

# ENCIL SEPTEMBER 1934

OINTS

AN ILLUSTRATED
JOURNAL for the
DRAFTING ROOM

# wheat and cement

EVERY work day in the year hundreds of shipments of wheat of a given grade are sold on the Chicago grain market at a uniform delivered price.

This wheat of a standard grade comes from hundreds of farms scattered over a wide area, anywhere from a few to 500 miles away. Though raised at different costs, and shipped varying distances, it is all sold at the prevailing delivered price. Though all farmers are keen competitors of each other, their wheat must sell at the uniform going price.

There is an economic reason for this. Since all wheat of any standard grade is worth the same, no matter who has raised it or from where it has come, buyers will pay no more for wheat of this grade from one state, than for wheat of the same grade from another state. The same economic law determines the prices of sugar, or any other standard product.

Since cement is a standard product as uniform as wheat or sugar of any given grade, buyers at any point will buy it only from a cement plant that is quoting the lowest price. Other cement plants, no matter where located, must meet this lowest price if they want the business. The lowest price becomes the going price.

Since all or nearly all cement plants—like all or nearly all wheat growers—are located at varying distances from a given sales point, and must pay widely varying freight charges, they actually net different amounts at the mill door, just as farmers realize different nets at the farm. Just as the wheat grower farther away must take a lower net than the farmer in a nearby state, so must the cement plants further from a given point be content with a smaller net than the one obtained by the mill nearest the market.

Uniform portland cement prices in any town are as logical and inevitable as uniform wheat prices at the Chicago grain market. The cement business is as highly competitive as the grain business. The falling cement price curve from 1920 to 1932 is evidence of this.

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## What Lies Ahead?

The present and immediate future of the architectural man cannot truthfully be said to look promising. Whether he be architect or draftshe is just now struggling in the midst of vexations, frustrated on every hand in his search for a reasonable quota of the work he needs and can do. Government agencies, that seem at first to promise to help him adequately, peter out into very little and become involved in regulations and limitations that crush his spirit into the dust. That the morale of the profession, under these circumstances, remains as high as indicated by the returns from a recent questionnaire circulated among architects by Stephen F. Voorhees, is simply evidence that professional men have courage of a high order and that they retain faith in the ultimate future. A summary of the results of this questionnaire showed the morale to be 25 per cent excellent, 50 per cent good, and 25 per cent low.

The architect is up against such things as the recent reversal of policy put into effect in the Treasury Department by Secretary Morgenthau whereby all smaller post offices (and by smaller is meant jobs running well above the formerly agreed upon level of \$60,000) are to be hereafter done in the Procurement Division, and such larger post offices as there are will be done by individual architects only if they will consent to go to Washington, work in the Procurement Division with its staff, and accept a salary (reported to be \$25 a day) in lieu of professional fee. Thus, not only is the architect reduced to the status of a salaried employee, but no work on these buildings is provided for the draftsmen in his own city unless they, too, pull up stakes, go to Washington, and succeed in becoming also employees of the Procurement Division. A rotten arrangement, to our way of thinking-one which we should all fight against lest it be extended to other Federal government departments.

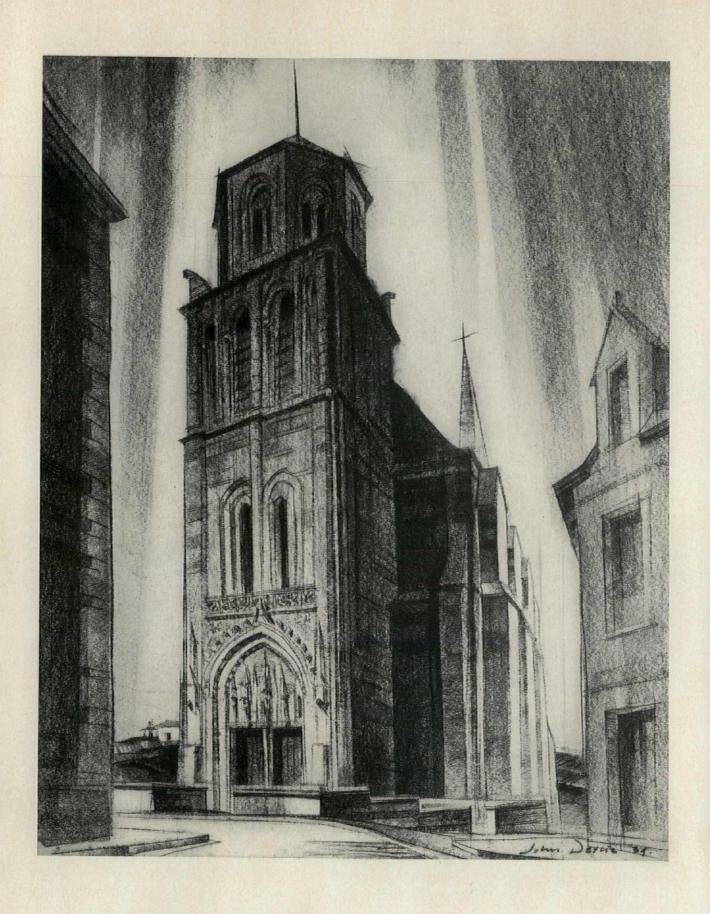
The activities of the Federal Housing Administration (why the word "Housing" was used is a bit obscure) give a little encouragement that some work may be obtained in connection with modernization and repair, though the size of the individual job (up to \$2,000) indicates pretty lean pickings for the architect in proportion to the amount of work and time required. However, on the chance that the stimulus of the campaign may produce some real work in future, the architect owes it to himself and to his country to push it along. Two or three months hence there will be some stimulation of new residence building, up to \$20,000 per residence.

Public Works have been well enough, though they were neither pushed as vigorously by the administration nor undertaken in as great volume as we believe they should have been. Many architects have bruised themselves against the ponderous wheels of the Interior Department's public works machinery, trying to get things moving. In fairness it should be said that the things did move, though slowly, and that the funds are by now all allocated and the projects mostly under way. But architectural works were small in volume as compared with engineering. The most promising news announcement that has recently come from Washington is the proposal by Secretary Ickes of a permanent Public Works Administration to see to it that works planning for a long range program becomes a continuous activity. Appropriations for a two-year extension of the present program are also to be asked for.

Details as to where the architect will fit into this long range activity were not announced, but it seems logical to suppose that he will be called upon to exercise his skill and knowledge on the planning problems involved. For \$100,000,000, or possibly less, 10,000 architects could be put to work planning and designing all sorts of public projects-housing, recreation centers, gymnasia, swimming pools, parks, hospitals and sanatoria, libraries, museums, schools-a long list of them, all needed for the expanding life of the future. Sooner or later it will be recognized that volume and velocity of spending measure the national income and that where private investment in capital goods fails to come forth it is necessary to find a substitute in the form of government or public spending for "public capital goods" in order that purchasing power may be sustained in the consumer goods field. Those who try to reduce the amount of federal government spending at this time through fear of future income taxes are short-sightedly acting against their own interests-choking off the flow of money whence their own money incomes are drawn.

Against the day when this truth will be recognized and effectively acted upon, the architect and draftsman will continue to keep themselves going by whatever work they can get, at the same time directing their minds toward the solution of those problems of community planning, housing and so on, the study of which were too widely neglected during the great era of private speculative building. America is going to need every bit of the architectural and planning talent that can be mustered by the whole profession—architects, draftsmen, teachers, and students. When the time comes let us be ready.

The Housing Study Guilds, Housing Authorities, Instituts d'Urbanisme, City Planning Courses, and all the similar activities that have sprung up in the last few years are true signs of the times. These are pioneers; the next generation will see them multiply and bring forth fruit.



TOWER OF THE CHURCH OF SAINTE RADEGONDE, POITIERS, FRANCE FROM A DRAWING IN BLACK AND BISTRE CRAYON BY JOHN STEWART DETLIE Size of original, 15" x 19"

## PENCIL POINTS

Volume XV

September, 1934

Number 9

## Post Depression Architecture and the City Debt

By John Irwin Bright

n an attempt to forecast the character and purpose of the building construction that is to be undertaken in the immediate future, one quickly realizes the unlikelihood of a continuation of the kind of architecture that came to a sudden stop at the end of the pseudo-prosperity of the nineteen-twenties. In the still resounding crash of financial values and beliefs that were seemingly so well founded, the old, familiar way of life was too severely wrenched to permit of anything so simple as an unobtrusive resumption. For modern architecture is the product of a combination of forces; of business, political, social, and artistic idealogues-and the first three of these factors, not to mention the last, are now in the process of being remodeled. Apparently the game is to have a new set of rules that will profoundly affect buildings and the way that they are made. Such prodigious upheavals as we are now witnessing do not happen unless the groundwork has been thoroughly prepared for them. The signs of their coming are seldom recognized. The final explosion itself is only the resultant of a series of prior, maladjusted actions that have thrown society out of balance and the sudden release of pressure leads to the re-establishment of a state of equilibrium. Crises in the world's experience are often conveniently identified by dates that may be only approximately correct. It suffices that they be significant. But as they recede into the perspective of time they become more and more identified with the events that they recall and future generations observe the day as sacred because of its symbolism.

Our own July fourth, 1776, and the French July fourteenth, 1789, illustrate the point. The deeds committed were of a stark literalness; a bell rang; a wall fell. Because of simple acts, understandable to the average mind, these days are remembered, although they are merely the pivots upon which swung open the vast doors of history. In much the same way October twenty-fourth, 1929, marked the finish of an era by a spectacular collapse of stock market prices. The crash, everything considered, was inevitable. During the entire preceding decade the gap between profits and production was widening. Considered relatively to each other, dividends were accelerating and production was

generally decelerating; until one fine day they parted company.

But the day itself, the twenty-fourth of October, is no less an historic marker, for, as time goes on, it becomes more and more evident that something strange, we know not exactly what, is taking place. And although we cannot descry with accuracy the new order of events, nor is it known how profound or shallow the change may prove to be, the most superficial observer is aware that as each month passes there is less possibility of re-establishing the broken forms of a life that only five years ago seemed so right and proper. In the nineteen-twenties, change, in the sense of a new social or political outlook, was unthinkable, or, what amounted to the same thing, was too distasteful for contemplation. True, there were creeping in some minor adjustments in the interest of a more abundant material life for a few and an ominous lessening of the buying power of the great majority of citizens; but nothing that could suggest a serious break with the American Tradition. Nevertheless the fracture did occur, and it came just at the time when the mass mind was being intensively drilled to accept the existing order as sacrosanct and to regard a divergence of viewpoint, or an exhibition of curiosity as to the course steered by the ship of state, as an undermining of the Constitution. It was no accident that the Empire State Building, Rockefeller Center, and the downfall of the Bull Market happened within a few months of each other. The buildings as items of city economics are no less preposterous than was the supreme convulsion of the Evidences of Debt. Lacking a firm if unrealistic belief in the possibility of a never ending magnification of population and money profit, Radio City would not have been commenced. In the crude words of one of the architectural advisors, the manifold blessings of Fifth Avenue prices were to be introduced to Sixth Avenue, never imagining that there could be an economic dislocation violent enough to arrest, much less reverse, the process. Yet such was the

Opinions on matters of art are infinitely varied and, in consequence, differ widely in importance. But there is one dictum generally accepted by those who have thoughtfully considered the subject. Whatsoever man fashions and builds is stamped, not only with his own individuality but also with the current beliefs and culture of the people with whom he is in intellectual contact. It is the brand of the tribe. This is especially true of architecture, at once the most subjective and the most objective of all the arts. The outlines of these qualities may be softened or even quite lost when a decent respect for the past moves through a specious eclecticism to end up in a debasing ancestor worship. The process reveals a state of mind, scholastic or snobbish.

Quite as significant as their individual appearance and plan is the grouping of buildings. But while the façades, at first impression at least, suggest a standard of visual culture, the manner and reason of their massing give a key to the dominant social and economic philosophy of the times and people. These things have been so often said and are so widely admitted that I hesitate to refer to them. Nevertheless they cannot be lost sight of for an instant in any sincere attempt to foresee the future course of building and the place of the designer in society. For shelter there must be, conceived, shaped, and constructed-fabricated, if the term gives pleasure-by human beings, and while there persists in man the instinctive love for the beauty inherent in order and economy of effort, the type of trained, sensitive mind through which these desires have always taken shape will continue to be sought after. The man's title matters but little. Architect is as good as any; the best perhaps, for it has the advantage of ancient lineage, and, provided it means what it says, the chief of the workmen. But if the architect expects, as a right, to sit with those who make decisions he must be prepared to offer a service for which he has had, as yet, no adequate, formal training, and to speak a language of æsthetics that hitherto has been strange to him. For there is every indication that in the immediate future the production of building will be much more concerned than it has lately been with the underlying human equation, meaning that the claim of the hive will come before the interest of the solitary worker, not to say the drone.

I am fully aware of the infinite variation of the architect's professional problems. In the past they have been almost exclusively the satisfying of the individual demand. Even when the government is the client, the attitude of the official in charge does not differ greatly from that of the private citizen. But there is a line beyond which anarchy becomes a liability, so there has always been the obvious necessity to conform to an official street system and quite recently, in America, legal limitations for the height and use of buildings are being adopted. This is about all. It amounts to a mob of rugged individuals, acting with somewhat less foresight than ants and bees, putting something together that seems to be falling apart. Much as the architect dislikes economics, and in this antipathy he is quite normal, he will soon be forced to give to this subject a serious attention. The words transportation and living conditions have a familiar ring in his ears but he has never thought of the city debt

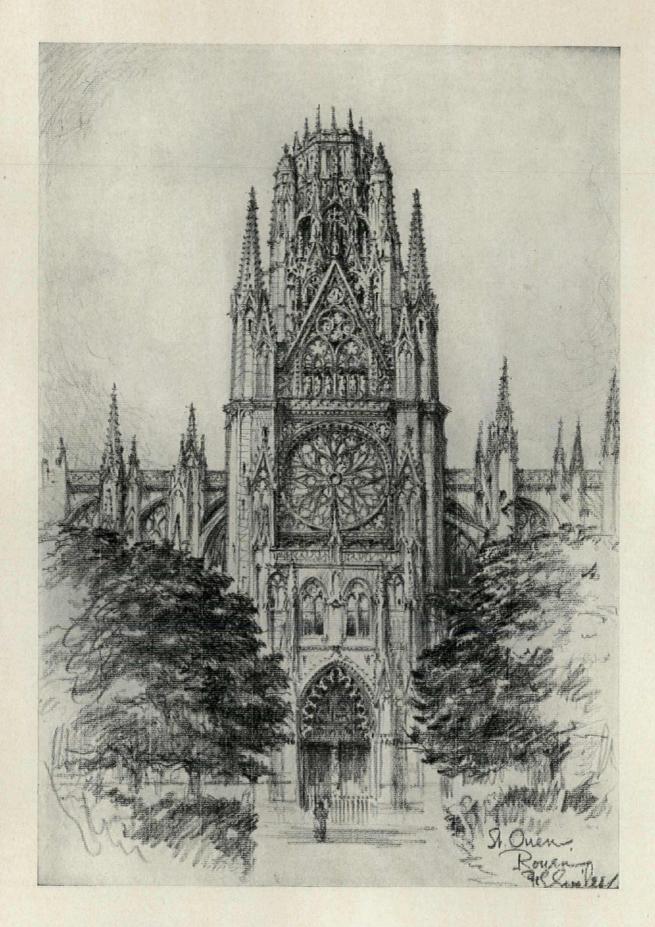
as his concern. And yet the greater part of this bond issue represents money, borrowed but not repaid, for the servicing of the buildings lining the thoroughfares. Many questions of finance that torment the great city are also known to the smaller towns, but in such attenuated form that they do not attract much attention. The evils and blessings that, when small, we live with in peace, may easily become too great to be endured. To the million or so of Chinese who die every year from starvation the thought that too much wheat in Kansas could be even remotely associated with the thin rations of so many Americans would seem a tragic joke, as indeed it is. And so our cities, that should provide in ample measure the needs of civilized man, are in danger, through lack of intelligent direction, of submerging the good in a rising tide of abundance. We know how to build cities but we have not learned how to operate them. Scanning the tables of municipal per-capita debt it is evident that there is a relationship between it and the number of citizens. We seem to do fairly well in units of moderate size. For concentrations of thirty to fifty thousand the 1930 census reveals a burden of about \$100 on every individual. As the city grows this figure steadily increases, the average of the upper ten being \$207 per capita, and New York, Philadelphia, and Detroit leading the procession with \$238, \$235, and \$236 respectively. Since 1930 the situation has grown decidedly worse.

A small city debt is not always bracketed with a high order of civic intelligence or even probity. It may mean that the schools and hospitals are being pinched. On the other hand a large obligation may have been created for the acquirement of the things that a modern community, to exist at all, must have; to cite but one, an abundant supply of pure water. But if a large debt implies superior benefits, just what are they? On this subject the city boosters are strangely silent. Each human being in New York, Philadelphia, and Detroit, 1930 statistics, bears a debt load twice as heavy as that imposed upon a resident of an average town of forty thousand, a ratio that cannot be expressed in terms of vice, moral turpitude, or amenities. Nevertheless it is a fact, attested by all the authority of the United States Government, that the per-capita debt tends to increase as the city gains in area and population. If size alone is responsible for this phenomenon the architect cannot be personally interested. But if the pattern, essentially identical in every example, passably satisfactory in small units, develops dangerous lesions after attaining a certain magnitude, then it is the moment to search for a new design.

But what has this financial confusion to do with the architects? Are they in any way responsible for the paralysis of the building industry, and is it possible that a changed attitude on their part could be of any benefit to themselves or to the public? What architecture is does not matter so much as how it acts and how it is used. Generally speaking it is considered to be an adjunct of wealth. So it has been in every age and country. Closely following the idea that architecture is associated primarily with æsthetics, is the careless habit of thinking that as architecture is always some kind of building it must, therefore, be constructive in the sense of denoting a progressive surge towards the material advancement of humanity. True sometimes, but not always. It is a feeling that finds an outlet in the vernacular of real estate where anything with a roof is termed an "improvement." Extravagant building, architecture as a luxury trade, has contributed largely to the downfall of many a city and nation. Rameses the Second, Pericles, Solomon, and Louis the Fourteenth spent entirely too much money for their country's good, and some of our modern cities are finding out that skylines are expensive ornaments. It is an illustration of the "conspicuous spending" of Therstein Veblen and is the architects' bread and butter. Individually and collectively they have applauded it. An article by the then president of the New York Architectural League, Raymond M. Hood, appeared in the New York World on December 29, 1929. In the very first paragraph he identifies the enemy. "Prophetic saints among architects, city planners, the intelligentsia, and deep-thinking professors are popularizing the gospel that New York staggers beside a chasm of self-destruction." Then follows a defense of the high building and some brilliant planning suggestions based on premises too daring to be accepted by deep thinkers. The author remembers the twenty-fourth of October, and like the bull that has just received the torero's sword thrust, and stands motionless, he cannot believe that it is all over. Mr. Hood's program, and all other city planning schemes of a similar character, rest on a pair of fantastic assumptions, the first being that the national interest-bearing debt, now in the neighborhood of 200 billions can continue to mount indefinitely without toppling over, and the second that the profits accruing from production will, over an unlimited period of time, nicely and evenly, balance the service charges on the Debt. It is evident that no such relationship can long endure when, as is the case at the present moment, the national annual income is not far from 25 billions, a sum fairly equal to that required for the proper servicing of the Debt. To the few owners of the bonds this is one of those celebrated revolving funds but to the rest of the people it is a spiral fund. Mr. Basset Jones is my authority for these figures. In his "Debt and Production" he assures his readers that the Debt is being continually compounded. It is not necessary to explain why this is so, says Mr. Jones, for it is a fact and facts "being the unanalyzed result of an observation or measurement" are not interested in reasons. When the arithmetic of the Debt is charted its curve is of the nature of a parabola. In order that Production may support the Debt-and there is no other source of supply for this purpose-the character of its line must be in substantial accord with that of the Debt, and both curves, essentially parabolic, must sooner or later indicate volumes of money too great for human comprehension. But this happens only on paper. While yet the quantities seem to be within the bounds of human reason the rate of growth of Production hesitates and fails to keep pace with the remorseless compounding of the Debt. The change of tempo is so gradual that, for a time, it escapes attention. At first the money for debt service is hard to Then the reserves are drawn upon and when they approach exhaustion the Debt is repudiated. It is as simple as that! The final decision to suspend payment is to be found in the realm of mathematics, not in the law on contracts nor in ethics. In the New York Times of May 6, 1934, it is stated that there are one thousand local governmental units that have recently defaulted an aggregate of 200 millions, a paltry one-thousandth of the entire burden. But the amount of debt in imminent danger of collapse can only be guessed at. There is good reason to estimate it at many times 200 millions.

The cloistering of architecture among the so-called fine arts saps its strength. To think of it as good for a house but too good for housing, to withdraw it tenderly from the hurly-burly of city-building into a haven of gilded peace and quiet degrades the universal mother of the arts, that in truth it is, to the level of the Whore of Babylon and makes it difficult of acceptance as a reality of life. But within the last twenty years our practical employment of energy has increased to such an extent that the "realities of life" has ceased to be a mere genteel phrase of the moralist. It has come to mean the living together in stable alliance with a not yet fully understood economic-technology. And until, through an adjustment of our philosophy of civilization, we learn the control of this new force there will be ever present the menace of destruction of our most cherished ideals and possessions. In the discovery of the terms of this accommodation the architect, or someone taking his place, will have much

If the picture that I have drawn is reasonably correct, then there does not seem to be much chance of a return of the ample days of the last one hundred years. Ever since that terrifying twenty-fourth of October, 1929, the business and political leaders have been assuring us that the old prosperity was just about to smile upon us. The architects put their trust in this kind of twaddle and kept their offices open, waiting for the outburst of long overdue commissions. Now, in increasing numbers, they are beginning to suspect that the old game is nearly played out and that a new one is struggling to be recognized, in which the design of cities, and indeed of any considerable group of edifices, will be largely governed by the offerings of Technology and the speed and freedom granted by Power, when used scientifically, artistically, and humanely.



SOUTH TRANSEPT, CHURCH OF ST. OUEN, ROUEN FROM A SKETCH BY FRANCIS S. SWALES

## New York and Its Plans, 3

### Land, Housing, and Life of Investments

By Francis S. Swales

The modern need of the city plan of New York is to replan its system of human and goods circulation for residence requirements and greater convenience of business. Trucking and freight, express and mail packages should be handled underground, separated from automobile and pedestrian street traffic, as freight trains are from the passenger tracks of a well-planned railway. Rail, truck, automobile, and pedestrian traffic require separation, and all these means of horizontal movement require more direct communication with means of vertical transitelevators, escalators, and aircraft. Fuel giving off smoke and soot should give way to super-power brought from hydro-electric sources. should give way to separated city districts and to horizontal as well as vertical partitioning; and height zoning to a few simple rules that would govern bulk of building and coverage of land. There is need of a new plan of street intersections; of many small parks or squares and of boulevards and new waterfronts and other things; but here, as elsewhere today, "city-planning" or planning on a grand scale has for the time being become synonymous with housing, and "low cost housing" with "slum clearance." Many vast projects have been and are proposed for housing. The charity of professional public benefactors; the benign despotism of promoters; the profits written into value of land; the "cost" included for worthless overhead; the very large amounts provided for counsel fees written down in the estimates of employee-architects of financial masters-writing professional advice as though it were independent and competent; are among things observed, but may be put down as perhaps only business or professional urbanity in obtain-

In rejecting on April 27th, 1934, one hundred and sixty-nine housing and slum clearance projects submitted to the P.W.A., involving proposed expenditures of \$350,000,000, Administrator Ickes commented that "Experience has unfortunately shown that many of the private housing projects . . . . were conceived rather as a means of utilizing unsuccessful land subdivisions . . . . than as a means of meeting a definite need for low cost housing." Also that it "probably would be necessary to start land condemnation proceedings in all cities where the Federal Housing Corporation proposes to construct low cost homes due to unreasonableness of owners who are attempting to sell at exorbitant prices,"

It may be that the Administrator will find that to exercise power of eminent domain and go to condemnation proceedings will not be the most economic or desirable course, though perhaps the only presently available way of dealing with the pressing problem of meeting the obvious need of temporary housing for the nouveaux pauvres. To many of the 169 applicants he might have asked, "Is this a plan or a plot?"

Terms such as "low-cost" housing are illusive. Relative to what-to money or to land-is housing to be low cost? How is its cost to be determined-by the "market price" at the time of inception and the making of estimates; or when it comes to finding out whether the capital expenditure can be recouped, together with an amount of interest required to make the deferred purchasing power, at the end of twenty or thirty years, equal to what it was at the time of the investment? Investment should be given a secure life -the practical certainty of the return of purchasing power of the credit at the time it was given-for this is of the essence of continuous balanced economy and of the permanence of value which the President seeks. Investment should be recognized to possess only a limited life; and the problem of what the reasonable expectancy of length of that life shall be, must be considered, discussed, determined, and provided by legislation; a way should be found to relate the value of land to that of buildings in order to arrive at conclusions as to "rate per room" that can or will be paid and as to a period of time over which continuous tenancy can be logically estimated.

Through the cost of living, to the service (or "labor") necessary to produce buildings, the real value of buildings is related to basic money (by basic money I mean that kind of certification of value of service most readily exchangeable among the greatest number of people), but no valid relationship now exists between land and basic money; hence, no tenable ratio between the value of land and that of the building (which latter, in village or city, provides the land with its artificial value) exists. Nor is such ratio likely to come into use until, and unless, the life-cost and life-value of various classes of buildings can be sufficiently established; and, thereby, the amount of landvalue that can be successfully carried on the cost of the building by the earnings and payments of the tenants or users, which is the only real value that can be conceded to land. That is the obstruction which confronts Administrator Ickes, the New York State Housing Board, the New York City Housing Authority, and all those other forward-looking, progressivepractical people and institutions, who foresee that if building homes and public works can be made a continuous public demand and a continuous public activity, a real profit to substitute for the artificial credit book



#### NEW YORK IN 1729

Some early evidences of thought in city planning are shown on this early map or "plane" as for example: 1-Placing the "City Hall" or old State House on the axis of Broad Street; 2-Provision of an open square on the east side of Nassau Street, just south of the site of the modern Federal Reserve Bank; 3-Provision of an open square opposite Trinity Church; 4-The dotted axis indicating a proposal to extend William Street northward as the axis of a future development. This map also shows the swampy sub-soil of large areas of land just south and north of Brooklyn Bridge, which indicate the reason why the west anchorage of that bridge was placed in its awkward position with reference to east side traffic of the old part of the city. The swamp meadow became the site of the notorious "lung block," now being developed as Knickerbocker Village with 12story "low-cost" housing. The dotted line indicating the earlier location of the Dutch wall or stockade along Wall Street has been added on this illustration for comparison with the Castello Map of 1660 (the basis of the drawing by Messrs. John Walcott Adams and J. N. Phelps Stokessee PENCIL POINTS for June, 1934).

profit will ensue. Beyond that also arises the vision that building may provide the affirmative answer to the question as to whether disarmament will in time become practical. City land, as a large factor of the cost of living, has for so long risen in market price, out of proportion to other factors—particularly to the cost of building—that it has become the greatest common cause of economic loss to the public.

In New York the "value" based on "market price" became so great twenty years ago that Administrator Ickes' "experience" is to all well-informed local architects a matter of ancient history. Administrator Ickes' statement indicates that although, as stated in my first paper, enough cheap land has been subdivided in the suburbs, to provide sites for individual residences for the entire population of cities, it is not the intention of the "altruistic planners" of regional land to allow it to benefit tenants or individual owners; but that slogans such as "decentralization," "slum clearance," "low-

cost housing," are designed to transfer the bonded debt and mortgage profiteering racket into the outlying districts, and to distribute it upon the great number of small shares in large-scale housing. It should not, therefore, be surprising that the Administration, which has given continuous proof of its sincere intention to guard the rights of the people who cannot protect themselves, should cut down the appropriation for so-called low-cost new housing to \$125,000,000 for the country, \$25,000,000 to be expended under the New York City Housing Authority, until it is made clear as to how the experiment will work out.

The gradual steps of changing housing conditions will accelerate rapidly. Repairs, which would seem to cause delay of new construction and the cancer of sub-normal housing and competition to grow, will do no more than supplement the temporary condition of a comparatively small beginning of new construction in a coming great program of rebuilding. It will give

time to plan the general house-cleaning of cities of their old-building rubbish, for which the public mind is now in a very receptive mood. Time is also required for President Roosevelt's policy with regard to gold to take effect by increasing prices, and with regard to corporations, to get them in harness so that the public assets of corporate life may not be lost and that the attendant public liabilities may be greatly reduced. Also, time is needed to work out a possible partnership along the principles of N.R.A. between the public, entrepreneur, and tenant that might eliminate the mortgage system by the substitution of a greater security through the agency of the Government.

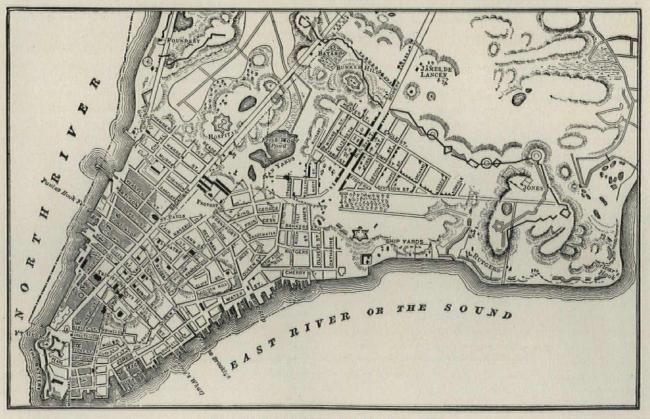
Throughout the country, in our cities, the market price theory of value of land which determines assessed value, taxation, and amount of mortgaging value is today the greatest obstruction to the reclamation of old, dilapidated districts. The values in "slum" districts are so great that they cannot be accepted for any other uses than their present purposes viz.: partial income on the alleged value of the mortgage bonds. Their position value is always needful and considerable; but in order to deal with it practically, abstract rather than concrete numbers must be used. Its value must be found in ratio to the cost of the building needed at the location.

Lack of legislation, at any time or place (perhaps because building is older than codified law), to provide for fixing the period of life of buildings erected for revenue; and lack of an established custom to provide common law, under which the value of land should be amortized at the same rate as the building—thus finding zero value (for purposes of taxation)

when the building becomes condemned against use, and preventing the amortized value of the building from gradual translation into the burden of value of land—are responsible for a very great part of the poverty still existing under modern civilization, notwithstanding both the public power and will to eliminate it. The burden of profit in land is too great for the good of the land.

Not only could continuous rebuilding of cities, to new plans under new ideals, be a major preventive of war, by absorbing investment to buildings instead of to munitions plants, and absorbing also the workmen in such plants and the men who commonly join armies and navies as a means of some sort of employment, but it could, by accelerated and extended programs, absorb all people not needed in other industries and thus do away with the major cause of poverty, lack of employment, and the secondary cause, the too great tribute paid by the workers for the use of land contained in rent. These two failures of the existing economic system preserve in fact a highly unjustifiable, as well as unjustifiably high value to old buildings, on land which, without the old buildings, could earn nothing and which, except speculatively, is worth nothing. Yet the value is charged to the land.

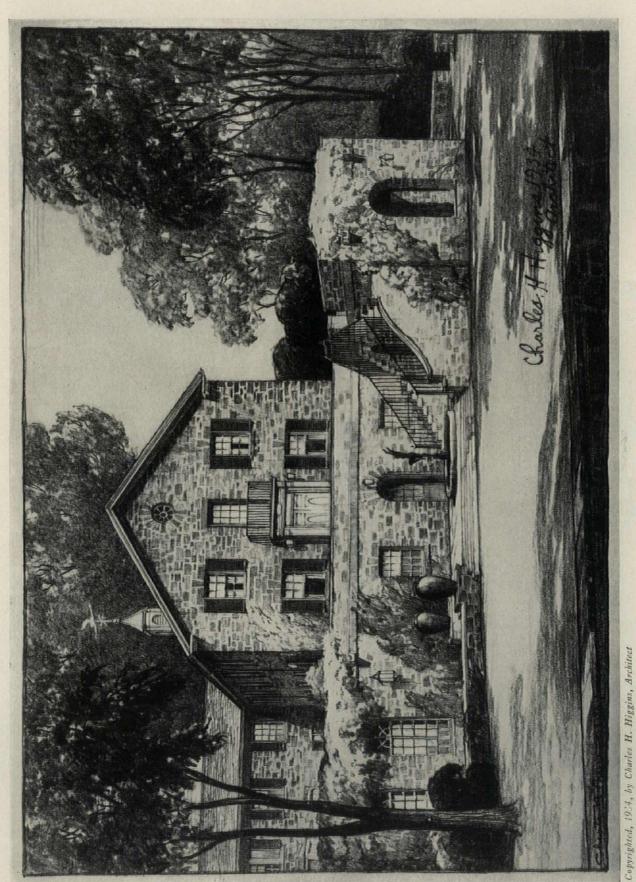
Up to a very recent time, finance has failed to take sufficient note of the change from scarcity to abundance of accessible land provided by new forms of transportation; but the value of land was observed to decline with the earnings of the building; and the habit of writing the highest capitalized value of the building (based on earnings) into the value of the land ceased. The employed tenant pays too much for



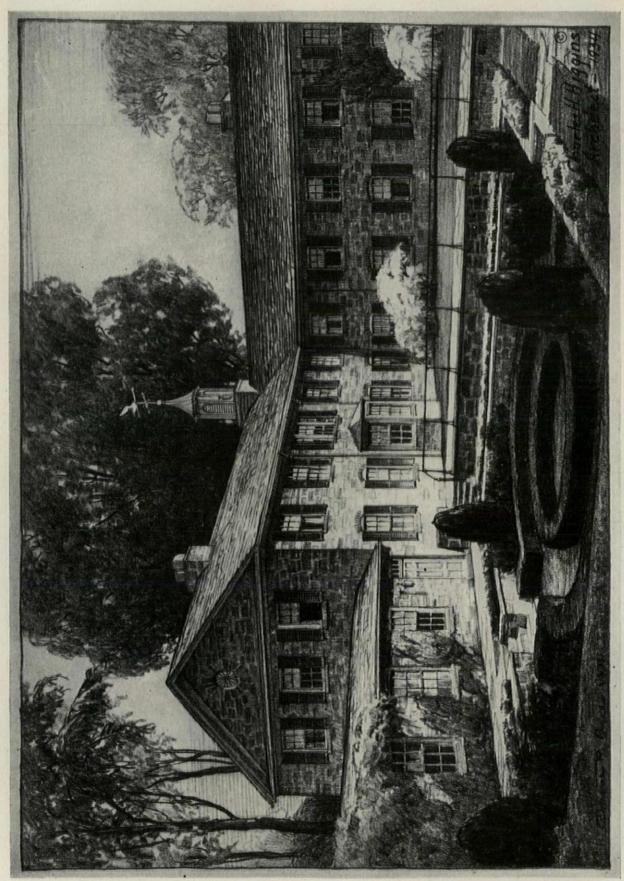
HILL'S MAP OF LOWER MANHATTAN, 1782

rent in ratio to his earnings, and the small investor in mortgage certificates will get too little back from his investment—an investment which has meant that he has bought the equivalent of a dead horse. The lesson to both would seem to be the need of a more trustworthy agency than the real estate brokers, banks, title guaranty and trust companies have proved to be in the matter of valuation. The former mortgagees (who foreclosed the owners, took deficiency judgments against them and forced many, perhaps most, to find relief in bankruptcy) are now in the responsible position of owners. Their hope of profit was to "sell" to the Government at prices which Administrator Ickes finds "exorbitant." Only one housing development in Manhattan (which "got by" through the R.F.C., ahead of Mr. Ickes) perhaps a new slum to be-on a grand scale, on the site of an old slum-one new development in Queens, and one in Bronx borough have passed Government muster of New York city land values. These are all projects of limited dividend (6%) corporations which come under the supervision of the State Housing Board, for the purpose of tax exemption by the city on the value of the buildings and exemption of state taxes which are comparatively negligible.

It is not important to consider the merits or demerits of these few projects by themselves but only to note that they are financed on the assumption of charging certain rates per room per month to tenants, and that the rates are as low, or lower, than any for which demand exists in comparatively new buildings in similar districts. We may also note that the value of land was in one case required to be reduced about 25% in order to obtain the approval of the State Housing Board; that the cost of professional services and builders' and sub-contractors' profits are approximately usual estimates; that the plans all provide unusually large open space within the site; and that under comparatively good management, to compete with similar existing housing, the maximum permissible dividends may be reasonably expected during a period of from 30 to 40 years. It may be supposed that the type of tenants will probably decline in character after the buildings have been tenanted for fifteen years; that mechanical equipment will depreciate, and also the purchasing power of the dollar; but that the investment will be returned in more than the original purchasing power and probably more than double the number of dollars before any of these buildings should be written off as liabilities rather than continued as assets. In short, they will be good investments provided that the price paid for land has not been too high to compete with the lower priced land that will inevitably come on the market and permit better quality buildings to offer lower rates with advantages of future developments of new forms of transportation, methods of communication, and social classifications. And provided, also, that cheaper costs of financing do not enter into future competition. In any event, in the light of all experience, these buildings will be obsolete as to the wants of people thirty years hence, and the problem of replacement will present itself. All commercial buildings, including commercial housing, have a nearly definite life. It would be to the advantage of everybody if it were fixed by law so that investors would know that there would be no residue or survival value after capital investment and interest value were amortized. Also, if an amortizing tax were levied on land value for its recapture to public control. The revenue from such tax could be reinvested by the city and used, when the building investment amortized, to purchase the land for the city. The land could then be put into redevelopment under exclusive public control, with the city in the role of preferred stock-holder taking a ratio of earnings as a participant and renouncing the principle of taxation, or "taking by superior force." The period of life of investment buildings should not depend merely on structural safety nor on official judgment as to satisfactory sanitation. The interests of public welfare go far beyond such primary considerations, which now help too slowly to do away with existing building cancers. The nearly extinct survival value of old investment buildings is not only a social nuisance but is financially damaging to the surrounding neighborhood by preventing the replanning of city districts and streets to conform to modern demands. Most buildings more than thirty-five years old, particularly those of non-fireproof construction, decline to fitness for storage conditions only. should not be permitted in that capacity to warehouse, by groups, masses of helpless and hopeless, unhappy humanity. Such buildings are known to develop the growth of disease and crime in enlarging areas of desperate poverty—a condition which itself is due largely to inadequate building programs held down under the passing system of "rugged individualism" and the nearlate "planned economy" of monopolies or "integrated corporations." Centralization of power in the hands of directors of moneyed corporations has brought about in cities a condition of decaying building areas, shunned by new generations, slowly killing the cities economically by causing depletion of population and general Employment of the building forces, which affect five million men and their families-or about one-fifth of the population of the country-is now recognized among the primary needs to provide economic balance to enable civilization to proceed and continue. Income is the result of doing things-not of doing nothing. For a program of continuous progress there must be also a nearly continuous program of destruction of obsolete things. The period of existence of any new investment building (one from which a monetary return is anticipated or expected) should be fixed. It should be done in future by covenant, in the terms of licenses to build, or to occupy, which should provide for the destruction of all such buildings at the end of their life as fixed by progressive economic conditions. We must learn to "scrap" buildings as we do automobiles and other machinery-not because they are worn out and entirely useless but because they are out-of-date, incompetent, and a handicap on the progress of the people, their business and their pleasure.



GARDEN FRONT, HOUSE FOR VALERIA HOME, OSCAWANA, NEW YORK, COMPLETED 1933—CHARLES H. HIGGINS, ARCHITECT FROM A RENDERING BY CHESTER B. PRICE



COURTYARD, DORMITORY FOR VALERIA HOME, OSCAWANA, NEW YORK, COMPLETED 1933—CHARLES H. HIGGINS, ARCHITECT Copyrighted, 1934, by Charles H. Higgins, Architect FROM A RENDERING BY CHESTER B. PRICE

## "The Upper Ground"

Being Essays in Criticism

By H. Van Buren Magonigle, D. Arch., F. A. I. A., A. N. A.

"'Take the upper ground in manœvrin', Terence,' I sez, 'an' you'll be a gin'ral yet,' sez I. An' wid that I wint up to the flat mud roof av the house, and looked over the par'pet, threadin' delicate."

R. K. "My Lord the Elephant."

IV

his month we will try to complete the review of current periodicals up to June.

Architecture devotes a large amount of space in the March issue to Duke University, one of the benefactions of the Duke family, in North Carolina. This group of buildings by Horace Trumbauer is large and apparently expensive. Conceived in a not very good Gothic, it misses conspicuously, both in mass and detail, the character and charm of that collegiate Gothic of England which it attempts to transplant to one of our Southern states. General views of the Campus show too many towers and things; instead of being used as accents there are so many of them that they each cancel the effect of the other; the composition seems to be made up almost entirely of accents. The buildings have too much texture, too many trivial details, too many "features," too much tracery. It is a kind of rich man's Gothic.

Work in this kind in its home in England is nearly always very simple. When it happens to be in stone as Duke is, the masonry is beautifully reticent in surface and texture. When there is so much in the way of architectural detail a designer is well inspired to keep his wall surfaces smooth and quiet to give the eye a chance to rest now and then.

\* \* \*

The whole thing makes one wonder why American architects at this time of the world persist in "doing Gothic" (or any other historic style for that matter); it ought by now to be possible to design in a spirit which discards the curséd letter. One way to do this is to lock up the bookcases; there are as a rule too

many books piled up on the drafting tables. In this instance there is no valid tradition in North Carolina that warrants this type of architecture, designed in and for a climate which is grey and damp with a much more level sun than the place where Duke is-although almost anything may be forgiven to a superlatively good thing. If it had been cast in the general character of the indigenous work we have in the East -that built when the States were still Colonies-it would have been simpler and probably better, certainly more sensible. Princeton sins in much the same way and so does Yale in many of her new buildings, so pretentious and expensive in appearance; but it is to be remarked with pleasure that after the Harkness dormitories with all their elaboration and imitation mediævalism, Mr. James Gamble Rogers has reverted to an architecture admirably simple, admirably American, and designed not pinched. Chester Price showed me

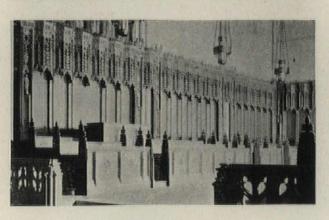
his drawings of some of it the other day, and it is entirely pleasing, full of character, and male.

It is all very well to impress the undergraduate and his papa and mamma from the provinces with a sense of the importance and dignity of Alma Mater; but it may be remembered that most of these youths come from very simple environments, to which they either return after graduation or find their way to the hall bedrooms of city boarding houses. And, while barrenness and a simplicity too Spartan for amenity are as much to be avoided as the unduly luxurious and elaborate, if there must be a choice it seems to me that it should be for an adequate simplicity.

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Reverting to Duke, the interior of the chapel is

From Architecture, March, 1934

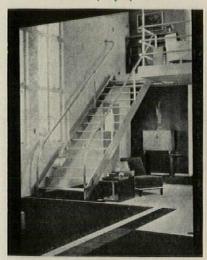




DUKE UNIVERSITY, DURHAM, NORTH CAROLINA

Horace Trumbauer, Architect

Architecture, April, 1934



DEFENDED BY FRANKL Designed by J. S. Kuhne and Percival Goodman

architecture.

very ambitious, very dry and Puginesque in general feeling. The choir stalls are very elaborate, but the pattern of the tracery in the canopies is of a sort that becomes tiresome in its insistent repetition. They are no less elaborate and expensive than the stalls in Amiens -but the difference in interest and beauty is rather marked.

tion. One of the first things Mr. Frankl says is: " . . all modern progress has been made by shock tactics," which recalls Schrecklickheit and other things that contributed to the defeat of the Teuton in war and perhaps foreshadows the defeat of the Teutonic ideas from which the more simian minds among us have been suffering over here.

Architecture, April, 1934

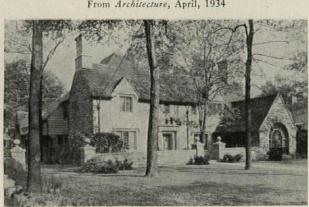


DEFENDED BY BULTITUDE Bradley Delehanty was the Architect for this interior

Alfred Hopkins as architect and Pitkin and Mott as landscapists have created for Howard Heinz at Pittsburgh a perfectly delightful house. It isn't copied from anything. It does not discard everything we have learned of rational building through a respectable number of centuries. The imagination of the designer rises above pipe-rails and overhanging masses of concrete apparently unsupported. It is simple without being naked or cold. It is lovely and lovable

In the April Architecture Paul T. Frankl and Henry F. Bultitude in two articles very conveniently printed for comparison in parallel columns and pages discuss "Furniture for the House of Tomorrow" (always Tomorrow). I cannot attempt an analysis of the two points of view; I haven't room for what I should be tempted to say; but read these articles yourself. Mr. Frankl was educated in Berlin, Munich, and Paris, and came to this country in 1914. Mr. Bultitude was brought up in the rich tradition of domestic England and is thoroughly trained in the theory and practice of creating interiors in that tradi-

From Architecture, April, 1934



HOUSE AT RIDGEWOOD, NEW JERSEY R. C. Hunter, Architect

Look up pages 194 and 195. The caption on the former reads: "An interior . . in which the stairs have been treated merely as a functional necessity." On the latter: "In which the staircase has been designed with regard to how it looks as well as how it functions." Then ask yourself why the boiler-room stairs have been promoted to the main floor. The answer is "shock tactics?"

Mr. Roland E. Coate has designed a charming house for Mrs. R. B. Fudger in Beverly Hills which departs from the local Spanish tradition very agreeably and yet seems as though it would be entirely harmonious with the Californian scene. It looks like a restful, pleasant place to live in.

In this same April number is Aymar Embury's house for Arthur Lehman at 45 East 79th Street, New York, a highly competent performance, one of its distinguishing features being a pretty garden, by Ruth Dean, instead of the typical New York back-

The house of Fred K. Lapham at Ridgewood by

From Architecture, April, 1934



HOUSE AT BEVERLY HILLS, CALIFORNIA Roland E. Coate, Architect

From American Architect, March, 1934

From American Architect, March, 1934



SCHOOL AT VILLEJUIF, FRANCE André Lurcat, Architect

Mr. R. C. Hunter doesn't seem to me to hang together. A caption says: "Obviously the exterior was inspired by the houses of the Cotswold district in England." Take the illustration of the main front reproduced here-a very sophisticated Georgian doorway with a curved broken pediment, Tudor Gothic label mouldings over the windows, the main wall apparently a very smooth ashlar or brick, between a main gable wall of rough random-ashlar and a solarium extension of the same; going on around the house we get colored brick and half-timber with brick filling, and wide clapboards over this. The aim seems to be to simulate a house built at different and widely separate periods. There is an awful lot going on for one rather small house. When one sees a little old house in England that has really grown with the years one often finds it charming-can one feel the same about a new American imitation? There are enough ideas and changes of material here to furnish forth a little village. And yet these materials each seem to be skilfully handled in themselves.

The "Portfolios" that have been such a pleasant and valuable feature of Architecture for some time continue the interest of their predecessors. The "Editor's Diary" too was an editorial inspiration and maintains its quality; I always read it through to find out what Mr. Saylor's wide circle of acquaintance is

thinking and talking about, even though it is only one mind's contact with others and limited to that contact. I hope it will go on and on.

But there is one thing I don't like about "Favorite Features," a newcomer in the magazinethe publication of scale details of these favorites of their architects. It is merely putting temptation in the way of the Copy-Peter who is too ignorant or too lazy to design for



SCHOOL AT DOWNER'S GROVE, ILLINOIS Waldron Faulkner, Architect

himself-and, my dear Harry Saylor, first you know these favorite features will be reproduced, very badly, without understanding, all over our beloved and longsuffering country-and then they won't be Favorite Features any more. The editors who publish such scale details are not really doing a service to architecture, whether the work be old or new; and I wish such "features" and "departments" were all abolished. The photographs are enough. Let the plagiarists (I am almost tempted to dignify the class with a capital "P," it is so large) if they must copy something get as near to it as they can without these scale details. Perhaps they may happen to catch the spirit of the thing instead of the damned letter-which is the business solely of the author-and in so doing be a step on the way to something fresh; in time they may even cease to be Plagiarists and become Designers!

I foresee that I shall very soon have to make myself clear, once more, on the subject of the so-called "Modern," for the Editors have received some communications from readers who do not at all understand my attitude toward design-which is very simple I assure you. Therefore I will reserve a discussion of the Portfolio of "Modern Ornament" until that more appropriate occasion.



HOUSE AT WASHINGTON, D. C. Victor Mindeleff, Architect

The May Architecture is given over, except for the usual Portfolio (on Rustication) and the pleasant white-washed brick house which Messrs. Duncan and Garrett have built for Mr. Duncan in Bronxville, to the work of that versatile genius Joseph Urban, whose recent death saddened a host of friends and admirers. Urban was, par excellence, a scenic artist. He had an early architectural training in Vienna, but his versatility, aided no doubt by the breadth of The Architectural Review, London, March, 1934



A TENNIS CLUB IN VIENNA Franz Singer, Architect

that training which undoubtedly did not stop at just architecture, led him quickly and fruitfully into other fields. It is not adverse criticism to say that his architecture naturally partook strongly of the theatrical, as witness the exterior of the theatre he did for Ziegfeld, the business building he did for William R. Hearst at 57th Street and 8th Avenue, and his design for the Metropolitan Opera House, with their strange conception of scale.

A man of vivid and untrammelled imagination who was able to do what so many Americans would like to do—let himself go—he would seem to have endeared himself as a man to those who knew him best.

In the American Architect I find most interest in the March number, in an article by N. L. Englehardt, Professor of Education in Teachers' College of Columbia University, on "Trends in School Planning." The following quotations are of special value:

"New educational objectives are being formulated; and a new emphasis is being placed upon the content and method of teaching. In this new society the school is required to create more worth while interests for more human beings over a longer period of their lifetimes."

"Within the past two or three decades there has been considerable progress in school building planning. Taken by and large, this progress has not been highly significant. It has been difficult to turn tradition aside."

"Throughout this country too many illustrations are to be found of bleak, barren, unattractive, and poorly conceived school buildings that add nothing to the adornment of their communities and certainly have little educational value in the lives of their users."

\* \* \* \*

In relation hereto I would direct the reader's attention to one of the illustrations of this article, the school at Villejuif, France, and ask you to compare this dreadful barracks with the other illustration of the Avery Coonley School at Downer's Grove, Illinois, by Waldron Faulkner, and reflect that there are misguided persons who would blithely reproduce such

hideous things as that French school in our United States. It would be no less than criminal—for a child has a right to a chance to grow up in beautiful surroundings and be able to look back upon his school with affection. It looks as though, if Germany had had the wit to be patient, she would have conquered France by the mere penetration of ideas—for even though this building is built in France it is "as Dutch as Billy-be-damned."

Continuing quotations from Professor Englehardt: "Community housing, recreational facilities, traffic conditions and school building projects should be harmoniously related in a complete unity."

"In the first place, the architect probably knows little about the activity program. He may not understand the philosophy which has changed the militaristic atmosphere of the schoolroom into one in which children are afforded the opportunity of mingling as human beings in a true social unit."

"The school building itself must be planned not in terms of the short-lived educational program of the past, but in terms of a constantly developing educational program beginning in early youth and continuing throughout adult life."

"The schoolhouse is to be a place in which chil-

The Architectural Review, London, April, 1934



BOARDING HOUSE AT DARTINGTON HALL

Howe & Lescare, Architects

dren live—where they play and grow, with each day's program."

"Schools will afford these opportunities not only for the child. Adults also will go to school in greater numbers as time progresses."

"The schoolhouse that will meet the new standards may not have the compactness and the concentration which characterize most present structures."

Professor Englehardt looks forward to acreage for school sites and the abolition of crowded units piled one upon another. Low buildings, light, air, very large play spaces, gardens, even woodlands . . "The School thus will be truly a place in which human beings learn while they live and live while they learn. The environment will be one of happiness, of encouragement, of stimulation."

May it come soon and quickly. Every parent in the land should resist with might and main the spirit of regimentation that is the spirit of Hitlerism, which seeks to reduce human beings to the condition of robots. We are seeing it foreshadowed in our own country by certain aspects of this precious New Deal.

\* \* \* \*

Clinton H. Blake's article in the same number as the above, "The Question of Architect's Charges," is written out of his wide experience in architectural and building practice. We all know the present and time-honored system (the percentage of the cost) is far from satisfactory—but it is doubtful whether the much more complicated method which Mr. Blake tentatively advances would be any better, viz.: "Theoretically and ethically, it would be far sounder, I believe, for an architect's charges to be based, as are those of other professional men, on the time involved, the character of services rendered, the amount involved in the transaction and the financial position of the client." That last item is loaded to the muzzle with trouble.

If a client thinks that his architect deliberately increases the cost of the work in order to increase his own fee (and there are lots of such clients) it means a number of things: the profession at large has not won the confidence of the building public; the client is often less the stinker than the ignoramus; the architects of this country are trying to straddle-to be business men and professional men at one and the same time, and very often to impress the client emphasize their business ability instead of their professional skill. We architects must remember that there are great numbers of "business lawyers" who deal with matters of business almost wholly and give business men advice about their conduct of business affairs-but these lawyers remain professional men; they do not stress their business ability but their professional ability. It is up to our profession to raise its character to the same professional level as that enjoyed, with the respect and esteem of their communities, by the lawyer and the physician. I wonder whether their integrity as to charges is insulted and impugned as often as the architect's is-it would be interesting to know.

\* \* \* \*

In May the American Architect deals largely with the small house, the problem being illuminated by Roger H. Bullard's article; it will not have been forgotten that he was awarded the Gold Medal for the 1934 Better Homes in America Competition. The article is so closely inter-knit with the many illustrations and diagrams that it is not feasible to quote intelligibly from it and therefore my advice is to read it—studiously.

\* \* \* \*

Professor Harry F. Cunningham, in the same issue, discusses with his usual intelligence and sympathy the house "Beyond the City Limits" and its architect, illustrated principally by Victor Mindeleff's delightful house for Mr. Welker, out of Washington, D. C., dominated by an immense and patriarchal tree which looks like a walnut but might be an oak; at any rate it is a superb old vegetable and the house is very carefully and sensitively designed in relation to it. One would love to own such a tree and the house that seems to take shelter beneath it. It is undoubtedly Mr. Min-

deleff to whom Professor Cunningham refers as "the happiest architect I know" and who has all his life long done almost nothing but modest houses. And Professor Cunningham says he intends to emulate his happy example. He is then going to invite his friends in for "a round or two of cocktails." If he fails to invite me I shan't forgive him—for I know the atmosphere of the *intérieur* he creates will be one of peace and happiness and fine understanding.

\* \* \* \*

The Architectural Review (London) goes modern with a vengeance in March and April. I am not informed whether the Review has emulated the typography and arrangement of the Architectural Record and the Architectural Forum or vice versa. In either case I cannot congratulate any of them on the result, for they are the hardest to read and understand of any printed matter I have seen in the course of a dreadfully long experience. Time was when it was considered sensible to make typography easily readable, both as to the type used and its composition, length of line tolerable to the eye and to the reader who owns the eye. But this Progress from which we suffer makes it as hard to read typographical matter as possible, ignoring the fact that nobody has the time or the patience to wade through pages of freak typography. The Review has this virtue-it sets apart with reasonable clarity in what it calls "The Craftsmanship Supplement" a lot of matter which seems to be paid advertising.

\* \* \* \*

In the March number we find a "Tennis Clubhouse" in Vienna by Franz Singer of which we cannot refrain from republishing one view. Mr. Levetus, who writes the article, tells us that Mr. Singer was a pupil of Professor Gropius in Leipzig; "his training resulted in an essentially modern outlook, logicality in thought and constructive ability, and the possession of a keen sense of beauty and form." "One is insensibly drawn to this clubhouse by its charm, its easiness of gait, so to say." However most people might be drawn to it, most of them would, I am quite sure, prefer to be insensible when that happens. I never cease to marvel at the guff and twaddle which is the sure and inevitable accompaniment of works of the "modern" school.

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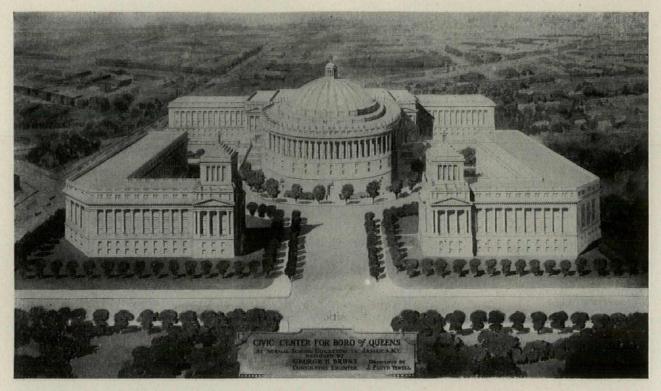
The "Dartington Experiment" occurs in the April issue. Although Dartington is in England, the building is by Messrs. Howe and Lescaze of New York and Philadelphia. We reproduce a view of the East front. Children are to live in it, and will no doubt derive their first impressions of architecture from it. They cannot fail to look back to it in later life with love and longing.

The May number of the *Review* gives us the first

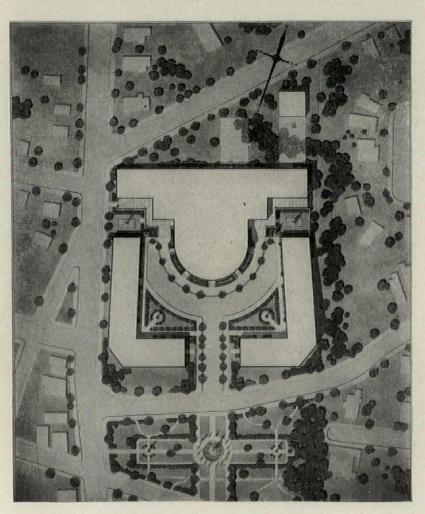
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third of the century in architecture and other things, pictorially, in quite an interesting way.

And so to bed.



PERSPECTIVE VIEW



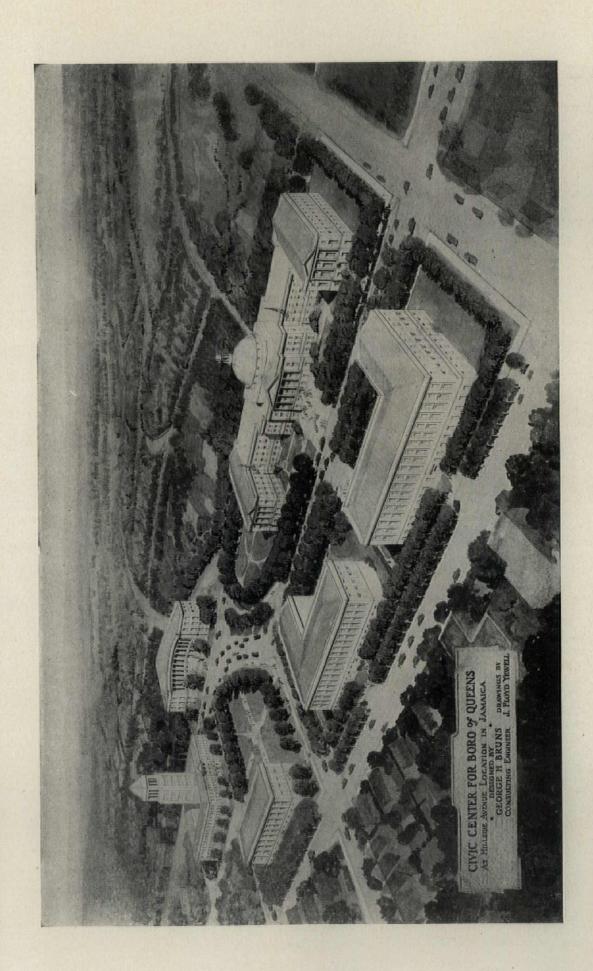
PLAN

PROPOSED CIVIC CENTER FOR BORO OF QUEENS, NEW YORK

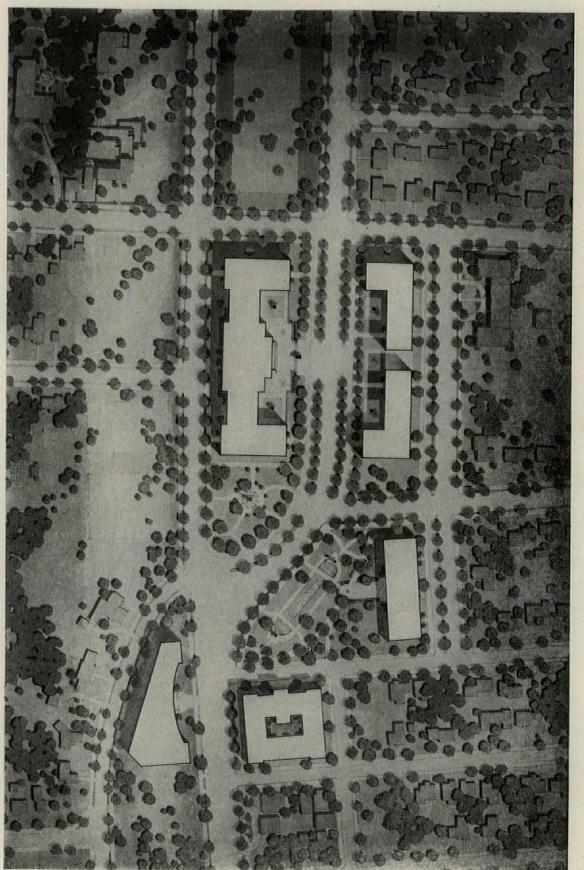
AS IT WOULD APPEAR AT THE NORMAL SCHOOL LOCATION, JAMAICA, N. Y.

George H. Bruns, Consulting Engineer Drawings by J. Floyd Yewell

OF POSSIBLE SITES for the proposed new Civic Center for the Boro of Queens, New York, the two offering the most advantages are shown in the accompanying drawings. Taking into consideration the several factors of central location, transit facilities, existing streets and sewers, locality population, favorable trends, suitable environment, circumferential protection, ownership by the city, and area plus frontage, the report of the engineer of the Jamaica Civic Center Committee rates the Hillside Avenue site as possessing 92 points and the Normal School location 86 points out of a possible hundred. Both designs shown were projected to house city, county, and borough offices, a courts building, an auditorium, and a central heating plant. The Normal School site, being smaller, is shown developed with six-story buildings as against three and four stories for the Hillside Avenue buildings.



AS IT WOULD APPEAR ON THE HILLSIDE AVENUE, JAMAICA, SITE-GEORGE H. BRUNS, CONSULTING ENGINEER AERIAL PERSPECTIVE, PROPOSED CIVIC CENTER FOR BORO OF QUEENS, NEW YORK From a rendering in color by J. Floyd Yewell



PLAN OF HILLSIDE AVENUE, JAMAICA, SITE FOR PROPOSED NEW QUEENSBORO CIVIC CENTER GEORGE H. BRUNS, CONSULTING ENGINEER

From a rendering in color by J. Floyd Yewell

## Wrought Metalwork, 9

#### Grilles

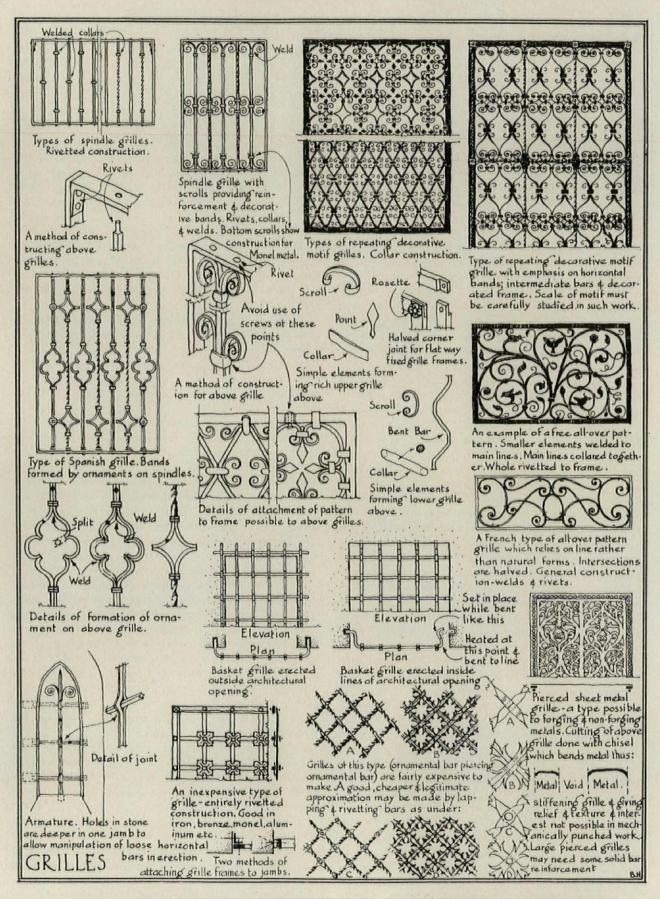
#### By Bernard Heatherley

It is sometimes difficult to know just what is the distinction between a grille and a gate. The French use the word for a gate (although sometimes calling the gate in a railing "la porte de la grille") and though in English we tend to apply the word to interior hinged work, we do have interior gates and exterior grilles. When grilles are fixed they may sometimes quite justifiably be called "screens"—as witness the Spanish rejas—or even "railings," and a hinged grille that is glazed is known as a "door." So that, in any discussion of this broad field we must—except in such definite cases as window grilles—consider, rather, matters of grillage—the arrangement of metal members, simple or rich in design—acting as a guard or barrier at an architectural opening.

In examining some methods of grillage construction we shall inevitably find matters already touched upon to be applicable to grilles and shall find grillage details to have other applications. The frame needs of gates apply equally to movable grilles, but obviously fixed grilles are not required to withstand similar sagging tendencies. Thus their frames may be economically halved or lapped and riveted instead of being welded or tenoned, and may frequently be made of much lighter material. Some designs require no frames-the members themselves passing into the stone or being secured to the wood. A parallel condition to that mentioned in connection with railing bottom bars relates to the enframement of grilles. In some instances, a frame destroys all the archæological intent of a design or detrimentally cheapens the work. A case in point is the armature—the type of grille so effective in small lancet windows, consisting of a single central vertical bar (whose top may become an ornamental finial) and one or several horizontal bars. To frame such grilles would be unthinkable-the apparent difficulties of installation being overcome by leaving horizontals loose on the vertical so that they may slide and be worked into position for leading. The intersections of members may then be pinned, although to do this is really superfluous effort and if the work is not being installed by its maker there is a risk of a marred or improper finish at the pinned point. Another type of grille ruined by a frame is the basket-made as shown in the Plate to Article 7, by passing one bar through another of the same size. There is no problem in erection if the grille is to come outside the lines of the opening. Members may be bent back so that their ends enter holes drilled in the face of the wall. If the basket grille is to come within the opening, however, the ends of members must be bent to an L as illustrated. The work leaves the smith's shop with the L's bent back so as to be able to pass within the limits of the jamb, is set in place, and each member heated and bent to the correct shape so as to meet its hole in the jamb. The acetylene torch is a most useful tool for this purpose—the logical one for present-day use. The heating and working of the metal in the field should, of course, be done by the responsible craftsman—not by one of the several trades which undertake to install metalwork away from its place of origin. Basket grilles best satisfy the eye when the horizontal members pass through the verticals.

Again referring to railings we find that grille designs roughly parallel them in character of types. Thus, we have the spindle, the repeating decorative motif and the free all-over pattern types. Two further possibilities are the "band" type, which may be a variation on the spindle or repeating motif, and the pierced sheet metal grille. The spindle type reached the ultimate in the Spanish rejas of the 15th Century. Besides showing what richness is possible to a series of verticals with horizontals reduced to the minimumas in inexpensive plain round or simply twisted bars, and in moulded balusters (which can make no claim to cheapness)—the Spanish craftsmen evolved a distinctive "band" type of grille design from a spindle basis. The band units were made by splitting parts of the vertical bars, bending them to shape and welding the ends back into the verticals; or by bending to shape, welding together, and welding into the vertical, forms made of iron similar in size to the verticals -not split. All archæological considerations aside, such work loses tremendously unless the square verticals are set "on the diamond," i.e., with their corners instead of their flat sides presented to the front. The work is of a highly technical character and should not be considered unless adequate funds are available to do it properly. To use the outline of the forms on bars set flat looks like an attempt to save money at the expense of the cross section and proper relief. Together with such misuse of elements frequently comes the misuse of the acetylene torch and welds of poor quality. The spindle grille has, of course, its correct renditions for all kinds of architectural design and may prove the least expensive to use as well as having its more expensive interpretations.

The repeating motif grille may comprise a series of detached motifs, or may comprise elements closely joined so as to give a pattern covering the whole grille. The latter is a very favorite form of design being full of interest, having many different ways of realization, and sometimes surprising even the designer by the beauty and unexpectedness of the shapes made by placing together several of the main motifs. Quite



NOTES ON THE CONSTRUCTION OF WROUGHT METAL GRILLES, BY BERNARD HEATHERLEY

often the pieces which make up the decorative units are of an extreme simplicity—out of all proportion to the richness they provide when assembled. To keep them so is one of the secrets of good grille design as well as the proper provision of "spots" for lights and darks, the shaping of a unit that will resolve itself into good bands and a closely knit character that will be strong and protective.

The free design type of grille-offering, as most grilles do, a panel form to be filled with ornamentis sometimes too strong a temptation to those whose conception of art is that which most nearly represents Nature. Thus we sometimes see iron pictures of birds or animals sitting on tree branches apparently engaged in exercising some one of their natural habits. There can be no objection made to the use of plant or animal forms as the starting point for decoration (what should we do without them?) but it should be remembered that the closer a representation comes to Nature, the less imagination is shown in the development of real metal forms. Lacking geometrical discipline, the free type of grille is a dangerous thing for any but a practiced designer to attempt. It is easy to fill a void with meandering lines to which are attached spots of plant or animal shapes, but to do so with taste and logic is another matter. Many existing examples, if stripped of their flowers and tendrils would show very poor linear quality in what should be strong and gracefully structural members.

Another way in which we might classify grille types and thus gain, much pleasure from examining them is according to the three main methods of metalwork construction-welding, riveting, and collaring. While many grilles employ all three methods, it will usually be found that, according to the type of grille, one method will be most in evidence. Generally speaking we will find riveting to predominate in spindle or lapped flat bar grilles; collaring will be seen as the structural mainstay of the repeating motif, and welding will play the major role in free designs. In the use of grilles, while we may justifiably screen ugly objects (as in the case of radiators), fill uninteresting voids (as in loud speaker openings), and enrich garden spots with them, great care should be taken as to how they are placed on the exteriors of buildings. Logic is affronted, for instance, if, for its decorative qualities, we use a protective grille at one spot when there are equally vulnerable spots adjacent to it, or if the spot is invulnerable without a grille.

The many uses and misuses of the "welding" torch especially in relation to grille work, suggest that we come to a fuller consideration of this tool than the mentions so far accorded it. Under the proper discipline this torch undoubtedly has its place among the craftsman's tools. Its weakness lies in the opportunities it provides for cheap facility to be substituted for skill, and the worker who comes to depend on it for his welding may fairly be rated as second class; he may be expected to depart from true and traditional craftsmanship in other important respects—to the detriment of his work. Among its conveniences is its ability to

take the heat to the metal when it might be awkward to take the metal to the heat, as when making adjustments after work is assembled or erected. Also it is used in heating tenons or rivets for heading over in assembly work, for burning out old rivets in making repairs or corrections, and for supplying heat when necessary for the application of structural collars. Its use in welding is of a preparatory nature; by spot welding the several members together they may be held in the correct relative positions whilst being heated in the fire for the real anvil weld. Without the torch, such work must be wired or held together by some other not completely satisfactory method, and sometimes the trouble must be taken to rivet members together and then weld them. In the attachment of serolls to a bar by a collar, the torch is very useful in making a spot weld to hold them temporarily in position until the real structural element is in place. And it may occasionally be used for small, less important welds.

The advocates of torch welding claim that it is as strong as anvil welding. I have never witnessed a test to prove the contrary, but in many commercially made pieces, rupture has occurred at the torch welds. Perhaps such welding was improperly done, but what is generally understood as "spot welding" should never be expected to withstand rough treatment. Thus, it is wasteful to specify spot welding at the intersections of grille members. In case of assault the spot welds would quickly give, but even so, if the grille were otherwise properly made it would lose nothing in strength. From the æsthetic viewpoint it would be as difficult to express in words what is lost by torch abuses as to explain to a novice of undeveloped palate, the difference between a great and an ordinary wine. Art is realized through the primitive, the sincere, the dramatic, and the picturesque, rather than through the scientific, technological, or complicated. Much of the pleasure given by a work of art comes from the picture it evokes of its creation; knowing something of the nature of iron, we are better satisfied by the actual or mental vision of vigorous blows delivered at the anvil, than by the spectacle of a mechanic wearing goggles, sitting at his bench sticking two pieces of metal together by playing upon them a flame from some scientifically devised contraption with dials, gauges, and cocks-like an over elaborated soldering operation. Even if we do not think of the actual making, the finished work will present its problem of choosing between two evils. Shall we allow the torch weld to frankly show, looking complicated, unnatural, ugly, and cheap? Or shall we "fix" it by grinding and filing off the ever-present excrescence, making the joint a thing of mystery and mechanics? Some say that the welding torch has opened up new possibilities for decorative metals. There are, no doubt, certain surgical innovations which could be employed to open up the new possibility of breathing through our ears. But most of us will not seek to exploit such possibilities while our noses function as satisfactorily as heretofore.

## A Community Recreational Center

By W. K. Oltar-Jevsky, A. I. A.

In this machine age, when a large part of the population is employed indoors, in an atmosphere of industrial efficiency, it is obvious that facilities for systematic recreation, especially in big cities, are extremely important.

The public of the present day regards physical exercise and recreation not only as a pleasure but as a necessary and desirable part of its existence as well. The amount of recreation indulged in is limited only by the available time of the public, by its pocketbook, and by the supply of available recreational facilities. The crowded attendance at such enterprises as exist proves that there is a demand. To provide for city population adequate recreational facilities is a problem of the day, particularly taking into consideration a new and increasingly important factor—shorter hours of labor and longer hours of leisure.

In the last few years a great deal has been done toward the establishment of outdoor recreational centers, particularly outdoor bathing developments. So far, very little or nothing has been done publicly toward furnishing adequate indoor recreation, at least for adults—this in spite of the fact that indoor recreation is probably far more important for the benefit of the population than outdoor. Every person living in a city is able to spare daily one to two hours for indoor recreation, whereas only once a week during a limited period of the summer season has he an opportunity to enjoy the public outdoor recreational facilities.

The basic idea of the accompanying sketch of a Community Recreational House is to suggest a way to establish for the city population, in every possible location, local centers of recreation, available to every person living within a certain surrounding area. Such an establishment could be considered like a recreational club with a membership limited only by the conditions of the locality. In accordance with the size of the population of an area supposed to be served, the Recreational House may vary in dimensions up to a very large establishment, provided that the greatest distance from the House to any point of a served area is within walking distance.

These drawings of a Community Recreational House represent a solution for a small city district. Located on a plot 40 by 200 feet, facing two streets, the building itself covers half of the plot, leaving the rest of it for a small playground with a house for the caretaker of the property and buildings. The access from two streets provides the proper conditions for service and emergency traffic, as well as for ventilation of the building. It also makes possible an unobstructed view from a roof garden. A playground from one side of the building and a setback of the structure

from the street creates also a feeling of privacy for the institution.

The wide entrance from the street gives generous access to the lobby, which leads directly to an auditorium. The lobby itself is more in the nature of a hall with ample room for seating accommodation where people may gather in groups. Accessory to the lobby are a coat room, an office, and the toilet facilities. From the lobby the stairs lead up to the second floor and down to a gymnasium and a swimming pool.

The auditorium is designed for 250 seats, arranged with two aisles. The stage facing the entrance is designed to accommodate lectures, motion pictures, community speakers, small orchestras, and amateur performances. It is equipped with dressing rooms and toilets and has direct access from the playground. The space under the stage serves as storage for the auditorium chairs, to allow the auditorium to be used for dancing. Two exits lead out from the auditorium at either side of the stage.

On the second floor, the area above the lobby contains a lounge room, a chess room, and a ladies' rest room, with the necessary toilet arrangements. These main rooms open onto the balcony, created on the street side by the setback of the building above the first floor, running the full width of the structure. From the second floor stair hall access is provided to the projection booth serving the auditorium.

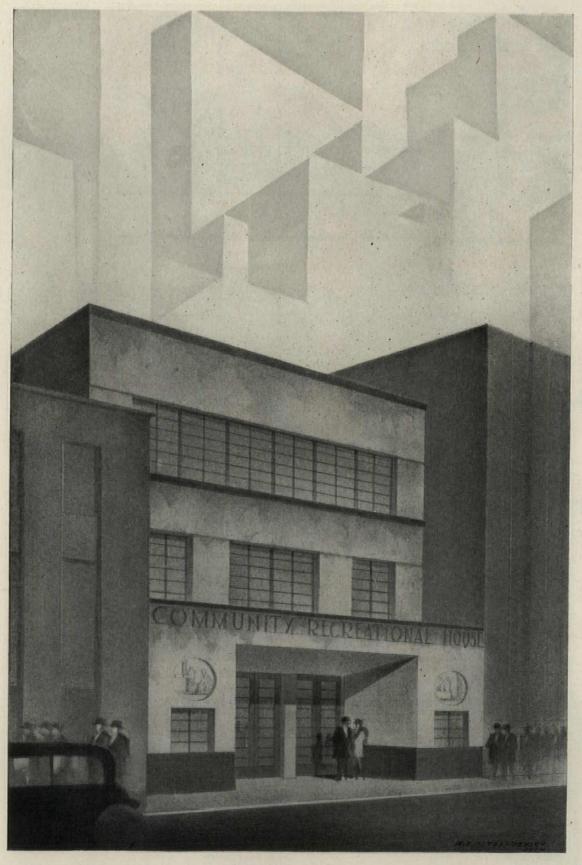
The third floor area extending over the second floor and auditorium is divided into a billiard room facing the street, a buffet-cafeteria occupying the center of the building and, accessible through that space, a roof garden flanked by pergolas. Supports and glass-partitions on this floor are so arranged as to create an unobstructed vista from street to garden.

The stairways leading from the lobby to the basement land in the respective dressing rooms. These are connected with the gymnasium and the shower passage which leads to the swimming pool. From there, the way leads back into the dressing rooms through drying rooms. Accessory to the respective dressing rooms are the toilets. The gymnasium is so arranged as to permit its use for either men or women according to the management's rules.

The sub-basement, situated at the rear of the building, serves to accommodate all mechanical equipment. Two stacks lead from there through the building to the roof, forming the support pillars for the roof garden pergolas.

The accompanying drawings satisfy many of the conditions which have to be considered in a project of this nature; there will be special conditions, of course, depending on the locality, which may demand different solutions in size, facilities, and treatment.

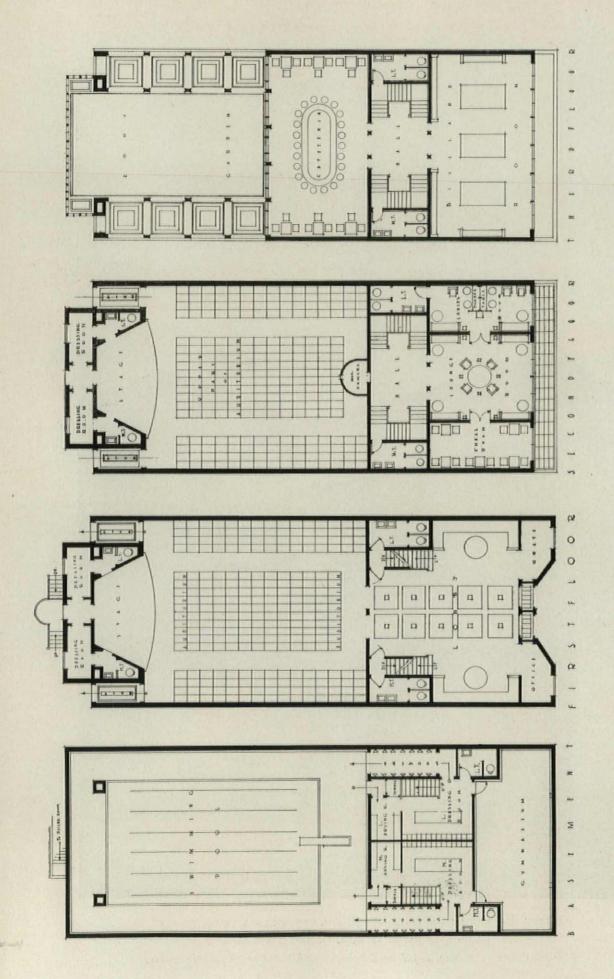
#### A COMMUNITY RECREATIONAL CENTER



PROJECT FOR A COMMUNITY RECREATIONAL CENTER IN A CROWDED CITY

DESIGNED AND DELINEATED BY W. K. OLTAR-JEVSKY, ARCHITECT

A feasible type of socially useful small "public work." See accompanying article.



PLANS, PROJECT FOR A COMMUNITY RECREATIONAL CENTER IN A CROWDED CITY PROPOSED AND DESIGNED BY W. K. OLTAR-JEVSKY, ARCHITECT

## The FHA Moves Ahead

By Chester M. Wright

To the architect has been assigned a definite and strategic part in the modernization program of the Federal Housing Administration. The plan for community campaigns outlined in the pamphlet issued on August 22 proposes that the chairman of the consultation committee "should be a prominent architect or builder thoroughly familiar with details of the construction business."

The function of this committee is to set up a central bureau from which the property owner may obtain advice on plans for alterations, repairs, and improvements. It is hoped by the Administration that such a bureau will be largely manned by architects. It will involve giving to the property owner disinterested advice on selection of materials, on the employment of labor and on how he may secure the greatest benefit from the provisions of the Housing Act, financially and otherwise.

It is expected that the architect will participate actively in the work of the Planning committee, developing plans for community improvement generally, but his immediate job and his greatest opportunity for educating prospective property owners in the services which a competent architect can give lie in the work of the Consultation committee. The more publicity the work of this committee can be given and the more the public can be induced to consult with this committee regarding its modernization problems, the greater will be the community and the national benefits from the campaign. It is needless to point out to the architect that his personal return, immediate and future, will be in direct ratio to his activity and prominence in the local campaign.

The Community Campaign pamphlet, which each campaign committee will have on file, outlines in further detail the functions of the Consultation committee in giving free advice on the following:

"1. Sources and approximate prices of building materials and equipment;

"2. Names of qualified architects, contractors, and sub-contractors, available to do modernization or repair work. (In case an owner asks for names of common laborers or handymen, his request should be referred to the proper relief agency.)

"3. General advice as to what types of alterations, repairs, and improvements are desirable

and necessary;

"4. Rough estimates of the cost of various types of work;

"5. Names of financial institutions approved to make modernizing loans.

"The Chairman of this Committee should be a prominent architect or builder thoroughly familiar with all details of construction. "It is suggested that this Bureau be so set up that it can be consulted either personally, by phone or by letter. It is suggested that where possible a consultation room be provided with extensive literature on home repairs and modernizing and descriptive folders and booklets of the manufacturers of building materials and equipment.

"The Consultation Committee should be careful not to favor any individual contractor or material dealer. When a property owner asks the Consultation Bureau specifically to recommend someone, the Bureau should, in the case of contractors, sub-contractors, architects, and others, give at least three names, and make sure that a fair division is made among the entire list."

In suggesting methods for getting estimates on modernization work, the FHA pamphlet gives em-

phasis and first place to the architect.

"The service of an architect (perhaps the one who designed the building) is valuable where the selection and specifying of materials are concerned, or where competitive estimates from contractors are sought. Such service is very desirable wherever structural changes, alterations in rooms, additions, or changes in design are concerned. He is experienced in dealing with contractors, in preparing contracts, and in assuring proper standards of workmanship. The architect's fee may be included in the loan."

The FHA suggests additional services to be given by the architect to the property owner, including negotiation of the loan, obtaining estimates and filing the application. In view of the responsibilities and opportunities thus conferred upon the architect, it behooves him to study the details of the housing program. He will find them in three pamphlets: Bulletin No. 1, Modernization Credit Plan, for banks and finance companies; No. 2, How Owners of Homes and Business Property Can Secure the Benefit of the National Housing Act; No. 3, Community Campaign. These are available through local campaign committees. Another pamphlet is entitled Architects, Contractors, Building Supply and Other Merchants.

Clarifications are being made of the Administration's finance policy because of misinterpretations of the wording of Bulletin No. 1. As now restated, "the maximum amount of charges that a financial institution is permitted to make for an insured modernization loan is based on \$5 discount for each \$100, on a one-year note to be paid in equal monthly installments." Because these installments are regularly reducing the loan, the ratio of gross charge to average outstanding balances is .0972 per annum, or about eight cents per month for each \$10 borrowed.

The FHA emphasizes that the .0972 ratio is the maximum permitted, no matter what is the size of the note, the number of months it has to run, the number

of installments provided or how the charges are collected. If the term is three years, the maximum cannot be calculated simply by multiplying the figure 5 by 3 and discounting the face of the note by \$15 for each \$100. The FHA has issued tables for determining discount amounts which limit the ratio on any transaction to .0972. This table lists \$13.02 as the discount factor for a \$100 note for three years. This charge must cover not only interest but also expenses of investigation, extra bookkeeping, collection of installments, and any other charges. The rate was worked out to give financial institutions a small profit which, added to the insurance protection provided by the government, was expected to release private funds long stagnant. In addition to loosening these private funds, the program reduces considerably the rate of interest normally obtained on installment credit loans.

This matter of the interest rate may arise to perplex the architect in his work of answering the questions of property owners. At such a time he may derive some personal satisfaction from possession of the formula used in calculating for any installment note the annual rate of charge on the average amount of the loan in his actual possession throughout the full period:

$$\frac{\text{amount of charge}}{\text{original amount advanced}} \times \frac{2 \text{ M}}{(n+1)} = \text{rate}$$

where n = the number of equal regular periodic payments required and M = the number of such periods in one year.

Applying the formula to the instance of a home owner who needs \$114 and who signs a note to the bank for \$120 and agrees to pay \$10 a month for twelve months:

$$\frac{6}{114} \times \frac{2 \times 12}{(12+1)} = 9.7166$$

Unwise expenditures for alterations, repair or improvements of property are not being encouraged by the FHA. The architect's counsel in such matters is advised. Major structural changes in any buildings, small or large, without competent architectural or engineering supervision is a dangerous procedure, it is pointed out, because the total costs are likely to mount far beyond the owner's original estimate.

It is not the intention of the Act to cause unwise expenditures in improving property actually beyond the possibility of effective rehabilitation.

Advisability of improvements which do not result in a building's conforming to local zoning and other ordinances should be questioned.

Loans are not encouraged where the proposed expenditure would increase the total cost of the property greatly beyond the cost of corresponding property in the same neighborhood. Thus a \$5,000 house in a \$3,000 neighborhood generally will be unwise.

Caution should be exercised in modernizing property in slum areas or areas marked for demolition, or obsolescent, or out of harmony with zoning or city plan. Loans for other than minor or sanitary repairs should be discouraged in such areas. Architects should consult and co-operate with the banks making loans regarding the soundness of expenditures for improvement.

A property owner may secure loans to improve more than one piece of property, provided each loan does not exceed \$2,000 and that no more than five such loans are made without the prior approval of the FHA in Washington.

Under the regulations only such equipment may be included for loan purposes as become "a part of the real estate when installed." The flexibility of this regulation has necessitated further definition. The list of equipment considered as "built-in" under the regulations includes the following:

Plumbing equipment, including tubs and showers Individual lighting plants and equipment

Incinerator or garbage disposal systems, if built-in Non-detachable heating systems and equipment (coal, wood, oil, gas or electricity)

Domestic water heating equipment if non-detachable Conversion oil burners, including oil storage equipment and thermostatic controls

Heating control devices

Automatic stoking and ash removal equipment, if permanently attached to heating unit

Lighting fixtures if integral part of system

Radiation, if part of heating system, including valves and accessories

Individual gas-making machines and equipment

Water works system

Built-in door or wall mirrors

Automatic garage door openers

Weather stripping

Built-in ventilating equipment, including fans

Forced heat circulating equipment

Fire escapes

Sprinkler systems

Fire and burglar alarm systems

Elevators and dumb-waiters

Kitchen units, ranges and refrigerators, if built-in Linoleum and other floor covering, if laid

Built-in ironing boards, dinettes, flower boxes, cabinets, bookcases and cupboards

Built-in laundry chutes

Built-in refrigerators, including automatic

Fitted storm doors and sash built for porches, windows, etc.

Fitted screen doors and windows built for porches, windows, etc.

New doors and windows of all kinds

Wells and cisterns, including pumps and windmills Individual serverage disposal systems, septic tanks

Water supply and sewerage connections with mains

Water suppry and sectorage connections with

Air-conditioning equipment, if built-in

Humidifying equipment, if built-in

Awnings made for windows and porches

Coal chutes

Built-in package receivers and mail boxes Concealed residential wall safes The following list includes types of equipment which, under the regulations covered by Bulletin No. 1 are "movables" and therefore may not be included in improvements financed by insured loans:

Furniture of all kinds
Floor and other lamps
Show cases (unless built-in)

Desks Radios

Porch swings

Electric fans

Toasters

Electric and gas irons

Ranges and stoves—gas, electric, coal or wood—unless built-in

Food mixing machines

Vacuum and other types of cleaners, unless built-in Individual detachable gas and electric heaters Single-unit air conditioners, unless built-in All other strictly detachable and movable equipment and apparatus

Aside from specific equipment, the cost of making all types of repairs, alterations, and improvements to any type of building (both labor and materials) may be included in insured loans, and, in addition, such improvements to the grounds on which the building stands as:

Sidewalks, curbs and driveways, of permanent materials, where property is improved with buildings Underground lawn-sprinkler systems

Demolition of old buildings (labor)

Silos, barns, sheds, and other buildings on farms

New garage and out buildings

Rulings on any special items will be made gladly by the Federal Housing Administration, although it is admitted that an architect's judgment on such a question should ordinarily suffice.

A source of valuable information on housing is developing out of the Real Property Inventory survey begun by Federal Emergency Relief Administration last fall. Little was at first expected in the way of information that could be correlated with other statistics over a long-time period. But a surprise was sprung. The greater part of the national survey was co-ordinated and the work of the field staff has proved up with remarkable accuracy. Now the work promises to become the scientific basis of the future housing work of the government.

An immediate result of the survey has been to eliminate a lot of guesswork in housing planning. As a result of the survey there is now statistical authority for the following outstanding estimates:

- 1. The national housing shortage is 5,000,000 house units.
- 2. The single family house is still the American standard; the number built during the last ten years has successfully maintained the ratio in competition with multi-family units.

- 3. There are 16,500,000 houses in the United States needing repairs, of which 3,000,000 need major repairs.
- 4. There are 500,000 houses which should be demolished for social and economic reasons. The survey of homes in cities shows that  $2\frac{1}{2}$  per cent of those appraised should be demolished. That would make the total for the United States about 450,000, but a previous survey by the Department of Agriculture of farm homes shows that a greater proportion of farm homes are unfit for habitation, thus making 500,000 a better estimate for the country as a whole.

A housing survey technique is being developed out of the experience of the Real Property Inventory in 63 cities. Professor Fisher of Michigan University is in charge of it. Intensive studies are being made of such cities as Peoria, Ill. An amazing picture is developing out of the maps and charts now in course of preparation, one which will do two major things for the housing program of the Administration: First, it will convince skeptics of the need of repairs to existing structures and demonstrate that the modernization program of the FHA is well founded. Second, it will show that America is still badly housed and that the market for new house construction is large enough to constitute a major factor in industrial recovery.

The FHA is not going to make a drive for reducing material costs and building wage rates. Adjustments may be encouraged in individual cases. Some price adjustments have already been made in material costs. But the facts submitted to Administrator Moffett show that the leading item entering building costs are below the 1926 price level. He sees no reason why repairs, modernization, and building work should be done without a fair profit to industry or labor. That fair profit includes the architect. However, Ernest John Russell, President of the American Institute of Architects, has suggested an adjustment to the Administration as follows:

"The architectural profession has an obligation to participate in the Better Housing Program because of the efforts being made to rehabilitate the construction industry, and particularly because of the profession's familiarity with the problem of building homes, and its ability to give distressed home owners the benefit of its training and experience.

"It can impartially advise the owner of the permanent value of desired improvements and can assure him that the money borrowed is wisely spent.

"Architectural fees for such service should be nominal and should be based upon time spent and incidental costs, and the element of profit should be eliminated. The architect can well afford to work upon this basis because if the effort to resuscitate the construction industry is successful, he will once more become busy on work that is profitable.

"I urge the architects of the country to participate in this movement because of the relief it will afford men who have been idle for years."

## "America's Little House"

An experiment that will be watched with intense interest by thousands of prospective home builders and owners was launched last month in New York by Better Homes in America and the Columbia Broadcasting System. The project is the building of an "ideal" home for an average moderate income American family of five, the house to be located on a site just 3 blocks south of the Grand Central Station, at the corner of 39th Street and Park Avenue, where it will be available by October for inspection by millions of people from all parts of the country who pass through the station each year.

The project is directly under the auspices of the New York City Committee of Better Homes in America, and the Columbia Broadcasting System, whose President, William S. Paley, is one of the sponsors of the Better Homes Movement, has guaranteed funds to support the building and maintenance of the house for one year. A broadcasting studio in the garage of the house will be used to send out pertinent educational and advertising programs.

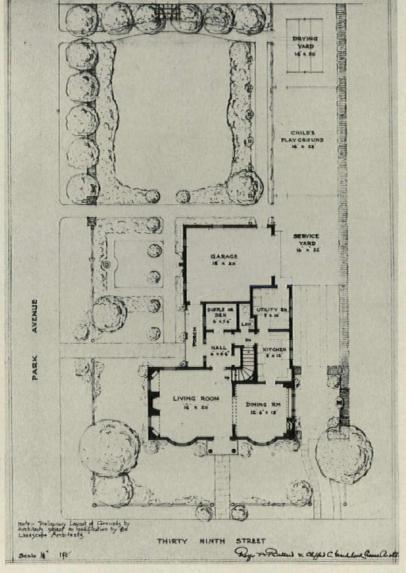
Roger H. Bullard, discussing the problem, showed how about thirty per cent was cut from the original cost estimates by intelligent modifications of the design.

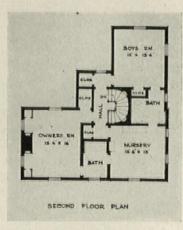
"In planning the Little House," said Mr. Bullard, "we wanted to design a home which families outside of New York could duplicate for approximately \$8,000. We began by planning for a house of nine rooms, to be built of 8-inch brick with a slate roof. We estimated it would contain 39,631 cubic feet (including a broadcasting studio).

There would be a living room and dining room, totaling 36 feet in length, a kitchen, utility room, ample stairway and hall, on the first floor; three bedrooms (one a nursery) and two baths on the second floor; beside a full basement under the entire house, providing for a rumpus room, workshop, boiler room and store room. But the cost was over our budget. We had to sit down immediately and revise some of our ideas.

"First we decided to give up a brick exterior and erect a frame building with clapboard siding. This saved \$1,190. We reduced the size of the cellar, saving \$150 more. Planning for a shingle rather than a slate roof cut the cost by \$295. Substituting an open terrace at the kitchen door for a roofed porch saved \$70, and omitting sliding trays in the closets saved \$45 more.

"We had planned stock window frames and moldings in most cases, but by slight alterations, to allow for these in all cases, we cut our costs another \$45. Slight changes in the grades of lumber specified saved between \$200 and \$300 more.





PLOT PLAN AND FLOOR PLANS, "AMERICA'S LITTLE HOUSE" NOW BEING BUILT IN NEW YORK UNDER THE SPONSORSHIP OF THE NEW YORK COMMITTEE OF BETTER HOMES IN AMERICA

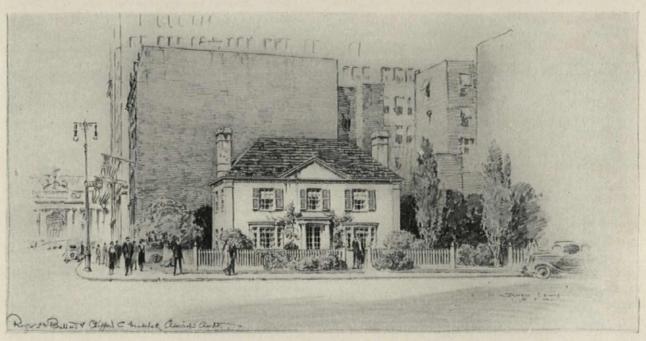
#### "AMERICA'S LITTLE HOUSE"

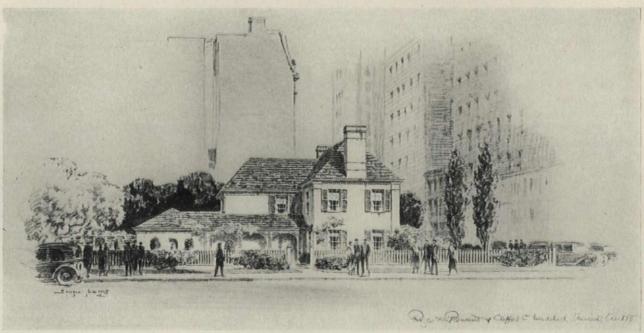
By these and other minor changes we cut a total of about \$3,000 from our costs.

"But still the building figures were too high. We decided that we must save about another \$1,000 by reducing the total cubage. We were resolved, however, not to give up any room (except in the basement) and not to reduce any room appreciably in size. It therefore became a matter of changes to eliminate every bit of waste space.

"First, we decided to do without the large hall with its winding stairway, and run the stair up from the living room instead. The hall could then be reduced in size and running the stairs between walls showed a decided saving in cost by eliminating the handrail and balustrade. This rearrangement also shortened the upstairs hall and allowed the bedrooms to interlock more economically. Slight changes in the design of our kitchen, utility room, and garage kept each as efficient as it had been at first, but saved further cubic footage.

"When we had finished we found that we had reduced the total depth of our house from 61 to 51 feet, and its width from 38 to 35 feet. The slight lowering of the roof in proportion also helped to reduce the total cubic space to 30,376 feet from the original 39,361. The exterior is not noticeably altered, nor is the feeling of the interior spaces. But this elimination of 9,000 cubic feet brought the final estimate down to a figure which assured our ability to duplicate this house almost anywhere in the East (outside metropolitan areas) for approximately \$8,000. In sections of the West and South, where labor and materials are cheaper, the cost could be even lower."





VIEWS FROM THIRTY-NINTH ST. AND PARK AVE., ORIGINAL DESIGN BY MESSRS. BULLARD AND WENDEHACK THE PLANS WERE MODIFIED AFTER THESE SKETCHES WERE MADE BUT THE HOUSE WILL APPEAR ESSENTIALLY THE SAME

## A Half Century of Architecture, 6

### A Biographical Review

By H. Van Buren Magonigle, D. Arch.; F. A. I. A.; A. N. A.

efore I left Boston the firm of Cram, Goodhue and Ferguson had just begun its distinguished career. We may not discuss here the work of the firm before Goodhue's death, but only the work he did after the virtual and then complete dissolution of his partnership with them. This occurred soon after they had won in competition the new West Point and Goodhue came back to New York to open a branch office to handle it. Thenceforward he was identified with New York, although so much of his life had been spent in Boston; he had served an apprenticeship in New York in the office of Renwick, Aspinwall & Owen; the elder Renwick was the architect of St. Patrick's Cathedral, the firm then being Renwick & Sands who also designed the old Booth's Theatre at the corner of 23rd Street and Sixth Avenue, of which my father was manager. The Renwick office was strongly Gothic in its leanings, and from all accounts was very congenial to Goodhue, who left this office to go to Cram's in Boston and soon became a member of the firm.

Goodhue was a brilliant draftsman, particularly in pen-and-ink, and was master of many arts, designing type faces, book plates, and all manner of like things. As he developed, his treatment of Gothic became ever freer, less bound by precedent; he threw Pugin overboard and designed in the Gothic as a man of the Middle Ages might have done, although he sometimes confused structural and decorative forms as in the east window of the Chapel at West Point where he ran a buttress up through the tracery for no structural reason. He didn't like the Classic, and often referred to the "fight between the Classic and the Gothic"-a struggle of which I have never known a classicist to be aware. When he had to work in a pseudo-Classic vein, as he did in the Academy of Arts and Sciences in Washington near the pseudo-Greek Lincoln Memorial, the evidences of his unfamiliarity with its spirit and its forms is very plain; the charm of the building lies entirely in its details. In the Library in Los Angeles, and the State Capitol of Nebraska, he struck out boldly in a vein truly and finely eclectic. The latter building is very interesting in its evidences that it is done by a Gothic man grown up and away from his training; no classically trained man would have given such essentially Gothic proportions to his interiors, higher in proportion to their width than a Classic man would have made them; nor would a classicist have made his corridors so narrow and so low, and some of the important rooms so low for their size-such as the Supreme Court Chamber, In spite of these and some other things which seem like defects to me, the State Capitol

of Nebraska is one of the few buildings in America free from the plagiarism our designers are so prone to, and one of the very few that point the way toward a really native school of design—for Goodhue passed all the riches of his knowledge, learning, training, through his personality as through a crucible—and what came out was Architecture.

The early work in Gothic of Goodhue and his old associates lies outside the main current of architectural thought and feeling; we live in the twentieth century, and to work with real sympathy in the Gothic one must have the ability to pretend that he is living in the thirteenth—and seven centuries is a rather wide gap to bridge, especially the first few of them; we are actually closer in our modern civilization to that of Augustan Rome than to that of France and Germany and England of the Middle Ages. The architect's job is to express his time—his time—by the architecture of his time. For this reason it is futile to discuss the Mediæval work that is still attempted here and there—a complete anachronism, as Richardson's mediæval-ism was.

This is not an autobiography and so we shall pass over the next two years except for a few notes.

Before I sailed, Mr. McKim asked me to consent to go to the new American Academy in Rome, saying that he thought if I would go two other Traveling Scholars would do so — Seth Justin Temple and George Bispham Page. After consultation with my friends in Boston who advised against it, saying that it might easily interfere with my freedom of action, I made my own decision and decided to go-whereupon the other two Scholars of that year came in. The Academy was not organized of course and proved of little help beyond giving us a place to work in-but neither was it a hindrance; and later it grew into real usefulness. We had some bare rooms on the top floor of the Palazzo Torlonia in Rome; it was a long time before we had anything in the way of furniture; also, despairing of getting permits to measure through the Academy we learned to depend upon ourselves and got our own permits and ladders and scaffolds. Never shall I forget a hair-raising experience we had while measuring the Palazzo Farnese! We had a swinging scaffold of the flimsiest description hung on the left rear corner of the building, with a very thin floor, six thin uprights supporting a perfectly inadequate railing waist high, the ropes being attached to the end sets of uprights. I am no good at a height-nearly fell off the Arch of Titus later and was only saved by a strong hand on my coat collar-so Temple and Austin Lord, both of whom were perfect steeplejacks, stood at the

ends and worked the ropes; my part was to make the sketches and put down the measurements they took and called off to me. I laid my drawing board across the flimsy railing and glued my eyes to it throughout the subsequent hours of horror. Lord and Temple were inexperienced scaffold men and sometimes Lord's end was a couple of feet above Temp's and sometimes below-and when a scaffold twenty inches wide and only six feet long has a pitch of two feet in six, the wee fellie in the middle had his choice of plunging forward to his untimely end or falling backward to it -the splash would be about the same. And that damned cornice-full sizes of which I cherish less for the sake of Michael Angelo than as a memento of a peril passed-is eighty feet from the street! And the street was paved with the hardest kind of paving stones. Grass would not have been so terrifying. As we descended slowly, measuring and recording, Lord and Temple calmly conversed over my head about the badly worn condition of the ropes and what the chances were of their lasting out until we reached the paving stones in the natural course—that they lasted is proved by my being here to tell about it.

At another time a group of us were measuring the courtyard of the Cancellaria; a man from Boston, traveling on his own, was one of them. He was in a bo'sun's chair, measuring the work about twenty feet up or so, when he began to spin a little-then a little faster-then he'd unwind and wind up again and again and again gaining momentum at every revolution! What to do? Everybody was laughing too much to think or care very much about relief measures -"let the jade go spin"-all except the victim. He had very little Italian but did his best; he called down to an Italian "Una pola longa!" and I'm blessed if that Italian didn't run off and come back with a long pole which he held up to the spinning student of architecture who seized it and stopped buzzing. I have often cited this as an example of the intelligence of the Italian in dealing with foreign ignorance of their language-if it had been a Frenchman he had appealed to, the poor lad would be buzzing yet.

There were lots of amusing episodes but we must get on to Paris. In 1895-96 there was a group of American students of architecture in Paris-there were eighty couples at the architects' dance that winter -who are among the most distinguished practitioners of the past twenty-five years such as: Chester Holmes Aldrich, of Delano and Aldrich; Donn Barber, architect of the Travelers' Insurance Building in Hartford; Theodore E. Blake, for many years the right hand of Thomas Hastings, and the actual designer of the Bryant Park front of the New York Public Library; Charles Butler and his first partner, Cary Selden Rodman; H. W. Corbett, one of the architects of Radio City; John S. Humphreys, professor of architecture at Harvard; Joseph Howland Hunt, younger son of Richard M. Hunt; Guy Lowell, architect of the New York County Court House; Benjamin Wistar Morris, who designed the Cunard Building; James Gamble Rogers, architect of the Medical Center in New York. Robert D. Kohn, co-architect with Charles Butler and Clarence Stein of the Temple Emmanu-el, had just returned to the States; and Joseph H. Freedlander, architect of the Museum of the City of New York, had recently taken his diploma at the Ecole, one of the first three to do so since Richard M. Hunt. Now there are so many with that diploma that they have formed a large and flourishing society. The two Warrens, Whitney and Lloyd, were there also.

We have since lost Barber, Hunt, Lowell, Rodman, and Lloyd Warren; the others, most of whom entered offices before going into practice on their own, are among those who are making architectural history now, for in those and succeeding years there was a rush to Paris that was to result, upon the return of the men to their home cities (if they didn't settle down in New York) in a profound change in professional thought and American design, especially as to plan as the fundamental factor in design. And it has since become the custom for students as a matter of course to round out their American studies with a year or more in Paris.

When I came back in the fall of 1896 I spent the first winter in McKim, Mead & White's office; and very hard it was to settle down into office routine after five years of being practically my own master; but I was intensely interested, glad to get back into harness even though it did chafe in spots. One of the first things I was given to do was the alteration of the first Lambs' Club in West 36th Street; I declared my intention of making a model set of drawings for an alteration; this ambition, plus the distractions of getting home again slowed up the job perceptibly and at last White, who knew that I had spent some months in Athens, screamed at me in a tearful falsetto "For godssake Magonigle push this along! This ain't the Parthenon, it's made of tin!"-referring to the galvanized iron bay-window.

The following Spring, in fulfillment of an agreement made five years before, Evarts Tracy and I went into partnership; this was the first year of McKinley's administration and the infant practice suffered from malnutrition with the rest of the country in the depression of Cleveland's second term. Had times been prosperous I probably should not have had the advantage of an invaluable experience—for in order to live I had to become a "free lance"; my Scholarship work had prevented my going into the Ecole and that training was lacking to me in consequence so that the many opportunities that began to come my way to work for, or side by side with, men having had that training in the French idiom and method of approach, gave me an insight into French theories of plan and composition: such offices of Carrère & Hastings, Jo Freedlander, Babb, Cook & Willard, where I came in contact with Butler & Rodman, Benny Morris, Chester Aldrich (Billy Delano was then a junior in Carrère's), J. Edwin Meek, now a Deputy School Architect, Henry Hornbostel, Whitney Warren, Masqueray, Richie Walker and a lot of other first raters—this was my Ecole, and better for me in many ways than Paris.

During these two years of free lance work I saw quite a bit of a very charming and irresponsible char-

acter, Clarence Luce, an architect of great talent and taste, and a very clever draftsman with an individual style. He had no office then, but every once in a while one of his many friends would give him a good job, and while the payments came in Luce lived high and wide. He was a little chap, very good looking, with a long slender blond mustache, the most courtly manners, and the most kindly expression imaginable; he could borrow money so easily and politely that it was a pleasure to experience the operation of extraction. One night he took that extraordinary draftsman Albert Randolph Ross and myself up to Canfield's gambling house next door to Delmonico's to show us a carpet he had had woven and dyed for the reception room-he was Canfield's architect-and I can see him now, standing in the doorway, swaying slightly, for he had dined well and wisely, indicating the carpet with a sweeping gesture and saying in a hushed voice "A lawn-hup! forgive me!-at night!" which exactly described the exquisite tone of it.

Now that Luce and Canfield and Delmonico's have all been gathered by the Reaper, it will do no harm to recall the periodical demands in the press that Canfield's be closed up, and the statements that it was impossible for the minions of the law to effect entrance, and to say that the elaborate suppers, served by Delmonico, Canfield's next door neighbor, that graced the sideboards, were not carried out into the street and delivered at Canfield's front door-not at all-and a policeman disguised as a waiter (if such a thing be possible) could have gotten in at the basement level with the utmost ease. Nor will it do any harm to refer to the superlatively clever way in which a very large and very select and private gambling room on the first floor was concealed without a suspicion of its existence. The upper rooms where Canfield lived were full of beautiful things, Whistler water-colors and etchings and lithographs, and lovely Chippendale chairs of priceless quality.

Luce used to tell many stories out of his experience of which I remember the two following, one of the attitude of the country builder toward that unnecessary evil the architect, and the other of a kind of lady client often encountered. Luce was going through a country house with the owner and the local builder, when the owner opened a door into a little dark hallway that ran just behind a small room, and said he wished he might have some light in that corridor. "Nothing easier," said Luce, "we'll just cut a couple of windows in this partition and borrow the light from that little room." A look of withering contempt and superiority spread over the face of the builder-he'd show up this here archytet: "Wa'all Mister Looce, yew may be a pooty good archytet but I want ter tell yew thar ain't any too much light in that little room a'ready!" The other story was of two ladies for whom Luce had built

houses in Newport, at different times, in a low-lying part of the town where shore rats were a considerable nuisance. One of the ladies had lived in her house for a couple of years and was calling on the newcomer for the first time, the latter's house only just completed. The older resident asked the newcomer how she liked her new house, to which the latter replied that she was very much pleased with it, but they were a good deal troubled with rats. "Who was your architect?" asked the visitor. "Mr. Luce," the hostess replied. Hitching her chair forward and shaking an indignant forefinger, the visitor said in a voice of concentrated venom, "Do you know, we had the same trouble with that man."

At the turn of the century the cities of America and particularly New York began to show evidences of the French training our young men in such numbers were having. Of course, as is always the case, the hosts of plagiarizers copied the worst features of the then contemporary French work, and even the adepts emphasized heavily rusticated stonework, great and gobby cartouches, huge brackets and consoles doing the work of three where none would have been better -these things appeared as a kind of loathsome eruption on the faces of many of the new buildings. Luckily there was less effect upon the country house; here and there was a house of French character, usually stately and quite handsome; we were mercifully spared in great measure the enormities perpetrated by the French architect the moment he passes the old fortifications and practices his horrid ingenuities in French suburbs and country places.

Carrère & Hastings, or perhaps it was Hastings solus, had evolved a theory that the orderly and logical development of architecture had been checked and diverted by the French Revolution and the succeeding Napoleonic reversion to Greek and Roman design; before that disturbing event, design had culminated in the style we know as Louis XVI; and that if we wished the logical evolution of architecture to continue, we should disregard all the intervening revivals and begin again with the Style Louis XVI-that of the old New York City Hall-and argued that our own early architecture derived from it through England, and sometimes direct from the French in Maryland and South Carolina-and New Orleans; that it was appropriate to American life and customs and by using it as a take-off we should soon arrive naturally at the "American style" so much and so often demanded. I still think this was pretty good doctrine; but there are by now so many and such violent cross-currents of taste and predilection here that it is too late to see it even tried—the theory being hoary-headed at fully thirty-five years of age, a grand old age for a theory.

(TO BE CONTINUED)

## A. L. Guptill's Corner

A LITTLE DEPARTMENT OF ARCHITECTURAL ESTHETICS, WITH EMPHASIS ON SKETCHING AND RENDERING

#### Rendering Project No. 4

Tinted papers of different kinds have long been popular for architectural sketching and rendering. They are employed in many ways. Pencil Points has already published many examples.

In line with our present purpose, the illustrations overleaf are of the sketch type of rendering. Both were hastily done at small scale on a smooth grayish-brown photographers' mounting board or mat stock. The notes explain how.

Despite the limited size and sketchy character of such drawings, they often serve one's purpose quite as well as more painstakingly finished renderings of greater dimension. If color is wanted, it can of course be added.

Tinted papers are particularly effective for the representation of buildings light in value, for they enable one to give special emphasis to the leading areas by snapping them up with white or near-white. A residence of light clapboards or stucco, for instance, can easily be given the proper prominence against its background. Backgrounds, in other words, do not need to be toned down, as they do when white paper is used.

For buildings darker in value, the tinted paper often represents the local hue of prominent portions, the white being applied to details, the sky, etc. The color of paper selected customarily depends on one's subject. If a building is brownish in hue, brown paper is appropriate. Dark green proves convenient where there are green roofs or an abundance of foliage. Dull colors are usually better than bright, though I recall a stunning sketch for a residence in California where bright orange paper was selected. It was untouched for all sunlit areas of both building and surroundings: all else was painted with a single value of blue-violet poster color. I remember another treatment, this time of moonlight, where opaque blue-green paint, diluted to suit, was used on bluegreen paper: a few touches of orange were added to suggest lighted windows.

But the thing to do is to get some tinted papers and experiment. Cover papers, such as printers use on catalogues and the like, are excellent. Try lights in opaque paint; white pencils or crayons; white chalk, including pastel. Try darks in paint, pencil, crayon, etc.

#### A Query on Color

Question: Do artists, including renderers, really see in nature the purple shadows, orange reflected lights, etc., they so often show in their paintings? Or why do they use them?—N. S. P., New York.

Answer: A splendid question. If we except the dim-wit product which all too frequently masquerades under the name of art (and which I doubt if even the most erudite authority could explain), you can rest assured that whether the artist sees such colors or not, he has sound reasons for their employment.

As a matter of fact, he does see more color than the layman. Just as the musician's ear is sensitive to nuances of sound which most of us cannot detect, so the artist can discover, in a surface which to the untrained eye is white or gray or black, definite distinctions of hue. These are subtle, however, so in themselves would not justify the stronger colorings you doubtless have in mind.

You must remember, though, that the artist is forced to paint with pigments which on the whole are far less brilliant than the typical sunlit hues of nature. His paper or canvas, too, as normally seen indoors where paintings are customarily viewed, is by no means as light as are many of the luminous surfaces he must interpret. If he paints from nature he therefore makes no attempt to match her colors hue by hue, as this would doubtless end in a discouragingly dingy result. Instead, he tries to create an impression such as one gains from a quick glance at a scene. To obtain the needed brilliancy he often employs unnaturally strong colors, or arranges striking contrasts. If, for example, he wishes to picture a sunlit wall, he tints his surface with yellow or orange. In order to make this seem sufficiently bright without resort to garish pigment, he then places in juxtaposition to it, perhaps as shadow areas, dark tones of opposite (complementary) color-in this case blue-violet. In other words, he uses blue-violet shadows in order to make the sunshine seem more convincing. In the same way other opposite pairs are deliberately employed, as red against green.

Further, the artist has learned that warm colors—reds, oranges and yellows—seem to advance, while most cool colors—blues, blue-greens and blue-violets—appear to retreat. As the spectator is seldom definitely conscious of shadows in nature, they should be somewhat subordinated in paintings, so it is logical for the artist to use cool colors (which are far more pleasing than dead gray) in their interpretation; also in other areas demanding suppression, particularly when in the distance.

Regarding orange reflected light, a real problem is to keep deep shadow tones transparent and vibrant. Orange reflections within shadows are merely an exaggeration of a common effect of nature, and prove splendid for this purpose, while at the same time contributing to the sunniness of the whole.

Additional uses of strong color result from the artist's attempts to hint, so far as possible, at such unpaintable things as motion, atmosphere, sounds, and even odors. The right color combinations can help him to convey such impressions to the sympathetic observer gifted with the proper imagination.

Another factor which causes the artist to employ hues which to the uninitiated might seem false or artificial, is that he has come to know something of color illusion. By certain arrangements of hues he produces effects which the same hues, differently disposed, would not give. For colors vary in appearance according to both their placement and the sizes of the areas in which they are employed. In a small painting (to exemplify this latter point) one must use brighter colors than in a larger painting if he is to gain a similar effect of brilliancy. To prove this, juxtapose numerous small brush strokes of complementary colors such as orange and blue or red and green; at the right distance the eye will tend to merge them into a somewhat neutral gray. In large areas, paradoxically, complements serve to intensify one another.

Aside from all these reasons, the artist customarily tries to make each painting beautiful. He composes his masses as well as he can, balancing his contrasts of light and dark. He plays up tricks of technique. What more natural, then, than to work for a harmonious and perhaps decorative chromatic arrangement, even to the extent of allowing artistic license to modify true appearances somewhat? Occasionally he even goes so far as to use his subject matter only as a sort of excuse for the development of a color "symphony" of highly conventional type. His primary aim being no longer representative, his coloring, even if decidedly unnatural, is excusable. It must be judged for its beauty alone.

#### PRACTICAL PERSPECTIVE RENDERING PROJECTS &

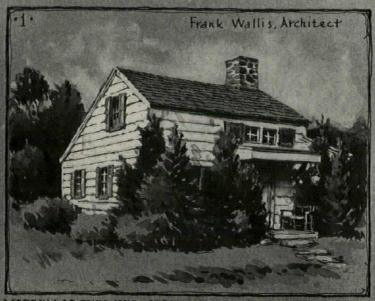
SHEET 4 .

· SOME USES OF TINTED PAPER · ·

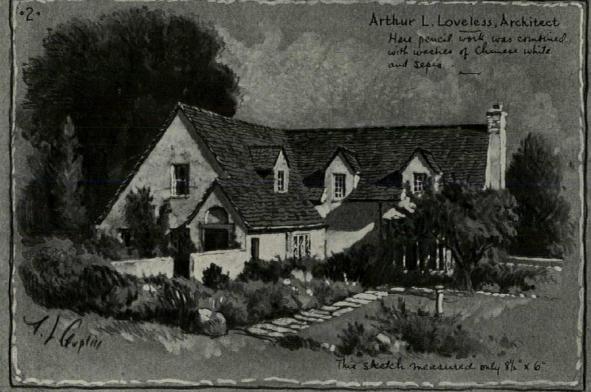
O Select a sheet of colored paper of suitable size, weight and surface, and lay out your subject in sence. Your drawing may be large or small.

2 Nevt, into the main lines as at 1 or Render the whole in pencit, as at 2. Following this per or pencil work, add washes of gray or brown water color with the brush, finally applying opaque white water color for the lights. Both the light and dark washes should be delited to Suit.

Colors can of course be substituted if desired. Simple schemes are best.



MEDIUM: BROWN INK, SEPIA WASH AND OPAQUE WHITE



## Dionysus in the Latin Quarter

The Quatz Arts Bal, 1934

By Butchel Karen

The Quatz Arts Bal roars into the Paris springtime behind a rollicking Pompier chorus and with, as attendant sound effect, the detonation of a thousand champagne corks. St. Germain des Prés is Little Dionysia for one night in three hundred and sixty-five.

This bacchic carnival has relived the Golden Age of Pericles. It has resurrected the ancient empire of Babylonia and rebuilt Nineveh in Assyria on the Mesopotamian plains. And it has disinterred Sodom and Gomorrah. Rome declined and fell before it in a shower of Corinthian capitals. Last year it was the Reign of Nebuchadnezzar. And this year the Vikings live again on the Mysterious Isle of Ioms. Apparently the ball committee feels that its long and boisterous tradition should be jubilated in every tongue, including the Scandinavian.

Arriving at the atelier at six in the evening, you find a scene of colorful and gay confusion—shouting, singing, laughing. And already, bottles are passing in careless hospitality against the usual atelier background of lurid obscene murals. Varicolored paints and stains are smeared on naked torsos. The boy who passed his admission exams and was received into the school yesterday is laughingly accepting congratulatory profanities from atop a drafting table as, stripped to the skin, he completely covers himself with an indigo body varnish. A long blond wig improvised from a piece of manila hawser and hanging to his knees is all he will wear. Papier-maché helmets painted in vivid colors and in gold and silver, ten-foot lances and spears with gay banners, enormous shields ingeniously

adapted from hoops and drafting boards and decorated with lurid ornament of origin more phallic than Scandinavian. Burlap sacking plus silver paint suddenly metamorphoses into a coat of mail.

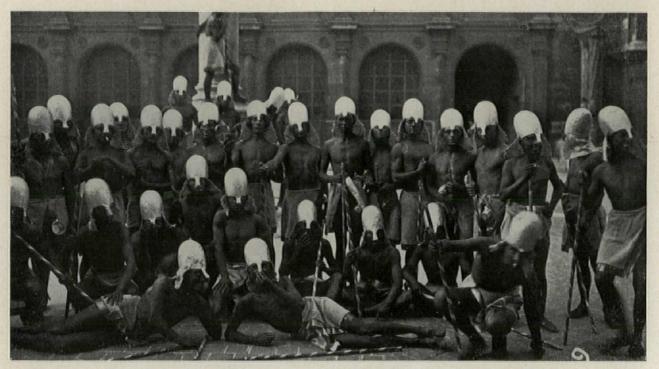
In one corner a chap is taking off a military uniform. He is a student of the atelier who left some months ago to do his military service, which is compulsory in France. Now, he has returned to the school for the annual fête. Hear him yell for a bottle of vermilion body stain. A group bursts into the room waving long red wigs and shouting an incoherent story about a costume shop and a proprietor who wasn't looking. The tall blond girl is shrieking and giggling as a dozen students fight to smear silver varnish over her. Hearsay regarding girls that have attended past Quatz Arts Bals implies that they either die within forty-eight hours or enter a convent.

The massier shouts orders as he adjusts his simple costume, extemporaneously contrived from a scarlet wig and a golden hatband, and down into the street and into the atelier café they swarm, this savage legion, yelling Scandinavian warcries. The first official drink of the evening and the first *Pompier*, the boisterous song of the *Ecole des Beaux Arts*. In the street outside, all taxis, busses, street cars, are stopped and the traffic policeman smiles. There is nothing he can do.

Women pedestrians scream and make for cover as the Viking warriors pursue with lance and shield. On they rush to the Café des Deux Magots at St. Germain des Prés, where ladies and gentlemen abandon aperitifs and dignity



AN ATELIER GROUP SNAPPED ON THE CHAMPS ELYSEES ON THE WAY TO THE BALL AT ABOUT 11 P. M.



LA GARDE NOIRE ASSEMBLED IN THE COURT OF THE ECOLE DES BEAUX ARTS

These dusky Vikings policed the ball, ejecting all gate crashers.

in a mad scramble for taxis before the shouts of this savage apparition. On the "Boul Mich" they stop to raid the Source and the Capoulade. Now a lithe golden figure with uncertain loincloth leads them into Montparnasse. They march, singing, to the Dôme. Here, on the terrace, surrounded by gaping bystanders jamming the streets to such extent that vehicular traffic must be diverted around the area, worried waiters are preparing the banquet. Other clans are enjoying similar repasts in a dozen Latin Quarter restaurants. One imaginative atelier is dining in picnic fashion under the Pont des Arts on the quai of the Seine. They sling hors d'œueres at each other and they empty bottle after bottle of wine.

One lanky student, stained red, is wearing only a furpiece around his middle, thus earning, from the American contingent, the soubriquet, "Daniel Boone." Now he loses this bit of protection in a melée as a lovely young girl is snatched from the crowd in the street and placed atop a table. They sing to her and they drink to her and the Americans fight for her phone number when they hear her English accent.

Shrieking and roaring, they dash across the square and into the fashionable café, Chez Les Vikings. The poor proprietress. She doesn't know what to do. This is the first time she has seen a Quatz Arts gang. A dozen pillaging rovers seize three charming young ladies over their cocktails. "Oh don't, don't" one of them screams in English.

Outside the Vikings they are producing bottles of booty from under their shields. On they dash to the Coupole, raiding the ice-buckets of the diners and carrying off bottles of looted champagne. Outside the Café Select, there is a nice prissy young man in an American sports roadster. They surround him and one of the atelier girls climbs into the car and musses him up. As they leave he is almost in tears, a smear of silver and vermilion.

Now they are commandeering autos, taxis, anything that

will get them to the Salle Wagram where the ball is perhaps already in progress. Our outfit surrounds a chauffeured limousine and with exaggerated courtesy our leader asks if the driver will be kind enough to convey us there. Surrounded by this formidable Viking crew he dare not refuse. Climbing into and onto the car, we begin a wild drive down the Boulevard Raspail, across the Seine to the Place de la Concorde and up the Champs Elysées. One clings to the radiator, his scarlet toga flying in the wind and his gold-lacquered hair flashing under the street lights. Other groups pass in similar transport. A taxi rushes by with our friend, the silver girl, perched on the hood her legs dangling in front of the windshield. She has a bottle and she is singing. A horse and wagon rattle by, a nude young lady astride the horse, the cart carrying a tribe of singing Vikings.

Various clans from the different ateliers begin to converge on the Avenue Wagram. They stop in surprise at sight of a blond torch singer performing on a café terrace. There is a moment of hesitation and then, raising shields and spears and shouting Scandinavian epithets, they raid the terrace and carry her off. And here is the Salle Wagram. Police are holding back crowds of the curious. The festive students clamber off of various vehicles. It is the gathering of the clans.

The entrance is heavily guarded by a formidable-appearing fraternity known as La Garde Noire. They are fifty students, selected for this important post because of their size. Stained completely black and wearing silver helmets and spears, they are a sinister obstacle to gate crashers. It is their duty to prevent the entrance of anyone not a bonafide student of the Ecole. They, with notable lack of ceremony, throw gentlemen of the press into the street. Passing them we enter a maze of gates. Each of these gates is opened to us in turn by members of a student examining committee as we reply to their questions and otherwise assure them of our identity. The questions are so designed that outsiders are unable to answer them.

Should you fail to answer properly you will be seized by the Garde Noire and ejected. One of their number has the special duty of anointing you with a generous splash of oil paint of a peculiar green shade. Thus you are more easily recognized should you try to enter again. At the stroke of midnight all of the doors are padlocked. No one can get in or out before five in the morning. Down the long corridor we go, and into the Salle.

The room is a riot of violent color. Each atelier has a section of the ballroom and each has constructed some vivid elaborate monument to the shades of the Viking Chiefs. One of them is, for example, a tremendous Viking galley with a golden stem forty feet high terminating in a monstrous, gargoyle-like grotesque. In the mouth of this golden figurehead lies a naked young lady with a champagne bottle, her long hair hanging, forty feet above the ballroom floor. The band is blaring the Pompier. It is a large brass ensemble and from where we are standing we can count eight trombones. Again and again they play the Pompier. And it is the only thing they will play all night.

An American friend is sitting solemnly in a corner gravely trying to open a champagne bottle. He is smoking a cigar and has in some way, with his disarrayed costume, managed a startling resemblance to Groucho Marx. The costumes are incredible; they are beyond description. Eccentric shields and helmets glitter in the spotlights. The American girl wearing a scanty yellow something is leading a gigantic ring-around-the-rosie. The committee's loge at the end of the ballroom is the head of an enormous serpent. In its red, cavernous jaw are reclining a score of lovely girls. A bottle, tossed in friendly spirit to the orchestra, crashes through the bass drum, but the band blares on. "Beautiful country around here," yells someone who subsequently develops to be a New York boy named Madigan. The girl with happy countenance and cerulean beads is Egyptian, and has been in the Scandals in New York and the Folies Bergères in Paris. An old man with a goatee is gaily prancing with two happy blondes.

Each atelier has in its loge, its own bar. There is nothing to drink but champagne, good champagne, a fine vintage, and an excellent brand. There are hundreds and hundreds of bottles of it. The massier of our atelier, true leader that he is, is the first to fall. An efficient-looking squad of doctors and internes, immaculate in white linen and rubber gloves rush out onto the floor and gather up his limp figure. Tenderly they carry him to a room entirely bedded down with straw. An ice pack on his brow and a hypodermic administered, he is removed from further circulation.

There is every nationality here. Diacomidis, the Greek, is now a vermilion Viking; so is Ventura from Venezia, and Ohana, the Irish-Algerian. A gray-haired woman is dancing with a boy twenty years her junior. One old man, the patron of one of the ateliers, questioned as to his peculiar costume, states that he has worn it for twenty successive Quatz Arts Bals, Viking or no. "It is refreshing," he confides, "to see people abandon their scruples for once."

One of the most impressive loges, that of Atelier Defrasse, is a tremendous papier-maché serpent forty feet high and painted in vivid greens and reds against a scarlet backdrop. Standing on the head of this great coiled snake



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is a girl—nude, of course. Prizes are awarded to the best loge, the best costume, the best couple. A student with knotted slave whip and a cringing girl chained to his wrist wins the last of these.

One atelier bar is discovered to have, as a special delicacy, a few bottles of that beer that made Milwaukee famous, especially imported from America for the occasion. It is more popular than the champagne. The famous American sculptor is discovered in this bar. He is sulking with disconsolate *migne* in a deserted corner.

"What do you think of the ball, sir?"

"My boy, this is my eleventh Quatz Arts Bal."

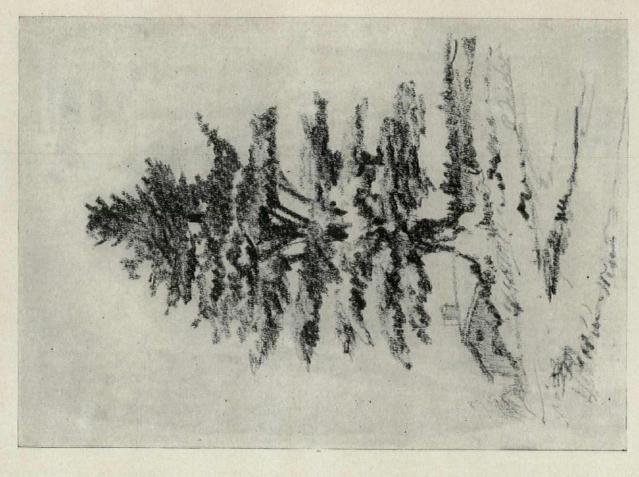
"And you're bored? You don't like it? But this is wonderful, marvellous," we say.

"Do you think so? I think it's tame. You should have seen them before the war. Why I carried a revolver to every ball I attended until 1923."

One of the galleys is carried slowly out onto the floor, the shields and spears of its Viking crew raising uniformly in time to the music.

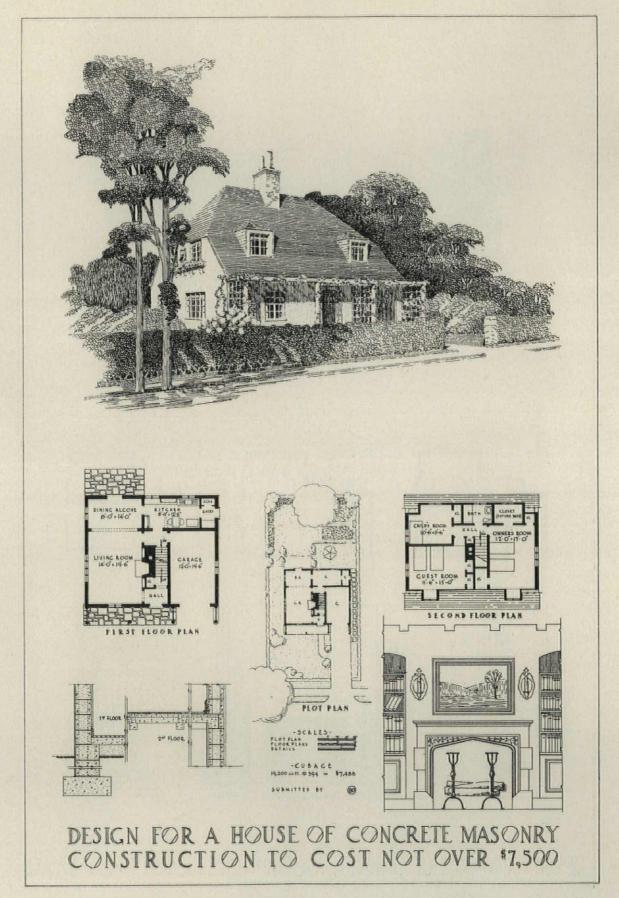
Suddenly it is five o'clock. The surviving members of the orchestra wearily begin to play again the interminable Pompier as they straggle out of the ballroom. A group of assorted naked Scandinavians are trying to revive the American with the blond wig, now couchant on a field of empty champagne bottles, still miraculously clutching his cigar, but having by some inexplicable circumstance, lost his shoes. And the battered remnants of the Viking horde wander out into the Paris dawn, singing and shouting. Behind the band which still adheres to its severely limited repertoire, they march along the Champs Elysées from the Etoile to the Place de la Concorde, deploying at that point for the ritual of the ablution in the fountains. Refreshed by the annual bath they continue on through the Tuileries gardens and across the Seine. The American of the tawny peruque and the Corona, now thoroughly alive, refuses to disqualify the seafaring tradition of his Viking ancestry and insists upon swimming across the river. His delighted colleagues cheer him from the bridge as he evades all efforts of a worried squad of police ineffectually attempting to rescue him with rope and boat-hook.

In the court of the *Ecole* the press is taking photographs and across the street at *Chez Michon*, following the custom of many years, the hospitable patron is again providing coffee and croissants. The ball is over.

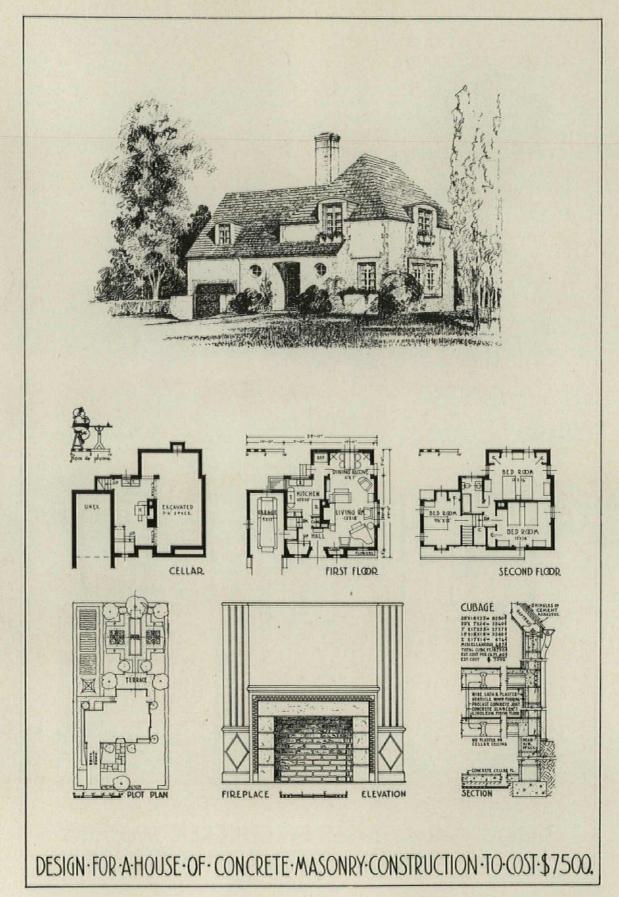




TWO TREE STUDIES DRAWN WITH LITHOGRAPHIC PENCIL BY PHILIP A. FISCHER



FIRST PRIZE DESIGN FOR A LOW-COST, FIREPROOF HOUSE—BY ROBERT H. SCANNELL, ARCHITECT PORTLAND CEMENT ASSOCIATION'S WESTCHESTER COUNTY COMPETITION



SECOND PRIZE DESIGN FOR A LOW-COST, FIREPROOF HOUSE—BY EDWARD J. SMITH, ARCHITECT PORTLAND CEMENT ASSOCIATION'S WESTCHESTER COUNTY COMPETITION