

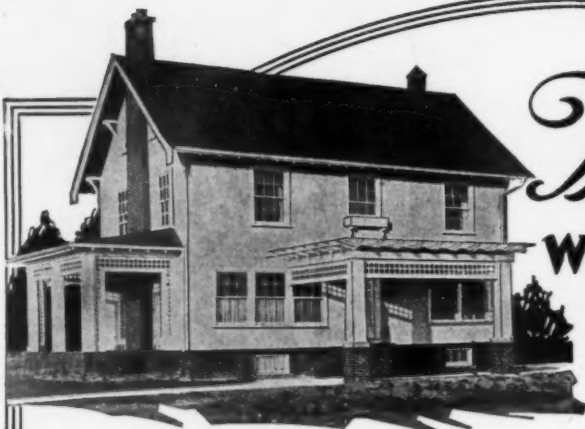
The AMERICAN ARCHITECT



A VIEW IN THE ALHAMBRA, GRANADA

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Architects, Stratton & Schneider, Detroit.
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If asked the reason for this seemingly inhospitable attitude, the Architect explains that a salesman commanding real knowledge of any line capable of architectural use is always welcome in the office. "But, salesmen of that class are in the small minority if our experience is a criterion. And, in the case of the man who really knows something about his own goods, no sign we could hang on the wall would keep him out. He always gets an audience and we are glad to accord it. Moreover, he usually understands the purpose of that notice."

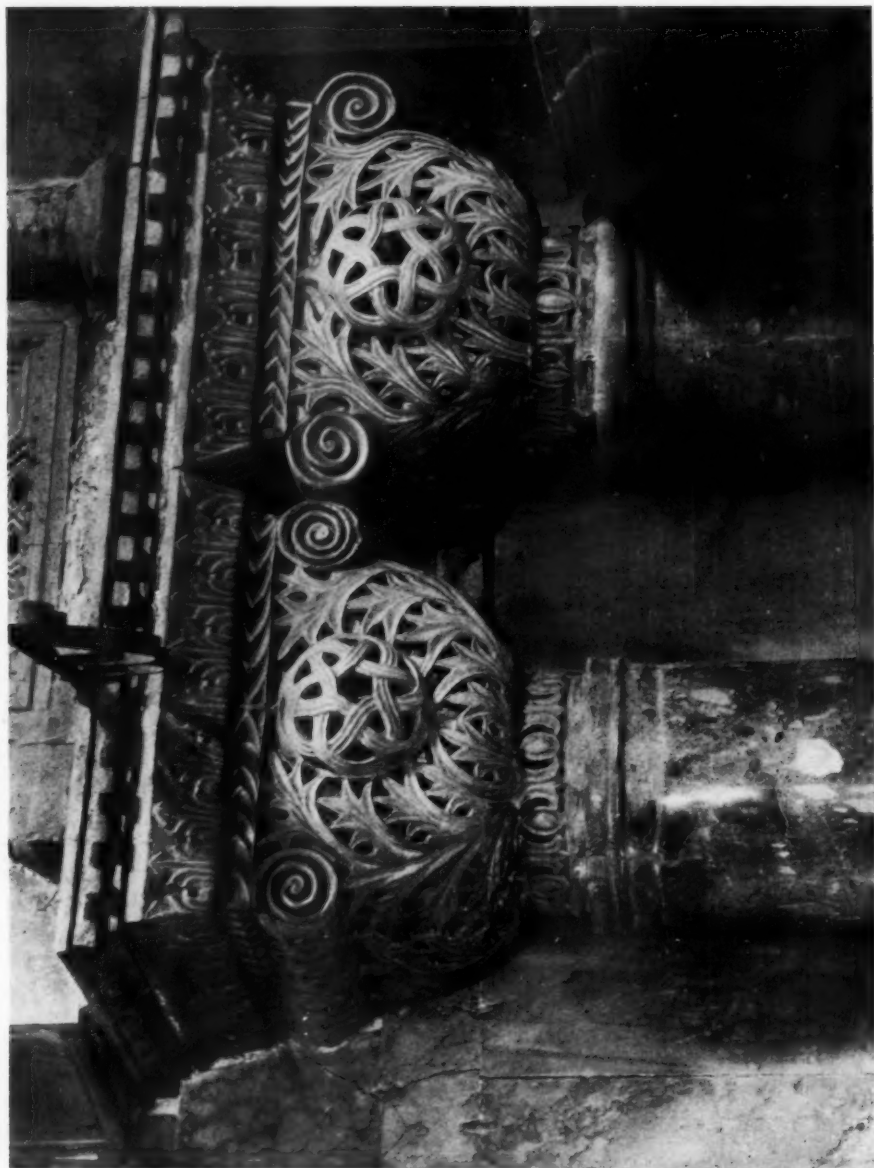
In the Architectural field there is no such thing as "Glittering Generalities" within the scope of Salesmanship and Advertising.

A salesman's eloquence may lend attractiveness to a sound selling argument, but eloquence will not serve as a substitute for the argument, which must be based on real acquaintance with the thing offered for sale and its application in the architectural field.

Architects have little time for useless interviews when their offices are crowded with work—just the time when they are besieged by salesmen. If these salesmen have something worth while to offer they are welcome; otherwise they are a menace to their employers' interests.

The same principle applies to Advertising directed to Architects. If it gives something of value in exchange for the time its perusal takes, it is always welcome.

Advertising Talks—VI
by
THE AMERICAN ARCHITECT



CAPITALS IN THE CHOIR, CHURCH OF S. MARK, VENICE

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NUMBER 2277



INTERIOR OF COMMUNITY HOUSE, BATTLE CREEK, MICH.

The Community House as a War Memorial

By MARTHA CANDLER

IN every part of the country, towns and cities have for months past had under consideration the most fitting forms of memorials whereby to honor their heroic dead of the late war. Everywhere there is the conscious responsibility to devise monuments of such nature as to be a perpetual and constantly-increasing force for good in the lives of all the people—monuments dedicated to the service of humanity as were the lives of those to be

honored. And so Liberty Buildings, "Homes of Democracy" and Community Houses are already in the process of erection from Maine to California, and hundreds more will be begun in the months to come.

It is now generally conceded that mere shafts of granite or statues of bronze, be they ever so artistic, are inadequate to express the tribute we would pay to our soldiers of democracy. And that they

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can seldom be artistic or inspirational is adequately demonstrated by the unsightly relics of former wars that "decorate" our parks and highways. "Consider," someone has recently invited us, "the crop of war memorials that sprang up all over the country following the Civil War. This country was then singularly unprepared for an eruption of 'artistic' impulses. It was the era of cast-iron lions on the door-step with a facial expression that no lamb would hesitate to lie down with.

of beauty, and a joy forever, but these cases are, sadly, confined almost entirely to a few large cities. Often we have fallen victim to the type of "art" described by Leacock as having become so versatile that a state's governor may now be cast of any size, regardless, and with any material that happens to be at hand!

It cannot be taken for granted, however, that the erection of a "standard" memorial building will constitute a good and fitting community center,



REST ROOM AND LOBBY IN COMMUNITY HOUSE, CHILLICOTHE, O.

The result was a tidal wave of cemetery monuments, somewhat enlarged and furnished with artillery and ammunition. Granite soldiers at 'parade-rest' sprang to pedestals all over the country, usually with careless forearms across the muzzles of their rifles. It was the golden age of the monument man and the local stonecutter, but the glacial period of American sculpture."

Wherever the best art and the most skilled workmanship have been available, there are, of course, specimens of such monumental art which are things

and that a Beaux Arts Committee setting up a national headquarters office can settle the architectural details satisfactorily. American communities vary in character almost as much as individuals, and an ideal memorial building for one town might be entirely out of place in another. One may be in need of a public library and social hall combined, and another may need a big auditorium, while a third might have already developed activities enough to require a thoroughly-equipped Community House. First in order must come a care-

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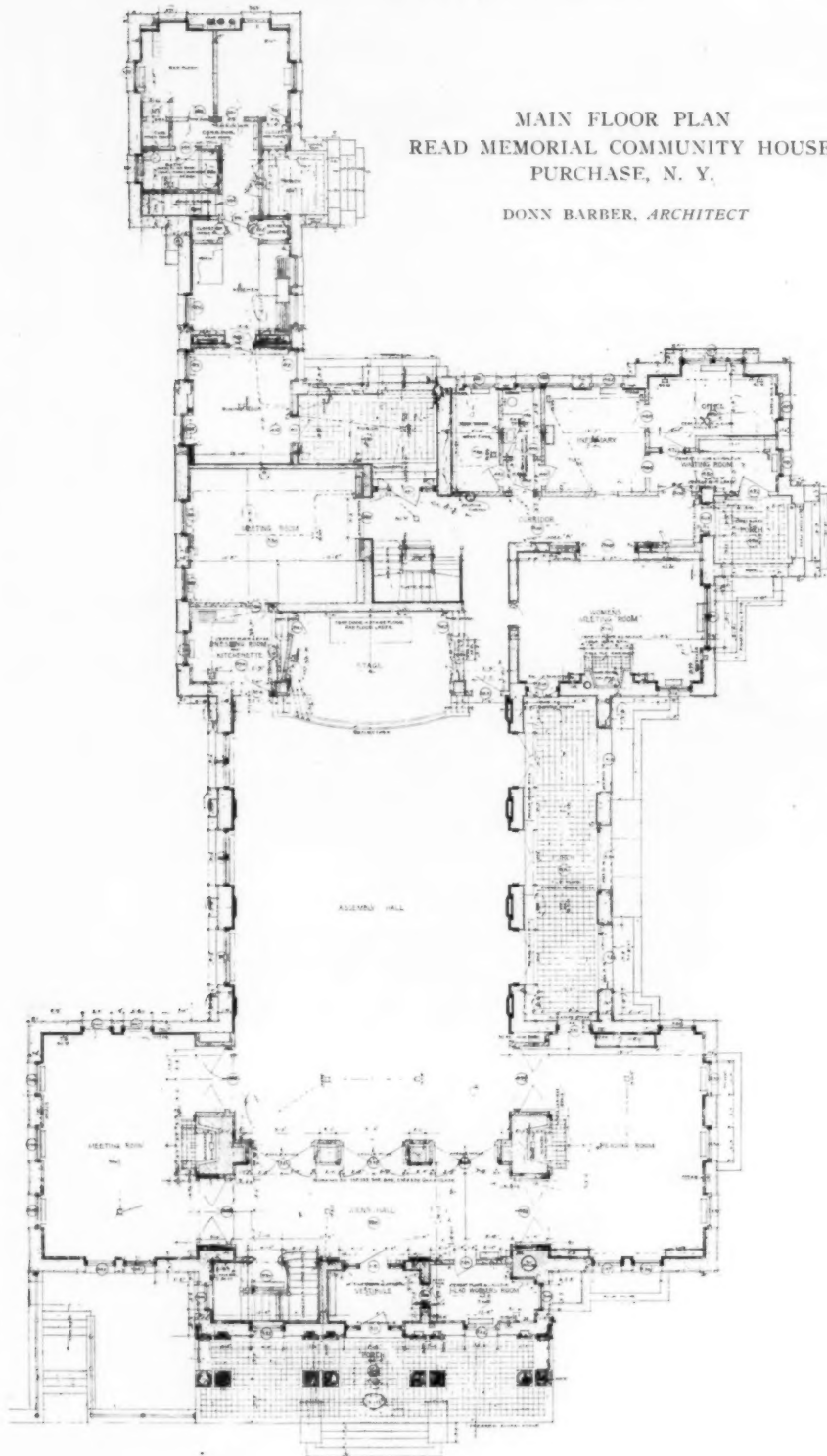


READ MEMORIAL COMMUNITY HOUSE, PURCHASE, N. Y.
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MAIN FLOOR PLAN
READ MEMORIAL COMMUNITY HOUSE,
PURCHASE, N. Y.

DONN BARBER, ARCHITECT



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ful survey and a planning of the house according to its specific purpose, if it is adequately to function as the physical center of civic and social activities.

Herein lies the opportunity for the local architect to show his originality and sense of the fitness of a structure to its purpose. Herein is challenge, for as the President of the Municipal Arts Society said recently: "The building must be made precious in some way, not only to the present generation that has a personal and immediate interest in the individuals and events celebrated, but to those that are to come. Only so can it be a true

The architectural problems involved appear at a glance to be entirely new ones. There has been practically no such thing heretofore as a building designed to house community projects; and where is there precedent for their building and equipment? There is little, and yet, the Community House is distinctive in the scope of its interests rather than in kind. Except that its appeal is essentially to the whole community rather than to a special class or to the people of a particular district, it might vary little in design and equipment from the better type of modern settlement houses. Except that it appeals to men and women, old and young, alike, it

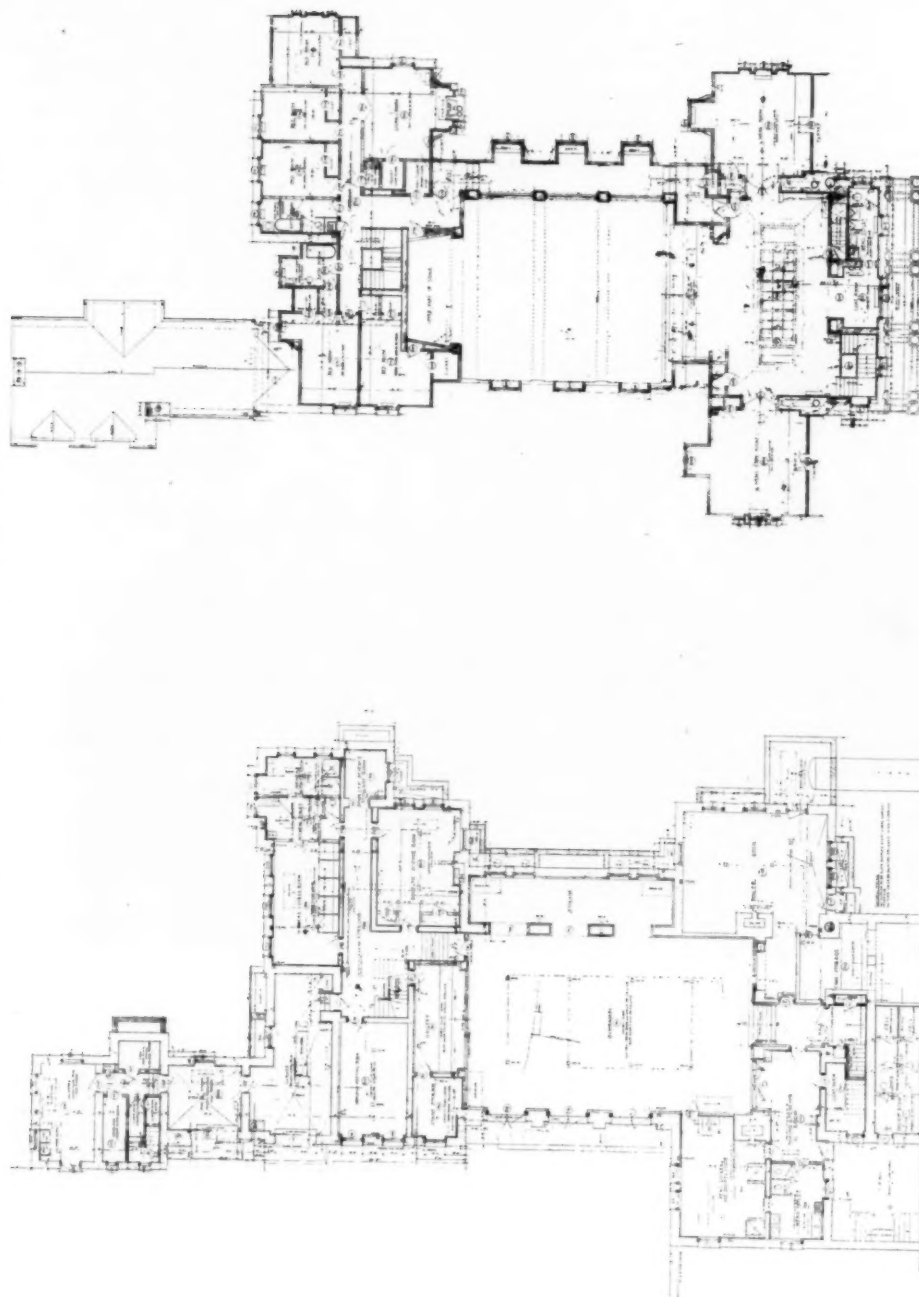


READ MEMORIAL COMMUNITY HOUSE, PURCHASE, N. Y.
DONN BARBER, ARCHITECT

memorial. The one thing that can do this is beauty. Expense without beauty is as sounding brass and a tinkling cymbal; it is nothing and will profit the community nothing; indeed, it is worse than mere futility; ridicule or contempt will be its portion; men will laugh or groan over it, depending upon their mood and disposition; and worst of all, it will fail of its primary purpose as a real memorial. Here at least beauty and use are interchangeable terms." Herein, viewed in the large, lies unparalleled opportunity for the creation of an American architecture, worthy of the name and eloquent of the widely-varying life and traditions of the widely-varying sections of the country.

might vary little from big central Y. M. C. A. buildings recently erected in a number of larger cities (though normally, a Community Building would require no dormitory space). College Unions, which have begun to democratize the life of a number of our universities, as Community Houses will inevitably democratize the life of the communities attaining to them, have features which may be admirably adapted into the Community House scheme. The social and club buildings of England's Garden Cities are in themselves good examples of Community Houses in construction if not in character. From the Guild Halls of Flanders, from the hotels de ville all over Europe, speaks

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BASEMENT PLAN

SECOND FLOOR PLAN

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forth a spirit that must animate the Community House.

And, viewed in retrospect, one of the most interesting by-products of the Government's activities in conserving the social side of life for service men has been the creation of a new type of building. There was something distinctly American in the architecture of the camps' social buildings. The big "Y" auditorium, the Knights of Columbus "hut", the library buildings, and—most

the camps and other training units. Its organizers and representatives went into these towns and cities, organized their resources for friendliness, stimulated hospitality and aroused a sense of responsibility on the part of the citizens. The organization usually formed its local executive committee from the Chamber of Commerce, the Rotary Club, the leading churches, women's clubs, and other definite phases of the community life, each of these becoming in turn executive head of a sub-committee



NEIGHBORHOOD CLUB, MORGAN PARK, MINN.
DEAN & DEAN, ARCHITECTS

of all—that amazing center of feminine life in the midst of military environs—the Hostess House, all managed to announce to the most casual inspector that they were dedicated to friendliness and service. So did the Red Cross buildings. Often they were impressive in their simplicity and fitness to their purpose, which was, in general, a new purpose.

And there are still better examples of the distinctive architecture developed out of the war, and these offer the most fruitful sources of suggestion as to memorial community buildings. They are the W. C. C. S. Community Houses. War Camp Community Service was the branch of Government work providing wholesome recreation and comfort for soldiers and sailors in the towns near

responsible for some definite part of the community program of hospitality and service to military guests.

One of the first big pieces of work undertaken was the opening of service clubs where the men in uniform could lounge, read and write, play games, and obtain food and soft drinks at cost. These were located in remodeled business buildings, theaters, church basements, private residences and wherever space was available. Because the uniformed men eagerly sought the company of civilians at every opportunity, and because of the newly-awakened interest of civilians in their fighting men, many of these turned automatically into community centers.

(Continued on page 205)

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COMMUNITY BUILDING, PERRY POINT, MD.
MANN & MacNEILL, ARCHITECTS

Editorial Comment

Ill-Considered Agitation by Organized Labor

PROTRACTED agitation by organized labor to extend its program of nationalization of American railroads to include all other industries brings the building field into intimate relations with the question of living costs. The spectacular wrath displayed by the representatives of the Railway Brotherhoods in presenting demands for wage advance or reduction in cost of foodstuffs unveiled a dangerous crisis. It afforded labor an opportunity to deliver an ultimatum to the Government and also to the people.

From an economic standpoint, the propositions of organized labor to socialize the railroads, and ultimately all private enterprises, is utterly impracticable. The merger of industry through absorption by the Government can be regarded as an economic heresy. The plan may be justly considered as a riotous clamor against capital prescribed as a panacea for present-day evils, apparently overlooking, under the stress of enthusiasm, that capital is an economic instrument which is indispensable in the furnishing of markets.

The cost of living inextricably is interwoven into all discussion of railroad problems.

The President's plan to force a revision of prices downward and drastic prosecution of profiteers through remedial legislation has been generally commended, but there are many who consider that definite and more speedy action will be required to prevent a repetition of the industrial crisis. The new legislation strongly urged by President Wilson on the occasion of his address before Congress on August 8 cannot be produced or carried out in a day. To pass the required law and to construct the machinery necessary for its enforcement will consume weeks and perhaps months. This will afford but cold consolation to the American people, who will become more and more insistent that their food and other necessities be available at more reasonable cost.

The socialization of industry looms up in menacing proportions. The International Labor Conference recently in session endorsed the plan. Frank Morrison, secretary of the American Federation of Labor, has lately revealed to a Congressional committee that labor organizations intended to unionize the United States Steel Corporation workers and

gain for them an eight-hour day. It is quite obvious that prices of steel products will rise when new wage and hour schedules are effective. As the cost of production is the controlling factor in the law of prices, increased costs of building materials will be inevitable.

The cardinal error of the brotherhoods may be described in the total neglect of the fundamental principles of economics. The Plumb plan submitted by these organizations bears evidence of a socialistic doctrine that regards the laborer as the sole producer of wealth and the capitalist as a super-numerary in the scheme of life—an intruder. The rate of wages in industry depends almost entirely on the cost of living. Prices are created by demand.

A STUDY of price movements of the manufactured commodities of to-day, especially in the building industry, shows the tendency is to rise and not to fall, as frequently predicted. Consumption is the real basis and regulator of production. It is a well-established fact that production is dependent upon two active factors—the human and natural forces. The human force, represented by labor, economists inform the world, cannot exist without the other, represented in capital. Disaster follows the footsteps of those seeking permanently to restrict the movement of a productive combination which is in order of industrial evolution.

Research will disclose that the combination of capital is strictly an economic phenomenon subject to economic law. Judging from the history of labor unions, labor combinations have been uneconomic in the character of their demands and methods. Wages are governed by a natural law whose operations cannot be controlled by trade unions. Every wage advance given by the railroads since 1917 has resulted in increased freight rates and corresponding rises in the price of commodities. The Railroad Administration has granted wage increases amounting to practically a billion dollars since 1917, when the Adamson law became effective.

Senator Cummins furnishes food for thought in his charge that the railroad brotherhoods plan for railway ownership will obliterate the relation of employer and employee. He believes the Plumb proposal would divide the workers into two classes, classified and unclassified. The two would be joint owners and could vote wage increases at will, thus wiping out the surplus, the public paying the debts.

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THE labor bodies have overstepped the original demands for wage increases or lower living costs. They now propose to call a nation-wide strike to force Congress to pass legislation which will place the railroads under government ownership. Intelligent business men realize the peril in such a plan, as government ownership or operation has been invariably inefficient and expensive than the same classes of enterprise under private ownership. A striking example can be found in the operations of gas-plant and water-works by municipalities.

It is true that the demand for building materials would be materially increased with price recessions in effect. Five years of war conditions have delayed construction to such an extent that the accumulated requirements of the period plus the demands of the reconstruction era must be met. Under the pressure of this amazing demand, it is difficult to conceive that prices will tumble to any appreciable degree despite slightly reduced living expenses.

No pronounced sentiment for deflation of currency is evident, as the proposal is as difficult as it is dangerous. Steadily rising labor and material costs are factors calling for the attention of the builder. It is generally understood that labor costs will not fall with the reduction in the costs of food-stuffs. The chief advantage of the present movement rests in its ability to check further wage increases.

War Memorials

ARCHITECTS in every community, and particularly the smaller ones, are to a considerable degree responsible for the character of the memorials that will be erected to commemorate the work of those who participated in any one of the many branches of service during the war.

The problem of memorials is strictly technical. Assuming, as *THE AMERICAN ARCHITECT* does, that any memorial erected should possess a utilitarian purpose, a building of some sort will be the natural outcome of such assumption. The lay mind is, therefore, not prepared to take into consideration either the selection of such a memorial or its design, and the whole matter devolves upon the architect. At this time it therefore becomes not only a patriotic but also a professional duty for architects to exert their influence in these matters.

If we are to be spared a repetition of the atrocities that were erected after the Civil War, it will be necessary to realize that there is scarcely a community so remote that it has been untouched by the war, and that in each of these, sentiments

of civic pride will suggest some form of memorial. Architects in these communities should not wait for a request for their services. They will, in most instances, be the only men in their localities with sound standards of art, and they should assert them in preventing errors that though honestly committed will be none the less a reproach to the towns where they occur.

A very valuable work is now being performed by the Bureau of Memorials of the War Camp Community Service as described in this issue. Bulletins have been issued that are intended as helpful guides in the selection of memorials, and through the well-conducted activities of this service it is believed that the character of memorials to be erected will reach a higher artistic result than ever before.

As Cass Gilbert has so well expressed it, "the most fitting monument is one from which flows the impulse for great and heroic action for devotion to duty and for love of country." It is therefore regrettable that a survey of what the world has in the past produced in purely symbolic and beautiful art creations are few in number, while the remainder, although conceived in a spirit of reverence and exaltation, have proved disastrous in artistic result.

The most permanent and the type least likely to offend by its artistic aspect, would appear to be the memorial building. Its attainment is not out of reach of the smallest town, and with its designing in competent hands, it would stand for all time a fitting and respectful tribute to those it was intended to memorialize and its maintenance would become a civic duty in every community.

Every profession has its duties and grows great and influential in proportion to the extent to which it fulfills them. That of architecture would appear to go further afield in the line of duty than any other. It is the duty of architects to show that they are artists by giving their best to every scheme that demands artistic interpretation. They have it as a duty to control and direct every architectural expression wherever employed. The betterment of farm buildings, the designing of the low-cost house, are part of their work, and now at this time it also becomes a duty to see to it that even the humblest memorial shall be so carefully considered that it may become what it undoubtedly should, a respectful expression of a community's gratitude.

Anything in the shape of a memorial not so originated is not only a reproach of carelessness, it is a downright slight to those men who made the supreme sacrifice that we as a people might peacefully live and prosper.

The Community House as a War Memorial

(Continued from page 201)

There were cases of small towns suddenly finding themselves the only "place to go" for a camp population outnumbering them ten to one. These are the places that fell to work without precedent and built Community Houses. Manhattan and Junction City, Kansas, were among the first. In these two cases W. C. C. S., and the district Rotary Clubs assisted the town in raising the funds for the building, which by agreement in each case, reverts to the municipality when demobilization is completed. Both lack the architectural merits and beauty that later buildings constructed at greater leisure, incorporated, and that any building of a memorial nature would require, but both are substantially built and have become the home of a newly-awakened community spirit of which any town might be proud. This is true wherever a community house has been erected.

Either might be taken as a model to be adapted by the local architect to fit local needs, his most difficult problem, after a community house proper has been decided on, being that of combining the monumental with the informal in such a way as to indicate unmistakably that the building is a memorial and the city's tribute to its war heroes, at the same time expressing something of the homelike comfort and intimacy of the structures developed during the war. Whether it will be possible in the average case to incorporate into the exterior architecture the two suggestions remains to be seen.

Those who have given most thought to the subject agree that in any case there must be some distinctive part of the building, exterior or interior, set apart to commemorate the fighters, both the living and the dead. This might be a Hall of Fame, into which shall be gathered relics of the battlefields brought home by local heroes; in which shall be kept the names of all service men who went to fight from that locality; and wherein shall be special memorial tablets erected to the memory of those who died while in service on land, on sea, or in the air. A memorial fireplace of granite or marble

has also been suggested for the common room; so has an arched entrance leading to the building, and containing the names of the men and the chief battles in which they participated. Such arches, of a fitting simplicity and dignity, have been erected by a number of cities, placed in parks and public squares, and often surmounted by a great flagpole. There is a feeling, however, that the memorial feature should somehow be made a part of the building itself, rather than a separate external feature.

In addition to the memorial feature, the building—to house the civic, social, recreational and educational activities of the average community—might have just such facilities as these war-built Community Houses have:

On the main floor:

(a) A big Assembly Hall, accommodating from eight hundred to fifteen hundred people, with a stage, dressing rooms, etc.

(b) A large Dining Hall, with possibly one or two smaller dining rooms, and a serving pantry. (In this arrangement the kitchen might to advantage be in the basement.)

(c) Central Hall, used as a lounge.

(d) Office of building manager, so placed as

to have an unobstructed view of as much of the main floor as possible.

(e) Lobby, with offices, news-stand, check-room, telephone booths, etc.

(f) Men's and Women's Retiring Rooms.

(g) Coat Rooms.

(h) Terraces or Loggias may be added. The Verandas at many of the W. C. C. S. Clubs have been among the most enjoyed features.)

Second floor:

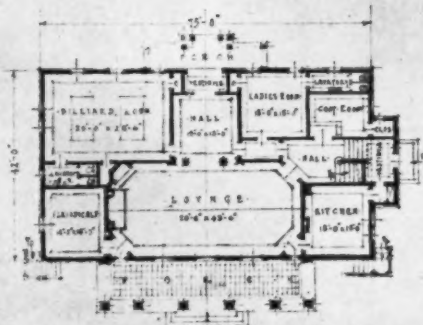
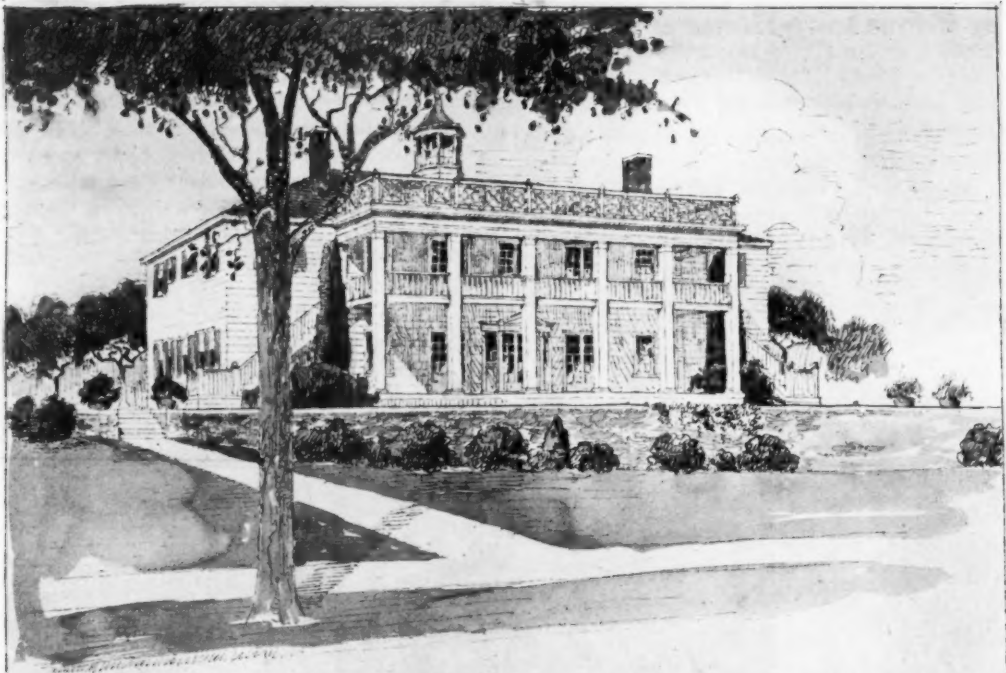
Library and Reading Room.

Several large and small Committee Rooms and headquarters for civic organizations such as the Board of Trade, Red Cross, women's civic betterment clubs, Boy and Girl Scouts, etc. (In numbers of places, the local building committee has planned to rent such space to non-partisan and non-sectarian bodies in the community, thus making the building contribute to its own up-keep.)

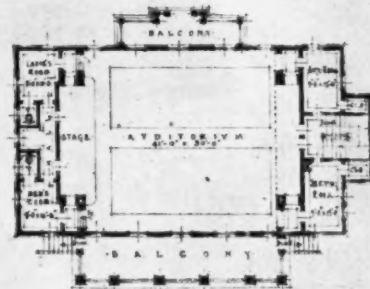


REST ROOM, COMMUNITY HOUSE
BATTLE CREEK, MICH.

THE AMERICAN ARCHITECT



FIRST FLOOR PLAN



SECOND FLOOR PLAN

COMMUNITY BUILDING

PERRYVILLE, MD.

DESIGNED BY
MANN AND MACNEILLE

70 EAST 42ND STREET NEW YORK

The above community building was erected for the town of Perry Point, Md., in connection with a large powder plant at that place. This building was constructed at a cost of approximately \$28,000 in the summer of 1918. The construction is of frame with shingle roof. The first floor contains a small library, billiard room and a large central lounge with open fireplace; also a ladies' room, coat room and kitchen, with the added feature of a large front porch. On the second floor is located the auditorium with stage and dressing rooms for men and women. A special feature of the second floor plan is a large balcony space communicating by French doors with the auditorium. This is a particularly attractive feature for use when dances are being given. On this floor there are also located a small ante-room for general purposes and service room for use when food service is required in connection with any of the activities in the auditorium.

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The basement might house a gymnasium, a swimming pool, rough-house and game rooms, bowling alleys, pool rooms and the like, as well as the furnace and store-rooms and janitor's rooms.

People in general in the community will either use the building, or find it cold and forbidding and avoid it, and for this reason the local architect should have thorough understanding of the particular problems involved. Given the proposed accommodation for an auditorium, for example, he should know whether to advise a flat or pitched floor, a deep or shallow room, a platform or a regulation stage, fixed or movable furniture. He should understand the laws of acoustics so as to enable him to reinforce primary sound by properly directed echoes, as well as to use such wall-treatment as to destroy other echoes. He should understand how to dispose the interior lighting so that at night from the street, the building will have the warmth of a club or a home, instead of the cold effect of a public building. He should know that a spectator's gallery in the gymnasium, if one is contemplated, is preferable to a running track. In all of these matters he should approach the problem with understanding of the community point of view.

The even more technical problems involved are the proper construction of the swimming pool, the erection of the stage, economic refrigeration, and the installation of the most up-to-date canteen fixtures, all of them requiring expert advice.

For this reason and for the purpose of making available to interested communities and local architects all over the country, all possible data on the whole subject, a central clearing-house for information has been established in the Bureau of Memorial Buildings, 124 East 28th Street, New York City. Through their co-operation with the American Federation of Architects, and other national agencies, they will be in a position to give advice as to the type of building advisable, and to furnish adequate assistance in the problems of such stage designing and stage lighting as will make the Community House the home of the local "little theater" groups, such wall-lighting as will provide for traveling art exhibits, and the proper acoustical treatments of such smaller rooms as are to be used for chamber music. For in addition to furnishing a place for the big dances and "get-to-

gethers", for movies to which the whole community will come, for organized recreation, and for educational and welfare activities, the Community House will furnish a friendly center for the arts, which, in the new democracy, must be made accessible to all, instead of as heretofore, reserved for the favored few. Methods of financing the project and all the various methods of administration, as well as specific data as to the cases where Memorial Houses have already been erected, or are in the course of erection, will also be available to those contemplating structures of the community type through this Bureau.

Secretary Lane has seen the erection of Memorial Community Houses as going far toward curing the old social and artistic stagnation in small American communities, but it has an equally important place in the new democratic social life of the large town or the city. Washington, D. C., will have in her new memorial building for which the funds are well under way, and the site chosen, an artistically beautiful meeting place for national and international conferences as well as for city affairs, while certain neighborhoods of other cities have chosen to establish the equivalent of the Community House in the smaller place—a Memorial Neighborhood House. One neighborhood of Philadelphia has on foot a project for the building of a vast auditorium.

The rich traditions of Colonial architecture in New England and the Old South await the hand of the local architect, the old Spanish missions of California and Mexico are fruitful in suggestions for the Southwest. The Community Houses of Battle Creek and Chillicothe give suggestions as to ways in which the free spirit of the Middle West may be interpreted, and the monumental classic and renaissance styles are always at the disposal of those for whom they are fitted.

There is thus the opportunity locally to grasp all that is richest in sectional and traditional styles, at the same time bringing them to a new and purely modern use. Considered more broadly, the architectural problems involved, arising from a purely American need, offer opportunity to develop something approaching a national type of building. No more inspiring challenge has ever come to the American architect.



KILHAM & HOPKINS, ARCHITECTS

New Principles Governing Planning of Civic Buildings

By WILLIAM ROGER GREELEY

FROM the ruins of the Cloth Hall at Ypres there is arising a new spirit of organization not only in industry but, what is much more important, in neighborhood life—a development of new methods of government and of town management. In the United States we have drifted not only far away from the group organization of the Middle Ages but have often departed from the early neighborhood co-operation which prevailed among the early settlers. We have acted upon the principle that the majority was right and should be permitted to override the minority in every case. It is now dawning upon us that this principle can be accepted only as a practical subterfuge to take the place of real justice in the disposal of common affairs.

When the early settlers in this country took up the burden of self-government their numbers were such that all members of the neighborhood met together easily on a common social and political footing and in a common building very beautifully and aptly called the "Meeting-house". This building served not only for the seat of government but for the solemn religious ceremonies of the Sabbath and for a rendezvous of the citizens during their hours of leisure. It offered them the same privileges and received from them the same respect and almost adoration as the parent hearthstone of a large family. In other words, it was the community home and altar—the Lares and Penates of the town were there enthroned. Political questions could be thrashed out thoroughly



PLATE 38

ENGLEWOOD NEIGHBORHOOD HOUSE, ENGLEWOOD, N. J.
MANN & MACNEILLE, ARCHITECTS





PLATE 59

DETAIL OF PRINCIPAL ENTRANCE

ENGLEWOOD NEIGHBORHOOD HOUSE, ENGLEWOOD, N. J.

MANN & MacNEILLE, ARCHITECTS

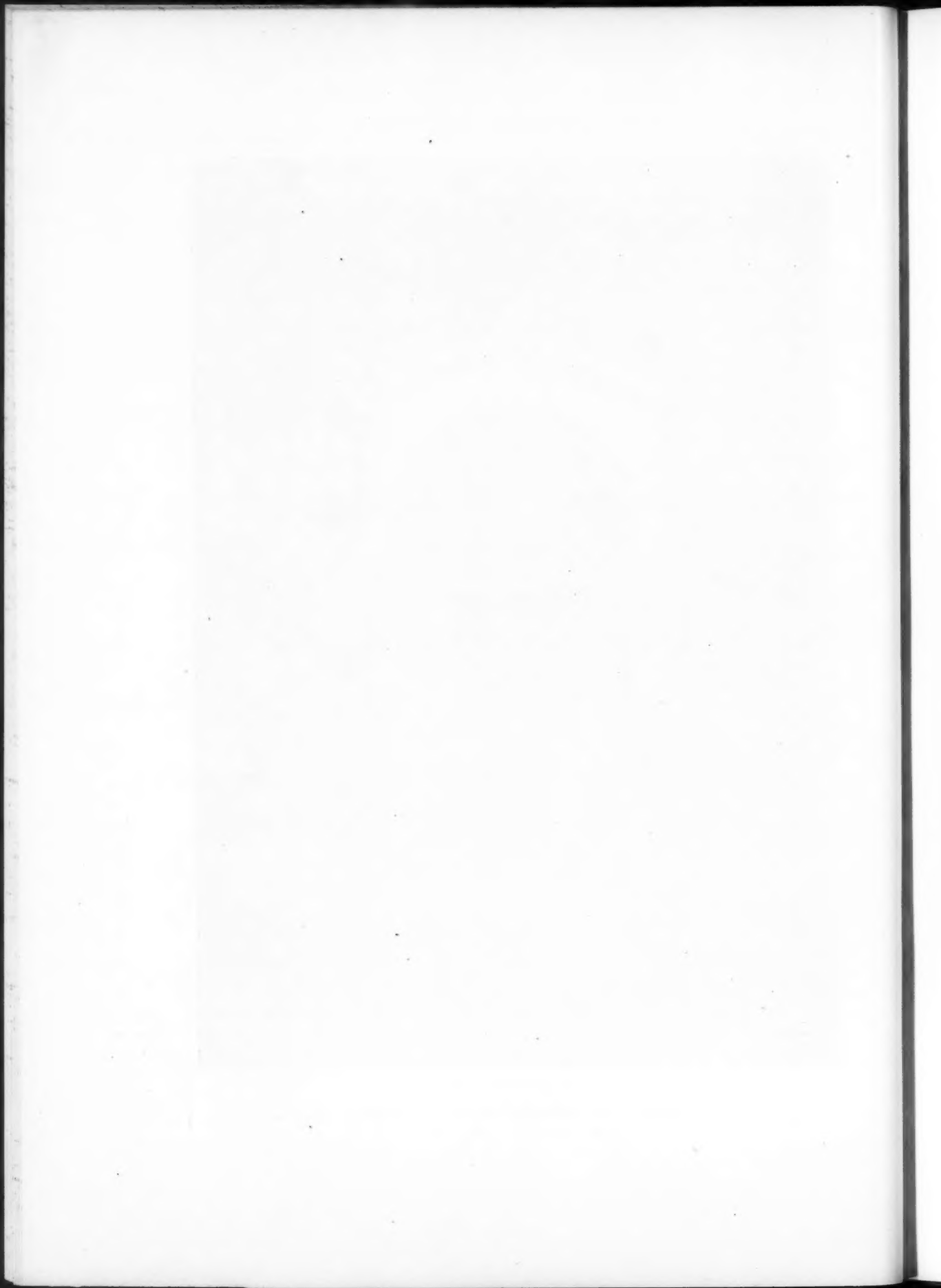




PLATE 60

ENGLEWOOD NEIGHBORHOOD HOUSE, ENGLEWOOD, N. J.
MANN & MacNEILLE, ARCHITECTS





PLATE 61

FIRST CONGREGATIONAL CHURCH, SIOUX CITY, IOWA
WILLIAM L. STEELE, ARCHITECT



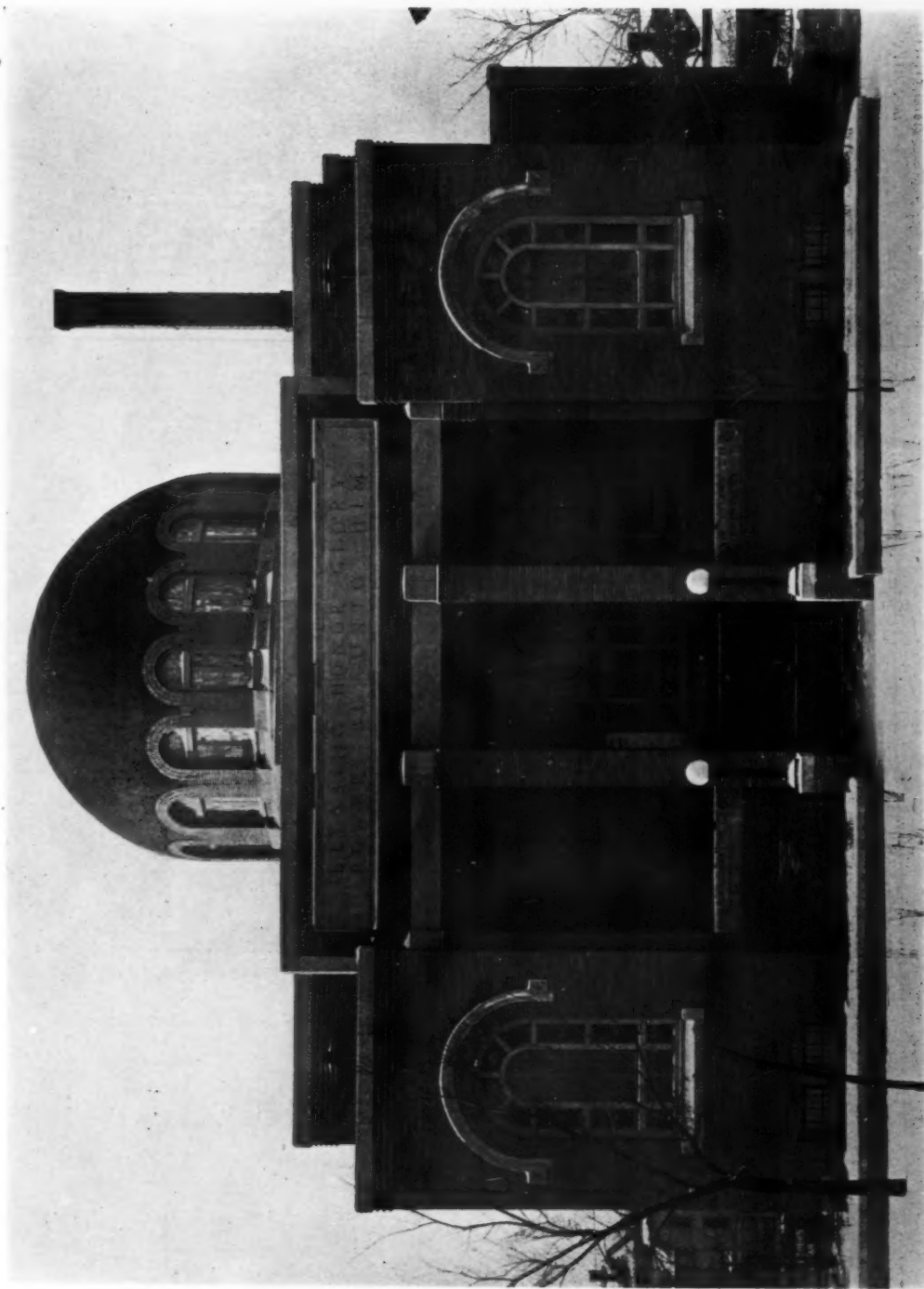
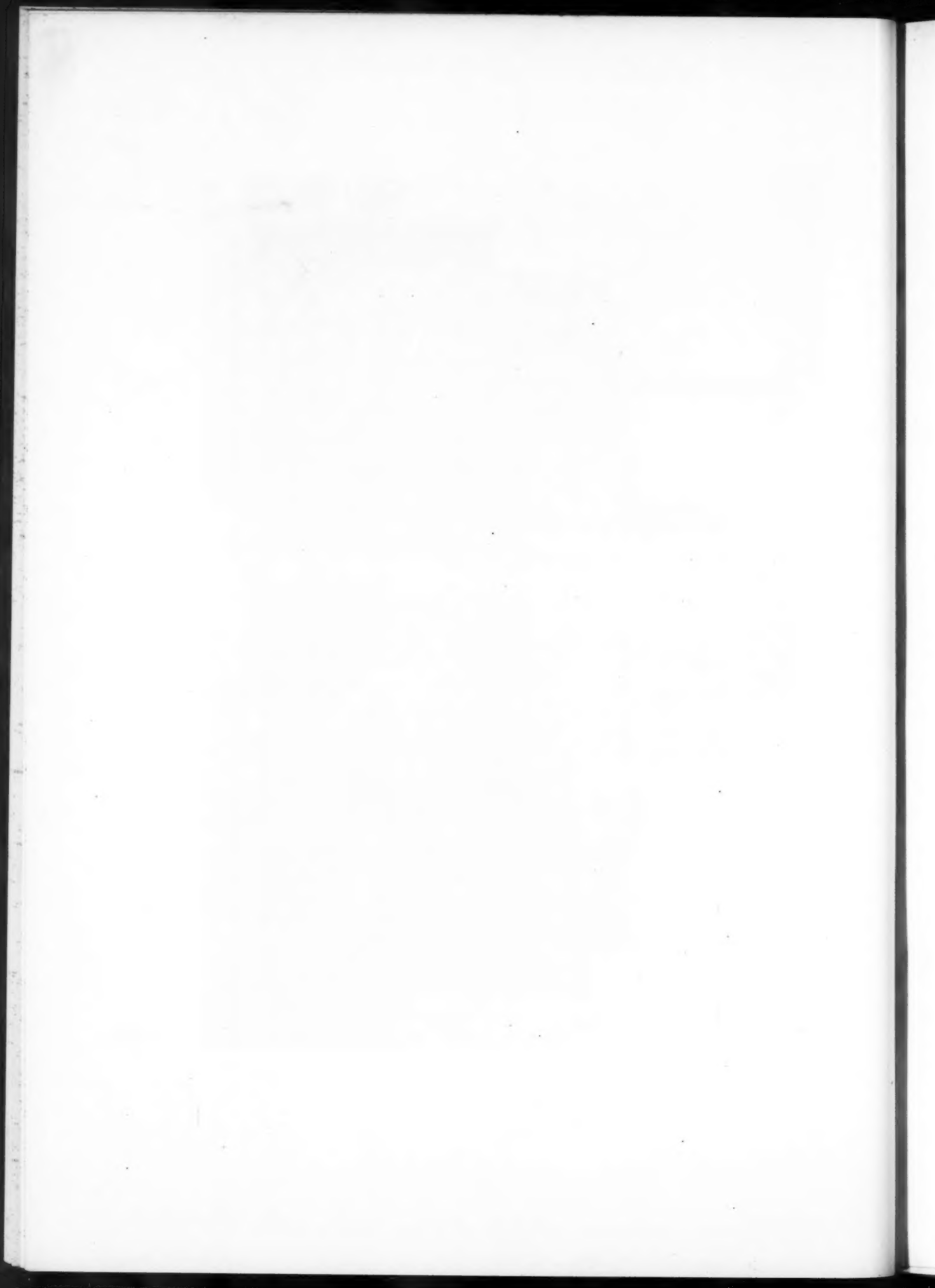
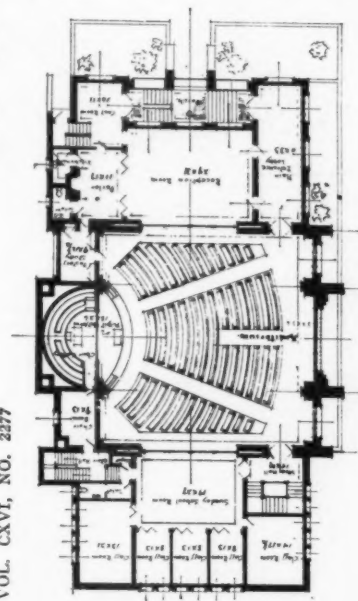


PLATE 62

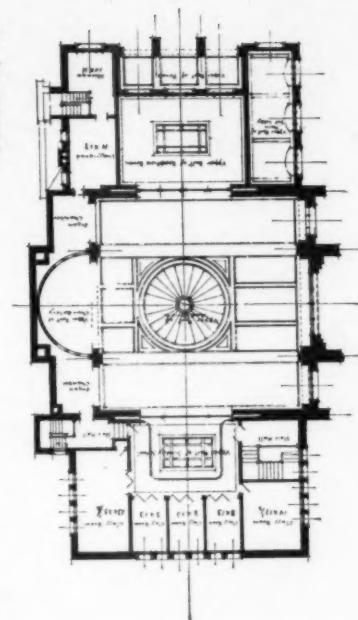
FRONT ELEVATION

FIRST CONGREGATIONAL CHURCH, SIOUX CITY, IOWA
WILLIAM L. STEELE, ARCHITECT

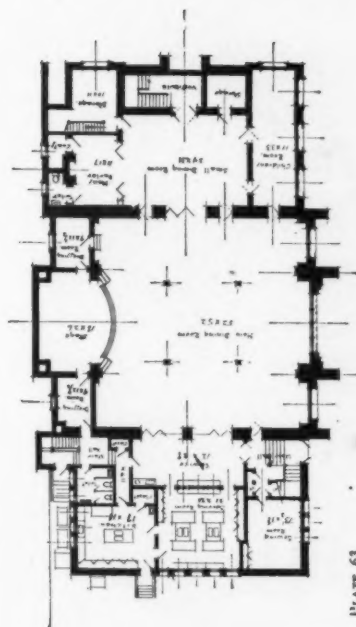




MAIN FLOOR



SECOND FLOOR



BASEMENT FLOOR

FIRST CONGREGATIONAL CHURCH

SIOUX CITY, IOWA



WILLIAM L. STEELE

ARCHITECT



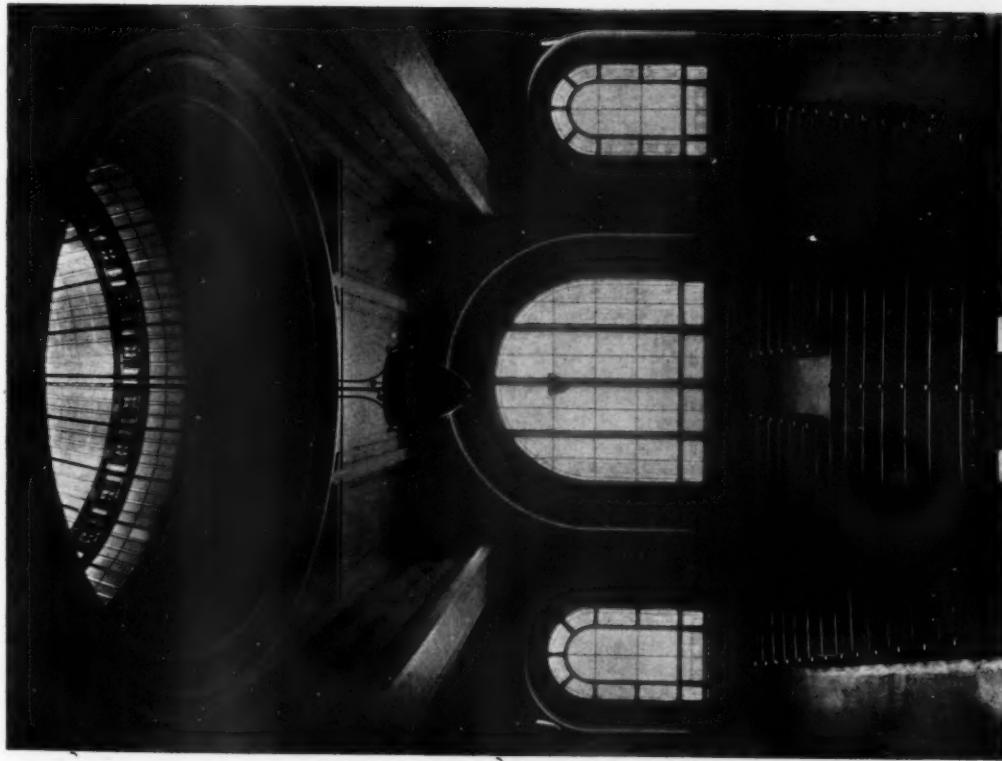
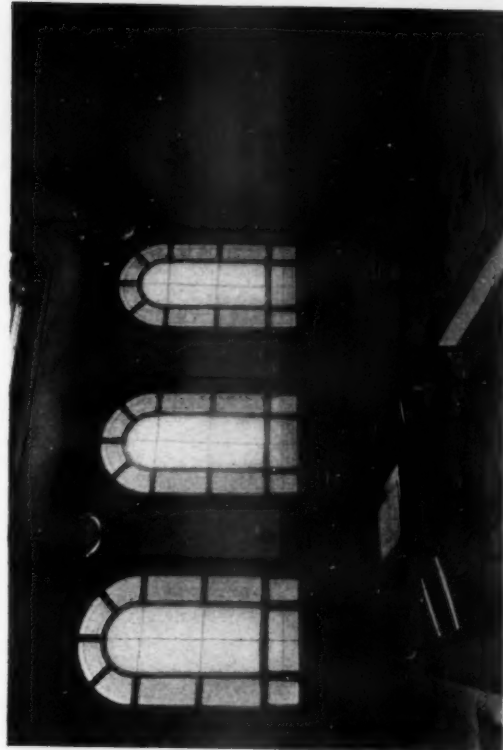


PLATE 64

DOMES IN AUDITORIUM

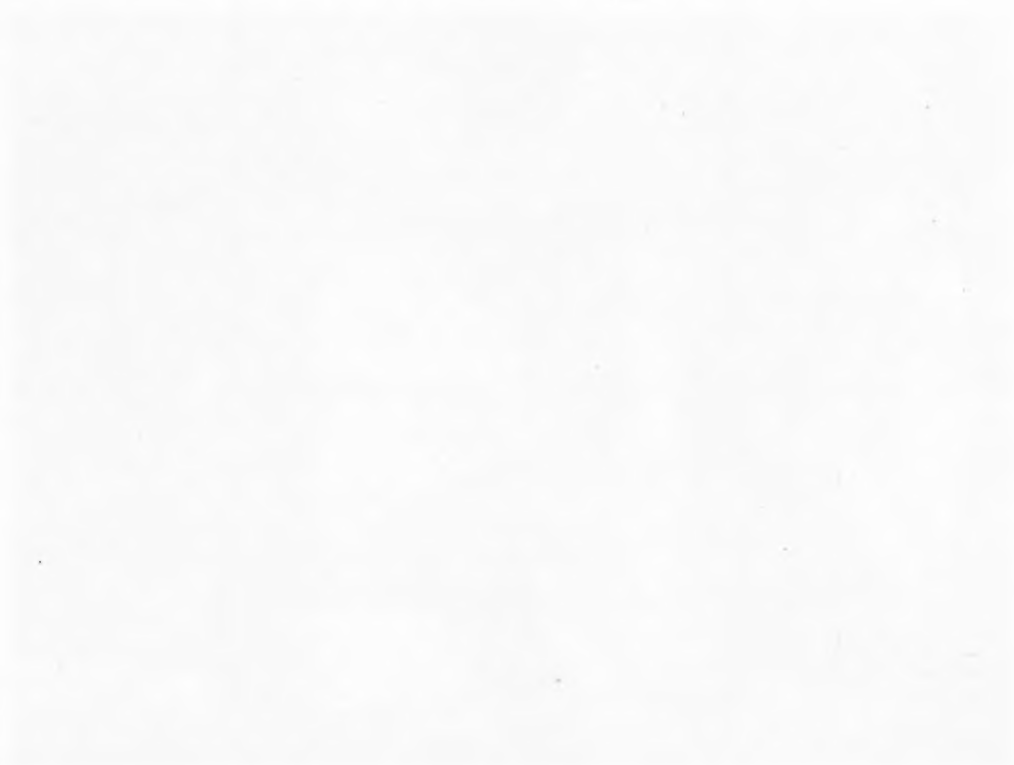


RECEPTION ROOM



AUDITORIUM

FIRST CONGREGATIONAL CHURCH, SIOUX CITY, IOWA
WILLIAM L. STEELE, ARCHITECT



THE AMERICAN ARCHITECT

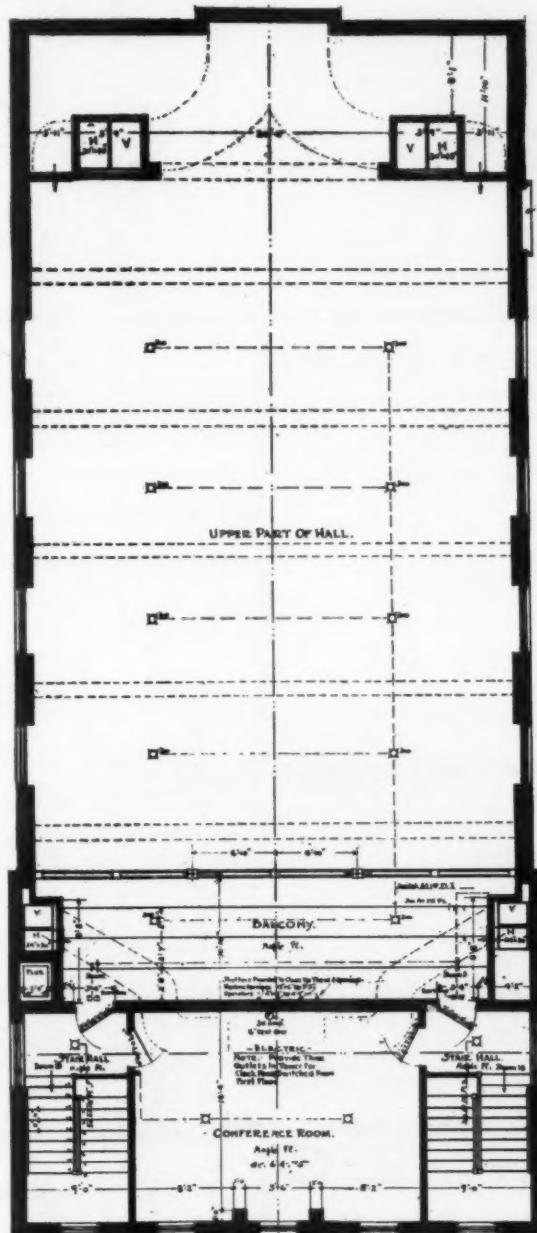
and intimately so that the resulting decision was not perhaps so much a victory of the majority over the minority as it was a "meeting of minds", to use the legal phrase.

This meeting of minds which is the consummation most devoutly to be sought in our civic affairs can only be obtained where gatherings are of the most informal and almost social nature, where restraint is removed and the interchange of ideas and opinions so complete that the resultant decision is shared by all and forms a crystallization of the common purpose. Such a unanimity of purpose must obtain in any partnership of two individuals and unanimous sentiment is infinitely better than the rule of a hostile but victorious majority.

Throughout the length and breadth of the land, and, in fact, of the civilized world to-day, the desire for this spirit of unanimity of thought and action is rife. It is perhaps the greatest revolution that will come out of the old order which the war is terminating. It is not a consideration for statesmen and sociologists alone, but interests every branch of human activity. For the architect, it means a new conception of the building which is to serve as the seat of government and the rallying point for neighborhood activities. The town hall must now comprise not only facilities for

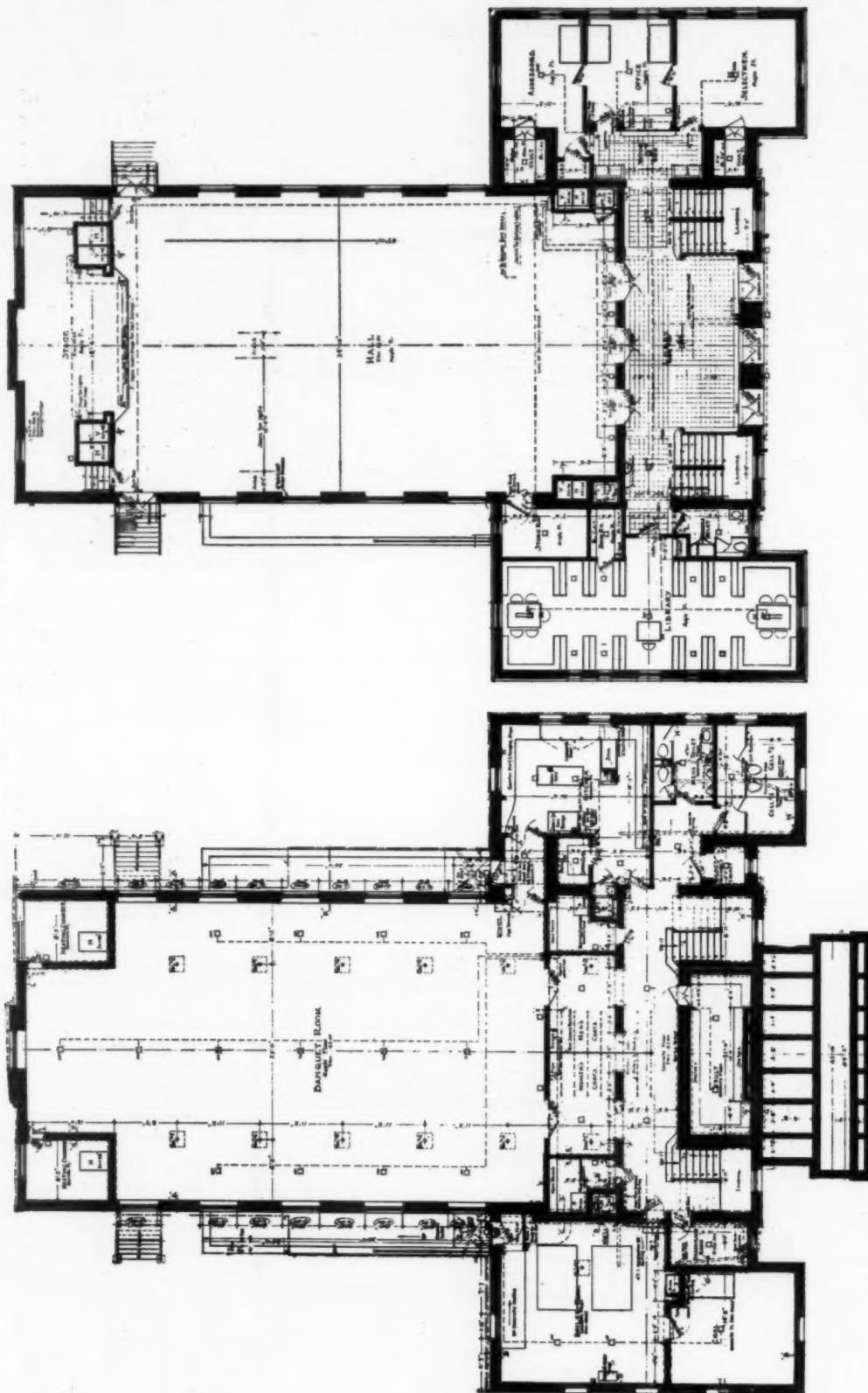
official business but also accommodation for the varied uses of the spare hours of the citizens of the community. In the plans already evolved for such buildings since the close of the war this tendency is easily discerned. The illustrations herewith suggest a civic center, as it is often called,

comprising the assembly hall, town offices and a number of additional rooms. Even the assembly hall is no longer planned for town meetings alone. Its stage is designed with curtained opening, footlights, wings and the other requisites for theatrical use, and in the rear is the booth for projecting moving pictures on the screen. The hall is provided with space for the storage of chairs so that it can be cleared for dancing, Boy Scout and Camp Fire Girl Drills, gymnastic exhibitions, etc., and in one corner is a dumbwaiter so that the gatherings can be rejoiced with a little frappé. Opposite the town offices in one of the wings of the building is located the library to accommodate 10,000 volumes. There is a difference in the attitude of a person's mind between going to a library building for the sole purpose of reading or getting a book and going to the "Village Hall" where everything is to happen and one may choose among a number of pleasant alternatives. In fact, in one instance that has recently come to the writer's attention, the Committee that is drawing up the program for a building



SECOND FLOOR PLAN

THE AMERICAN ARCHITECT



FIRST FLOOR PLAN

TOWN HALL, TEWKSBURY, MASS.
KILHAM & HOPKINS, ARCHITECTS

BASEMENT PLAN

THE AMERICAN ARCHITECT

similar to that described above has decided to place billiard and pool tables in the central portion of the library floor, leaving the surrounding walls for the bookcases and providing a quiet room adjoining the large one for reading purposes. This plan results from the feeling that those for whom the influence of good reading is most desirable must be surrounded by an atmosphere a little less distasteful to their present state of mind than that of a bare and unmitigated library.

During the war every village was organized for one or another kind of semi-public work, either to support the Red Cross, the War Camp Community Service or some similar activity. In the accompanying plans a large room is set aside as the headquarters for such semi-official gatherings. It is placed on the second floor in a position of retirement so that the other activities of the building will not interrupt its use.

If the way to a man's heart is through his stomach, there are very close analogies that can be applied to the life of a small village or a neighborhood in a large town or city. The conviviality and good fellowship that is part and parcel of a feast may not be easily explained or justified but is and has been from the earliest dawn of history an obvious fact. Provision for a banquet hall to seat 200 to 400 people seems an important part of the program for such a building.

It will be noted in the plans reproduced herewith that this hall has large windows on two op-

posite walls to secure ample light and ventilation and is provided with coat and toilet rooms. No inferior accommodation appears acceptable to the present-day committee. The hall is connected by double vestibule doors with a modern kitchen. The most popular meeting in hundreds of communities is the "supper" followed by an address or entertainment. An intimacy and good-fellowship hard to stimulate in any other way is engendered at this kind of gathering.

Two cells designed to house the wayward members of the neighborhood will be seen in one part of the basement plan. These at present seem necessary more as a safe harbor in which to tide over periods of dizziness than as a place of confinement for criminals.

The building above referred to is one of a type being erected in certain New England towns, which feel very keenly the new needs of the 20th century. The way in which they are meeting the problem is a great advance over the familiar types of the last century and yet marks only a beginning in this line of planning. The architect in order to sympathize with the new requirements and to interpret them intelligently must be a student of neighborhood life and realize the revolutionary principles which are making the whole world restless and excited at the present moment. According as he is able to comprehend these problems his contribution to the design of the buildings entrusted to his care will be great or small.



COMMUNITY HOUSE, SAN DIEGO, CAL.

LOUIS J. GILL, ARCHITECT

This is one of the pioneer Community Houses in America. For four years it has been the center of social activities, and its service to this community is generally regarded as very great.

Community Club at Havana, Cuba, Suggests Ideas for Social Centers in This Country

VARIOUS communities now considering the erection of war memorial social centers in this country might well profit by considering as a model the Centro Gallego, or Galician Club, at Havana, Cuba, a peculiar institution about which comparatively little is known outside of Latin America. It is a workingman's club, yet in our most modern cities there is nothing like it in size or outward or inward splendor. It is of monumental proportions and imposing architecture. The ball room of the club is an entire block long and 70 feet wide, with room for eight thousand people. Its theatre is larger than the Metropolitan Opera House, New York, seating nearly 10,000 persons.

For the past forty years this laboring people's club has been growing. It was founded in 1880 with 730 members. To-day the 50,000 figure has already been passed. Each member pays into the treasury \$1.50 per month, which shows that the dues alone amount to \$75,000 a month, or \$900,000 annually. The activities of the club include educational features, for children as well as adults, music, painting, manual training, bookkeeping, shorthand and other commercial subjects. There is a club hospital, accommodating 1,000 patients, and a dental clinic, at both of which more than 13,000 patients were treated in one year.

After a member has been in good standing for five years, if he becomes ill and is unable to support himself the club undertakes to return him to his home and give him \$75 besides. A club member dying without funds is buried by the club. Other features of the club include free legal service. Amusement, of course, is the other function of the club. There are athletic teams for the principal sports. Dances are also a prominent feature.

As the members of the club live in various parts of the island the question of dues is systematically handled by agents appointed to make collections. Failure to pay for three months causes expulsion from the club. Dues are usually paid with promptness, as none of the members wants to lose any of his many privileges.

There are four clubs of a similar character in Havana, but the Centro Gallego, for the laboring classes, is the largest and by far the most popular. Another of the most prosperous is what is called the Association of Clerks, which has thirty thousand members. Then there is a women's club, called La Balear, all institutions peculiar to Havana, and there is nothing similar in this country.

The failure of many proposed war memorials in the United States is due to the fact that they are too narrow in scope to command support of all the people in a community. Some favor museums, some libraries or schools, and others arches and tablets. In the Havana club all interests are combined under one roof. The Cubans have made a decided success of this co-operative model community club. The question is whether it could be utilized in the solution of American problems.

There are many reasons why social community centers in America cannot now follow the Cuban plan, admirable as it may seem. In Cuba the laboring classes are all natives of the island, all speaking one tongue. There is a very small percentage of foreigners among the working element. They have the same ideals and ambitions. Their tastes are similar, and they are bound together by the same religious ties.

Where would it be possible in the United States to get together 50,000 workmen, or even 5,000, who would be interested enough in the things their fellow workers are doing to belong to the same club? They could not be found. That is because there are so many races, so many creeds, so many tongues making up this class in America. Furthermore, there are already firmly imbedded in our national life so many clubs and secret organizations that a community project, such as the Centro Gallego, would have difficulty in finding a fertile field in which to flourish. Just count the number of clubs you will find in the medium-sized city in this country. There will be the Y. M. C. A., Knights of Columbus, Elks, Masonic lodges, in addition to church, art, military, athletic and social organizations of every type and description. There are clubs for all classes and they cover every possible field of activity. The Cuban idea is to have one club for one individual class that will afford a wide range of activities, and be governed by one central organization.

But in the United States it is decidedly different. Groups of men and women whose interests are similar band themselves together. There are not the hard and fast class distinctions that are so rigidly adhered to in many other countries. This allows for the wider development and expansion of organizations in various fields. In a club for one class there is bound to be restriction in some phase of activity. In this country perhaps the Y. M. C. A. comes closest to the Cuban institution in width of scope. But this association is democratic in the extreme and no tendency toward class distinction is permitted to exist.

A community club of the Cuban type could be successful in this country only where the community is made up of one nationality or one religious belief, and such a place would be hard to find. Great strides toward the Americanization of our foreign element were made during the war. The making of simon pure Americans of our Italian, Polish, Russian and other foreign born population will first have to be effected before a club of the type outlined could be made practical in America. There is no question but that the community social center would be a wonderful thing for our country districts, where a lack of amusements and no opportunity to keep in touch with the big things going on in the world yearly drives the younger generation from farms to the city. It could also be made to aid the work of our county charity organizations in taking care of the sick and needy with medical attention to an extent never before thought possible.

Consequently, if this model people's club is ever to be realized in this country there must be a stronger and more sincere effort made to Americanize the many elements of our foreign population, for it is in this way alone that progress could be made. And this de-hyphenating of our foreign born population must be accomplished through education and industrial training.

Possibly the activity of the Government in the Americanization of the alien has been more pronounced than is generally known, but there is yet a large and unexplored field. In order to concentrate every bit of good effort to accomplish so desirable a purpose it seems that organizations similar to the Centro Gallego, as far as may be effective, will materially aid in the solution of the problem.

Current News

Ex-Soldiers to Reclaim Land for Community Settlements

WASHINGTON, D. C., Aug. 7.—The establishment of soldiers' community settlements through reclamation of cut-over timberlands and wet lands of the Southern states, irrigation of arid lands in the West and development of other unutilized lands throughout the country, as contemplated in the Mondell bill, is endorsed by the American Legion, the great organization of world-war veterans of this country, for membership in which 4,000,000 men are eligible.

At a joint meeting in New York last week of the executive committee of the Paris and St. Louis caucuses of the American Legion, the Mondell bill was approved in principle. This action was predicated in part upon a resolution adopted by the St. Louis caucus which was as follows:

"WHEREAS, the reclamation of arid, swamp and cut-over timber lands is one of the great constructive problems of immediate interest to the nation; and

"WHEREAS, one of the questions for immediate consideration is that of presenting to discharged soldiers and sailors an opportunity to establish homes and create for themselves a place in the field of constructive effort; and

"WHEREAS, one of the purposes for which the formation of the American Legion is contemplated is to take an energetic interest in all constructive measures designed to promote the happiness and contentment of the people, and to encourage actively all proper movements of a general nature to assist the men of the Army and Navy in solving the problems of wholesome existence; and

"WHEREAS, the Department of the Interior and the Reclamation Service have been engaged in formulating and presenting to the country broad, constructive plans for the reclamation of arid, swamp and cut-over timber lands;

"NOW, THEREFORE, BE IT RESOLVED: By the caucus of delegates of the American Legion in Convention assembled, in the City of Saint Louis, Missouri, that we endorse the efforts heretofore made for the reclamation of lands, and we respectfully urge upon the Congress of the United States the adoption at an early date of broad and comprehensive legislation for economic reclamation of all lands susceptible of reclamation and production."

By authority of the New York meeting, legislative representatives of the American Legion are in Washington to do what they can to further the enactment of the legislation. The legislative committee of the Legion is made up of Col. Luke Lea, formerly United States Senator from Tennessee, Col. T. W. Miller of the Ordnance Department, who was formerly a member of the house of representatives from Delaware.

Conferences have been held with leaders in congress in the interest of the Mondell bill and the prospects for the measure are considered bright. It is making good progress in the house committee on public lands, which has been sitting daily considering amendments proposed to the bill.

It is authoritatively stated that the American Legion is opposed to all propositions for a cash bonus to soldiers. Legislative representatives of the Legion believe such a plan to be unwise, unnecessary and not desired generally by the soldiers.

That there are large areas of cut-over and wet lands in the South suitable for development and settlement by soldiers is recognized by well informed officers of the Legion, who also say they know of lands in Indiana and other states of the Middle West and in the East that are available for community settlement projects for soldiers.

They believe that the Mondell bill if enacted into law would result in providing employment and homes for many thousands of soldiers, and at the same time would aid in developing the country, promoting the movement of population back to the land, improving agriculture, increasing the food supply, and by these means discouraging the spread of Bolshevism.

F. H. Bosworth, Jr., New Dean of Architecture at Cornell University

Francke Huntington Bosworth, Jr., now practicing architecture in New York City, has been selected as dean of the College of Architecture of Cornell University, and will assume his duties in September. He succeeds Prof. C. A. Martin, who has resigned his deanship. Mr. Bosworth will teach design, succeeding Prof. E. V. Meeks, who is in the Orient and who has accepted a position in the School of Fine Arts at Yale University, contingent on his return in the autumn.

Mr. Bosworth has followed his profession continuously since 1901, the first year with Carrere & Hastings, and since 1902 in private practice until 1917, when he closed his office to go abroad. He is a member of the Society of Beaux-Arts Architects and of the American Institute of Architects, in both of which organizations he has held offices.

Mr. Bosworth entered Yale in 1893, in the academic course and graduating in 1897. At Yale he was a member of Psi Upsilon. He studied from 1897 to 1901 at the Ecole des Beaux-Arts, Paris.

Third Division Plans Memorials

The Third Division, now part of the Army of Occupation on the Rhine, has made a proposal to the French Government through American Headquarters to erect a memorial near Chateau-Thierry to the men of the division killed on the battlefields of the Marne.

Permission has been requested to erect two monuments at the north end of the main bridge in Chateau-Thierry. They will flank the approach and be so designed that they will form a part of a new bridge to be constructed there. They will be substantial and ornamental, with bronze tablets and suitable lighting arrangements.

One monument will commemorate the heroes of the regiment who gave their lives, and the other will perpetuate

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the names of the battles in which the division took part. It is estimated that the two monuments will cost approximately \$25,000, which cost will be borne by the 23,000 men and 1,000 officers in the division.

The Third Division is commanded by Major-Gen. Robert L. Howze. The Chateau-Thierry battle marked the beginning of the Third Division's excellent war record. Later it took part in the operations of the Marne, St. Mihiel and Meuse-Argonne, for each one of which there is a white stripe in the divisional emblem.

Should Build to Last Centuries

Americans returning from the war bring with them the new doctrine that a church, a public building or a dwelling should be so built that it need not be rebuilt every generation. Comfortable, attractive houses 300 years old, fine churches 500 years old, are among the sights they have looked upon in France.

Just now, according to the *Minneapolis Journal*, in a period of high cost of labor and material, this doctrine that a dwelling may be satisfactorily built but once in 300 years, should appeal to the prospective house builder. It assures at least that he need build but once in his lifetime and that his child may not need to build at all.

Such a house need not cost much more than one that would go to wreck in thirty years. A little well-trained thinking will be about the only difference. Four qualities must be built into such a house: Permanent material, permanent beauty of plan, permanent warmth and economical arrangement. These qualities are fundamental, always have been, and always will be. Such a house will sell well 300 years hence, and will have pleased every occupant in the meantime.

Good styles of architecture are permanent. Our best styles to-day are centuries old. Warmth also is an abiding quality. A house that is hard to heat will not be permanent. The fuel problem will be a constantly growing factor in home life. America is not likely to see cheap fuel again very soon. A house warmly built is fortified against waste in this item of maintenance.

Standardized workmen's houses, single and multiple, built chiefly of cement or clay products, are to be a large feature in future housing. But these must be made attractive to the eye, and economical of upkeep. Workmen cannot live well and lay by in store unless their houses are so built.

The average earner who has built a home has to spend his life to earn it. And he has been forced to do this, often because his father built a house that did not last a lifetime. A cheaply constructed house is a waste to the family and to the community. The ideal house of the future will stay built.

Hold French Art Exhibition

Under the auspices of the French government and the Franco-American Board of Commerce and Industry, the latter a New York association formed for the purpose of improving the industrial relations between France and America, an exhibition of French Samples of Art applied to Industries will be held from July 24 to August 24 in the Pennsylvania Hotel, New York.

On account of conditions at present existing in France many American buyers have not visited that country since the war and the idea of the exhibition is to enable buyers

to obtain a comprehensive idea of the French goods that can now be delivered to this country particularly for the Christmas trade.

The particular industries being represented in this exhibition have suffered somewhat less than many others in the war and a very extensive selection of industrial art objects has been made.

Among the most interesting articles that will have an important place in the exhibition are Gobelin, Aubusson, Beauvais Tapestries; Art Pieces of Sevres; Art Leather Goods; Art Enameled Goods; Art Jewelry; Art Crystal; Real Laces and all goods known as "Articles de Paris."

This exhibition affords an opportunity for the American public to show its interest in the efforts of French manufacturers to restore the conditions that obtained in these industries prior to the war.

Army-Built Bridges Withstand Flood

CAMP DIX, N. J., Aug. 2.—Only the stanchness of bridges erected on main roads near the camp by army engineers while in training here for overseas service kept highways in this section open to travel, when each hour brought new reports of bridges washing out by overflowing streams in adjacent townships of Burlington and Ocean counties.

Water draining rapidly from the camp formed ten acre lakes of what are usually dry brooks at points along the Wrightstown-Pointville road. A single storm, late in 1917, washed out two bridges along this highway, and to prevent delay National Army engineers, then in training here, replaced them with materials supplied by the State. Twice the volume of water that wrecked the original structures has passed under the new bridges and they still hold firm.

United States Builds Chain of Forts Along Border

The United States Army is building permanent outposts along the Mexican border to prevent incursions by armed bands of Mexican bandits across the border. These will extend from the Pacific to the mouth of the Rio Grande at Brownsville, Tex., and will be garrisoned by detachments of infantry and cavalry from the southern department.

In the Big Bend, where many Mexican raids have occurred, these outposts are being built like the blockhouses of frontier days, with trenches surrounding the low adobe and concrete buildings, but in the form of a quadrangle to give the best possible defensive protection. At Palvo, Ruidosa, Redford, Glen Springs and Vado Piedra these outposts are being constructed under the direction of Col. George Langhorne, commander of the subbase. A cantonment also is being built at Marfa, Texas, sixty miles from the border, to serve as headquarters for the outposts.

In the El Paso district proper an outpost is being built at the Santa Fe Street approach to the international bridge to Juarez. This will house the dismounted cavalry bridge guards, who inspect everything sent to Mexico.

At Ysleta, Fabens, Fort Hancock and Sierra Blanca, Tex., similar buildings will be erected for the patrols and detachments guarding the fords from Mexico. All will be plastered with cement on the exterior, and will have stables for cavalry horses, electric lighting systems, running water, shower baths and modern mess kitchens.

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A cantonment is being built of brick at Fort Bliss to house the reserve troops for these outposts, which will include 110 men and four officers each.

Outpost buildings along the New Mexican border will be constructed of lumber from Camp Cody, N. Mex., and unused material purchased for other cantonments during the war. The headquarters will be located at Columbus, with outposts at Hachita, the Corner ranch, Slaughter's ranch and other strategic points along the New Mexico border. Each outpost will cost approximately \$18,000.

American Academy in Rome Issues Report

The annual report of this school is off the press. It is a dignified account in seventy pages of the aims and career of the American Academy in Rome since its foundation in 1905. There are the names of the students abroad and discussions of their work; lists of scholarships appear, and holders thereof, past and present, are also set down. A record of the founders, patrons, trustees and other associates is presented, as are the charter, by-laws and further details regarding the organization.

Reports as follows are printed:

Of the Executive Committee, by E. P. Mellon.

Of the Acting Director, Gorham P. Stevens.

Of the Professor in Charge of the School of Fine Arts, also Gorham P. Stevens.

Of the Librarian of the Academy, Albert W. Van Buren.

Of the Lecturer in Classical Archeology, C. Densmore Curtis.

Of the Lecturer on the History of Art, Prof. Van Buren.

Of the Finance Committee, H. Walters.

These show a wide range of activity, and include much of interest with regard to the effect of war conditions on the character of work done.

Communications may be addressed to the New York office of the Academy, 101 Park Avenue.

French Architectural Treasures Seriously Affected By War

The architecture itself—and this was the most precious irreplaceable part of the artistic heritage of France—has suffered greatly in the war, states a writer in *Scribner's*. Obviously a Romanesque church could not be removed for safety from the Soissonnais to Toulouse. It is far easier to ascertain the extent of the damage among churches than among the movable objects, but the magnitude of the disaster, the number of monuments in the war-zone make precise statements precarious. Besides, the ruins possess so poignant an emotional quality that there is an almost unavoidable tendency to exaggeration. I was told the other day on excellent authority that the Germans had prepared mines to blow up the Abbey of Ourscamp, and that the holes they had drilled in the columns for this purpose were clearly visible. I went at once to Ourscamp, and found the holes in question, which, however, had been drilled over a century ago to receive the choir-rail. Such false reports are unfortunate, since they tend to discredit the authentic instances of atrocities that indubitably exist. I have seen with my own eyes proof that the Germans, at the time of their retreat, did deliberately blow up the churches of Boultsur-Suippe, Heutregenville, and Betheniville, all of artistic importance.

The zones of destruction are singularly uneven. In general it is in the country churches, rather than in the great cathedrals, that the loss has been heaviest. It is clear that, with the exception of the cathedral of Rheims, comparatively little irreparable harm was done in 1914. It is along the lines held for a long period between 1914 and 1918 that the damage is most appalling. The bombardment seems to have increased in intensity as the war went on. The armies came to depend ever more upon heavy artillery and to use it more recklessly. East of Rheims where the line was nearly stationary for four years, there remain of the former villages only heaps of masonry. Even the sites of important churches, like Cernay-les-Rheims, can hardly be determined. One hunts among formless heaps of stone until one finds a voussoir from a rib or a capital then one knows one is standing where was once the church. The damage was also heavy during the advance and retreat of the Germans in 1918, as for example, in the beautiful little church at Crezancy.

Latins Build Better Homes

The Italian who has lived long in America is helping to Americanize Italy more potently than any other factor. He has introduced American ideas and American ways of doing things at every possible turn when it is practical and more efficient than the Italian.

The Italo-American has brought back from America an idea of better housing conditions, and if he decides to settle again in Italy he builds a home patterned along American lines with plenty of space around it and with its division of rooms.

Just what effect an extended importation into Italy of American customs will have will hardly be called problematical. Italy is largely dependent for her wealth on the income received as a result of the artistic aspects of her surroundings. The very natural beauty of her rural districts is so different from what is to be seen in other countries that travelers are attracted from everywhere, and from the host of visitors is received perhaps her largest revenue. If the physical aspects of a typical Italian town gives way to a conventional American environment, not only will the misfit be lamentable, but one of the chief sources of interest for the foreigner will be gone.

It should be realized that the spirit of Americanism is so universal that it can thrive in any habitat. It need not carry its winter dress to summer climes.

Industrial Homes to be Sold

WASHINGTON, D. C., Aug. 7.—Six thousand homes built under the direction of the U. S. Housing Corporation will soon be placed on the market. These buildings are located in the principal industrial centers of the country. No houses were built in this city by the corporation which can be sold as homes.

Want Building to Exhibit German Trophies

WASHINGTON, D. C., Aug. 9.—The Ordnance Department has asked for an allotment of funds for a building at the Aberdeen Proving Ground, Aberdeen, Md., to cost \$135,000, for the exhibition of captured German war material.

Montclair Golf Club's Method of Developing Property

At a recent meeting of the Montclair Golf Club a program was outlined for developing its property. The planning of a golf club house is in the hands of Donald Ross, Montclair architect, and a structure costing over \$300,000 is contemplated.

In the Montclair plan the stock is owned outright by the members of the club. Improvements are ordered only by the written consent of two-thirds of the entire membership. Each member contributes his proportion to the total required, and the amount of his contribution is added to the value of his stock.

It is a very democratic and popular plan and has worked most successfully in Montclair. When the present program is completed Montclair will have what is believed will be one of the finest sites in the Orange Mountains.

Scotch Cottages As Compared With English

The standards of housing construction and accommodation in Scotland differ from those in England. The Scottish dwelling is usually more durable and more substantial in regard to construction, but less spacious in its interior. Very often the standards with regard to heights and sizes of rooms are higher, but the Scottish family has been accustomed to do with fewer rooms than the English family. The common size of dwelling in Scotland is the two- to four-roomed tenement flat or single story cottage with "but and ben," sometimes with an extra half story in the roof.

The prejudice in Scotland in favor of tenements or apartment houses has prevailed until a few years ago in spite of the educational work in favor of the separate home.

The influence of these practical demonstrations has been considerable. It is another instance of the importance of the object lesson as a means of educating public opinion. An object lesson in England did not have any effect on the people of Scotland. It shows the necessity of localizing any practical demonstration in housing that is to be effective.

War housing in Scotland has stimulated public opinion to promote housing schemes in connection with reconstruction in Scottish cities and towns, and also as a means of providing memorials for returned soldiers.

The linking up of the movement for increased production from the land with that of providing employment for returned soldiers has also been a motive in connection with recent housing development in Scotland.

At Longniddry, in one of the best agricultural districts in Scotland, a model village is being developed for the purpose of attracting soldiers away from crowded centres to cottages with small holdings or allotments attached to them.

Builds Motor-Driven Bungalow

Hugo D. Pohl, a Chicago painter, has built a motor bungalow which he believes is outfitted with sufficient care to make possible a three year tour around the world. He proposes to "place the world on canvas," and has selected this method of getting about.

Wants Permanent Employment Service

Fred C. Croxton, of Columbia, Ohio, former chairman of the Ohio States Industrial Commission and an employment expert, has urged the establishment of a permanent national employment service before the joint hearings by the Senate and House Labor Committees on the Kenyon-Nolan Bills.

"There is nothing that contributes more to unrest than unemployment," Mr. Croxton said, "and the Federal Government should give its full attention to the question."

The country needs a national employment service based upon Federal, State and city co-operation. The problem of employment is primarily a community matter and the community should bear part of the expense. The administrative unit is the State and the States also should contribute to the cost. The Federal Government should help the States to build and maintain public employment offices and should standardize operations and handle the clearances of information and labor between States. Uniform standards are needed; each State and community should be given through the Federal Employment Service the best that is in the others.

Personals

Geo. A. Fuller Co has opened offices at 319 American Building, Baltimore. Walter G. Distler, manager.

S. E. Sonnishsen, formerly of the Downs Block, Seattle, and Harold Ginnold, Seaboard Building, have taken offices together in the Boston Block, Seattle.

Andrew J. Sauer & Co., architects and engineers, announce the removal of their offices to the Denkla Building, Eleventh and Market streets, Philadelphia.

Johns J. Zink, architect, has opened offices at 409 McLachen Building, Washington, D. C., and desires catalogues and samples.

Leo H. Weisfield and M. O. Nathan, architects, have formed a partnership under the name of Weisfield & Nathan, 441 Monadnock Block, Chicago. Building material catalogues are desired.

Durham-Banville Co., architects and engineers, have opened offices at 323 Walnut Street, Philadelphia. The company specializes in structures of steel and reinforced concrete.

Walter W. Judell and Harry W. Bogner have formed a partnership for the practice of architecture under the firm name of Judell & Bogner, succeeding Schuchardt & Judell, 508 First National Bank Building, Milwaukee, Wis.

James D. Beacham and Leon Le Grand have entered into partnership for architectural practice in Greenville, S. C., with offices at 14, 16, 18 Finlay Building. Manufacturers' catalogues are desired.

William Cotton, the artist, has been commissioned to paint the mural decorations for the Capitol Theatre in New York, which is to be the largest in the world. The paintings, which consist of six panels, are to hang in the handsome lobby and foyer. The subjects are romantic. The building, which is to cost more than a million and a half dollars, and is situated at Broadway and Fifty-first Street, is to be opened in October.

Floating Bungalows Result from Housing Shortage

Hundreds of white-painted bungalows, built on floating logs or pontoons and moored to piling driven in the bed of the Willamette River, some distance from the shore in Portland, Ore., furnish all-the-year-round homes for perhaps five hundred Portlanders and make an attractive sight along the Willamette, within three or four miles from the city. The houseboats, moored in groups of from 10 to 100, are reached by floating sidewalks, also built on logs, leading from the shore and along the rear of the houses. Gangplanks connect the houseboats with this float.

Telephone and electric lighting wires, gas pipes and city water mains extend along the float and are connected with each houseboat, giving these river dwellers "all the comforts of home," including running water from the mountain streams, so that river water need not be used for drinking and cooking. Gas meters, furnishing gas for cooking and heating, are placed for each house and gas and city water are led into the homes by rubber garden hose connected with the mains along the float.

Gay blossoms in window boxes and hanging baskets adorn the broad front porches or decks of these dwellings. The decks are furnished with screened porches, hammocks, swings and artistic furniture. The interiors of the bungalows are as elaborate as desired by the tenant and often include a large living and dining room, one or two bedrooms, a bathroom and kitchen. From three to five rooms is the average interior arrangement.

In some cases one half of the floating home is fashioned into a boat-house, in which the owner parks his motor-boat. There are one or two two-story house-boats, in which the motor boat occupies the lower "floor." Canoes are customary adjuncts to the homes, as canoeing, swimming and surf-board manipulating are among the popular pastimes in summer.

A constant downstream current of two miles per hour in summer and four or five in winter, carries off refuse and impurities. Waste matter is thrown overboard from the rear of the house and is not carried to mid-stream, but sinks or is carried away toward the bank. The Willamette is from a quarter to a half mile wide above Portland.

Indian Relics for Wisconsin Museum

The collection of Indian copper and stone implements owned by Henry P. Hamilton of Two Rivers, valued at more than \$30,000, will be presented to the State Historical Museum and will be on exhibition in the Fall. Mr. Hamilton is a vice-president of the Wisconsin Archeological Society and a member of the State Historical Society.

The greater part of the collection has been obtained from Manitowoc County, along the seven-mile lake frontage between Two Rivers and Two Creeks, formerly the site of Indian villages.

More than 2,000 selected specimens of exquisite Oregon jewel points, made by the Indians from agate, jasper and similar stones, and the finest example of flint chipping in the world were, however, obtained from other sections.

The largest collection of native copper implements in the country, numbering 14,000 pieces, will be part of the gift.

Mr. Hamilton started collecting Indian implements and ornaments as early as 1884, and his collection is well known throughout the country.

Broadening the Scope of Technical Education

The signs of the times are reflected in the following resolution unanimously adopted at the public conference on business training for engineers and engineering training for students of business, recently held in Washington, D. C.:

Resolved that: It is the sense of this meeting that:

1. Industrial and commercial development has created a demand for men with technical engineering training and business ability. Manufacturing industries are seeking engineers to qualify to serve in capacities requiring sound business training. Banks and brokers also need men with business training and the engineering point of view. This need is rapidly increasing and bids fair to demand a large number of technically trained men for both domestic and foreign commerce.

2. In order to meet this demand the economic phases of engineering subjects should be emphasized wherever possible in engineering instruction. This may be done by emphasizing the problems of values and costs in the regular technical work and by introducing or extending courses in general economics, cost accounting, business organization and business law into the engineering curricula. These courses should be designed particularly to meet the needs of the engineering student.

3. The engineering phases of economic subjects should be emphasized wherever possible in commercial instruction. Students in commercial courses should also be given opportunity to take special courses in the basic principles and practices of engineering, so that they may understand in general terms the operation of power plants and transportation systems from the engineering point of view.

4. It is also urged upon all institutions with departments in engineering and economics or commerce that they consider some plan of coordination to develop a course in preparation for those careers wherein practical training in modern languages, in the essentials of engineering and business theory and practice have been found to be both helpful and necessary.

The purpose of this conference, says Dr. Swiggett, Chairman of the Conference Committee, and under whose direction two preliminary conferences on this subject have been held, is to direct public attention at this time to the positive need in our country for an increasing supply of well-trained young engineers to enter upon business careers with promotion in the direction of industrial and commercial management. In large scale industrial production and commercial enterprise, the men of the future most helpful in eliminating waste of machinery, materials and men, overcoming the present shocking percentage of loss in these three things, is the man whose training represents a combination of the essentials of engineering and a knowledge of the fundamentals of business practice.

There is some objection, says Dr. Swiggett, to the use of the term commercial engineer for this new type of trained engineer, but the committee has discovered through two preliminary private conferences that many universities and colleges have already felt the demand from industry and commerce, and are endeavoring in some way to meet it with the coming school year.

The conference is to have largely the character of a symposium, and will serve as a clearing house for the exchange of ideas leading to common thinking and common action in respect to the object and program of the conference.

No Material Decrease in Construction Prices Expected for a Number of Years

Report of Special Committee on Housing of the New York Merchants' Association
Outlines Findings After Investigation of Labor Situation and Suggests
Increased Production to Stop Advancing Prices

Part II

NEXT to the scarcity of money available for building construction, the Committee believes that doubt as to the continuance of the prevailing high prices of building construction is the chief detriment to immediate activity in building. The Committee has investigated this subject of prices with great care, both individually and as a Committee, and it is the unanimous opinion of the members that building construction prices will not decrease to a material extent for an indeterminate period—a number of years at least.

It appears to be almost the unanimous opinion among the economists and business men who have carefully studied the present price situation, that we are now on a new world price level, and that future price adjustments will be made toward this new and higher price level rather than to the price level existing in 1914. This new price level is due partly to world-wide expansion of credit on the basis of which business is now conducted and of which increased volume of paper currency is one evidence. The inevitable result of inflation is a decrease in the purchasing value of the currency unit.

Inasmuch as the increase in prices and monetary inflation has taken place in practically every civilized part of the world, there is no reason why the adjustment should be one toward the prices existing in 1914. On the contrary, this adjustment will be a process of rearranging prices on the basis of the new price level so that prices of individual commodities will bear the proper relation to prices in general. For this reason it may be expected that the prices of some commodities which have not advanced materially during the past few years will rise, in order to complete the adjustment to the new price level. On the other hand, of course, it is true that many prices which, due to war conditions, have been increased even beyond the new general price level, will gradually fall to it.

Even if there were not a new price level, the prices of most ordinary commodities would remain high, and in many cases increase, due to the economic situation surrounding their production and sale.

As a result there would be a tendency toward an increase on the rest of the commodities in order to eliminate price discrepancies, and this of itself would bring us to a new price level. This statement applies to conditions in all the leading countries and especially in the United States.

It has been estimated that in general seventy per cent of the cost of production of articles in common use may be attributed to wages. This explains why the most important reason for the general increase in prices and for the maintenance of high prices is the higher wage scale.

Wages advanced during the war period because of the scarcity of workers and the great demand for them. Wages will be maintained for this and for other reasons. Before long we will undoubtedly see a great labor shortage; in fact, there is already a marked labor shortage in many skilled trades, and the unemployment situation, about which so much is said, is due to maladjustment of labor and a

surplus in individual lines of industry—such as the building trades—rather than to a general labor surplus.

The supply of labor the world over has been diminished greatly by wastage of war operations, while in this country in particular there has been a further decrease due to cessation of immigration, accompanied by a rapid increase in emigration, and to the absorption of many of our workers in industries hitherto unknown or unimportant in this country. At the same time the demand for workers will increase as soon as our industries expand to meet the vast requirements which will be put upon them by the world's markets.

The effect of this situation upon prices can readily be imagined when it is realized that there has been no marked drop in prices even during the past few months, when industry in general has been curtailed, and when the labor supply has been increased by millions of soldiers and war workers.

The determination of workers to maintain the high wage schedule is another factor to be considered, and would be important even though the law of supply and demand should not operate to maintain present wages. It is this determination on the part of workers to prevent wage decreases that has been, to a large degree, responsible for the maintenance of wages since the signing of the armistice. Workers are determined that they will receive a greater share in the profits of business enterprises than has hitherto been the case, and there seems to be a growing conviction on the part of students of this subject that in the future a larger return from industry than hitherto will go to labor. This return will be chiefly in the form of higher wages.

Up to the present time, higher wages have not yielded a correspondingly higher real return to labor. The policy of the manufacturer has been to increase the price of his product sufficiently to cover the increased labor cost. Inasmuch as this policy has been general, the result has been an increase in price of all products and hence an increase in the cost of living, with the further result that workers have demanded additional wage increases to offset the continued increased cost of living. There seems no way of stopping this alternating increase in wages and cost of living, except by increased efficiency of production or by decreased profit per unit in production, or both. This means that the manufacturer must eventually make his profits through an increased volume of business with less profit per unit of product, and must keep production cost low in the face of rising wages, by more efficient machinery, improved methods of management, and especially by the co-operation and earnest efforts of employees. Granting that this is the ultimate solution of the problem, nevertheless, it will come gradually rather than immediately. In the meantime the demands of labor for an increased share in the returns from industry or the determination of labor to maintain present wage schedules will not permit a drop in prices.

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The stocks of merchandise the world over were depleted during the war, while since then the expectation or hope that prices would fall has caused continued sales by merchandisers without corresponding purchases. This situation cannot continue long. There must soon be a marked increase in manufacturing to complete the depleted stocks of merchandise. As soon as peace is declared, the devastated countries of Europe will commence extensive reconstruction operations, the results of which will be seen in increased activity of industrial plants the world over. Without doubt, our industries will be unable to keep pace with orders received. The inevitable tendency will be higher selling prices.

A study of price conditions in other important countries shows that the increase of prices in this country has been less than in most countries. Therefore, prices here are doubtless nearer the new general price level than is the case elsewhere, and if this is so, prices will tend to maintain their present level here until material adjustment has been made in foreign countries. Our tremendous stocks of gold will likewise tend to maintain prices until after prices in other countries have dropped.

A great deal has been said about price conditions in the period immediately following the close of the Civil War. It should be realized, however, that the situation then and now are not directly comparable and that, therefore, while the Civil War experience is probably indicative of the immediate future, it is not necessarily so. The effects of the Civil War were confined largely to North America, rather than to the entire world. The destruction, and hence reconstruction, was confined to a comparatively small agricultural area instead of to large industrial sections and entire countries. The war wastage in men and materials was relatively small. These comparative conditions would indicate a more immediate and rapid drop in prices after the Civil War than now; yet following the Civil War, prices in general actually increased for a short period, then receded slowly for several years, and did not reach the pre-war level until 1878. Building construction costs in particular increased over a period of years, due to the fact that the demand, which was repressed during the war period, asserted itself after the war.

Practically every argument which applies to the general price situation applies especially to building construction. Labor is an extremely important factor in building construction, so if the conclusions stated above concerning maintenance of wages are correct, it does not seem possible that building construction prices can be materially decreased. Furthermore, the building materials situation is such that the deductions arrived at above concerning general prices apply with particular force to building materials, especially because the increase in price of building material has been below the average price increases. Not only have building material prices already been maintained during a period of great stagnation in the construction industry, but the demands for building materials—with consequent effects on prices—will be especially heavy when the inevitable building activity does commence. It should also be remembered that the prices of many building materials, lumber for instance, have been constantly and rapidly increasing for several years, and there is no new economic factor operating to prevent this continued upward trend.

The prevailing doubt concerning the maintenance of present building construction prices is at the present time disappearing, as is indicated by the increasing number of building projects, either under way or about to be commenced. It should be noted, however, that this building activity is entirely inadequate to the demands for homes.

In conclusion, your Committee believes that there is no

panacea or palliative for the present bad housing conditions, and while it believes that some of the devices proposed for ameliorating the situation will prove of value, it is also firmly convinced that the situation will be improved materially only by the construction of new houses under normal business conditions, when all parties financially interested in building operations receive a return sufficient to prove an inducement for further activity. In other words, individuals will enter the building construction field only because it is economically profitable.

Your Committee, therefore, again respectfully suggests that the desired results can be hastened by increasing money available for building operations, which can be made possible by eliminating income and excess profit taxes on mortgages held to the extent of \$40,000 by any individual, and by allowing the landlord a sufficient return on his investment.

The Committee further recommends that the Board of Directors of The Merchants' Association of New York place itself on record as believing that the present prices for building construction will not be materially decreased in the near future.

Solving the Problem of Labor Unrest

WHILE it appears certain that most commodities have reached a stabilized price level and that there will be no radical or immediate recession, there are indications that some building materials, particularly lumber and brick, will go even higher. This is due mainly to the fact that during the war construction supplies, as a whole, failed to share the advance of other commodity groups, and because there is a shortage of more than a year's production.

There was, however, a more general feeling among architects and builders that with the gradual elimination of disturbing features, many of which are no longer viewed with apprehension, that the construction industry is rapidly attaining its stride for a long and steady spurt. Architects are coming to a clearer understanding of their community needs and the part they are to play in satisfying them. Manufacturers are taking the long expected turn toward enlarged output, which is a decided evidence of growing confidence, as well as a factor in reducing prices. A forecast that the generality of business men are accepting is that the solution of the present problem lies in adopting methods of production and of distribution that will make for increased production.

There can be no hope of reduced living costs until the shortage of commodities is overcome by greater production. This reduction must come through increased efficiency in plant facilities and methods of operation. Labor is the largest item in the cost of production and is strongly affected by the cost of living. Increased output alone can reduce the cost of living. Laborers, both skilled and unskilled, have more money than ever before. It is the non-technical and small-salaried class, clerks and bookkeepers, who cannot live as comfortably as before the war. The country, however, is undeniably prosperous. Commercial agency reports show that weekly business failures are the smallest on record. Despite the advance in prices of automobiles and other luxuries dealers are having difficulty in supplying the demand. The purchasing power of the dollar is now regarded to be 50 cents, but many are earning two dollars instead of one as before the war and find it no more difficult to pay \$15 a pair for shoes than they did \$7 formerly.

With the return to something like stable conditions in the building field the country occupies a most advantageous

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position. Conditions in England, for instance, are much worse than here. There steel has advanced 192 per cent, against 96 in the United States, and concrete is 278 per cent, compared with 80 per cent here. It has been necessary in Great Britain for the government to guarantee the investor against possible declines for a period of five years. In this country, however, building permits show how rapidly the boom is gaining headway. Of course, it is country homes, apartments and commercial buildings that are leading. The revival is much slower in public works and railway construction.

America's building boom naturally should be greater than England's. The great majority of builders here have not been affected as they have in Europe. They are in a position to get needed materials more readily. The country's finances, despite large loans made to foreign powers, are stronger than ever before. There is every reason to believe the prosperity that is now being enjoyed will continue for some time. The main factor likely to disturb confidence as to what the future will bring to the profession of architecture and to the building industry is to be found in what is called the unrest in the labor situation.

To this must be added the serious situation that is developing through the emigration of thousands of foreigners, who, while on our shores, have constituted that part of unskilled labor that has been such a factor in construction. They are not alone creating a severe labor shortage, but are taking with them hundreds of millions of dollars which they have hoarded with the idea of spending their remaining days in ease in the land of their birth.

Just recently three steamships sailing in one day from the port of New York for southern European ports took as passengers 3500 aliens. It was estimated by Government officials that each alien represents an average of \$2500 saved while working in this country and that the great majority will never return to the United States. Ten years ago an average bank roll of this amount would have been sufficient to maintain a peasant family for the rest of their lives. But as the increased living abroad makes this impossible to-day it may be that some will return within five years or so. Many, however, will purchase property in their home lands and settle there.

Practically none of the returning foreigners saw service in the army or navy. With the exception of a comparative few they made their money in American shipyards and munition plants. The high wages of the war years made the desired fortunes quick of attainment and these men are returning years before they would have gone had times been normal. A majority are from Italy, Greece, Portugal, Czecho-Slovakia and the Balkan states.

But what makes the labor situation so serious is the fact that the exodus of unskilled labor is not being relieved by immigration to this country of men who can take the places of those leaving. This class, considerably cut down by the war, is remaining in Europe and taking advantage of increased wages there in reconstruction work. Nor is it expected that there will arrive in this country in the near future enough men of this type to replace this fast departing labor.

There has also arisen a further problem for the architect and builder and that has developed from the increasing demands of labor for recognition in the readjustment of living conditions. Ultimately these demands are sure to work out for good, for a higher standard of living, and for truer Americanism. But at present the immediate effect of the demands upon construction militates against the successful operation of capital, which cannot so quickly adjust itself to greatly increased cost. But after the adjust-

ment is made there is no reason to doubt that a greater purchasing power of the mass of the people will mean wider opportunity for all those who are engaged in building enterprises. It is a problem that calls for the adoption of a broad-minded, unselfish policy, one that will make not alone for general progress, but for the comfort and self-advancement of the individual.

Building Material Market Reports

(From Our Special Correspondents)

FALSE CONCLUSIONS AS TO PRICE TREND RETARD GOVERNMENTAL BUILDING

WASHINGTON, D. C., Aug. 9.—Baseless conclusions of Representative Langley and associates that a recession in price of materials may be expected by Jan. 1 is proving one of the greatest detrimental factors in the governmental building program. Secretary of the Treasury Glass has forwarded a letter to Congress showing that 114 buildings can be constructed when the committee takes action and reports the omnibus bill to Congress carrying the necessary appropriations.

The Supervising Architect of the Treasury stated this week that all drawings and specifications have been completed. These plans could be placed on the market for bids by Sept. 1. The aggregate limit of cost was fixed in 1913. The enormous increases in the prices of materials and labor have not been considered thoroughly by the House committee. Secretary Glass has called attention to the fact that the limit of cost as fixed has been based on pre-war conditions. He stated that all proposals received for Government buildings exceeded the amount available.

It will require about \$3,800,000 increase in the limit of cost. Reports of the Supervising Architect show more than 50 buildings in various stages of completion throughout the country.

CHICAGO, ILL., Aug. 11.—While business in the city has received a severe setback because of the continuation of the lockout of the building trades, the closing down of the lumber and building material yards, and the strike of the railroad shopmen, there is an active demand from the outside consuming industrials. Orders in the hands of jobbers and wholesale distributors show substantial gains in volume over those of the corresponding period last year. Throughout the Middle West there is a disposition to buy liberally, notwithstanding prevailing prices.

Workers and employers in the building trades are still at loggerheads, although it is believed by many that a settlement is close at hand. The workers, through an attorney, have complained to States Attorney Hoyne concerning the action of the building material yards in refusing to sell to independent contractors. They claim this action is a conspiracy. The dealers say they acted alone and argue that if it is legal for one union to strike in sympathy it is legal for material dealers to close down in sympathy with the employers. In the meantime building is at a standstill in Cook County.

An exodus of carpenters and other craftsmen to other cities is reported. The union officials say that of 20,000 who normally work in Cook County, not more than 12,000 are left, and a shortage of labor is feared when eventually the differences are settled. It is estimated that 12,000 men are idle in the Calumet and Joliet districts and Gary, Ind., because of the strike of the railway shopmen. Many of

(Continued on page 228-A)

Department of Architectural Engineering

Placing an Old Building on a New Financial Basis

By H. CRAIG SEVERANCE, *Architect*

IT is very doubtful whether the splendid possibilities in the reconstruction of old buildings is fully realized by either the architect or the owner. It would seem, therefore, that the architect should become better acquainted with these so that he may the more intelligently advise his client as to the best method of procedure, when the opportunity arises.

The building described in this article is by no means an extreme example of what may be done, but is typical of many structures possessing equal, if not greater, possibilities, for earning increased revenue when wisely reconstructed.

The Welles Building, here illustrated, is located at No. 18 Broadway, in the lower end of Manhattan Island. As development in Manhattan started down town and progressed northward, it is but natural that the oldest structures are to be found in this section, and it was also natural that when the forerunner of the modern skyscraper was conceived, such structures should first make their appearance in this locality. High buildings at that time were largely experiments, the architects having no precedents to work by, and these pioneer buildings were often badly,

yes, even most wastefully planned. To-day the architect seeks to design for his client a building that is an economic success, one that will bring a profitable return, but that seems hardly to have been the case during the early days of the high building.

The Welles Building was erected some thirty-

five years ago, when men were beginning to doubt the wisdom of the City Fathers in using a cheaper grade stone instead of marble for the rear façade of City Hall, it having been the belief that the city would never grow further north than the Hall. Ground values were nowhere near their present high levels, taxes were moderately low, and the cost of building materials and labor ridiculously small compared with present prices. The result

seemed to be an almost wanton waste of floor space in planning this building, which, coupled with a fondness for large story heights produced a structure giving a minimum return on the investment.

Of course while the economic conditions previously mentioned still obtained, the owner did receive a moderate return on the money invested, but when property values advanced, as well as the cost



UPPER PART BROADWAY FACADE, WELLES BUILDING,
NEW YORK CITY

Two upper stories are new
SEVERANCE & VAN ALLEN, ARCHITECTS

THE AMERICAN ARCHITECT



ELEVATION OF BROADWAY FRONT, WELLES BUILDING, NEW YORK CITY, SHOWING WORK ON ADDITIONAL STORIES IN PROGRESS

of construction, the assessed valuation of the property increased in like proportion, and the tendency of the tax rate to mount higher and higher caused a financial burden that could not be entirely offset by increased rentals. The return on the estimated value of the property dropped to such an extent that the building threatened within a few more years to become a liability rather than an asset.

When such a stage is reached, two courses are usually considered, namely, either to dispose of the property, which is usually accomplished at a sacrifice, or, having decided that the building has outlived its usefulness—is really dead so far as realty values are concerned—to tear it down and erect a taller building planned to bring in an adequate financial return. The second course naturally re-

quires strong financial backing and is not always possible. In the case at issue the building was sold. The new owner, while ready to admit that something was wrong with a property bringing in such a small annual return, was not inclined to have it torn down and replaced. In other words, he believed the property was ailing but not dead. Accordingly he called in the doctor rather than the undertaker, in this case the architect, and not the house wrecker.

The problem to be solved was: "What is wrong with the property?" and "How can it be remedied?"

A careful survey was made of the building, which is L shaped in ground plan, covering a ground area of approximately 14,000 sq. ft., with a frontage on Beaver Street as well as on Broadway, constructed with heavy masonry bearing walls, wrought iron beams, girders and columns, and segmental terra cotta floor arches. Comparison of rental values per square foot of floor area was made with other properties in the same locality and it was found that the ground floor was being rented at altogether too low a figure. An increase here, while improving matters somewhat, would not solve the



UPPER PART BEAVER STREET ELEVATION, WELLES BUILDING, NEW YORK CITY. ADDITION TO ORIGINAL BUILDING CLEARLY SHOWN

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problem. The answer to the first question undoubtedly was: "Insufficient rentable floor area," and to the second: "Additional rentable floor area must be added, and rentals increased where too low." The remedy was applied in a two-fold manner: first by making available for renting purposes all the space which had been rendered unproductive by the original designers of the building, and secondly by adding two new stories to the structure.

The first part of the solution or remedy involved no intricate structural problems and consisted in part of removing coal storage bins, boilers, generators and other mechanical equipment in the cellar. Alterations were made to the heating plant so as to utilize the supply of the New York Steam Heating Co., whose lines run along Broadway, and all electric current is now supplied by the New York Edison Co. The basement was then altered for use as a restaurant and is now occupied as such, adding many square feet of rentable floor space.

In both the Broadway and Beaver Street sections a large opening was originally left in each floor, for a light well and in the roof directly over each series of openings which formed a partially inclosed shaft, was located a large skylight. The intention of the designers in making such an arrangement was to provide light to the interior corridor and a few offices, but it so happens that these light wells are practically useless as far as this original intent is concerned. The well opening in the Broadway section is 700 sq. ft. and in the Beaver Street section 600 sq. ft. These openings, which are now being framed and floored over, can be provided with natural light by means of windows in the side walls. Such added floor areas will be inclosed with interior partitions and utilized for office purposes, thus adding in each story 1300 sq. ft. to the rentable area.



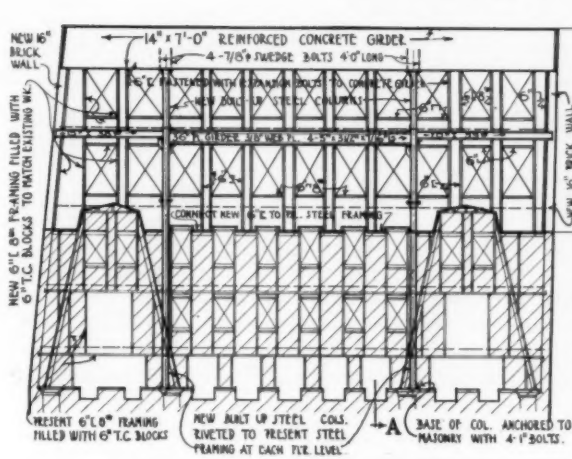
REINFORCED CONCRETE STRUCTURE, SUPPORTING TANKS. NOTE CONCRETE GUSSETS AFFORDING ADDED RIGIDITY

The second part of the solution, consisting of increasing the height of the building, was more intricate and required considerable study. It was not thought advisable to carry up the interior bearing walls, so interior columns of several different types, as shown in the accompanying drawings on page 224 were provided. These new columns were arranged, so far as possible, to fit in with the interior arrangement of the new tenth and eleventh stories.

These two additional stories were originally designed in steel, with reinforced cinder concrete floor slabs. The alteration was made in the latter part of 1918, when it was very difficult to obtain sufficient structural steel as needed. Inasmuch as the new portion of the building was to be occupied by a firm engaged in supplying materials to the Government, it was possible to obtain a small amount of structural steel and as large a quantity of reinforcing steel bars for concrete as was necessary to complete the work. It was therefore decided to redesign the work in reinforced concrete. Having in mind the oft-repeated objection to the use of this type of construction for office buildings, especially of irregular plan, it was an agreeable surprise to obtain such satisfactory results.

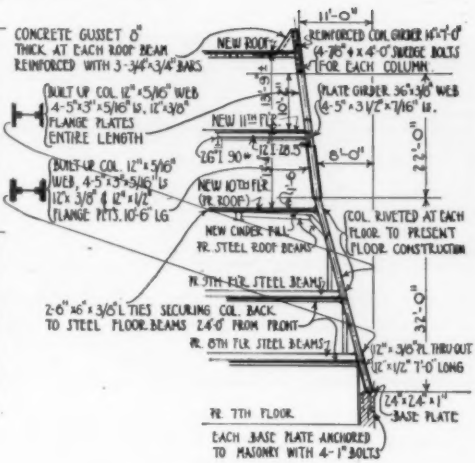


INTERIOR OF ELEVENTH STORY LOOKING TOWARD BROADWAY FRONT. LOWER PART OF CONCRETE GIRDER CAN BE SEEN ALONG FRONT WALL PROJECTING BELOW CEILING LINE.

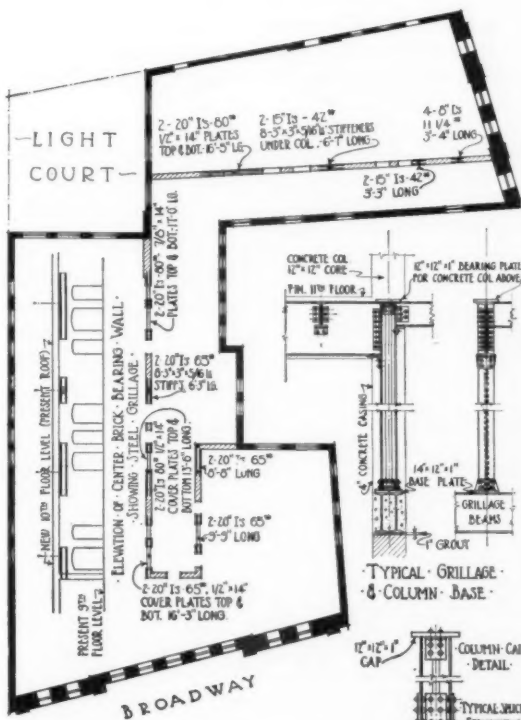


ELEVATION OF BROADWAY FRONT

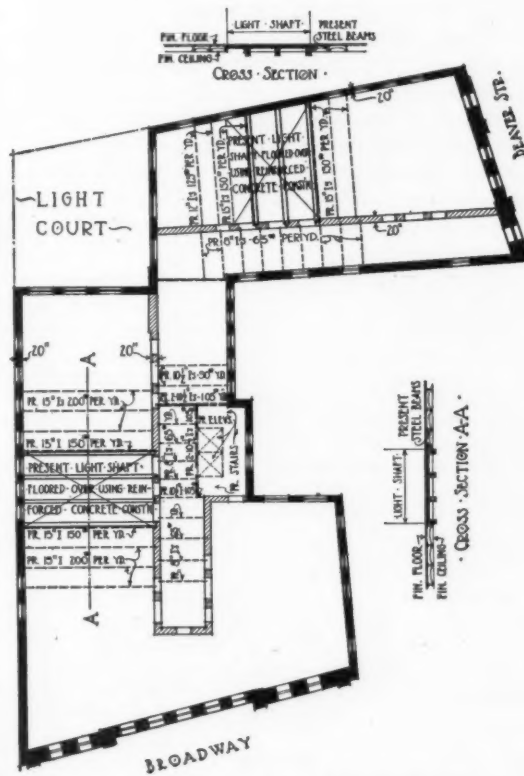
STRUCTURAL STEEL CONSTRUCTION



SECTION ON LINE A

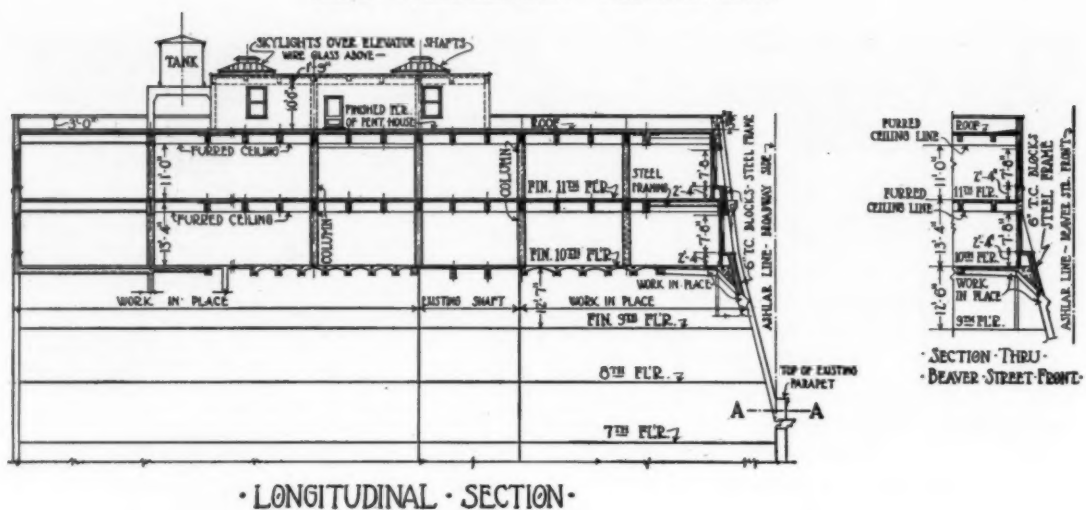


COLUMN GRILLAGE PLAN UNDER 10TH FLR.



FLOOR OVER LIGHT SHAFTS 8TH & 9TH FLOORS

ALTERATION TO WELLES BUILDING, 18 BROADWAY, NEW YORK CITY
SEVERANCE & VAN ALLEN, ARCHITECTS



struction is filled in with 6-in. terra cotta blocks, plastered on the inside and covered with copper on the outside to match the old work.

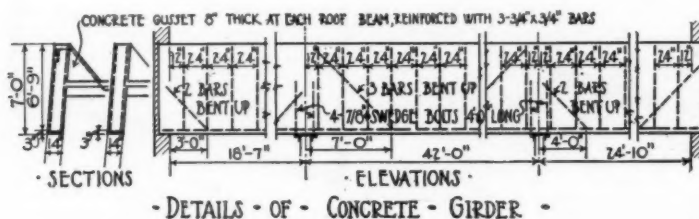
The roof framing plan is shown on page 224 and the layout of the eleventh floor framing is similar except at the front where steel framing was used, and the beams, girders, etc., are designed to support a heavier live load. The appearance of the finished building after alterations is illustrated in the photographs on page 221.

The soundness of the investment is proved by the following figures:

Value of land and building prior to alteration	\$650,000
Annual net income, deducting taxes and operating expenses	15,000
Interest on investment	2 2/3 %
Cost of alterations	300,000
Estimated present value of land and building	1,000,000
Annual net income after making alterations	180,000
Added annual revenue due to alterations	165,000
Interest on money expended upon alterations	55 %
Present interest on total investment	18 %

From the foregoing it will be seen that while the expenditure may seem high, amounting to 46 per cent of the original value of the building and ground, yet the amount by which the annual revenue is increased is sufficient to amortize the entire cost of alteration in two years, assuming the money to be borrowed at 5 per cent interest, after which the added revenue would be clear profit.

There is no reason why numerous properties in the same condition cannot be placed upon as sound a financial footing as that here described, by the judicious expenditure of the necessary cost of such alterations as are advisable to accomplish the end in view. Such reconstruction work is beneficial not only to the individual owner of the property affected, but also the community at large. It makes available additional space, now much needed; it provides added revenue to the municipality in the form of increased taxes; and, in common with all construction work, it tends to some extent at least to lower the cost of materials by making increased production possible.



Rhine Bridged in Record Time by U. S. Army Engineers

DURING the period of occupation of German territory by American troops the time is being devoted to useful training. American Army engineers are engaged in friendly competition at the Ponton School at Hönningen, Germany, and are establishing enviable records in constructing ponton bridges across the Rhine. Two such records but lately made are reported in a recent issue of *Engineering News-Record* by the army officers concerned.

The achievement of the Second Engineers shown in the accompanying illustrations is described therein by Captain James M. Farrin as follows:

American engineers built a bridge across the Rhine at Hönningen on May 25, 1919, in 58½ minutes. The structure, shown in the two airplane views, was a ponton bridge and was put up by the Second Engineers of the Second Division of the Army of Occupation. One of the pictures shows the entire structure completed and was taken from an altitude of 1000 m., while the other from an altitude of 200 m. shows the progress of the con-



AMERICAN BUILT PONTON BRIDGE ACROSS THE RHINE
AT HONNINGEN, GERMANY

struction, the disposition of the working parties, and other details of the bridge.

The 3rd Corps Ponton Bridge School is located at Hönningen, where has been collected a large supply of German ponton material, and where also each engineer regiment of the 3rd Corps sends details for a 10 days' instruction course. The Rhine at this place is 1440 ft. wide and has a current of nearly 7 km. per hour. It is approximately 25 ft. deep in mid-channel, and in general has a rocky bottom. These facts alone are sufficient to make its bridging no easy matter.

Authority had been secured to suspend all traffic on the Rhine in this vicinity for two hours on Sunday morning, May 25. At 9:15 a. m. on that day the abutment was started, and at 10:13½ a. m. the last side-rail lashing was finished. The method of "successive pontoons" was used throughout; the average time for the construction of a bay being 1¼ minutes. The construction proceeded without mishap and with clock-like precision to a junction in the center, where the bridge was closed without any difficulty whatever.

Each boat was equipped with a 125-lb. anchor, which was cast at a point about 150 ft. upstream from the bridge. In such a swift current and with a rocky bottom it was expected that some of the anchors would drag, but fortunately this only happened in one case. This boat was quickly pulled back to position by a launch stationed nearby. In addition to the boat the anchors there were 500-lb. anchors placed in mid-stream as a safeguard, and every fourth boat had a down-stream anchor.

The equipment used in the construction was all captured German ponton equipment, and consisted of 91 steel boats and 3 trestles, making 95 spans in all, of which 49 were laid



AMERICAN ARMY ENGINEERS CONSTRUCTING RHINE
PONTON BRIDGE, PHOTOGRAPHED FROM AIRPLANE

THE AMERICAN ARCHITECT

from the right hand bank and 46 from the left; 665 pieces of 6 x 4 in. by 18 ft. balk; 1615 pieces of 1½-in. flooring plank; 190 pieces of 6 x 4-in. guard rail and 1330 pieces of ½-in. lashing.

Soon after the bridge was completed, Battery B of the Twelfth Field Artillery crossed with full equipment.

The Ponton School at Hönningen was established by Col. H. C. Fiske, Chief Engineer, 3rd Corps. The bridge detail comprised 400 men, half of whom had received 10 days of training, the other half only 3 days. The ends of the bridge were in charge of Capt. William C. Atwater, Company F, and First Lieut. Lyman McE. Chase, Company D, working under the direction of Maj. Theodore Wyman, Jr., and with the supervision of the regimental commander, Col. Stuart C. Godfrey.

Two weeks later the First Engineers lowered this splendid record by approximately seventeen minutes, accomplishing the feat in the remarkable time of 41 min. 8 2/5 sec. The best previous record made by the Germans under the same conditions was more than twice as long, being 1 hr. 30 min.

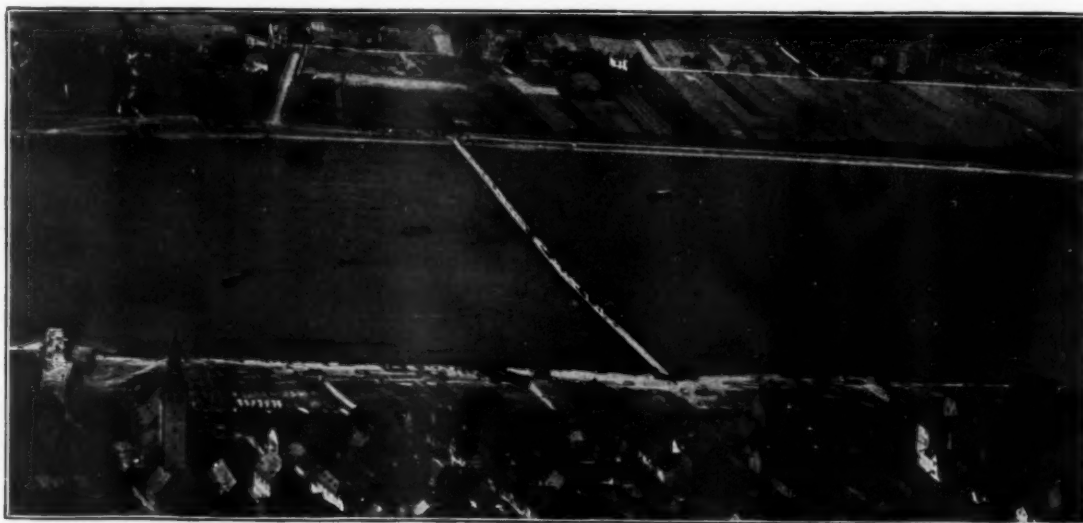
First Lieutenant Sam H. Andrews, U. S. Engineer Corps, in reporting the event states in part:

On June 8, at Hönningen, Germany, the First U. S. Engineers, commanded by Col. E. J. Atkinson, by bridging the Rhine River in 41 min. 8 2/5 sec., accomplished a feat which should be made known to the entire engineering world.

The bridge was built by successive bays from both banks of the river. The material was piled on the bank and the men were in company formation when the signal to start was given.

Every man of every detail was working 100 per cent efficient to beat the splendid record established by the Second U. S. Engineers when they completed the bridge with the same material at the same place and with the same number of men in 58½ minutes.

The bridge was designed to carry divisional traffic, including artillery, and immediately after the completion of the structure a long line of automobiles together with foot troops crossed to the other shore.



COMPLETED PONTON BRIDGE ACROSS THE RHINE AS SEEN FROM AN AIRPLANE, 200 METERS UP



Stained with Cabot's Stucco Stains
Harland A. Perkins, Architect, Boston

A Four-Year Record of Cabot's Stucco Stains

Gentlemen: Wakefield, Mass., November 11, 1911.
Last spring I used over two hundred gallons of your Waterproof Cement Stains on Miss Boit's new house at Wakefield. This was a job I was very particular to have right, and I am glad to say your material has proved entirely satisfactory in every way.

JAMES F. SHERRITT.

Four Years Later:

In September, 1915, an examination of the Boit residence by an expert decorator showed that the Cabot's Cement Stains had worn so well and grown so soft and beautiful with age that he advised against re-coloring the stucco when the other parts of the house were painted. This is typical of the results obtained. These Stains tint stucco surfaces in soft, rich colorings that grow more charming under the action of the weather.

CATALOG SENT ON REQUEST

SAMUEL CABOT, INC., Manfg. Chemists, Boston, Mass.

1133 Broadway, NEW YORK

24 West Kinzie St., CHICAGO

Cabot's Quilt, Waterproof Cement and Brick Stains, Conserve Wood Preservative, Damp-proofing, Water-proofing

5-5



Where Color Counts

TUDOR-STONE

Roofing Slate

is available in a great diversity of satisfying blendings. Greens, grays, browns, mottled shades, purples, russets, etc., and all with the remarkable Tudor-Stone texture.

THE RISING & NELSON SLATE CO.

Since 1869 Miners and Makers of High-grade Roofing Slates

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ARCHITECTURAL WOODWORK
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CHURCH, BANK AND OFFICE
INTERIORS AND CARVINGS

SHIP AND YACHT JOINERY
PERIOD MANTELS, STAIRWAYS
SPECIAL FURNITURE AND
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HARRIMAN QUALITY WOODWORK

A Uniform Temperature Day in and Day Out

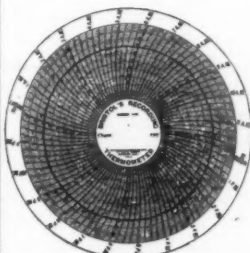


Chart Showing Even
Temperature Obtained.

A system that will control the steam supply in public buildings, hotels, office buildings, residences, apartments, etc.

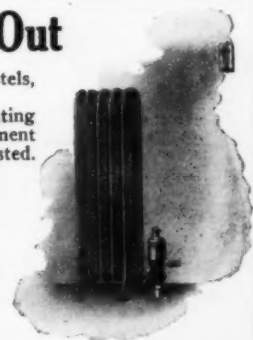
Gold's Thermostat is operated entirely by electricity from the lighting circuit. The Thermostat will shut off the steam at the right moment and use just enough steam to properly heat the room. None is wasted.

GOLD'S THERMOSTATIC HEAT REGULATING SYSTEM

uses no compressed air, eliminating the expensive installation and maintenance of an air compressor, air lines, etc. One Thermostat will control a number of radiators. The construction and operation is simple. Costs little to install and saves its cost many times over. Architects are invited to send for detailed description.

GOLD CAR HEATING & LIGHTING CO.

Whitehall Building, 17 Battery Place, New York



Application of Electric valve to radiator

THE AMERICAN ARCHITECT

Building Material Market Reports

(Continued from page 220)

these are affiliated with the steel workers' union. In Gary, nine blast furnaces, all rolling mills, coke ovens and plate mills, are down.

Regarding business conditions during July, *Manufacturers' News* says:

"The month of July was one of the most prosperous ever experienced by the industries of the Chicago district. This applies not to a few selected lines of business, but to all of them.

"On top of active present trade have come orders of some magnitude for future delivery, especially in the iron and steel industry. The most important order received is for approximately 26,000 tons of bars, shapes and plates, to be used for car repairs.

"Conservative authorities place the recent increase in steel mill operations at 15 per cent, which is a magnificent record, in view of the fact that structural steel has been

in moderate demand and that the railroads have placed no orders except for repair work."

A warning that measures must be taken to stabilize prices rather than to sharply readjust them, and optimism over the business and economic future, characterize the annual business review just issued by the Continental & Commercial National Bank.

"In all lines of trade where prices are fairly firm, the outlook for business is pronounced good," says the report. "What is needed is stability rather than any sharp and extended readjustment. Stability of prices for any considerable period would reassure both wage earners and employers."

The report says that lowering the standard of living by artificial methods makes for popularity, but ignores economic principles, thus setting aside temporarily the law of supply and demand. "The building industry, while disturbed here and there by strikes and wage controversies, is gradually expanding. In the iron and steel industry the present volume of orders is less than in normal times, but the demand for iron and steel for peace-time products is rapidly increasing in volume."

Late Quotations in Building Material Markets

(Price quotations now current on building materials and supplies as noted by dealers and jobbers for delivery in New York and Chicago follow. The quotations set forth are placed before readers of THE AMERICAN ARCHITECT to afford an accurate review of market conditions rather than for use as a basis for actual purchase. They will not only provide knowledge of the exact state of the market as to items quoted, but will also present a basis to judge conditions as affecting correlating materials. Items marked (*) indicate an advance over last week, while those marked (†) record a decline. Other prices did not fluctuate during the week.)

BRICK		New York	Chicago
Face brick (delivered on job):			
Common (Delivered at job in Borough of Manhattan only), per thousand.....			
Rough red	\$17.85	\$12.00	
Smooth red	29.00	40.00	
Rough buff	26.00	40.00	
Smooth buff	32.00	40.00	
Rough gray	38.00	42.00	
Smooth gray	40.00	42.00	
Colonials	24.00	30.00	

BROKEN STONE		New York	Chicago
(Delivered on job):			
1½ in. per cu. yd.....	\$2.75	\$2.50	
¾ in. per cu. yd.....	2.75	2.50	

BURNED CLAY		New York	Chicago
(Delivered on job)			
Block partition:			
3 in., per sq. ft.....	.13	.10	
4 in., per sq. ft.....	.15	.11	
Chimney tops:			
12 x 12 for 8 x 8 flues.....	\$3.50	\$2.25	
Flue lining:			
4½ ft. x 13 ft., per lin. ft.....	.24	.12	
4½ x 8½, per lin. ft.....	.18	.16	
8½ x 8½, per lin. ft.....	.24	.16	
8½ x 13, per lin. ft.....	.35	.20	
13 x 13, per lin. ft.....	.60	.45	
8½ x 18, per lin. ft.....	.60	.50	
13 x 18, per lin. ft.....	.95	.75	
18 x 18, per lin. ft.....	1.25	.85	
Wall coping (double slant):			
8 in., per lin. ft.....	.18†	.14	
12 in., per lin. ft.....	.33	.26	
18 in., per lin. ft.....	.54	.30	
Wall coping (single slant):			
8 in., per lin. ft.....	.16	.14	
12 in., per lin. ft.....	.26½	.30	
18 in., per lin. ft.....	.54	.30	

Hollow Tile		New York	Chicago
(Delivered at job, in New York below 72nd St.)			
2 x 8 x 12 partitions, per 1,000 sq. ft.....	\$70.15		
3 x 12 x 12 partitions, per 1,000 sq. ft.....	102.00	\$67.90	
4 x 12 x 12 partitions, per 1,000 sq. ft.....	114.75	72.50	
6 x 12 x 12 partitions, per 1,000 sq. ft.....	153.00	99.60	
8 x 12 x 12 partitions, per 1,000 sq. ft.....		135.80	
10 x 12 x 12 partitions, per 1,000 sq. ft.....		167.50	
12 x 12 x 12 partitions, per 1,000 sq. ft.....		194.60	
2 x 12 x 12 split furring, per 1,000 sq. ft.....	63.75	45.30	

CEMENT		New York	Chicago
Per bbl. in 20 cent bags (Rebate 80c. per bbl. for bags in New York), 15 cent bags in Chicago (Rebate 60c. per bbl.).....			
	\$3.43	\$3.00	

COPPER SHEETS		New York	Chicago
At the mill, hot rolled, 16 oz. base-price, per lb.....			
(From jobber's warehouse add 2 to 3 cents.)	33½c.	33½c.	
Cold rolled per lb.....	35½c.	35½c.	
From stock in 100 lb. lots and over.....	35½c.	37½c.	
For less than 100 lb. lots 2c. per lb. advance.			
Polished, 20 in. wide and under, 1c. per sq. ft. extra; over 20 in. wide, 2c. per sq. ft. extra. Planished, 1c. per sq. ft. more than polished.			
Bottom, pits and flats, 1 oz. and heavier, per lb.....	44c.*	44c.*	
Tinning one side, per sq. ft.....	.06c.	.06c.	

CORNER BEAD		New York	Chicago
Per foot	.02	.05	

FIBRE		New York	Chicago
Per bushel	.36	.30	

FINISHED IRON AND STEEL		New York	Chicago
(Mill Shipments)			
Bar iron, refined grade.....	2.77c.	2.62c.	
Bar iron, double refined.....	3.77c.	2.62c.	
Soft steel bars.....	2.79c.	2.62c.	
Shapes	2.72c.	2.65c.	
Plates	2.92c.	2.65c.	

GALVANIZED SHEETS		New York	Chicago
No. 18 and 20 gauge, per lb.....	\$6.40	\$6.37	
No. 26	6.70	6.67	
No. 27	6.85	6.82	

GLASS		New York	Chicago
(Discounts from manufacturer's price lists)			
Single strength, A quality, first three brackets.....	77%	77%	
Single strength, B quality.....	77%	77%	
Double strength, A quality.....	79%	79%	
Double strength, B quality.....	81%	81%	
Plate—up to 5 sq. ft.....	.82%	.80%	
Plate—over 5 sq. ft.....	.84%	.80%	
Plate—up to 10 sq. ft.....		.80%	
Plate—over 10 sq. ft.....		.80%	
Polished plate glass (commercial run of thickness and quality) sizes to 5 sq. ft. inclusive.....	.80%		
Sizes over 5 sq. ft.....	.82%		

GRAVEL		New York	Chicago
1½ in. (Borough of Manhattan only), per cu. yd....	\$2.75	\$2.50	
¾ in. (Borough of Manhattan only), per cu. yd....	2.75	2.50	

GYPSUM		New York	Chicago
Plaster Board:			
Delivered at job, Boroughs of Manhattan and Bronx.			
27 x 28 x 1.....	37c.		
27 x 48 x ½.....	34c.		
32 x 36 x ½.....	22c.	25c.	
32 x 36 x ¾.....	22c.	27½c.	
32 x 36 x 1.....	24½c.		
Plaster Blocks:			
Delivered at job, Boroughs of Manhattan and Bronx.			
2 in. sold, 12 x 30, per sq. ft.....	.11c.		
3 in. hollow, 12 x 30, per sq. ft.....	.11c.	10c.	
4 in. hollow, 12 x 30, per sq. ft.....	.12½c.	11c.	
6 in. hollow, 12 x 30, per sq. ft.....	.18c.		

LATH		New York	Chicago
Eastern spruce, per thousand.....	\$7.50†		
No. 1 white pine, per thousand.....		\$7.50	
No. 1 hemlock, per thousand.....		6.50	
No. 1 yellow pine, per thousand.....	7.50		

(Continued on page 228-B)



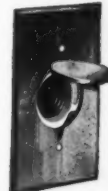
Electricity on the Porch

HOME-BUILDERS frequently neglect proper provision for electrical convenience on the verandahs and sleeping porches of their dwellings—and then regret it later. Porches should be adequately lighted with control switch indoors. A locking switch on the porch also is frequently desirable. Receptacles of a type protected against the weather should also be provided for table lamps, fans or portable cooking devices. This is particularly desirable in suburban homes where outdoor afternoon teas are a popular summertime diversion.

The G-E line includes wiring devices for all such uses. Your electrical contractor or consulting engineer will help you select the ones best suited to the installation.

**G-E RELIABLE
WIRING DEVICES**
*can be furnished by any reputable
electrical contractor*

The name General Electric Company on an electrical device is a guarantee of quality backed by over a quarter-century's experience in the generation, transmission, distribution and application of electricity.



Single door flush receptacle.



Flush switch locking type, preventing unauthorized use of light.



"Double flush 'standard' plug receptacle.

General Electric
General Office **Company** Schenectady, N.Y.

THE AMERICAN ARCHITECT

Building Material Market Reports

(Continued from page 228-A)

	LEAD	New York	Chicago
American pig, per lb.	6 1/2 to 7c.	6 1/2 to 7c.	6 1/2 to 6 3/4
Bar, per lb.	8 to 9c.	8 to 9c.	6 1/2 to 6 3/4

	LIME	New York	Chicago
Common, 200 lb. bbls., per bbl.		\$2.50	\$1.50
Finishing, 300 lb. bbls., per bbl.		3.70	
Hydrated, in paper bags, per ton.		18.50	17.50

	LUMBER	New York	Chicago
(Retail prices per M, delivered.)			
Yellow pine, 2 x 4.	\$68.00	\$52.00	
Yellow pine, 2 x 6.	65.00	50.00	
Yellow pine, 4 x 4.	70.00	55.00	
Yellow pine, 8 x 8.	68.00	60.00	
Yellow pine, 12 x 12.	75.00	65.00*	
Yellow pine, No. 1 boards, 1 x 6.	80.00	65.00	
Yellow pine, B and better flooring (plain).	82.00*	75.00*	
Yellow pine, B and better flooring (quartered).	100.00	85.00	
Douglas fir, 6 x 6 to 12 x 12.	67.50	60.00	
Douglas fir, 12 x 12 to 14 x 14.	80.00*	72.00*	
Norway pine, 2 x 4.	60.00	55.00	
Norway pine, 2 x 12.	75.00*	60.00	
Hemlock, 2 x 4.	58.00*	52.00	
Hemlock, 2 x 12.	60.00	54.00	
Oak flooring, 13/16 quartered white.	200.00	167.50*	
Oak flooring, 13/16 quartered red.	190.00	145.00*	
Oak flooring, 13/16 plain white.	125.00	105.00	
Oak flooring, 13/16 plain red.	125.00	108.00*	
Maple, 1" F. A. S.	85.00	80.00	
Basswood, 1" F. A. S.	88.00	82.00*	
Maple flooring, 13/16 clear.	95.00	85.00	
Maple flooring, 13/16 select.	85.00	82.00	
Maple flooring, 13/16 No. 1 factory.	75.00	62.00	
Mahogany, 1" F. A. S.	300.00	300.00	
Quartered oak, 1" F. A. S.	200.00	185.00	
Plain oak, 1" F. A. S.	130.00	115.00*	
Red gum, 1" F. A. S.	100.00	95.00	
Sap gum, 1" F. A. S.	75.00	65.00	
Chestnut, 1" F. A. S.	95.50	90.00	
Poplar, 1" F. A. S.	135.00	120.00	
Birch, 1" F. A. S.	85.00	80.00	
Spruce, random 2"	62.00*	57.00*	
Spruce, wide 8"	65.00	60.00	
Spruce, 10"	70.00	65.00	
Spruce, 12"	75.00	70.00	

	METAL LATH	New York	Chicago
Under 100 sq. yd., per sq. yd.	40c.	35c.	

	MORTAR COLORS	New York	Chicago
Red, per lb.	.05	.05	
Brown, per lb.	.05	.05	
Chocolate, per lb.	.05	.05	
Black, per lb.	.05	.05	

	OILS	New York	Chicago
Linseed, city, raw.	\$2.25	\$2.48	
Linseed, boiled, advance, per gal.	.01	.02	
Out of town, American seed, at.	2.25	2.48	

	PAINTS	New York	Chicago
American white, in oil, kegs; lots over 100 lbs.	13c.	13c.	
White, in oil, 25-lb. tin pails; add to keg price.	14c.	14c.	
Red, bbl., 1/2 bbl. and kegs; lots over 100 lbs.	13c.	14c.	

	Dry Colors:	New York	Chicago
Red Venetian, American, per 100 lbs.	\$2.00 to \$4.50	\$2.00 to \$4.00	
Metallic Paints:			
Brown, per ton.	\$32.00 to \$36.00	\$24.00 to \$32.00	
Red, per ton.	35.00 to 40.00	24.00 to 32.00	

	PIPE	New York	Chicago
Cast Iron:			
6 in. and heavier.	\$52.30	\$53.80	
4 in.	55.30	56.30	
3 in.	62.30	68.80	

(Discounts to jobbers for carload lots on the Pittsburgh basing card; freight rates from Pittsburgh to New York, and also from Pittsburgh to Chicago, in carloads, per 100 lbs., are 27c. An additional 5 per cent discount is allowed to large jobbing interests over those listed below.)

	Wrought:	F.O.B. Pittsburgh	F.O.B. Chicago
Steel:			
Black, 1/4 to 3 in.	Butt Weld	50 1/2 to 57 1/2 %	42.6 to 49.6 %
Galv., 1/4 to 3 in.		24 to 44 %	14.6 to 34.6 %

	Iron:	F.O.B. Pittsburgh	F.O.B. Chicago
Black, 1/4 to 1 1/2 in.		29 1/2 to 39 %	19.6 to 29.6 %
Galv., 1/4 to 1 1/2 in.		2 1/2 to 23 1/2 %	9.4 to 11.6 %

	Steel:	F.O.B. Pittsburgh	F.O.B. Chicago
Black, 2 1/2 to 6 in.	Lap Weld	53 1/2 %	45.6 %
Galv., 2 1/2 to 6 in.		41 %	31.6 %

	Iron:	F.O.B. Pittsburgh	F.O.B. Chicago
Black, 2 1/2 to 6 in.		34 1/2 %	24.6 %
Galv., 2 1/2 to 6 in.		21 1/2 %	9.6 %

	Steel:	F.O.B. Pittsburgh	F.O.B. Chicago
Black, 1/4 to 3 in.	Butt Weld, Extra Strong, Plain Ends	46 1/2 to 56 1/2 %	33 to 43 %
Galv., 1/4 to 3 in.		29 to 44 %	10.6 to 18 %

	Iron:	F.O.B. Pittsburgh	F.O.B. Chicago
Black, 1/4 to 1 1/2 in.		28 1/2 to 39 1/2 %	
Galv., 1/4 to 1 1/2 in.		11 1/2 to 24 1/2 %	

	Steel:	F.O.B. Pittsburgh	F.O.B. Chicago
Black, 2 to 6 in.	Lap Weld, Extra Strong, Plain Ends	48 1/2 to 50 1/2 %	35 to 37 %
Galv., 2 to 6 in.		37 to 39 %	10 to 12 %

	Iron:	New York	Chicago
Black, 1/4 to 6 in.		25 1/2 to 34 1/2 %	
Galv., 1/4 to 6 in.		10 1/2 to 22 1/2 %	

	PLASTER	New York	Chicago
Neat wall cement in 15 cent bags, per ton.		\$21.30	\$19.00
Finishing plaster		24.00	19.00
Lath mortar, in cloth bags, per ton.		15.05	

	PUTTY	New York	Chicago
In bladders, per 100 lb.		\$6.25	\$4.25
In 1-lb. to 5-lb. tins, per 100 lb.		6.75	6.50

RADIATION
(A further discount, effective April 4, of 15% on direct radiators, 12 1/2% on wall radiators, and 10% on steam and hot water boilers is announced. This approximates a drop of 36% on radiators and 33% on boilers from prices in effect before the 1st of January, 1919.) Chicago reports a 57% discount on standard heights.

	REGISTER	New York	Chicago
Cast iron semi-steel or steel, in black or white japan or electro plate and small faces and borders.		40%	40%
Wall frames		40%	40%
Large faced, 14 x 14 in. and larger.		60%	60%
Base board registers		40%	40%
Base board intakes		40%	40%
White enameled goods		15%	15%
Solid brass or bronze goods, except grilles.		net	net
Grilles in black and white japan or electroplate in cast iron, plain lattice design—smaller than 14 x 14 in.		40%	40%
—Larger than 14 x 14 in.		60%	60%

	REINFORCING BARS	New York	Chicago
High carbon steel from mill.		\$48.50	\$49.50
Medium steel from mill.		48.50	49.50

	ROOFING MATERIAL	New York	Chicago
Tarred Felt Paper:			
No. 1—25 lbs. to 100 sq. ft., per ton.		\$62.00	\$75.00
No. 2—16 lbs. to 100 sq. ft., per ton.		63.00	75.00
No. 3—12 lbs. to 100 sq. ft., per ton.		64.00	75.00
Rosin sized sheathing, per ton.		60.00	65.00
Corrugated roofing, galvanized, 2 1/2 in. corrugation, over flat sheets, 30c. per 100 lbs.			

	ROSIN	New York	Chicago
Common to good, strained (wholesale), 80 lb. per gal.		\$18.75*	

	SAND	New York	Chicago
Mason, per cu. yd.		\$1.80	\$2.50
Torpedo, per cu. yd.		1.80	2.50

	SHINGLES	New York	Chicago
Red cedar, 5 to 2, clear, per thousand.		\$11.00*	\$7.00
White cedar, extra star, A star, per thousand.		10.00	7.00*

	SLATE ROOFING	New York	Chicago
Pennsylvania:			
Best Bangor	F.O.B. cars, Quarry Station	\$6.50 to \$9.00	\$10.20 to \$11.45
No. 1 Bangor Ribbon		6.75 to 7.25	9.20 to 9.70
Pen Argyl		7.25 to 9.00	9.70 to 10.45
Peach Bottom		10.00 to 12.50	12.45 to 14.45
No. 1 Chapman		7.25 to 8.25	8.70 to 9.95

	Vermont:	New York	Chicago
No. 1 Sea Green		3.50 to 6.75	5.95 to 9.00
Unfading Green		5.50 to 9.00	8.30 to 11.05
Red		13.00 to 16.00	14.80 to 22.80

	Maine:	New York	Chicago
Brownsville, U'f'g Black, No. 1		10.00 to 12.50	14.10 to 15.10
Slaters felt, 30 lb. roll.		.92	
Slaters felt, 40 lb. roll.		1.22	

	SPIRITS TURPENTINE	New York	Chicago
Per bbl.		\$1.75*	\$1.10

	STONE SCREENINGS	New York	Chicago
Lime, per cu. yd.		\$2.35	\$2.50

	STRUCTURAL STEEL	New York	Chicago
Beams and channel, 3 to 15 in., per lb.		2.72c.	3.47c.
Beams and channel, over 15 in., per lb.		2.72c.	3.57c.
Angles, 3 to 6 in.		2.72c.*	3.47c.
Zees and tees.		2.72c.	3.47c.
Steel bars, half extras, from mill.		2.35c.	3.37c.

	STUCCO	New York	Chicago
In cloth, per ton (white, mixed).		\$22.50*	\$19.50

	STUCCO BOARD	New York	Chicago
Medium weight stucco board, plain, per M sq. ft.		\$42.50	\$45.00
Medium weight stucco board, creosoted, per M sq. ft.		50.00	50.00
Heavy weight stucco board, plain, per M sq. ft.		55.00	55.00
Heavy weight stucco board, creosoted, per M sq. ft.		60.00	60.00
Medium weight stucco board, plain, narrow key, per M sq. ft.		50.00	50.00
Medium weight stucco board, narrow key, creosoted, per M sq. ft.		55.00	55.00
Insulating board, heavy felt background, per M sq. ft.		50.00	50.00

	SHEATHING BOARD	New York	Chicago
Heavy weight sheathing board, per M sq. ft.		\$50.00	\$50.00
Medium weight sheathing board, per M sq. ft.		45.00	45.00
Stucco or plaster board, sheathing board and insulating board are in rolls containing one sheet 25 ft. long and 4 ft. wide (100 sq. ft.)			

	WALL BOARD	New York	Chicago
Wall board, shipped any length, 4 ft. wide, per M.		\$45.00	\$45.00
Packages flat in cars if ordered in less than car lots. Add \$5.00 per M ft. for crating.			