets you must have great audiences," says Whitman. Today's emotional and intellectual complexes are no good audience for 1880 or even 1900.

Given a genuine eagerness to understand, it is still hard to reconstruct the life of those eras. Even the

TO HARVEY ELLIS · A GREAT ARCHITECT



N 1891 just what was startling about this building and why were the designs of Harvey Ellis discussed over every drawing board?

To answer this question we face the difficult emotional and intellectual task of dissolving those conditioned tensions of ours, which have been induced by science and the machine within the magnetic field of America's social dynamo since 1893.

Today we are either thrilled or enraged by the new patterns of manners and customs, new design mechanisms in art, science, and industry, but in 1891 it was the *new ideas* seen through *old* forms which blew the whiskers and withdrew the flounces of important and frightened ladies and gentlemen.

Today we seem unable to recognize the self-promoting ideas behind the fashionable gadgeting of current popular procedures, while in 1891 those who were privileged and successful looked right through all the old familiar architecture and saw with horror, a crowd of revolutionary insistences which appeared certain to ruin the comfort of upper middle class prosperity, and for which there were then no known answers except rage and a flow of words.

In sincere 1891 they *wanted* to think but it hurt. Today we are obliged to think whether we want to or not, and that hurts too. In both eras it was the pocketbook that cried the loudest.

MODERN IN 1891

What was the architecture of Harvey Ellis telling a world of habit?

(1) That volume of business plus service equals profits. That is to say, the 8 to 12 steps up from the side-walk to do one's banking, which was universal at that time had to go, because the extra return on high base-

WHEN SELECTING an employe for special duties, a business associate of mine, when all the applicant's qualifications had been recounted, was accustomed to conclude his canvas with, "... well, is he mentally light on his feet?" This appears to be Harvey Ellis' outstanding characteristic. His structural and technological sense is secure—and it is from that point on that his genius as a practitioner in the true Fine Art of building begins to sing.

ment rentals would not cover the loss of customer volume due to inconvenience. Then as now it took an architect to analyze business values. There was no profession of Sales and Advertising in 1891.

(2) Again, that city noise, far greater then than it is now (iron tires on granite cobbles) was a destroyer and must be shut out of working offices by doing away with windows. The new power fans for moving air, first extensively used by Adler and Sullivan in the Chicago Auditorium, could now supply all the clean air needed.

(3) That city daylight, far more gloomy from coal smoke than now, need no longer be depended upon, since the new incandescent lights, first freely used in Chicago by Sullivan's engineer partner in the new McVickers Theater, could now provide ample and dependable working light in place of the feeble gas lights of the 80's. And so windows, which at best only lighted a few yards of floor near the street walls, should be eliminated by "modern" designers; but it was to be fifty years before they actually went.

A long analysis would be required to show the creative bractical invention of this creative architect Harvey Ellis, but you may note;—a fully developed color system for the exterior; the use of glazed ceramic tile and the then newly developed terra cotta; the bank's clock, to this day a salesmen's gadget stuck on banks everywhere, here integral with the design and complete with special hands and a glass mosaic dial: the decorative terminals for the long sill line later used by both Sullivan and Wright all through the years. The bank project as a whole reflects the dignity and self-respect of old-time businessmen who did not pose as a branch of the government, nor feel the need of reinforcing their prestige with Roman Pomp and a show of extravagant expense.

ONLY FIVE YEARS prior to the Chicago Exposition's "White City" of 1893 which completed the destruction of American joy in color this 1888 bank design of Harvey Ellis glows like Sullivan's golden Transportation Building. Here the fan arch of violet raindrop sandstone breaks up into the colorful rug of ceramic tile, inset with ruddy terra cotta hoods over the niches. Narrow bands of enameled tile form a wainscot either side the entrance, with a half vault of dull gold tesserae over the entry. Clock hands and figures and the sign would be bright gold against a jewel like dial; the historic frieze also in mosaic would perhaps be marble, its very rich coloring keyed to tie in with the Lake Superior brown sandstone of the general construction.



sounds were different. Table talk was an art of conversation, not a broadcast. The click of the dishes and the echo of the soft leather footfalls on the marble floors seem to have a sort of faraway echo against the paneled ceilings of those great rooms. The tables were larger, the spaces between them greater. There was no "service" by the colored waiters who neither thrust themselves into the action nor were they used by publicity-conscious diners to boost their personalities. The negro waiter had a long tradition of knowing what was required and quietly doing only what was necessary. The food was not the center of interest. Its quality was taken for granted. The people were the picture, their minds and manners were the action, but unlike our day the whole drama was only naively self-conscious, the general focus was not turned by each on himself, nor by each on the other, but panoramic in an unrealized sort of way.

ACTUALITY ONLY FOUND IN ACTS

The whole recollection of these scenes make one realize vividly the futility of all style-form design. The material form of the 1870 things themselves was an integrated expression in living use. Our writers let us see these scenes better than architects and decorators because writers are untroubled by a necessity to reproduce authentic style and because they repicture as a whole the people and events in action along with the material objects. An essay in colonial buildings with the costumes and servants and coaches and drama of their day, can be interesting and educationally useful, as reconstructed Williamsburg, Virginia, has shown, but it is pageantry, not architecture. In Washington, the isolated and remote Roman Pantheon copy, adverted to the memory of the restless, exploring, very modern mind of Jefferson, who loved men and lived his life working with and for the common people, does not even lend itself to the art of pageantry. Actually it is only the grave marker of a fashionable and impotent designer, the last record of a dying artistic hierarchy, expressing no more contact with the substance and quality of this great nation of ours than eating-apples could be fathered by glass flowers. A replica of the Parthenon sweetened up to serve as a memorial to Abraham Lincoln is meaningless and sad without Greek panoplied warriors, tribunals and festivals, against the background of Areopagus. What our American people today actually enjoy in viewing such monumental reproductions is their own joy and satisfaction in being sufficiently alive to learn some new thing. The living experience that might be added to that joy by forms truly significant of their own national heritage, our official architects never even give them a chance to imagine.

RAIN IN THE DESSERT

"Old stuff that line of criticism . . ." yes, just as old as the rules of arithmetic, which must be applied to be useful, for what we all know too easily loses its cutting edge.

To deal with reality in an arguing world, one must keep saying to himself, "It is not the old forms in (or on) these buildings that cancel their validity, but the fact that the buildings are dead. They are not in circuit with the blood stream of the community. Only an occasional artificial memorial day shot stirs some public attention to those cold and sapless halls."

The builders of Pisa Cathedral were not satisfied at merely copying Roman architecture. They sailed down to Rome in their boats and actually carried off a miscellaneous assortment of old stone columns, cornices, and

ornamental carvings. But the building they built with them was not Roman "style" or even reborn Roman, it was a *living* architecture, new, fresh, and beautiful.

THINGS ARE BUT THE HUSKS OF DEEDS

No, it is not old or copied forms which hold us back. Don't be a sophist, however, don't fool yourself with wish logic. If your building is alive, it is *in spite* of such borrowings, not *because* of them. Honesty does not rest in the words you use, but in the integrity and potential of the idea conveyed by them. To get the facts and miss the truth is the age-old error of all priestcraft.

New England "modern" is no more functional than New England Early American. Each is stubbornly limited to expressing a few special functions lying in widelyseparated fields of human interest, while ignoring all the others, together with all the life-giving material which is omitted from both. Thus both factions of the current, and of late rather one-sided, art war are cheating us of the good common life which we Americans so desperately need.

Because historians have been preoccupied with the past, which while not dead exactly, has at least ceased physical movement, their technique becomes conditioned to the point where the contemporary world must somehow, at least momentarily, be frozen in its tracks or they are wholly at a loss to examine it and report. The result is that historical criticism has been applied not to our contemporary body of living thought and accomplishment, but to a largely unreal hypothesis, the more misleading because, in the face of an insolvable paradoxstatic life! Our scholar chooses those special frames from his researching movie shot, which superficially resemble research material in the fields with which he is familiar. By this single track procedure he misses entirely the folk substance, the true genius of the people which is saturating every phase of his own daily life and which will be instantly seen and appraised with amusement and interest by every school child in the next generation.

> "It Is Not the Knowledge of a Thing But the Doing of It that Is Difficult."

Yueh, B. C. 1322, Shu-King, Section xii.

Not alone in historical architectural criticism, but in all educational pursuits, professionalism threads its machine with a beautifully taken celluloid ribbon and then projects upon its white screen *a single moment* of what *once was* both thought and action. This shot registers but a single point of view through the smallest of apertures. Withdrawn into this dark theater, it mistakes the flicker on the screen for reality. Meantime life goes on without the experts who could be so useful.

It is for this reason that the world-moving contributions in the arts and sciences are not only made by nonprofessionals, but are bitterly resented by the masters whose sons will use the new knowledge as commonplace. Gallileo, Columbus, Florence Nightingale, Harvey and Pasteur in Medicine, Owre in Oral Surgery, Billy Mitchell, de Gaulle and his "1935 tank thesis," the early discoverers of vitamins, leaders in the social sciences, the creative painters, sculptors, and architects, literally thousands of "amateurs" (in the view of the professional "experts"), have been martyred by selfstyled leaders for the useful contributions which have made our world as good as it is.

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SLUM PREVENTION

by Albert O. Larson, A.I.A.

WCH has been written on housing and slum clearance. Most of it follows a long-familiar pattern of theory that the public expenditure of vast sums of money through slum-clearance projects will eliminate the slum from our social problem. Even the so-called housing authorities are but little concerned with the economic or tax problems involved in slum clearance. They are even less concerned with slum prevention.

In the larger cities there have been more slum-type dwellings created during the past twenty-five years than during the twenty-five years previous. And during the war, with a shortage of labor and materials, slums are being created at a much faster rate. With the physical deterioration of homes and schools comes the physical and moral deterioration of those who live in those homes.

The medical profession has made notable strides in achieving public support for preventive medicine. The real hope for the future health of the nation will come with the widespread public understanding of the importance of preventing sickness and disease. This program must be greatly handicapped unless we can soon prevent not only the existence of slums but also the creation of new slums.

In order to grasp the problem, let us define the word "slum." Every place of habitation, whether it be a tenement, an apartment or a single-family dwelling, which because of lack of light and air, or because of structural or sanitary conditions, becomes unfit for human habitation, may be defined as a slum. Slum dwellings are not confined to the large cities. Just as bad housing may be found in many New England and Middle West cities as in New York or Washington.

Has any housing authority really investigated the cause of slums, and more particularly those which are right now in the making? A typical block is right now deteriorating toward the slum period which few of our housing experts would even recognize as such. In that block but few of the homes have well-kept yards; most of them need paint; repairs have been neglected; plumbing and heating are out of repair. With that condition disappears the pride of home ownership. Disease and petty crime become a part of the life of that block.

The corner stores have started down the road to dilapidation and the neighborhood merchants no longer attempt nor are able to meet modern competition. Typical schools in such areas are all similar: gray forbidding institutions, poorly lighted, with antiquated plumbing in a bad state of repair. While the teaching methods may be quite on a par with other schools in new residential districts, the average school in the deteriorating district is in every other way a symbol of the approaching slum. The church, also, in that district, with fast thinning membership, is a characteristic part of the same picture. Within a surprisingly few years those homes, with the stores, the school and the churches, will be a full-grown slum, with all the social problems characteristic of the slum. Then comes the housing expert, who at one stroke, at public expense, would erase the whole picture and start over again.

What has caused the change in that average blocka change which may be duplicated by the thousands in every city in the land? The breakdown starts with the lack of self-respect and civil pride on the part of only one or two families. An accumulation of rubbish or an unkempt yard by one family, and the downhill trend starts. Neither the school nor the church has seen the problem and attempted to restore that neighborhood self-respect and pride which would delay the slum from replacing what was so few years ago a community of good American families. The school and the church should be the first to set the example with new, modern buildings which would keep alive that neighborhood pride which is so essential for the perpetuation of clean, livable homes. Good living is the first necessity for good health, and good homes will hold in check those influences which create the social sins in the slum.

The bank, the real estate owner and civic authorities all play important parts in turning that neighborhood into a slum. If, through legislation and public opinion, the profit can be taken out of slum housing, then slum housing will disappear. Those same financiers would now attempt to salvage their souls through the sponsorship of a few slum-clearance projects. Nearly all housing units are owned or rented by banks or trust companies or are mortgaged. An early interest by those mortgagors and a community responsibility for good housing would require that all renewals or new mortgages be contingent upon reasonable upkeep and modernization. When those financial institutions refuse to make loans on any property which is on its way toward becoming a slum, then the majority of those buildings will either be rehabilitated or torn down.

Not a state in the Union has a comprehensive or modern housing law, nor regulations which protect the health and well-being of our families in prohibiting unsafe or unsanitary housing. There has been no disposition on the part of health and building officials to enforce existing housing laws. The vested real estate interests are definitely opposed to the housing legislation.

Poor construction and bad planning have been characteristic of most of the government-sponsored housing construction. Most of the slum-clearance projects will again be slums in but a few years. The cost of these government projects has been much greater than if planned and built by those having had experience in good housing construction. Wartime hysteria is the inevitable excuse for all the blundering which has been done. It is to be hoped that we have seen the end of government-sponsored housing projects.

New and modern schools have been constructed, but rarely in the older residential districts. The drab, antiquated schools of the older districts are definitely contributing toward the speed with which those districts are becoming slums. A survey shows that in one of our larger cities the lighting in the average school is approximately ten per cent of that required for maximum efficiency in classroom and shop work. In that same city a ridiculous union rule prohibits school janitors from doing any cleaning above a six-foot height. Slum-

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THE POSTWAR HOUSE

Written Especially for NORTHWEST ARCHITECT

By HOWARD LELAND SMITH, A.I.A. Architect, Underwriting Division, Federal Housing Administration

CONFUSION in the public mind as to the shape of things to come in the way of houses to be built in the postwar period is not surprising. Forecasts of "miracle" houses which will flow off an assembly line and on to one's lot with slightly more effort than pushing a button leads the public to expect that anything may happen. Not only are we lead to believe that these houses will be of vastly improved design and livability, but we are told that their cost will be only a fraction of that of the prewar vintage.

Assume for a moment that these remarkable changes do occur. The magnitude of the change will be little short of revolutionary. Progress often results from revolution, especially when a preceding era has been reactionary, decadent or dormant. In such instances change is the salvation. But has housing during the past decade been so lacking in progress that the industry must be stirred out of its complacency by a spectacular eruption?

Those who have had the opportunity to observe housing on a national scale know that industry has given much thought and spent millions of dollars in recent years in an earnest attempt to produce better housing for less money. Many a landscape has felt the impact of experiments in housing though many a sincere effort came to naught. Since progress was and is being made in an orderly and evolutionary manner, a revolution in house design and construction would not appear necessary at this time.

Many new ideas for the house of the future are being given genuine test. Others will be developed and tested as materials again become available. Some will not survive the tests, some will prove practical but will be limited in use because of production cost or expense of operation, some will be adopted by the home-building industry to the benefit of the public. Like all advances in civilization, time and use will provide the final test. To the extent that new developments in house building have real value, and can be afforded by the majority of our people, they will endure and come into general use. Changes in building practice are evolutionary, not revolutionary.

Technicians in the Federal Housing Administration watch housing trends and developments. They examine new methods of construction to determine the structural soundness of their design and their possible acceptance by the public. Contacts are maintained with laboratories where heating and ventilating equipment is tested. Developments in the plumbing and electrical fields are followed. All new developments are evaluated as to their effect on design, cost and marketability of future housing.

Based upon present information, there is not sufficient evidence to indicate a revolution in house design or construction. There will be improved equipment for plumbing, heating, air conditioning, and electrical installations. Likewise improvements in kitchen and bathroom equipment will add to convenience of use and attractiveness of appearance of future houses. But these of themselves will not result in houses of radically different character.

As in the case of the first World War, the second has hastened the development of many new materials and

devices which should prove valuable to the construction industry. Production methods developed to meet war production schedules have contributed to a lower cost of some building materials which will permit them to be economically used in low-cost housing. Although houses will benefit in appearance and utility as a result of these advances, it does not necessarily mean that old forms or shapes will have to be modified. Until the functions of living change, there appears no logical reason to reshape the various elements that comprise the average house.

No logical excuse for altering the general arrangement of the average house has arisen since the advent of the automobile. With the passing of the horse and buggy, the stable with its noxious odors became history. Its passing no longer makes it necessary to place the living room at the front of the house with a porch separating it from the street. The rear yard can now be developed in a manner that adds to livability and privacy and the living room can be closely related to the garden. In spite of this opportunity to improve the livability of houses, the average home builder still clings to arrangements common to the horse and buggy days.

If the industry has moved slowly in accepting changes made possible by the automobile, what reaction will it have to the airplane, especially the heliocopter? It is not uncommon to see the postwar house pictured with a heliocopter descending to a flat roof or landing in a small court yard. Although simplification in the control of these wonders of modern science will undoubtedly come in due course, aviation experts say that it will be many years before the control of the heliocopter can be developed to a point comparable with the ease of manipulation of the modern automobile. When, as, and if air travel becomes as common as that on our highways, there will be new problems to solve, and housing will face a new set of conditions.

What reasonably can be expected of the form and character of postwar houses was expressed well in a recent address by Mr. Abner H. Ferguson, Commissioner, Federal Housing Administration, before the Building Products Executive Council. He said, "As to the design of the house to be built, I do not believe there will be any great revolutionary changes. Customs and traditions are not broken down easily. For one thing, I firmly believe that at least as far as the returned soldier is concerned, he has been thinking of the familiar cottage with its picket fence, rather than some strange new type of house, and that is what he is going to want."

To the home-building industry generally, and especially to architects in particular, Mr. Ferguson's remarks should be reassuring. His statement is not the opinion of an individual nor the wishful thinking of any one group. If, therefore, the postwar house is not going to be materially different in form or character from those built prior to the war, then we can anticipate an orderly and continuing development which will neither affect our economy nor destroy all those customs which man has gradually adopted as part of our way of life in a democratic state.

We Heard That ...

Duluth Architect Passes Away

The many friends of Carl Nystrom of Duluth noted with regret his recent passing. Mr. Nystrom had practiced in Duluth for many years as a partner in the firm of Bray and Nystrom. After that association was terminated he practiced alone until shortly before his death. Mr. Nystrom has designed and supervised many of the larger school projects in the vicinity of Duluth.

Major William Ingemann, until recently Executive Officer at Army Air Field, Fort Sumner, N. M., has recently been transferred to Army Air Field, Pecos, Texas, as Executive Officer. While Bill is away at the wars, Milt Bergstedt, who recently joined partnership with Bill, is running the office in St. Paul.

Give a man enough rope and he'll make 15c cigars out of it.

Harold Starin, Duluth architect and disciple of Izaak Walton, has returned to the office after a trip along the Gunflint where he spent some time showing a couple of returned aviators how to snag the big fellows. To hear Harold tell it, it is doubtful whether there are any fish left in those parts after his trip.

Lt. Irwin Malakowsky, Seabees, architect, Mound, Minnesota, passed away recently from injuries received in shipyards at Bremerton, Washington.

Tom Shefchik continues to head the Rent Control Agency for the OPA in Duluth area.

Minneapolis and St. Paul Architects are all busy those who are maintaining their offices and others who are either with the U. S. Engineers or are "helping out" some of the firms that are busy with both war work and postwar planning.

-0-

It's an ill wind that blows no goods-whoops!

P. M. "Pete" Olson is busy with construction of vitally needed mining buildings for one of the large steel corporations.

-0-

Abraham Holstead and William Ellingsen are still helping Butler Shipyards do a record job of producing ships for the Maritime Commission.

-0-

A number of members of the Association have expressed the thought that it would be a good idea to get together sometime this year, if not in formal convention then in an informal dinner meeting, There are many things to discuss, not the least of which is the problem of the shortage of draftsmen both at the present time and after the war. Some of the other states, notably Michigan, Ohio and Pennsylvania, are doing a great job on unification. This, too, is important as the more united a front we can maintain the better attack we are going to be able to make on our many mutual problems. Let your Secretary-Editor have your reactions and we will see if a "gathering of the clan" can be arranged that will work out to the convenience of as many as possible.

"Fitz" Fitzgerald, "Rein" Melander, Bert Smith and E. C. Giliuson, all of Duluth, are practicing from their own offices.

-0-

There is a real shortage of draftsmen and any men in other areas who desire employment in Minnesota should communicate with H. W. Fridlund, Secretary, Minnesota Association of Architects, 5216 Upton Avenue South, Minneapolis, Minnesota.

Women's stockings certainly RUN into money.

The Minnesota Chapter, A.I.A., invites all architects whether members or not to their regular meetings held every third Thursday of each month at the Skylight Club, 1200 2nd Avenue South, Minneapolis.

Lt. (jg) Rex Galles is at the Navy shipyards at Bayonne, N. J.

Charles Leighton is with the Austin Company at Dow Chemical Co., Midland, Michigan.

Otto Olsen, who for some time has been attached to the Army Engineers in Missouri, has returned to Duluth to resume private practice.

Editor's Note:

Bowing to requests of our readers we resume publication in this issue of Kwiz Dillies, being a series of ten questions designed to be both educational, in a sense, and entertaining. A score of 90-100 is pretty good and if you don't score over 40 you will probably end up in Congress some day.

1. A "Royal" wood shingle has a $\frac{1}{2}$ " thick butt and is (1) 18", (2) 16", (3) 24". (4) 20" long.

2. Handmade brick are made by what is known as the (1) soft mud process, (2) stiff mud process, (3) dry press process.

3. Brass is an alloy of (1) copper and tin, (2) copper and zinc, (3) nerve and impudence, (4) copper and bronze, (5) copper and lead.

4. Why should stone carving on a stone be done before the stone has been long exposed to the air?

5. Two trees stand next to each other; one has a 6" diameter trunk and the other 10". When they are cut down the heartwood construction of both are the same. *True or false*?

both are the same. True or false? 6. "English bond" means (1) alternate headers and stretchers in each course, (2) alternate courses of headers and stretchers, (3) Johnnie Walker Black Label, (4) two headers and a stretcher, then two headers, etc.,

7. The Minnesota law requiring registration of Architects, Engineers and Land Surveyors was placed on the statute books in (1) 1897, (2) 1906, (3) 1918, (4) 1920, (5) 1921, (6) 1931?

8. Why is "summer wood" in trees darker and more dense than "spring wood"? 9. In 1926 the delivered Minneapolis or St.

9. In 1926 the delivered Minneapolis or St. Paul price in 5MFBM lots of No. 2 Douglas Fir 2"x4"s was approximately (1) \$20, (2) \$30, (3) \$40, (4) \$50, (5) \$60, (6) \$70 a thousand.

10. Prevention of serious inflation is very important to the building. One of the best ways to curb inflation is to (1) BUY MORE WAR BONDS, (2) NOT BUY ANYTHING YOU DON'T NEED, (3) MAKE WHAT YOU NOW HAVE LAST.

See Page 14 for answers.

IF IT'S NEW

It's News



NEW INSULATION DATA SHEETS AVAILABLE

The Wood Conversion Company, manufacturers of Balsam-Wool and Nu-Wood have just issued a portfolio of Data Sheets showing proper application of insulation in many types of construction. Into these Data Sheets have gone experience gained in insulating over a half million buildings over a period of more than twenty years.

The original portfolio consists of a file folder cover in which are fifteen of the original set of Data Sheets. Each sheet discusses one problem. Several sheets cover specific problems of attic insulation application. One of the sheets discusses the use of attic fans—another illustrates how to insulate and ventilate a flat roof deck properly.

This is the first of a series of such drawings—others will be made available as new problems and new answers are developed. Architects and contractors are invited to send in their problems, which if found to have general application, will be answered in additional Data Sheets.

The Balsam Wool Data Sheets are available free of charge from the Wood Conversion Company, First National Bank Building, St. Paul 1, Minnesota.

NEW LIGHTED WALL SWITCH PLATE

An electrically-lighted wall switch plate that is said to operate for less than two cents per year and add fourfold to the utility and convenience of ordinary light

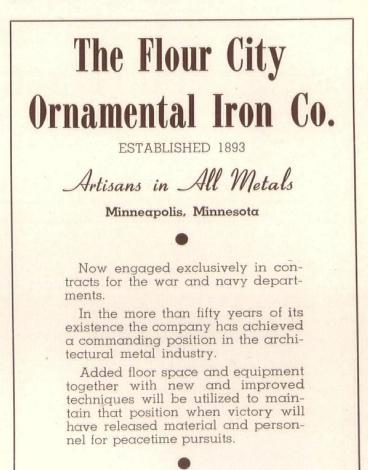
switches, has been introduced by the Associated Products Company, of Columbus, Ohio.

Known as the LumiNite Wall Switch Plate, it features a tiny shielded light that comes on automatically when room lights are turned out, and remains off whenever room lights are burning. Thus it not only makes the switch easy to locate in the dark but also serves as a safety or pilot light at night, and helps keep walls free of smudges and fingerprints from hands groping for light controls.

Another important advantage of the LumiNite plate is that it saves on light bills by indicating whenever porch, basement or upstairs lights that can't be seen from the switch location have been inadvertently left on, either in the daytime or at night.

The plate is gracefully molded in a single piece of ivory plastic, at the top of which is an attractive housing for the fractional-wattage glow lamp and mechanism. A portion of this housing is specially fabricated so that the bulb will emit a soft, pleasing glow of light—so subdued that its use in the bedroom will not disturb the lightest sleeper, yet providing just enough visibility for safety and convenience in finding one's way about at night.

The bulb used is said by actual tests to operate at the surprisingly low cost of less than two cents per year for current. And because it minimizes the heat factor which shortens the life of ordinary light bulbs, extremely long service life is a major feature of the LumiNite Switch Plate. The unit fits any standard switch, and works equally well in three- and four-way switch arrangements.



ARCHITECT

Slum Prevention

(Continued from Page 8)

like schools are a characteristic part of every slum area.

Let us visualize a program which would result in the complete elimination of slums during the next generation:

1. The enactment of comprehensive housing legislation which would make the sale, rental or ownership of unsafe or unsanitary housing illegal.

2. The rigid enforcement of all existing and new housing legislation by health and building authorities.

3. Public-spirited cooperation by all financial institutions in a program for the rehabilitation or elimination of all slum or near-slum properties, including residential and commercial.

4. The construction of the most modern type school facilities in such areas, together with a long-range program of educational work toward good citizenship and better housing.

5. A continuous better-housing program on the radio, in the press and from the pulpit.

Such a program would stop that blight which is now taking a large portion of the residential areas of every city. We must approach the whole problem with preventive measures. It will pay big dividends in better health and citizenship in the future.

Again I say that under present laws and with public approval, slum housing is now financially profitable to a few. If those profits are legislated out of slum housing, slums will disappear. Where have we public officials who are bold enough to grasp or put into effective execution such a long-range program of housing reform?

Sullivan Brochure Well Received

It is with gratification that we acknowledge the response from our readers throughout the United States to our recent republication of Louis Sullivan's masterpiece, "What Is Architecture."

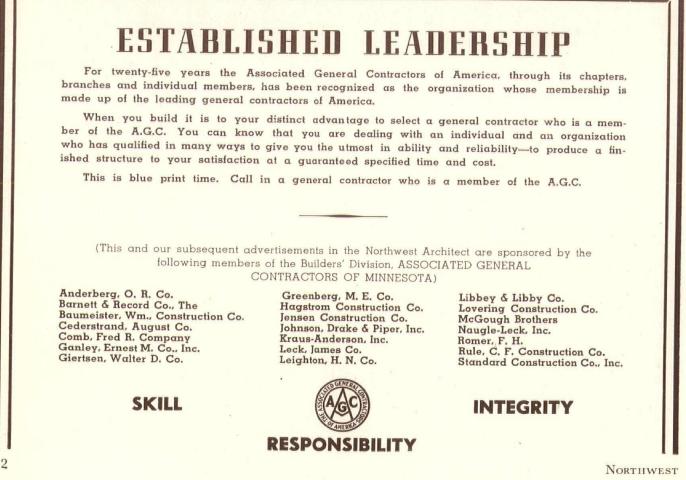
Among scores of appreciative comments we were particularly pleased to receive the following from Claude Bragdon, a master in his own right and at 78, younger both in perception and doing than the vast majority of the architects of today. Mr. Bragdon says, and we quote:

". This should be 'required reading' for every worker in the fine arts and for every educator. It has such a deep and sound philosophical basis that it is always contemporary when not of the current thought of the time and place. Certainly it reads as freshly and inspiringly as when it was first published. Being practically unknown to the present generation of architects it preaches the gospel to them who are in darkness. I shall have both of my children, who are educators, read it. "

Claude Fayette Bragdon, F.A.I.A., born in 1866, is a distinguished New York architect, stage designer, and author. His books, like his life, cover a wide range of experience.

"The Beautiful Necessity," "Four Dimensional Vistas," "Introduction to Yoga" and a dozen others are to be found in most libraries. His translation of Ouspensky's "Tertium Organum" is a monument of advanced scientific philosophy. The story of how he came to do it is of unusual interest.

"More Lives than One," his very popular and successful autobiography, is recommended as the best of entertaining good reading. It will make you wise, capable, and happy to know Mr. Bragdon.



Forgotten Builders

(Continued from Page 7)

I am willing to make plenty of mistakes, but I shall never form a part of that stuffy army of face-saving, class-maintaining, self-preserving intellectual aristocrats who have blocked the way to every advance of mankind since the priests of Ammon ruined the social reforms which Ikhnaton had instituted for the benefit of his people, and who also eventually assassinated Tutankhamen because he continued to declare, as his father had done, that there was only one God.

It is a common observation that people of our day just miss having any fun, a view which is confirmed by the curt appraisal "Americans are the kind of people that wherever they are they wish they were some place else." Few amusements are more of a bore than the assembly line entertainment of our dolled-up night club extravagances. Young Socrates getting drunk in a Bacchic festival was at any rate neither stupid nor commercial.

*Dionysus, god of the vineyards, groves and meadows, joined grape, ivy, and pan pipes in a ritual of wine, women and song which symbolized the rich Dorian heritage of the Greeks. Farmer, forester, and shepherd were honored for their contribution to a life of experience in beauty which our silly bottle connoisseurs and salad-mixing gourmets are neither athletic nor intelligent enough to grasp.

MY LAST CARTRIDGE

Having gone in for prophesy in 1896, if no more at first than a matter of successfully choosing the Cause and Men who were to win forty years later, let me continue with my prediction continuity, so far successful, and offer to you of 1990 my analysis of what you will be looking back over when you recall that inept "Olde Moderne" way back there in 1945, or find it quite too much that the designers of your youthful days could have been so superficial as to fall for illogical streamlineism, stark plumbing-esqueries, unreal inter-nested facades, ubiquitous corner cults, slant plan patter, embarrassed fire places shrinking into awkward angles and all the other applique neo-bozartifices.

Let no controversial reader run off with the idea that I condemn these features. The basic issue is whether they appear as normal growth from the essential idea of the building or are lugged in for application by an aesthetic person thinking in terms of popular professional fashions. The working philosophy here rests on fact, not looks; on the quality of the heart, not the logic of any system. Many of our so-called traditional buildings are much more functional than current self-conscious "modern" which, considered as a whole, is too often constructivist. Mental peace and health are more important than bodily comfort and if we architects must borrow furniture for our facades, there is less vandalism and a more comprehensive view of man in the old romantic designing than there is in the neurotic slicks by which shallow people, well supplied with electric controls, expect to skid around all normal life experience and so more quickly reach their canned and dehydrated kill-times.



A NEW DAY'S SUN

The unbelievable simplicity of the world-wide "form and function" philosophy, recognized from age to age for five thousand years, from thinkers recorded in SHU-KING on down to Thoreau, Emerson, and Louis Sullivan in America, is so patent to even an untrained mind that to the working generality of architects today it is incredible how such plain good sense could have been so universally and bitterly rejected by practically all architects during the architecturally-fatuous forty years between Sullivan's Transportation Building of 1893 and Saarinen's rejected *Chicago Tribune* in 1933. The mildest thing said about me as the protagonist of this philosophy at Cornell 1899-1903 was, "Purcell is a queer duck," or when I went back to lecture on the idea in 1911, "That is pretty strong medicine for young minds!"

BUT NOW IT'S DIFFERENT

Thus the young men of 1944 doubtless feel that "Had we been living in those times we would not have been so unalert. It looks to us that being an architect in 1900 was really too easy. What we have to face these days are more highly integrated building problems, complex with demands by new processes, new materials in great variety, new sciences, new special needs in increasing measure."

We of 1900 agree that what you say is true. We would be perplexed by your problems. We would be obliged to secure some new and more intensive education—and mere refresher courses would not do it, so we must pass the flashlight to your more versatile hands.

FROM THE PROMISED LAND

A few of you will have seen, back there in 1945, that it was the functional relations between human beings,

^{*}As an introduction to the creative life in the new world era which this war's end could make available to all, may I urge you to read "Plato and Platonism," and "Greek Studies" by Walter Pater (in most libraries) and the now hard to get, but worth going for, "The Glory That Was Greece" by H. C. Stobart. All are delightful contemporary recreation and you will never again use the worl "Classic" about anything Greek nor be casual about the contrast between the out-of-doors Greek and the penthouse Roman.

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and the bearing of such forces on building, that was the main issue. Not the interconstructional relations of mechanisms; not even the relation of man to his machines; the great need was to solve the spiritual and emotional problem within man and society as a result of the impact of all those ball-bearing material mechanisms. After World War II the whole world had to learn to live with those new tools-and without a lot of them too; nor did America escape this hard lesson. Too much had been done in turning over all healthy fun to machines; the people demanded their turn.

Prefabrication as at first visualized failed, not for lack of ingenuity, but for lack of heart. The returning soldiers of World War II, after an exciting life of action, found their six-hour working day unsatisfactory and were desperate for something to do from 3 P. M. to bedtime. Television proved a bore; who wanted to watch

someone sing or play ball after the action excitement of Bataan and Salerno. "Let's us do it !"

SIGN OFF

Unmet architects of 1990, don't miss the boat, as most did in 1900. Architecture for you will have again become romantic, humane, very warm, personal, and tied to an aesthetic implicit in your times. The "fan" complex will have disappeared. All of you will be playing the game. You will see less waiting for the door to be opened, more fun opening it yourselves. Less hectic going places, more happy doing where you are; less getting, more giving; less having, more living,

That's the coming world I see! Soldiers and Sailors, WACs and WAVES of 1945, make sure now that you won't have to look back only to find that you did not take your part in the fun of helping to build the new world for which you fought and many of you died.

"Others may praise what they like;

But I, from the banks of the running Missouri, Praise nothing, in art, or aught else,

Till it has well inhaled the atmosphere of this river-Also the western prairie scent, and fully exudes it again."

ANSWERS TO QUESTIONS ON PAGE 10

1. (24")

4. Because exposure allows "quarry sap" to evaporate and in so doing deposit a cementitious material which forms a surface harder than in the center of the stone.

5. False-As the diameter increases the sapwood changes to heartwood. 6. (2) 7. 1921 (amended in 1933)

8. From the carbon absorbed from the air.

9. \$40.00

10. (1) (2) (3)

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HOLMER GOES TO CARNEY CEMENT CO.

N. A. Holmer, formerly director of sales and marketing for the Elastic Stop Nut Corporation of Newark, New Jersey, is now General Sales Manager of the Carney Cement Company and the Carney Rockwool Company, with quarries and plants at Mankato, Minnesota.

The General Sales Office of the Carney Companies will be maintained in the St. Paul Midway District, at 2478 University Avenue. Mr. Holmer and the Carney Sales staff will move to the St. Paul offices from Mankato in order to provide greater service to the building industry.

Mr. N. A. Holmer comes to the Carney Company with a wide background of experience in sales and merchandising.

He was formerly general sales manager of the Mid-State Steel & Wire Company of Crawfordsville, Indiana, distributing farm steel products to a national market of jobbers, lumber dealers, building and hardware supply outlets. Previously Mr. Holmer headed Sales for Unity Mills Distributing Company, a concern, distributing steel products, building materials to the Northwest market.

The new Carney Sales offices in St. Paul, headed by N. A. Holmer, offers the contractors, designers and builders of the Northwest prompt, complete service on all Carney Building Products.

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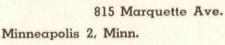
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