# Southern Architect Building News

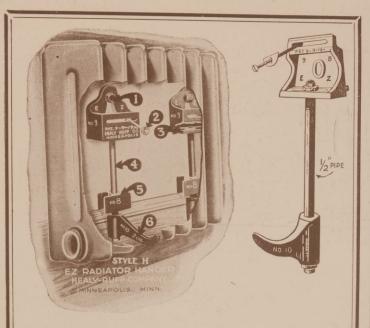
DALTON

AUGUST, 1922

**ATLANTA** 



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- Made for Wall, 1, 2, 3, 4, 5-Column, and Window Radiation.

Not Adjustable for Baseboards.

Very Reasonable in price.

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better than shades and awnings, cost

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# (P. 10) P. 4 (0) : X3 STEAM AND COMPLETE HOT WATER SATISFACTION ON ROOMS IN PRILABELINIA GURNEY HEATER MFG CONPANY IBB-200 FRANKLIN ST



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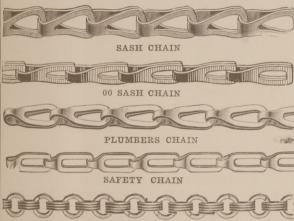


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The Shelby Spring Hinge Co.

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CABLE CHAIN

THE SMITH & EGGE MFG. CO.

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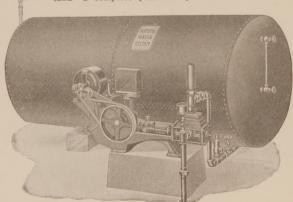
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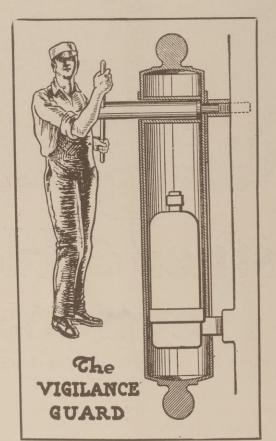
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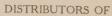
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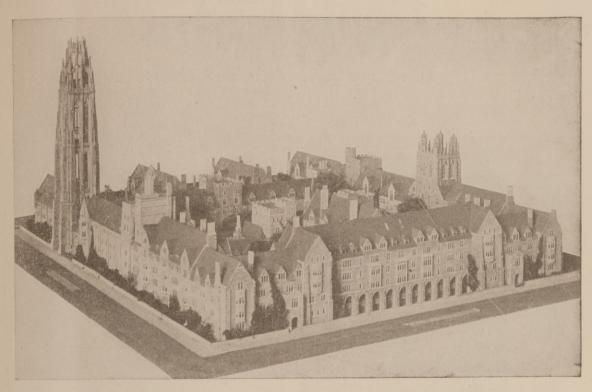
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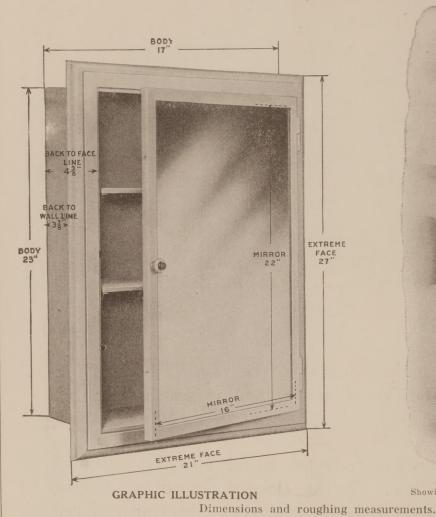
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Mirror, without Bevel \_\_\_\_\_16 in. x 22 in.

Wall Line to Face \_\_\_\_\_ Wall Line to Back \_\_\_\_\_ Opening required for installation 17¼ in.x23¼ in.x3% in.

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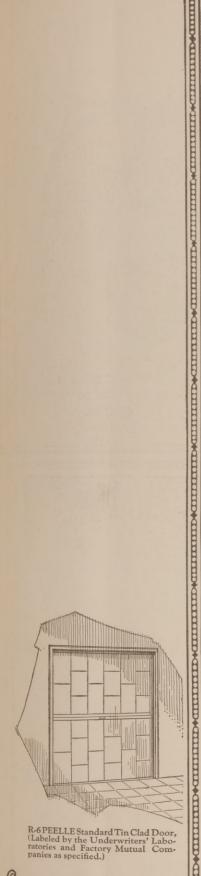
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# LIGHTING

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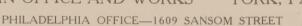
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# —"and so the specifications for the annex, too, called for

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Yes, "Ensley Basic Slag" was used exclusively as the coarse aggregate in the concrete. But of more significance still is the fact that the sterling qualities of Slag so evidenced themselves to the owners of the building and to the architects that recently, when plans for an important addition were completed, SLAG was given a vigorous Okeh in the specifications as to the type of coarse aggregate to be used.

NOTE: The original building, shown above, was built by Evans Bros. Construction Co.; Joy & Gallup, architects. The addition will be built by Smallman-Brice Construction Co. from plans drawn by Warren, Knight & Davis.

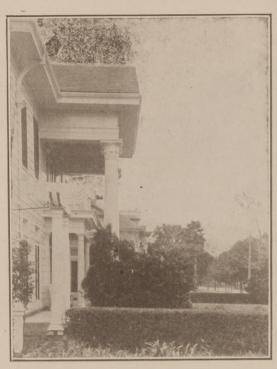
# Slag Concrete is practically Everlasting!

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ESTABLISHED 191

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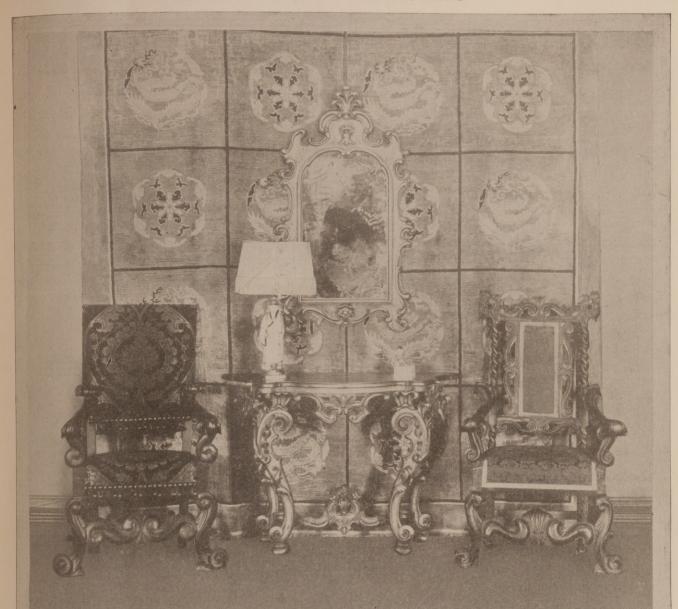
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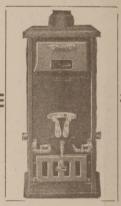
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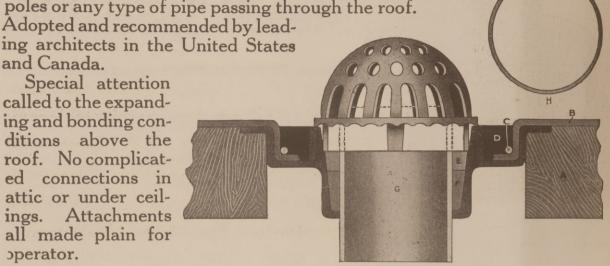
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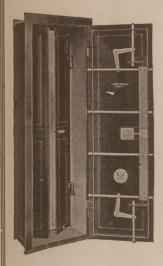
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Magnesite for Stucco

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# The Hall's Safe Company



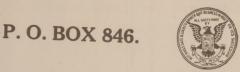
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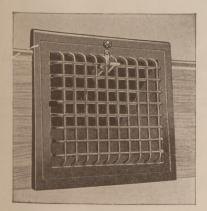
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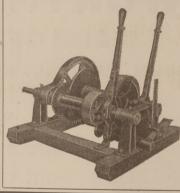
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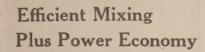
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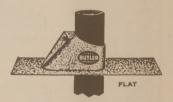


OVERTON Plumbers' Flashings are self adjusting to meet requirements on any roof AT ANY ANGLE. Turning or twisting to get proper adjustment is not necessary. Cut opening for soil pipe through the roof, lay flashing over same and the pipe will necessarily come through vertically; then tighten up the bolt and you have a WATER-TIGHT



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THE BIG IDEA consists of a V in the shoulder of the flashing which forms a metal spring that expands or contracts with the soil pipe. This assures a perfectly air-tight joint and one that does not require calking every year or two.



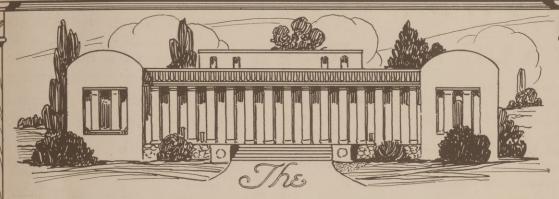
OVERTON flashings are so constructed that they will not leak even though located at a low point in the roof where snow and ice accumulate. All OVERTON flashings are adaptable for use on soil pipe both standard and extra heavy.

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## SOVTHERN ARCHITECT AND BVILDING NEWS

Construction

Landscape

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Published Monthly by

#### Industrial Press Publishing Co.

This paper is issued and mailed from our printing house at Dalton, Ga. Business Office, Atlanta, Ga. All letters should be addressed to the Atlanta office, 402 Trust Co. of Ga. Bldg.

H. E. HARMAN,

President.

E. R. DENMARK,

Editor.





Pacific Finance Building, Los Angeles. Dodd & Richards, Architects

This splendid office building is faced with a smooth brick of gold tone, and represents the highest type of fireproof commercial structure. The frieze of the building, in the form of a lofty top story, is embellished with charming brick pattern work.



# SOVTHERN ARCHITECT & BVILDING NEWS



August 1922



Vol. XLVIII. No. 8

# "The Drake," A Super Hotel

The Front Door, Planned to Receive Without Ostentation and to give the Traveler That Feeling so Beautfully Expressed by Shenstone—"The Warmest Welcome—at an Inn."

L ocation claims first consideration in the placing of a hotel. The site should be on a highway or at a junction of highways where many people pass. It should be in a neighborhood where it is pleasant to dwell. It should have light all around, good air, eye-pleasing views, be reasonably quiet, and easily and quickly reached from the railroad depots, the retail and wholesale stores of the city and the places of amusement.

The site of the new Drake Hotel in Chicago meets all these requirements and more; for in addition to its availability for city hotel it also has the qualifications for residental and resort hotel. It is where North Michigan avenue meets the Lake Shore Drive and Lake Michigan, and is directly on the great artery of travel to the north; a location which centers an aristocratic residence district, yet is within a few minutes of Lincoln park and the center of the city. It has light on all four sides and commands views combining city, country and open water in a delightful panorama.

The Drake sentinels the north end of the great "Boulevard Link" improvement, as The Blackstone sentinels the south end of the wonderful mile of buildings on Michigan Avenue that forms the greatest and most impressive sky-line of any city; the two hotels, only a few minutes apart by motor, linked by this wonderful highway, which also is bordered with two-miles of promenade, conceded to be the greatest pleasure walk in the

world; the drive illuminated at night with ropes of clusters of lights, and the great Wrigley Tower by the river a beacon diffusing its brilliance of ten thousand lights. The accompanying map is of the congested loop district and the lake front from the Field Museum at the south end of Grant Park to the south end of Lincoln Park, and centered with Yacht Harbor and Municipal Pier.

#### The Public Rooms.

In planning The Drake, a great deal of thought was given to arrangements for receiving guests, men an women, who may arrive travelstained, and prefer to make themselves presentable, so to speak, before entering the parlored rooms.

#### Making Arrival Inconspicuous.

In nearly all hotels heretofore built the clerk's desk has been located conspicuously in the main lobby, which is the hub—the center of life—in the hotel. To many people arriving after a long jouney by rail, boat, motor, or airplane, and travel-stained, the preference would be to arrive inconspicuously and be given opportunity for a bath and change of clothing before mingling with the well groomed guests already at ease in the hotel.

The solution of this problem, the making it possible for inconspicuous arrival, the booking and rooming away from the formal rooms, is solved, in The Drake, in a unique way. To explain fully, we call attention to the plans of the ground floor and main floor of the hotel, where

a study of the entrance vestibule on the ground floor plan and the entrance hall on the main floor plan, will show clearly how this semi-privacy is attained.

The main entrance is in the center of the Walton place front. The entrance vestibule opens to an easy flight of stairs to the Entrance Hall on the main floor.

Before taking an imaginary journey up this stairway we will investigate the immediate surroundings of the Entrance vestibule on the ground floor. To the left a corridor leads directly to the elevator lobby, so that guests of the house arriving and having no occasion to go to the business office, may take the elevator direct from this floor to bed room floor.

The corridor from the Entrance Vestibule lobby leads direct to the barbershop, a large, light room fronting on Walton place; and along-side it the public lavatory. The corridor turns and extends north, passing the ladies' hair dressing parlor and various shops to the Italian dining room and florist shop on the Lake Shore Drive front of the hotel.

#### Separate Entrance for Ball Room.

To the right of the vestibule is another feature of unusual interest, for here is the main entrance from the street to the Ball Room, this with separate door for ball patrons, also a separate lobby along which are the banquet reception conveniences as men's and women's check rooms, lavatories, and the like; the main stairway to Ball Room leading from the east end of this Ball Room lobby.

#### The Clerk's Desk and Business Lobby.

Now we will look at the main floor plan: We see the wide steps leading up to Entrance Hall directly facing the elevator lobby. To the right is the clerk's desk, inconspicuous, but with every convenience the arriving guest can desire. There is the room clerk, the information clerk, the cashier, the porter, the check room, every facility for arriving in comfort and making arrangements for the stay, in a quiet, businesslike way that lends a touch of friendliness, and makes the big house home from the start. To the right of the clerk's desk is a further extension of the business end of the hotel, this also inconspicuous. The business lobby is lined with cigar-stand, news-stand, railroad ticket office and telegraph office on one side, and the check room and telephones on the other side, and extends to the ladies boudoir, a unique room appreciated by the women guests. The corridor at its far end opens to Entrance Hall.

#### Entrance Hall an Architectural Dream.

The Entrance Hall is really the hub of the

house. The room is an architectural dream; its walls of Bedford stone; its floor of Tennessee marble, rug covered; its ceiling a sky-light framed in richly carved panel in polychrome; the walls topped with a ribbon frieze with design in polychrome; the chandeliers in the form of wrought bronze; the distribution of palms, flower boxes, and specially designed furniture combining to make it one of the most attractive front doors, so to speak, of any that has ever been designed for a hotel.

#### Reception Court.

From this entrance hall one mounts a few steps to the left and the glory of the main floor is opened to the fascinated eye.

Here is the Reception Court, finished in Italian renaissance style, and centered with a fountain; the ceiling a rolling sky-light by which, on pleasant days, this court is converted into an open air Italian garden. The walls of the court finished in palm-finish plaster, which is a plaster in an ivory shade put on by hand, its irregular surface showing the hand print, and giving to it the name "palm" finish. It is a most pleasing finish, rich, quiet, and one that harmonizes with every style of decoration and furnishment. The columns are of scagliola, dark colored, and beautifully veined. A profusion of tree palms and flower boxes complete the garden effect.

Leading off this Reception Court are two wonderful rooms, the like of which are not to be found in any other hotel. One of these, to the east of the Reception Court, is the Ladies' Lounge and Library; the other, to the north, is the Avenue of Palms.

#### The Ladies' Lounge and Library.

The Ladies' Lounge and Library is a reproduction of Haddon Hall, the mansion of the dukes of Rutland in Derbyshire, England, and a notable example of medieval residence of a great English proprietor. The room is finished in oak, the walls in palm-plaster finish, the ceiling in a beautiful scroll pattern in relief, the pillars oak paneled, the bookcases carved oak, the cozy corners inviting in their atmosphere of comfort. At each end of the room a Gothic mantel with hearth fire-place. The windows richly draped; the furniture a combination of old and new, luxurious, satisfying; the color scheme soft and eyepleasing; the illumination soft and for eye comfort—all in all a room combining the artistic, the refined, the restiful atmosphere in a manner unexcelled by any other hotel rest room we have ever seen.

The Avenue of Palms is a revelation. Coming into it from the Reception Court there is brought to view a hotel main floor which for

Main Dining Room looking west, as seen from the balcony of Private Dining Room "B." Avenue of Palms is to the left; the windows to the right overlook Lake Shore Drive and Lake Michigan.





View from Entrance Hall looking west tow a r d Reception
Court. A corridor
to the left leads to
Ladies' Boudoir; also
to the telephones,
telegraph office, news
stand and other conveniences of the metopolitan hotel lobby.



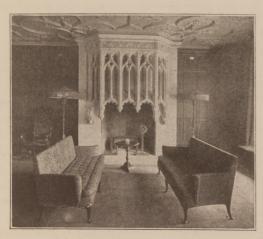
The Library and Ladies' Lounge, its architectural lines and finish a reproducton of Haddon Hall in Derbyshire, one of the most beautiful and famous rooms in historic England. The restful quality is emphasized.



Parlor and sun parlor of typical residential suite. The home quality is emphasized in the mantel and clock and pictures and the essence of neatness in decorative finish.



Another view of parlor and sun-parlor of a residential suite.



One of the two gothic open hearth fireplaces in the Library and Ladies' Lounge. Emphasizes cozy-corner comfort.



View from reception court towards Library and Ladies' Lounge.

spaciousness, for the thousand and one things that fascinate the eye, is incomparable.

#### The Avenue of Palms.

The Avenue of Palms is a corridor 60 feet wide by 140 feet long extending as a sort of dais overlooking the main dining room; the corridor so named—Avenue of Palms—because of its colonnade of Bedford stone and the two rows of palm trees bordering it from end to end. The ceiling is spandreled, the curved lines linking the columns, and extending beyond on either side. The floor is of Tennessee marble, rug covered; the color scheme of decoration, red and gold; the furniture reproductions of famous Italian patterns.

An idea of the view from the Avenue of Palms may be gleaned by consulting the plan of the main floor. Imagine oneself standing in the very center of the Avenue of Palms and facing the main dining room. Every way one looks, east, north, and west, there are windows opening either to Lake Michigan, Lake Shore Drive and park, or North Michigan Avenue.

# Main Dining Room; Club Grill; French Restaurant.

The main dining room, 54x165 feet, is five steps down from the Avenue of Palms and entirely open to the view; the Club Grill, 57x95 feet is to the left; the French Restaurant, 56x74 feet, to the right, and the corridor extending to the east leads direct to the open-air terrace 40x100 feet. There is no other view anywhere in a house of public entertainment that embraces so much of the so-called public rooms of the luxurous type with unobstructed view, and so uniformly pleasing a vista.

And here, too, we have not alone the view of wonderful furnishings and decorations, but also the lay-out for service. If we study the plan a little further, we will note that to the left of the Avenue of Palms there is a check room of generous size centered to care for the patronage of the main dining room and the Club Grill. Also we will observe at each end of the main dining room two generous spaces marked "service." These are pantries, hooked directly to the kitchen; one at each end of the kitchen, and so multiplying and speeding the service that the west end of the main dining room and the club grill are service centered for the waiters, and the east end of the main dining room and the French restaurant are also service centered for the waiters. these service pantries is equipped with tables, refrigerators, and silver, glass, and china cabinets for service aggregating one thousand persons at a time, two thousand in all.

The kitchen, by the way, is directly under the Avenue of Palms, and, so located, is convenient for all dining rooms on this floor, including the

Ball Room; and the provision is for service of three thousand at one time, when occasion, as New Year's Eve, may call for so great a catering feat.

The ceiling of the main restaurant is broken with three large rolling sky-lights so that in summer time it may be converted in a few minutes to practically an open-air dining room.

It is difficult to describe this dining room, but the accompanying illustration taken from a balcony at one end will give a fairly good idea of it. The architecture is pure Italian. The colonade of columns carry a spiral of vines. The color scheme is Neapolitan blue and gold and red; the drapings predominately red relieved with Italian puff shades; the chairs of gold and red; the floor of Tennessee marble with aisles carpeted; the chandeliers of crystal; the napery, glass, and silver of finest quality and beautifully patterned; a flower stand centering each table; the room temperatured for comfort. An orchestra stand is located at each end over the service pantry.

The French Restaurant is located in the northeast corner of the Main Floor. It is a cheerful, beautifully decorated room in Louis XVI period, the color scheme light blue and ivory, harmonizing with dark blue rug and crystal chandeliers. Its east windows open to a terrace 40x100 feet, which is gardened and used for al fresco tea, also for promenade. This terrace is also entered direct from the ball room windows. The French Restaurant is utilized largely for breakfast room and for luncheon parties.

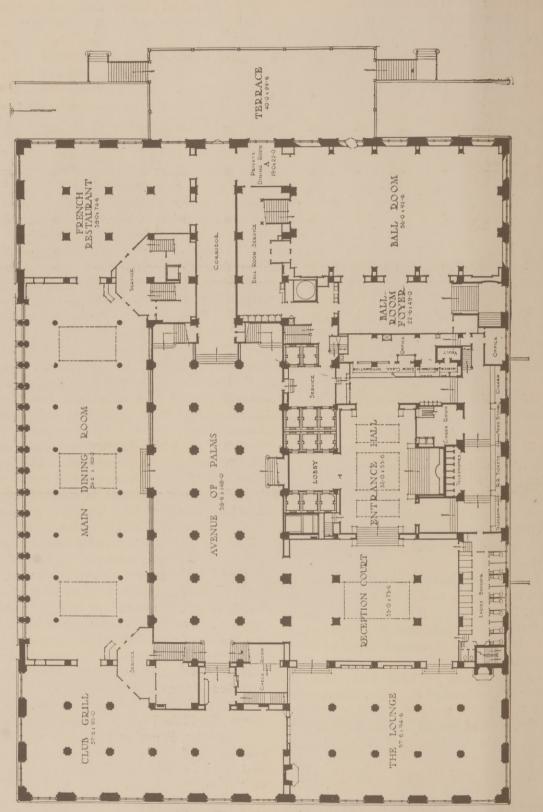
The terrace is built over the hotel's receiving alley, and extends to a lawn and flower garden occupying the 200-foot lot to the east of the hotel that is reserved for a future extension. Shrubbery hides the alley-way. The wide stairs from the terrace to the lawn were utilized for bringing up the automobiles when the big ball room was the center of attraction at the recent Automobile Show. The illustration of the French Restaurant pictures its dainty finish, the comfortable arm chairs, and the rich drapings.

The Club Grill, located in the northwest corner of the Main Floor is a typical men's room—for smoking, lounging, dining—a room built for comfort, and quaint in its antique tables, chairs, and other furnishings. It carries the atmosphere of the luxurious men's club, and the service is consistent with its atmosphere. The outlook is to Michigan Boulevard, the park, and the lake.

#### The Ball Room.

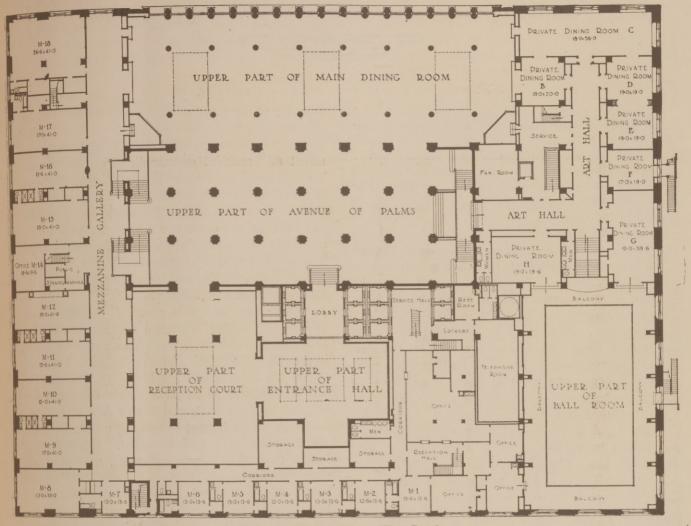
The ball room is sufficiently large to seat a thousand, utilizing the balconies and foyer. This room, of Georgian architecture, has many unique features deserving of more than ordinary comment. In the first place it is grandly proportion-

(Continued on page 40)

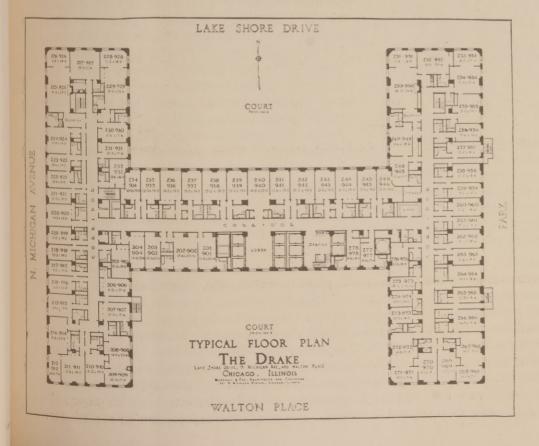


Main Floor Plan of the Drake.

Entrance from Walton place. Lounge and Clue Drive; Ball Room and French Restaurant front main Dining Room fronts north on Lake ShorDrive; Ball Room and French Restaurant front east on park.



Mezzanine Floor Plan, The Drake.



# Contemporary Architecture and Appreciation



By Talbot F. Ham'in.

F our people and our civic governments here in America have been behind the times, and timid in their treatment of the housing needs of our cities, our architects-and by architects is meant not merely building designers, but men who live up to the noble traditions and the high responsibilities of their art—cannot be likewise blamed, for where they have had opportunities to build tenements, they have produced buildings which will bear comparison with any in Europe in sanitation, in convenience, in beauand in economy. "Indeed, in some ways they have set a standard that far surpasses the European standard; as, for instance, in the matter of bathrooms. New York in 1904 had the terrible total of three hundred and sixty-two thousand dark interior rooms; but New York now has probably a larger number bathrooms than any other city in the world, and bathrooms whose average convenience and cleanliness are a wonder to foreigners. A great deal of the progress which our housing laws have made is attributed to architecture, too. The public opinion of the architectural profession is very powerful, and organized as it is in architectural societies all over the country, it has no little influence over legislation. Every architectural society has committees which devote a great deal of time to legislative matters; which examine every law proposed that can have any bearing whatsoever upon building; which are always discussing sanitation and fire prevention and building codes, and by means of public agitation and education striving always to raise building standards safety and beauty."

"The dual idealism which the architect should always possess, which makes him alert to practical requirements, and at the same time always avid of beauty, prevents him from ever being satisfied with merely crudely necessary results, however perfectly convenient. The true architect, like every true artist, sees life in a manner too broad and too keen to allow that. . . .

"It is difficult to trace the effect of beauty upon us moderns. Our lives are more complex, our spirits less naive, more skeptical less ready to yield to the stimulus of beautiful art. It is especially difficult to realize the social effect of beauty here in America, for the puritanism under the spell of whose austerity large portions of this country were settled has left traces of itself even now; traces in whose influences are strangely commingled good and evil—sane thought and unhealthy repression, a stern moral sense and an unreasoning suspicion of all that is beautiful. But it would be an utter falsehood to deny the effect of beautiful surroundings on our people. The study of psychology has established the close connection between aesthetic pleasure and certain signs of mental and moral health. To cite a simple case, in the mere eye rest and repose which a simple and beautiful building furnishes, there is a distinct source of true health and happiness, and a distinct influence towards the thinking of sane and beautiful thoughts.

"One may well rest assured, therefore, that architecture is performing a noble public service in creating beautiful buildings as well as in making them well built and convenient. There is too much evidence in the history of the past, in the life around us in psychological inquiry, for anyone to deny that, and it is a fact that which the greatest and most far-seeing people have always appreciated and accepted. Beauty, then, has a two-fold, beneficent effect, first physical, then spiritual. . . . .

"Tehre is a third great service which architecture performs for the commonwealth, the inestimable service of "town planning." Architecture has never been satisfied with designing single buildings. Wherever great cities have grown, there the architect has striven not only to fill them with beautiful buildings, but to arrange them in the best possible manner, and so, little by little, to produce cities whose design shall be the expression, not of chance, but of art. Thus the imperial Caesars built in Rome forum after forum, straightened roads, widened and lengthened streets. Thus, centuries later, Henry the Fourth built in Paris the Place Royal, setting an example which many of his successors followed in making breathing spaces and spots of real beauty in the capital. After the London fire in 1666, Sir Christopher Wren prepared a great plan for the rearrangement of the burned portion, with fine wide streets and dignified spacesa plan, unfortunately, never followed.

"Slightly different was the example of Cardinal Richelieu, who, in the first half of the Seventeenth Century, had his architect, Lemercier, design an entire village for him, to be built in connection with his chauteau—a village which, though never finished, exists as one of the earliest examples of comprehensive town planning. His was an example too autocratic and requiring too

much of enormous wealth and power to result in emulation, but it indicates the tendency always present to progress from the building and designing of single buildings to the designing of entire groups."

Our own country has an early example of town planning starting from a different point of view, in Washington, which was first laid out from the plans of Major L'Enfant, an accomplished Frenchman. General Washington was farsighted enough to realize almost alone at his early time the enormous benefit of having the national capital carefully and thoughtfully planned, and he was fortunate enough to have a Frenchman to develop the design for the French have always had a superlative skill in the solution of such problems, in the placing of important buildings, and the values of vistas and variety. It is this French skill which has made Paris the most beautiful of all capitals; each great monarch, and each successive governmental regime, striving through its architects to make successive improvements, laving out new streets, building dignified Places, setting beautiful buildings always in the most effective situations. The new boulevards, the tremendous and exqusite vistas, like that up from the Place de la Concorde to the Madeleine, or up the Champs Elysees to the Arc de Triomphe, the treatment of the great Chamber des Deputes, or the Trocadero, these elements of high and inspiring beauty can be the results of nothing save dauntless architectural skill and superb architectural taste backed by great and sympathetic power; and it is this French skill and taste which has influenced the beautification of countless European cities, from Berlin to Bucharest.

"In those bustling, booming days when American industrialism and commerce were growing with mushroom rapidity, and cities were springing up all over the country, little thought was given to their planning. The city fathers merely laid out a criss-cross of streets, all at right angles to each other; the real estate promoters got hold of as much as they could, and speculation and chaos were the inevitable results. Buildings went up here and there, with no correlation, and each landowner built exactly what he pleased. Fads and fashions boomed now one portion of the town, now another; residential acreas became business areas; business areas faded and died away into emptiness; factories were built in places where they spoiled promising residential developments. Cut-throat speculation and competition followed no ideal, recognized no checks. The resultant chaotic inefficiency of such a city is amazing, and it is a characteristic all too universal in this country. Under any such anarchy

real estate becomes a questionable investment, for real estate values soar and die unaccountably. The scattering of business and manufacturing makes a great deal of trucking necessary that might easily have been avoided. It necessitates an endless loss of time and money in the ordinary run of the day's work."

Mr. Hamlin believes when once business and residential areas have become somewhat settled the American policy of allowing anyone to do what he wants with his property enables owners to build the great many-floored skyscrapers of our cities, buildings which are often unsound economically, for so few of them earn an income large enough to justify their cost, and which often add immeasurably to the congestion of the streets whose light and air they obstruct, and to the fearful crowding of all means of communication.

"Little by little order is beginning to grow out of this chaos of our American cities. Many of them have permanent town-planning boards, which are continually looking for places where changes are necessary, taking traffic censuses to find out by actual count where street congestion occurs, and trying to find means of remedy; pressing all sorts of housing and building reforms; plotting new transit facilities so as best to serve the whole city, and planning new developments with an eve to the future. They are considering always the acquisition of new park spaces, and planning park systems in such a way that every portion of the city may have its share of greenness and open sky; they are striving to meet the insistent demands of hordes of children for ever more numerous playgrounds. Moreover, the city planners have a keen eye to the connection of the city with the outside world. They note the position of its railroads or its main highways, and try to arrange for manufacturing districts and wholesale markets in connection with terminal schemes. If the city is on the ocean, or a navigable river or lake, they attempt to develop its port facilities in the most efficient possible way, coupling them up with railroad or warehouse or market, and, at the same time, arranging some means by which the population of the city may enjoy the peace and quitness and cool breeze which large bodies of water always produce. In a word, modern city planning is concerned with every single feature of city life, housing, water supply, food supply, drainage, railroads, port facilities, amusements, recreation, transit, streets, parks.

"But because architecture can never forget that it is an art, city planning can never lose sight of aesthetic values, and every question is considered from a double viewpoint. The good city

(Continued on page 68)



BUILDING FOR HUMBLE OIL & REFINING CO., HOUSTON, TEXAS CLINTON & RUSSELL, ARCHITECTS



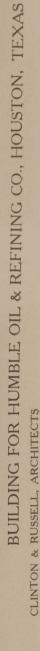
DETAIL OF MAIN ENTRANCE

BUILDING FOR HUMBLE OIL & REFINING CO., HOUSTON, TEXAS

CLINTON & RUSSELL, ARCHITECTS



ABOVE: TYPICAL CORRIDOR. AT LEFT: DETAIL OF MANTEL IN BOARD ROOM







THE BOARD ROOM

BUILDING FOR HUMBLE OIL & REFINING CO., HOUSTON, TEXAS

CLINTON & RUSSELL, ARCHITECTS





DETAILS OF UPPER AND LOWER STORIES, POLK AVENUE ELEVATION
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STORE FRONTS ON MAIN STREET



REAR ELEVATION
BUILDING FOR HUMBLE OIL & REFINING CO., HOUSTON, TEXAS
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(Continued from page 29)

ed for the entertainment of large parties. It is so placed in the southeast corner of the main floor that functions may be held in this room without in any way disturbing the regular business of the hotel. There is virtually a private entrance from Walton place, a foyer of sufficient size for reception purposes, a service room independent of the regular kitchen service, and direct entrance by stairway from the mezzanine floor through Art Hall, where the private dining rooms are; this stairway under control, so it may be used or not as conditions warrant; the service hall with Subveyor to the dishwashing room on the floor below. The illustration pictures the room looking north. The balcony extends around on all four sides. The floor is art marble. The illumination is by crystal chandeliers and art wall brackets. The chairs are Thonet bentwood. There are two 75-ampere receptacles for spot lights and stereopticon at each end. At each of these stations there is a switch which controls the ball room lighting system, so the man operating the stereopticon can put out or on all lights on the instant. There is a moving picture booth, with fireproof doors and projecting opening skillfully concealed when not in use, and the booth well ventilated; also there is a switch panel to control the ball room lighting so that the lights are under perfect control, individually and collectively.

The arrangement for telephones is admirable. For instance, telephone service is esablished in alcoves, as for motor shows and the like; and telephones may be distributed all over the ball room and balcony.

In the ball room pantry there is a battery of wall cases stocked for complete service of china, silver and glassware; also refrigerators with tray shelves for the temporary holding of salads and other cold service, these sufficient for the capacity of the ball room.

#### The Ground Floor.

The only dining room on the ground floor on the level with the kitchen, are the Italian Room, located in the northwest corner, and the dining rooms for officers, maids, chauffeurs, and uniformed employes.

#### The Ialian Dining Room.

The Italian room has its individual tea kitchen for the dainty service; also toasters, griddles, and a steam table service for the popular priced table d'hote luncheons and dinners; the close proximity of the main kitchen facilitating this service. This Italian room has already become a Drake institution, and one of the most popular refreshment rooms in the hotel. A pleasing feature is the quaint ceiling with its pillars joined by spandrel arches. The color scheme is gray,

blue and gold; the floor black and white tile; the tables with polished black glass top and linen doilies; the entrance thru the main corridor from Walton place, and direct from Lake Shore Drive. The windows are decorated with flower boxes. The entrance corridor side has rustic fence. The service end is circled with counters, the counter to the north for soda fountain, to the east for candies, and to the west a display case for confectionery.

#### The Mezzanine Floor.

#### Concession Rooms on Mezzanine Gallery.

At each end of the Avenue of Palms there is a grand stairway leading to the mezzanine floor. the stairway to the west landing on what is called the Mezzanine Gallery, which is devoted to a series of ten large rooms called concessions, which are rented for business purposes, and in a sense are separate from the hotel, except that the gallery, so conveniently reached from the Avenue of Palms, is in a sense an arcade of shops or affords a Chicago office for merchants of other cities who would have a show room where the address and surroundings are conductive to a select patronage. The center room in this gallery is utilized for the office of the public stenographer and the office of Maitre d'Hotel Thomas J. Karas. The southeast corner room is permantly occupied by Logan Bryan & Co., brokers. these concessions have paneled Ritz-Carlton style walls, taupe carpet, large clothes closet, and bath room. The baths are simlar to those in the bedrooms, and a number of the concession rooms also have the bathroom supplemented with shower behind glass door with open grille top.

#### Private Dining Rooms.

The grand stairway to the east of the Avenue of Palms rises to Art Hall, where are grouped seven private dining rooms centered with a serice pantry. These dining roms range in size from 18x20 to 18x56 feet. They are finished in either Colonial or English style. The mezzanine floor plan shows the layout.

Five of the rooms have outlook on Lake Michigan. Private Dining Room B overlooks the main dining room, and is provided with a balcony which forms a sort of theatre box. Every room

has storage space for table tops.

The stairway shown to the south of the Art Hall connects direct with the ballroom. In the Art Hall, at the entrance to each dining room, there is a plug for electric heater to keep dishes hot when there may be any slight delay in service. There is also a signal light to show whether current is on or off. Waiter service is speeded with hydraulic elevator.

#### The Kitchen.

More than half of the entire ground floor is
(Continued on page 74)



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## Editorial Comment



## The Southern Architect and Building News

Southern Architect and Contractor, Atlanta, Ga., and Southern Building News, Memphis, Tenn., and Southern Building Record, Nashville, Tenn., Consolidated.

Entered as second-class matter May 27th, 1911, at the Post Office at Dalton, Ga., under the act of March 3d, 1879.

This paper is issued and mailed from our printing house at Dalton, Ga. Business office, Atlanta, Ga. All letters should be addressed to the Atlanta office.

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#### TO OUR ADVERTISERS

Our advertisers are requested to have copy and cuts for changes for advertisements in this office not later than the 5th, preceding the month of publication.

We cannot be responsible for changes not made, when copy and cuts are received later, or submit proof.

#### THE ARCHITECT.

You who have never employed an architec, may question the need of his services. You with some experience with him, may still not appreciate the intricacies of his practice or what to expect of him. Do not decline to employ him without investigation.

The architect—literally, "the chief of the works."—is a clearing-house artificer who knows how to consider, sift, and harmonize all ideas; to secure attractive, refined, common-sense and economical buildings, with a valid reason for every element in his plan and specification; to settle all questions beforehand and protect your every interest at all times.

That which is well done is beautiful; to say "it is architectural," is the greatest compliment.

You may not understand that architecture is a profession calling for men of the highest integrity, business capacity and artistic ability—men fitted to command respect and confidence as advisors, and sustain a grave responsibility to the public. No one may have given you practical information as to the relations that should exist between client and architect. Experience has shown that lack of information on this subject may be a cause of trouble in building. The following is a brief outline of the vital elements in building:

#### The Real Aim and Reason.

1. Your interest is to secure the most valuable service, the most suitable design and the best construction, at the most economical expenditure. These can only be obtained by employing, not as a luxury but as a necessity, an expert—a competent and reliable architect. You will be most benefited by choosing an architect before deciding upon anything connected with the building proper (if possible, even before you determine the building site and limit of expenditure), thereby gaining the services of the expert's technical experience and knowledge in every phase of the problem.

#### Assurance.

2. As you do not and cannot know what you are buying, you must trust to the architect. Therefore, you should first of all assure yourself that the architect is worthy of your confidence, and that he is fitted, by study of economy in plan, construction and materials, to discharge this grave responsibility—in short, that he has the right to the professional title, just as you do in chossing your physician and attorney.

#### Dealing With Him.

3. Do not expect gratuitous competitive designs any more than free diagnoses, prescriptions or briefs. Plans are not like merchandise—kept in stock to fit all needs; the model plan exists only for its individual place and condition; each building requires specal study to adapt it to its site, environment and use. The architect has been trained to this end, and through his experience he is able to bring to you this service.

#### Method of Procedure.

4. Designing a building is a process of evolution. The architect's function is to work out for you the best solution of the problem in hand. To his judgement is entrusted the consideration of a multiplicity of ideas, wishes and needs. The best eventual scheme may be quite different from the one first suggested either by your architect or yourself. This may require several separate sketches and many modifications, which are part of an architect's regular, complete service, and is obtainable in no other way. Hence, you would get the benefit of your architect's mature thoughts in careful consideration of the various possible solutions of the problem, and would not simply adopt the scheme presented to catch your attention and "get the job."

Let your architect assist you in the proper location of your building. He will regard the points of the compass for light and air, the char-



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acter of the site, the soil, the grade, the outlook, environment, etc.

Do not mar your building by incongruous decorations and furnishings. If you desire an effect of organic unity when the work is done, make use of the architect's service to that end.

You will thus obtain the complete services of an expert, and not those of a mere draughtsman. A blue print is not the sum and substance of the architect's service, but is one form only of instruments of service—simply a photographic copy of a drawing which represents time and study.

#### His standing.

5. The architect's practice is upon the same basis as that of the physician and the attorney; each is a profession, and the selection of the best qualified man should be made upon a record for character, integrity, ability, and fitness for service.

#### His Fee.

6. To employ an architect on the basis of his low charge is usually wrong. "Penny wise and pound foolish" is this uneconomical method.

An incorpetent man in selling his service for a small fee may, and often does, waste a great deal of money in inefficient planning, unsafe and unscientific construction and design, and unwise specification of materials.

An incompetent man as supervising architect is worse than useless, as he has no standards of his own. He is at the mercy of the builder.

A competent architect may easily save the client several times the amount of his fee.

#### Quality.

7. Architects, like doctors and lawyers, place different values upon their services, and their services likewise vary in merit and results. This should not confuse you. The best is likely to cost more but be cheaper in the end.

#### The Trust.

8. In merchandising one may buy calico or silk and pay accordingly, but there is nly one kind of professional service worth paying for-

the best the architect (or doctor or lawver) is capable of giving. This means, generally, adherence to established standards of practice and adequate fees. To under-pay any man is to tempt him to slight your interests. "The architect should not receive any commision or any other substantial service from a contractor or from any interested person other than his client."

He is agent for no one except his client.

#### Working With Him.

9. Make up your mind what you must have. Then take the architect into your confidence as to the amount you are willing to pay or expend. Be perfectly frank with him. Do not set a price and then refuse to relinquish terms and conditions which are bound to make your building cost more than you are willing to spend. Do not hurry. Take time enough on the preliminary sketches that you and the architect may understand each other before the working drawings are started.

Each party should keep duplicate records of all understandings, agreements and instructions.

Alterations after the approval and completion of working drawings necessitate additional cost to the architect, for which the client should pay.

#### The Construction Stage.

10. Use the architect's experience and knowledge of men and materials—in getting bids, in making contracts, and in supervision.

Do business only with a capable and honest contractor. Incompetence is as much to be avoided as dishonesty. You cannot expect to get an honest building if the price asked is too low.

Watch the work as much as you see fit, but if you have employed an architect whom you can trust, rely upon him and save yourself time and worry. You can earn more at your business than you can save trying to assume responsibility which properly belongs to the man you have employed to carry your work to completion.

#### Avoid Cross Currents.

11. Do not violate the principle which requires one head on the job. Let your instructions

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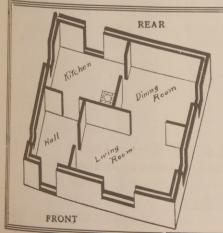
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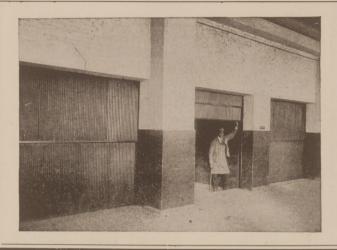
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to the contractor be given through the architect. The contractor who comes to you with suggestions or to call your attention to real or fancied errors in the drawings or specifications should be referred to the architect. Make use of the architect's advice throughout.

#### The Harmonous Distribution of Expenditure.

12. Architectural service is the only form of reliable insurance that the client may purchase which gives the right to claim that he is getting what he paid for.

The architect puts selling value into a building—not only because the owner can claim for the building what the architect certifies it to be, but also because of the intrinsic value which results from a good design as compared with a poor one.

13. "Free Plans," which are offered with material or construction contracts, can in no manner nor degree approach the quality or satisfaction of the real service of an architect.

#### Final Cost.

14. If you follow these hints in all they imply, there is no reason why your structure should cost you a cent beyond the estimated price, (deliberate changes made by yourself excepted), or why it should cost you more worry than any ordinary business transaction.

#### The Aim of Architecture.

The American Institute of Architects, composed of the leading architects of the nation, has for its object: "To organize and unite in fellowship the architects of the United States of America, to combine their efforts so as to promote the artistic, scientific and practical efficiency of the profession, and to make the profession of ever increasing service to society."

The Iowa Chapter of this Society offers the above for careful consideration, and will be pleased to furnish copies of service documents and other information, or discuss any points with interested persons.

#### Finally

From the foregoing you see, it will be wise for you (even if you think you must use a "ready-made-plan") to confer with an architect before deciding on any action.

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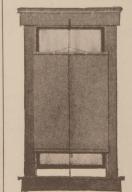
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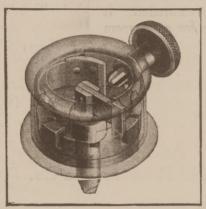
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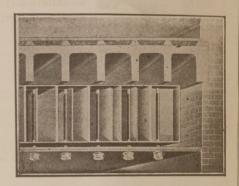
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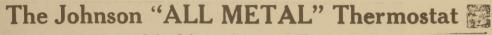


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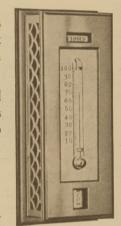
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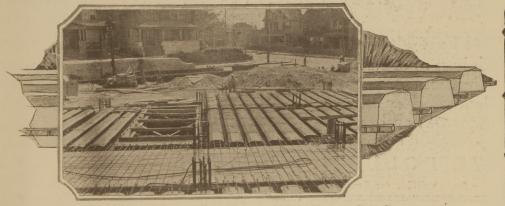
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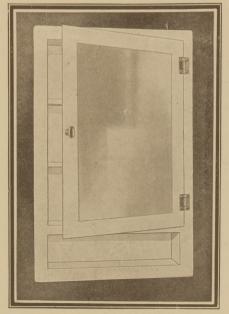


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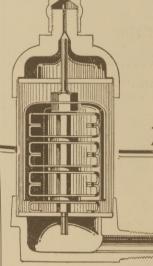
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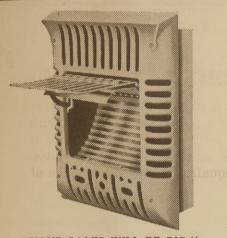
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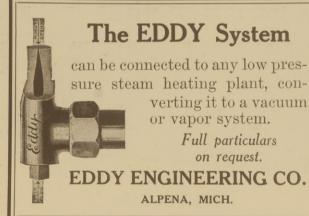
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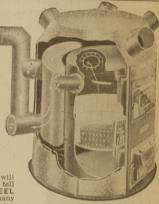
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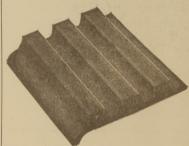


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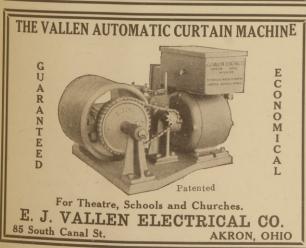
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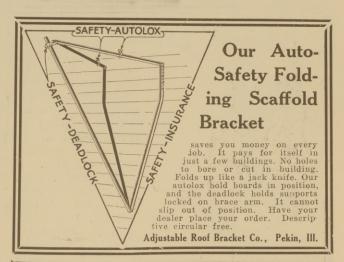
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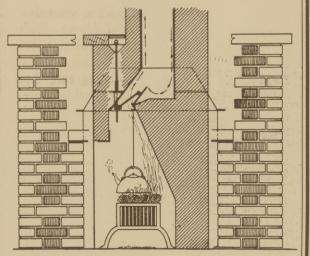
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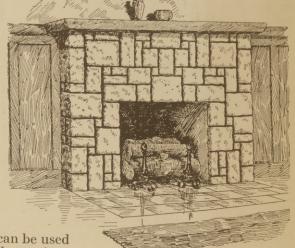
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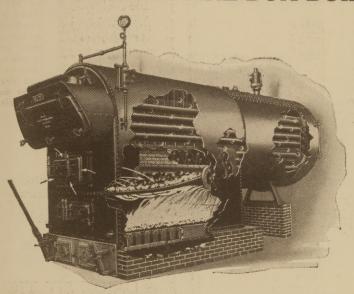
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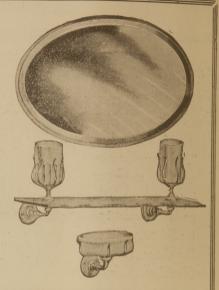
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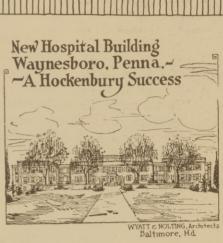
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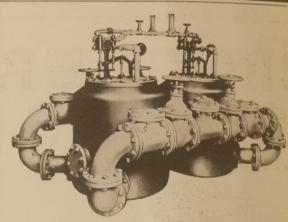
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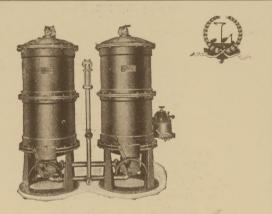
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EJECTORS that never fail to eject. Solid BRONZE, positive action, valves.

Send for free sample ink remover for your tracings.

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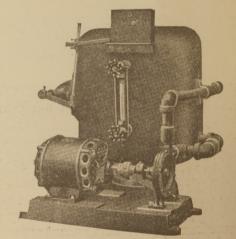
In the large number of fine buildings and homes equipped with Loomis-Manning Filters similar to the above cut, the experience has been that the filtered water is attractive for all uses, protects and keeps clean plumbing fixtures, piping, tanks, and boilers, and is a safeguard for health because the water is safe for drinking.

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A refrigerator that can defy a raging fire can protect ice and food against any weather con-ditions. Ask for full details about Herrick in-sulation and 26 other extra-value features. Name of dealer and booklet free.

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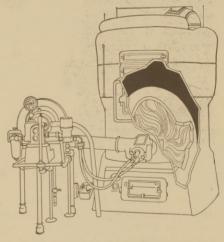
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Brascolites were selected for the Illinois Bell Telephone Company's general offices after a careful consideration of the problem and various tests extending over a period of more than a year. Competent architects and engineers of the Telephone Company, as well as engineers outside their organization, were consulted and all factors which should enter into the selection of lighting equipment were carefully considered in the light of experience gained from long time operation of sample fixtures.

That the Brascolite has solved the problem in this case is evidenced by the photograph. The ceiling in this room is extremely high, and heavily beamed. The space is used for general office work of a particularly exacting nature and a fairly high intensity was considered necessary as well as thorough diffusion and uniformity. An amber tone to the light was considered desirable.

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Our general catalogue No. 8 pictures and describes the Standard Brascolite line—a Brascolite for every purpose. Let us send you a copy. We also have for distribution a series of special catalogs on lighting equipment to meet special requiremnts. Write us for the one that interests you; No. 1—Hospitals: No. 2—Banks and Office Buildings; No. 3—Schools, Colleges and Y. M. C. A. Buildings.

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## Labor and the Building Trade Today

By Morton C. Tuttle.

NINE times out of ten a discussion of labor troubles, of seasonable employment, of jurisdictional disputes in the building trade, is based upon observations of the city building trades. Now the city building trade covers only a small part of the huge activities grouped under the title of "American Building Trade."

Only sixty-eight cities in this country have a hundred thousand inhabitants or more. Outside these cities the activities of the building trade cover the construction of highways, railroads, bridges, water and sewer developments, irrigation projects, wharf and waterfront construction, tunnels, wireless towers, lighthouses, farm buildings, and the thousands of houses, big and little, that are built here and there all over the land.

The city building trade is conspicuous because its activity is so concentrated, its personnel and labor problems are accentuated through labor troubles, stories of seasonable employment, occasinally scandals involving both employers and employees. Outside the big cities the work goes on rather peacefully. Except for the city work, the operations average comparatively small, caried on by small contractors, whose operations seldom exceed a few thousand dollars per year. The aggregate of these small operations is tremendous, and the total operations, city and country, big and little, total an indeffinite amount usually stated as between one and three billion dollars a year.

#### A Seasonable Occupation.

The building trade as a whole is a seasonable occupation. In the South as well as the North a large proportion of each year's building operations starts in the spring, carries through the summer months and tapers out during the fall and winter. There is a secondary bulge of activity in the early fall, apparently belated work which is driven through in an attempt to get it closed in before the middle of winter. The typical operation is one beginning in the spring.

The construction of the architectural type of building, such as the office building, school house or urban residence, has become divided among a great number of specialists (sub-contractors). Each of these sub-contractors specializes in some one part of the work, one firm doing pile driving, another marble work, another glazing, another roofing, and so on until the average city office is

broken into thirty or more sub-trades. Each one of these sub-contract divisions has been paralleled by a union organization, which segregates the men working in that line.

#### Laborers in Rotation.

Obviously these trades are employed in rotation on each job, that is, the pile drivers will begin work before the brick masons, and the painters will not be busy until the roofers have done their work and the building is tight. Accordingly, if most of the work starts in the spring, the pile drivers are likely to be busy early in the year, and may be on the streets before the summer is over, while the electricians may be loafing during the summer and exceedingly busy in the winter.

This sub-division of work leads to the accentuating of the seasonable features of the building business. If the same gang of men who started the foundation could only do the interior finishand painting, obviously a crew of men would be busy during the whole of the building season. But, after the piles are driven, the pile-drivers disappear from the job and a new crew of men take up the next operation.

It is theoretically possible for individual workmen to be skilled in two or three trades, and carry union cards permitting them to work at more than one occupation. If a man was skilled as a bricklayer, as a carpenter and in the roofers' trade, and was free to get work in all three of these lines, he could keep himself pretty well occupied during the year. Now this is a negligible possibility, for two or three reasons. In the first place the unions do not encourage this sort of thing. A man classified in one trade who proposes to work at one or two other trades is likely to be considered a poacher. Beside that, for practical reasons a skilled roofer will stick to his line of work. If he engages himself in any other trade than roofing he is likely to lose his opportunity at the trade at which he is best paid. When men are out of employment they consider it safer to spend their time in touch with their union headquarters, or in visiting offices where employment may be hoped for, rather than in taking employment, say as a laborer, or carpenter's helper. It is clear, that if they are engaged in a less paying occupation, they are likely to lose the opportunities which may at any time come up to get employment at their regular occupation,

#### Sand Hogs Like Deep Tunnels.

Besides, there is an inborn prejudice in favor of sticking to one's own trade. Men take a genuine pleasure in the exercise of their specialized skill, and this love of a given occupation is one of the pleasant things that appear in the building trade. For instance, the "sand hogs" who work under air pressure in deep tunnels seem to take genuine pleasure in that kind of work. They have tremendous pride in the dangerous and difficult jobs which they have done. Men recognize that the appreciation and praise of men in their own line of work gives the keenest satisfaction.

For these reasons, and for the fact that a man who cannot offer a definitely classified description of himself is out of luck at the employment window, men stick to one trade. It is astonishing how grimly and for how long men will go without work rather than risk the chance of losing out at their regular business.

A graph, issued by the Boston division of the American Building Congress, shows in a clear, if sketchy, way, the seasonable waves of employment and unemployment in some of the subdivisions of the city building trade of Boston.

The unemployment problem of the city building trade is clearly visualized once the seasonable movement of these sub-trades is understood. From the spring to the fall a forecast can be made as to what trades are likely to be busy and what are likely to be slack. Much confusion has resulted from the failure to understand this procession of operations beginning with the spring and ending with the completion of a job. It is quite possible to get conflicting points of view in regard to employment in the building trade, depending on whether an examination is made of unemployment among the pile drivers or among the painters and finish carpenters or any other of the score or more of sub-trades. Late in the year it is safe to suppose that the pile drivers are out of work, and equally safe to assume, for instance, that the asbestos workers and finish carpenters are busy. Examination made in the spring would indicate the reverse of this situation.

#### A Fertile Field for Ingenuity.

To cure this seasonable unemployment in the building trade is very difficult. It largely lies in the hands of the employers. By energy and selling ability it is possible to stimulate work in the off season, and the best concerns are doing this. Each year more work is being done in the winter months. Very often it is true that it is cheaper to pay the added expense of winter work and obtain occupancy of a building than it is to delay the operation and carry it through at a less cost during the summer months. The able concerns are sharing the extra cost of winter operations

and are finding that the expense has been commonly exaggerated. This effort is smoothing out the employment curves for many concerns.

The cost of this seasonable unemployment is reflected in the higher wages paid men who must earn their year's income working only part of the year. These higher wages, of course, are reflected in the higher cost of buildings, and this again increases rent. There is a fertile field for ingenuity and energy for anyone who can help to solve the seasonable unemployment of the building trades.

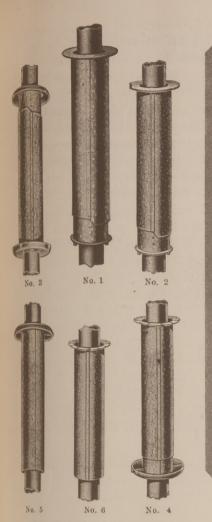
Viewing the building trade as an element of our social structure, there will be found less feeling of loyalty between employers and employees in the building trade than we should like to find. This arises largely from the fact that the building contractor assumes correctly that there is available for his purposes, labelled and segregated in trade unions, men skilled in his particular occupation. These men can be hired at established rates or wages, under standardized enditions. The efficient can be assorted from the inefficient by the hire and fire process, and by this method a crew of men possessing technical knowledge can be obtained.

The one thing they do not possess, and never will under this process, is loyalty to their employer. Pulling them out of the pool of labor, giving them employment under conditions established and supported by their unions, and then impersonally throwing them back into the pool of labor on an hour's notice establishes the union as the only stable rallying point in the situation, so far as the mechanic is concerned. From his point of view without the union he is out of emand out of luck.

Naturally, under this situation the feeling of loyalty crystallizes in the union, and the men grouped in their union, face the employers, grouped in their trade associations. The men believe, and properly, that the union keeps the employers' association in line on wages, hours, working conditions, and the union impersonally deals with the impersonal employers' association.

I am describing the worst side of the situation. There are, of course, many employers who give steady employment to a considerable number of men. These men haves been selected and have worked with that employer for years, and have a genuine interest in his success. The vast majority of men, however, are treated quite impersonally. It is too expensive for the employer engaged in a seasonable occupation to carry a crew of men unemployed.

With all these troublesome facts to contend with, the city building trade is producing buildings which are the best in the world. The quality of work found in the best of our public buildings,



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hotels, residences, cannot be produced except by men who have a real pride and feeling for their work. If anyone begins to feel gloomy about the labor situation in the American building trade he has only to get acquainted with some of the splendid mechanics who are responsible for the best of our work. Among these men he will find many who possess not only suprising skill and patience and a genuine love of accomplishment, but also men who feel a real enthusiasm and loyalty for the concerns which employ them. The best of the labor leaders will tell you that employers have a wonderful opportunity to be of real service to their men, and by such service, mainly that of giving them steady employment, they can build a loyalty which is beyond price.

The best men in the building trade are struggling hopefully with this problem of unemployment, and in its partial solution they are taking fresh courage.

## HUMBLE OIL & REFINING CO. BUILDING, HOUSTON, TEX.

Clinton & Russell, Architects.

The building for the Humble Oil & Refining Company, a subsidiary of the Standard Oil Company, Houston, Texas, is a building in which special attention was paid to local climate conditions. It may be said to be a good example of regional architecture. The building fronts on three streets and the arrangement provides for the maximum of sunlight and air. The building has a ground area of 31,500 sq. ft. and the area of each upper floor is 26,395 ft., the total floor area being about 264,000 sq. ft. with a net rentable area of 237,000 sq. ft. The ground floor is designed for stores with large show windows and a generous area reserved for a gymnasium for employees of the company. The greater part of the building will be devoted to the use of the Humble Oil & Refining Company.

The excavations were started in January, 1920, and the building was completed in September, 1921. The exterior walls are of face brick with limestone trimmings. The frame is of structural steel and the floors are of reinforced concrete covered with linoleum. The interior partitions are of clay tile and also gypsum tile, the roof being of clay tile covered with mastic. The staircases have mahogany trim, the office doors and trim being of hollow metal. The building is heated with steam and lighted by electricity. There are four Otis overhead worm gear traction machine elevators operating at a speed of 400 r.p.m., each with a capacity of 2,500 lbs. The architects were Clinton & Russell, New York City, and the general contractor was James K. Stewart & Co., Inc.

(Continued from page 33)

planner forgets neither his sewers nor his views and vistas, and he deisgns his parks as well as his docks, for only by the combining of the useful and the beautiful can the ideal city arise.

"For the ideal city has begun to arise, out of the grimness of our thoughtless ill-designed past, like a phoenix. The work is going on quietly, and still slowly, for it is hampered by the jealous individualism f our conservative democracy, common weal only attacks on its liberty. Nevertheless, it has made great strides which have proved its success. A drive around the park system of Chicago is a revelation; the busy, happy playgrounds, the great parks, the miles of parkway thrill even the coolest observer. So the gradual changes in Boston, the development of the Fenway, of the Charles River basin, of the Metropolitan parks outside the city, of the increasing use of the great waterfront, are but symptoms of a movement which is destined ultimately to permeate the whole land. Cincinnati, Detroit, Minneapolis, Madison—they are all beginning to appreciate the virtues of a planned city, and are striving in some measure to realize the true ideals of what a city might be. . . . .

"The American cities have still far to go before the ideal is realized, but we may well be glad that a beginning has been made. There are three chief objections which obstruct its realization. One is the innate conservation of a power ful portion of the population, the second is the refusal of the people to accept the principle of 'excess condemnation,' and the third is the lamentable inefficiency of many of our city administrations. The first objection is gradually disintegrating under the effects of education; the second is still powerful. By the principle of excess condemnation, a city which desires to make any improvement may condemn not only the land actually required by the improvement, but an additional strip all around, which it may either sell, or lease, or develop in some other way when the improvement has been made. That is, it permits the city to help to finance any improvements by the actual profits which the improvements produces, and at the same time it gives the city a certain amount of jurisdiction over the character and artistic style of buildings to be built adjoining it. This power at once enables a city to do infinitely more than our American cities are at the present capable of doing; and it is the secret behind the great achievements of European city planning compared with our own. The wonder is not that we are behind Europe in city building and city planning, the wonder is, that without this great financial and aesthetic aid our cities have accomplished as much as they have."





## Department of Engineering

Plumbing, Heating and Ventilating, Lighting



## House Construction for Heating Economy

The Suggestions from Collective Experiences of Heating and Ventilating Engineers.

I T sometimes seems that there is more competition among builders to see which can build the cheapest rather than which can build the best. However there is every reason to believe that the next few years will see a great change in building standards. It is beginning to be realized that one of the fundamental reasons why money for houses is hard to obtain is because ordinary present-day construction is so flimsy that interest rates and commissions must take account of the great risk of rapid deterioration in such construction.

Too much attention has been paid to getting a low first cost rather than a low ultimate cost. The ultimate cost of a building depends on the length of its life, its cost of upkeep and the cost of its operation. For even the most humble home has its cost of operation, including such items as the money spent for heating, lighting and the like. If a house is so located and constructed that the kitchen and other rooms most used are naturally dark or poorly lighted the annual expense for artificial lighting, over and above what it would be for a well constructed kitchen, is an appreciable factor of cost, which in 25, 30 or 50 years at even 4 per cent compound interest would amount to a tidy sum.

#### Heating an Important Factor

At the annual meeting of the American Society of Heating and Ventilating Engineers in New York City in January several papers were read and much discussion took place concerning the heat losses in buildings of various construction. As the price of coal mounts higher and as its quality deteriorates more and more, this matter of building a house, or apartment, or any other kind of a building so that it can be heated efficiently and economically will receive constantly greater attention.

#### Air Leakage Through Walls and Roofs

Discussing the subject of the "Effect of Wind Velocity on Radiation Losses and Interleakage," \*Stewart A. Jellet said: "There is one side of this subject I do not think has been touched on, and that is the character of the wall itself. The infiltration varies tremendously with the character of the wall and the different classes of material used for its construction. We found a few years

back, when concrete roof construction came into use, that our calculations as to the heat losses were all at sea, and that the losses were very much greater than we had figured before. After a series of experiments we found it necessary to increase radiation on the top floor of a building if the roof was concrete and the same thing was true of a terra cotta building. I know of one building built with terra cotta walls in which some water pipes were put in the air space back of the inner furring. They frequently froze, although the building inside was comfortably warm 2 or 3 ft. away from the wall, but with a low temperature outside and a northwest wind. the temperature 3 in. away from the wall was 58 deg. F. and 3 ft. from the wall was 72 deg., showing that terra cotta is porous.

#### Water Leakage Through Walls

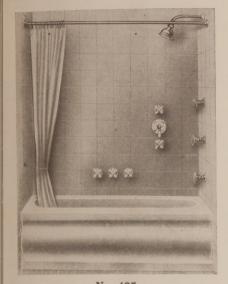
"Any calculation of infiltration will not amount to much unless we figure the character of the wall itself and know in alvance how the building is going to be built. We have the same question in Atlantic City, not so much for air leakage as for water leakage. At the present time we are engineers for a building there. After very considerable thought, the owners decided that in addition to the inner 4 in. furring and air space, they were going to have 13 in. walls all the way up their 14-story building, because on the wall of one of the newer hotels a northeast storm drove the moisture through an 8-in. wall carefully laid, and the paper molded. The owners of this new hotel have decided to have a 13-in. brick wall and a 4-in. terra cotta furring with air space. It costs a good many thousand dollars to do it, but they say the damage to the other buildings has been continual and they figure that their heat losses are greater through the walls than they are at the windows, also that the leakage is not around the windows but through the walls.

"If that is true of rain driven with high wind velcities it is also true of air itself. It is going to penetrate a porous material such as terra cotta very much sooner than it will a solid brick wall, or it will penetrate a light brick wall sooner than a heavier one.

"We ought to know in making up data the factor of safety which applied to a 13-in. brick wall, a 17-in. brick wall and both with a terra

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cotta furring. I think all these things ought to be considered if a table is to be prepared."

Making Masonry Walls Tight

Samuel R. Lewis: Not enough stress is being laid on the quality of the masonry. Masonry walls, as a rule, are good filters. When our ancestors built a cistern they were quite likely to build a brick wall around the pump to serve as a filter. I call to mind an experience with a long outside wall, something like the wall of this room. Canvas was pasted against it on the inside and it was painted so that it was fairly airtight. A gale of wind one day blew the canvas from the wall by the leakage-pressure through the wall.

"The masonry walls in buildings must be considered as a means merely to hold something up as supports, not enclosures. I have built some houses in which a diaphragm of paper with cemented joints was provided between the floors over the plaster ceiling as a furring against all outside walls. Flexible air-tight paper joints were also made between the floor and ceiling diaphragms and the walls so as to allow for drying out the joists. Similiar joints were made between the window and door frames and the furing. The results were remarkable and well worth the trouble both in comfort and in fuel saving.

"In building a supporting wall, steps must be taken to make it air-tight, as the wall in itself is usually a seive. Too often we install a larger heating plant than is necessary, which burns more fuel forever after, when we would have better fixed up the building so that a large heating plant would be unnecessary."

#### **Heat Losses in Frame Houses**

On "Heating the Average Home Economically," a discussion reported in the January journal of the society, P. J. Dougherty said: "In a survey made during the war it was discovered that practically as much coal was required to heat a house in Texas as one of the same size in Minnesota, in spite of the great difference in the average winter temperatures. In the cold states houses are better built and thus require a relatively smaller amount of fuel to keep them warm, as compared with the less solidly constructed houses in the Southern States.

"Heavy building paper and shingles placed over the siding of a poorly constructed frame building will materially reduce coal bills besides reducing paint bills. Metal weather strips on all outside doors and windows are very essential for economical heating. The leakage around three average-sized windows in a room is frequently equal in area to a pipe 8 in. in diameter.

#### Chimney Heights

" A strong draft, properly controlled, is the best fuel economizer on the market. Faulty

chimneys are responsible for more heating troubles than any other condition. A highly efficient heater will prove a failure on a poor draft. A chimney less than 35 feet high is erratic and uncertain in its action, and usually gives trouble in rainy or snowy weather. A tile 12x12 in. is the best size for the average house. No tile less than 8x12 in. should be used. A 4-in. tight brick partition should separate all tile-lined flues in a chimney. All heater flues should be subjected to a smoke test and made tight before the house is turned over to the owner. Leaky flues are the most frequent cause of draft troubles. No other connection should be made to the heater flue but that of the heater.

### Unfair Competition and Peddling Bids

"The heating contractor is responsible for the proper capacity and proper construction of the heating plant and the type of heater used. Unfair competition and **peddling bids** on the part of the owner sometimes force a heating contractor to install a heating plant considerably below the capacity required. When properly operated and controlled a plant that is above the capacity required is far more economical and satisfactory than one that is below the capacity required.

#### Have Heater Plenty Large Enough

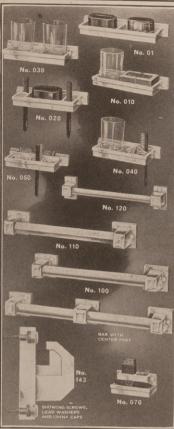
"Most of the heating boilers installed in the average home are too small to meet the practical operating conditions demanded of them. The average man who attends his own heater is away from home about 10 hours during the day. If he uses hard coal, his heater, if of the proper size, should keep his home warm from the time he leaves in the morning until 10 hours afterward when he returns at night without his family being compelled to put coal on or shake the fire during the day.

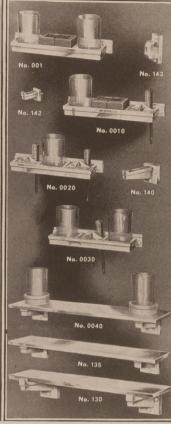
"It is the general practice to install boilers in homes rated with hard coal on only an 8-hour firing basis instead of on the 10 or 12-hour rating basis as the actual conditions require. Furnaces as a rule are rated on a 10-hour firing basis.

"The ratings placed on boilers tested according to the Boiler Testing Code of the society apply only to standard testing conditions such as ample draft, intelligent firing, good quality of coal, clean boiler properly, cemented and mounted, etc. A boiler properly rated at say 800 ft., when tested under standard operating conditions, may not be able to develop say 500 ft. rating if the draft is weak, the firing inefficient, the coal of poor quality, the heating surface covered with soot, the sections and door frames leaking air or if there is a short circuiting of the gases due to faulty cementing, etc. Because of those prevailing handicaps placed on most heaters, in which the actual operating conditions are far be-

(Continued on page 80)







# "Samsonchina" Bathroom Accessories

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PRACTICAL AS A MONKEY WRENCH. CLEAN AS A SUR-GEON'S NEEDLE.

SCREWDRIVER
PUTS THEM UP.

USE ON ANY KIND OF WALL. GOOD ENOUGH

FOR THOSE WHO
CAN AFFORD
THE BEST,
AND PRICED LOW
ENOUGH FOR

EVERYBODY.
THERE IS A PIECE
FOR EVERY
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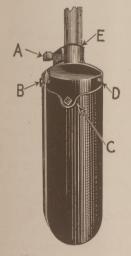
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To put on new scoop, loosen three bolts, remove old and replace with new. Bolts furnished with each scoop.

Three-eighth inch set screw to stay handles.

Spade Complete \$2.50. Extra blade with bolts 75 cents.

Order one now and have it on the job when the laborer starts in. Then you won't have to beg, borrow or steal your competitor's.

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Order by parcel post C. O. D.

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BROOKLYN, N. Y.

(Continued from page 40)

taken up with the kitchen department, including provisions storage. The main room has eleven-foot ceiling and red tile floor. It is a daylight kitchen. The room is divided off into four sections by two wide aisles crossing at right angles, forming a Greek cross. The northeast section carries the dishwashing department and the storeroom; the southeast section the room service; the northwest section the bake shop, and the southwest section the kitchen proper.

### The Ventilation System.

The finest architectural creation would cease to be habitable if not properly ventilated. For this reason extraordinary effort was made to supply every part of the house, working quarters and living quarters, with fresh air.

To do this for The Drake entailed a cost of hundreds of thousands of dollars. The architects worked hand in hand with the engineers to provide a continuous supply of washed and temperatured air, and the result is a house free of dead air and free of disagreeable odors.

The magnitude of the building required several separate and distinct installations, sixteen in all, as, for instance, one for the main floor (exclusive of the ballroom); a separate system for the ballroom; a separate system for the private dining rooms; a separate system for the kitchen; also for the scullery; two separate systems for the guests' bathrooms; also three separate systems for the basement, including for the laundry, the engine room, the helps' toilet and locker rooms.

Guests of The Drake who find the atmosphere so pleasant and comfortable in all of the public rooms, have, as a rule, only a vague idea of how this temperature control is produced and maintained, for, to the unitiated, there is seemingly no evidence of how it is done. There is no draft. The places of ingress and egress of air are so disguised that the harmonies of the room are not disturbed or disfigured.

We will explain in a brief way the system: The washed and temperatured air is fed to the main floor near the ceiling in the center of the Palm Court at the rate of fifty thousand feet a minute. It is pulled to the outer edge of the floor by fans thru grills distributed along the walls from the Library Lounge, Grill Club, the main dining room, and French restaurant. American blower fans are used. Radiators are ranged under the windows of all rooms to further regulate the temperature, and steam coils are placed around each of the large skylights for the purpose of temperaturing the cold air that drops down from the skylight, and to correct moisture.

The ventilation system for the ballroom has capacity for 26,000 cubic feet a minute.

The individual ventilating system for the seven private dining rooms on the mezzanine pulls 9,600 cubic feet a minute. The air is brought in from court roof over two coils and thru air washer, then over three reheating coils; all coils controlled by National Regulator automatic device by air operated thermostatic valves with thermostats in air washing chamber and in ducts leading from final heating chamber. The Acme air washers are installed.

There is a separate system for the Italian dining room on the ground floor, northeast corner. This system, 13,000 feet a minute, delivers 10,000 feet a minute to the Italian dining room, and the balance to the uniformed employes' cafeterias and officers' dining rooms near by. A further supply of fresh air for the cafeterias is obtained thru a pull from the Club Grill on the floor above, which adds 6,000 feet a minute, all under thermostat control. The pull from the grill is blown in on one side of the cafeteria, and pulled out on the other side.

A very complete ventilation system is installed for the kitchen, and a complete change of air is made every four minutes. It is a reversal of the system on the main floor, for in the kitchen the pull is in from all around the outer edge, 50,000 cubic feet a minute, and it is pulled out over the range and urns at the rate of 52,000 cubic feet a minute; this is to keep a slight vacuum on the kitchen so as to prevent escape of odors into the dining rooms.

This system is also in effect over the stock kettles in the scullery and vegetable kitchen, where the air comes in from all around and exhausts over the stock kettles, which are centered in the room.

The Plumbing.

The plumbing in The Drake received the most careful study by owners and architect before decided upon, the purpose being to produce fixtures for this building that should represent the best thought in design and construction.

The bathtubs are equipped with a quick filling and quick emptying device, which is very essential in an up-to-date hotel. The spout is of special design and discharges at an angle so that the water strikes against the foot of the tub 8 inches above the bottom, thereby reducing the noise when the tub is filling.

The lavatories are fitted with an integral spout, all china handles and china escutcheons, so that there is no metal showing above the top of the lavatory, thus reducing to a minimum the amount of cleaning necessary in these fixtures. Over each lavatory is a special design ice water faucet.

The closets are new type wall closets of the syphon jet pattern operated by a concealed flush





valve; the regular blow-out type of closets being too noisy for guests' bathrooms. Each of the closets is fitted with a white enameled cane-seat chair, thus affording both a seat for the closet and chair for the bathroom combined in one fixture. There is a space of three inches between the bowl and the floor, thus facilitating cleaning the floor.

The showers in the guests' bathrooms are fitted with a plate glass shower stall door, white enamel finish with open grille at the top. The shower consists of an 8-inch N. P. tubular head coming from the ceiling of the stall and is operated by a concealed Crane mixing valve placed close to the front of the stall so that user can ascertain the temperature of the water before entering stall.

In the barber shop and beauty shop, special attention was given to the lavatories, which are 24x30 inch vitroware china pedestal lavatories, each lavatory in the barber shop fitted with a Crane concealed mixing valve with china escutcheons and china handles. The mixing valve controlling the supply to the basin thru an integral spout and also independently controlling the shampoo supply.

The public toilet room is conveniently located for guests, being off the main corridor on the street level floor, thereby having an abundance of daylight, and is so arranged that the amount of privacy required in a room of this character is very effective. The general lay-out of the room in finish and color scheme has been highly complimented by competent critics.

### BED ROOM FLOORS.

#### The Corridors.

By consulting the floor plan one can see at a glance the simple lay-out of the floor; the battery of six-passanger elevators centering the floor, with spacious landing; the battery of service elevators alongside with service hall screened for privacy and quiet. The corridors are eight feet wide, paneled in light gray to ceiling, the doors painted to match, and each corridor door with wood transom over it. The halls are carpeted full width; the lighting is from ceiling, the fixture made of beads of crystal woven basket fashion in hemisphere shape, which gives a sort of holoplane effect, but are more elaborate than the holoplane lights. There are two linen lockers on each floor stocked to maximum capacity and under thoro control. Each corridor is plugged for vacuum cleaning. There is enclosed closet for waste-paper chute. A Cutler mail chute is at elevator landing. The elevator cars have walnut finish, are floored with rubber tile, and each car equipped with safety devices, making accidents impossible.

#### Bedrooms and Parlors.

The bedrooms range from  $8x14\frac{1}{2}$  feet for the smallest to  $12\frac{1}{2}x21$  feet, and average  $9\frac{1}{2}$  by 19′. The living rooms for the suites range from 19x21 to 19x28, not including sun-parlor annex 11x19. The walls are finished in French gray, or similar pleasing color; the clothes closets are of generous size, and all with mirror-faced doors; the closets reminding of the Ritz-Carlton hotels, which for many years have standardized for the refinements of room finish.

The furniture, made by Marshall Field & Co., is practically all of the new style painted type with floral decoration. The illustration of the typical bedroom, and the illustrations of typical living rooms of the suites, picture better than our words can describe the attractiveness of this furnishment.

The typical room has taupe carpet, uniform on all floors, silk coverlids on beds and pillows; the chairs upholstered in damask silk; the windows with net curtains and silk overdrapes; every double room with twin beds, Columbia feather mattresses, vanity dresser, and chiffonier. There are portable lamps on table, desk and somnoe, and lights attached over mirrors and over clothes closet doors. There is a trunk rest and metal waste basket. Every living room has clock synchronized with master clock; also has bookcase, pictures, and bric-a brac to give home atmosphere. The illustrations picture one of these suites, giving two views, one showing the mantel side, with spark guard and marble hearth; the other the window side, and the sunparlor with its Winsdor furniture.

#### Suites for Permanent Occupancy.

Mrs. Bryan showed us thru some of the suites that have been rented for permanent occupancy to wealthy people, and which are furnished with the private collection of the owners. The bathrooms in these suites are 10x10 feet, not including the glass inclosed shower. The suites have private hall with console.

The bath rooms are described under head of "plumbing." They are as inviting as bathrooms can be built, all porcelain fittings, the lavatories 30 by 30 inches, with ice-water faucet at one side. Over each lavatory is a medicine chest with lights over it. The showers have dial with lever for temperature of water control, and inscribed "Crane, Model A." The shower is a rose in the center of the ceiling.

The valet shop is located on the 100 floor and equipped with pnuematic tube and telautograph. The housekeeper's office is also on the 100 floor, and also equipped with pneumatic tube and telautograph.—Courtesy of "The Hotel Monthly."

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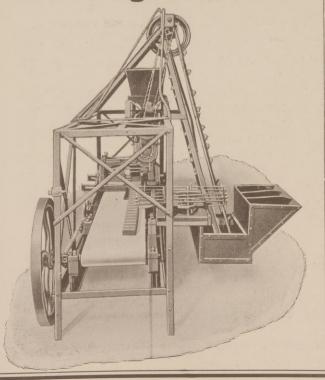
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### Structural Service Department



T HE use of concrete for chimneys is one more step toward the prevention of fires. The National Board of Fire Underwriters report that the annual average loss by fires due to defective chimneys from 1916 to 1919 was nearly \$12,-000,000, or for the three years, \$36,000,000, and their reports are not complete.

The defects in chimneys are usually cracks extended through to the flue, allowing sparks to come through and ignite the woodwork of the building. Sometimes the interior of the flue, made of inferior heat-resisting materials, spalls off, making the walls of the chimney so thin that the heat sets the wood on fire. A chimney of concrete or one that has a lining of concrete does much to prevent this. The cost of a properly constructed chimney is but little more than the ordinary type.

The recommended ordinance of the National Board of Fire Underwriters is too long to quote in full, but the paragraphs below give the salient points.

"The walls of brick chimneys shall be not less than 3\%4 ins. thick (width of a standard size brick), and shall be lined with fire clay flue lining.

Flue linings may be omitted in brick chimneys for private dwellings provided the walls of the chimneys are not less than 8 ins. thick, and that the inner course shall be a refractory clay brick having a softening point of at least 1922 deg. F. (Segar Cone 05).

All brick work shall be laid in spread mortar, with all joints push-filled. Exposed joints, both inside and outside, shall be struck smooth. No plaster lining permitted.

Concrete chimneys cast in place shall be suitably reinforced vertically and horizontally. The walls shall be not less than  $3\frac{3}{4}$  ins. thick and shall be lined with fire clay flue lining.

Flue linings may be omitted in reinforced concrete chimneys for private dwellings, provided the walls of the chimney be not less than 6 ins. thick, and provided further that quartz gravel shall not be used as the coarse aggregate.

Concrete blocks used in chimney construction shall have walls not less than 3¾ ins. thick, and blocks enclosing more than one flue shall have suitable reinforcement completely encircling the blocks and well embedded in them. All concrete block chimneys shall have fire clay flue lining.

Stone chimneys shall be at least 4 ins. thicker than required for corresponding brick chimneys, and shall have fire clay flue linings. Rubble stone chimney walls shall be not less than 12 ins thick.

Hollow building tile shall not be used for the walls of isolated or independent chimneys, but may be used for chimneys built in connection with exterior hollow tile walls of buildings not exceeding three stories in height, in which case the chimney walls shall be not less than 8 ins. thick. The outer 8 ins. of a building wall may serve as the outside wall of the chimney, but the remaining chimney walls shall be constructed of two layers of 4-in tile set with broken joints; or they may be built of 4 ins. of solid brickwork. In either case the walls of the chimney shall be securely bonded into the walls of the building. No chimney shall be corbeled from a hollow tile wall. All chimneys built of hollow building tile shall have fire clay flue lining.

Chimneys shall be at least 3 ft. above flat roofs, and 2 ft. above the ridges of peak roofs, and shall be properly capped with stone, terra cotta, concrete, cast iron, or other approved material; but no such cap or coping shall decrease the required flue area.

Chimneys shall not rest upon or be carried by wooden floors, beams or brackets, nor be hung from wooden rafters. Iron brackets or stirrups attached to wooden construction shall not be used to support chimneys. In frame buildings shall always be built from the ground up, or rest on basement walls.

Chimneys shall be built upon concrete or masonry foundations properly proportioned to carry the weight imposed without danger of settlement or cracking. The foundation for an exterior chimney shall start below the frost line.

The walls of brick buildings may form part of a chimney, but the walls of the chimney shall be securely bonded into the walls of the building, and the flue shall be lined the same as an independent chimney. Flues in party walls shall not extend beyond the center of the walls, and their location shall be permanently indicated on the exposed side of the wall.

Flues shall be built as nearly vertical as possible, but in no case shall they have an angle greater than 45 deg. from the vertical. Where flues change direction, the abutting linings at the angle joints shall be clipped to fit closely, and at no point shall the cross-section area be reduced. There shall be but one connection to a flue.

Connections between chimneys and roofs shall be made with sheet metal counter or cap flashing (copper recommended) arranged to overlap roof flashing and allow for movement that may occur between chimney and roofs.

### Note the Lock-Joint

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No increase in the wall of chimneys, nor any projecting masonry shall be permitted within a distance of 12 ins. above or below the rafters or roof joints."

(Continued from page 72)

low standard testing conditions, good practice demands that small boilers from 50 to 100 per cent greater in capacity than the amount of radiating surface installed. Good engineering practice demands that proper factors of safety be used to meet the varying conditions met in actual operation.

"The short circuiting of the hot gases through a boiler and the leakage of air between the sections into the flue travel because of improper cementing of the spaces between the sections is a frequent cause of heating trouble. We all know that air leaks through cracks in a cigar's wrapper ruin a cigar. Air leaks because faulty cementing also ruin the economical operation of a boiler. Regular boiler cement should be used; asbestos is porous and should never be used.

"It is important that the boiler be the proper type to suit the conditions. If the draft conditions look unfavorable, install one size larger firepot with fewer intermediate sections having a short fire travel. If the draft is strong, give preference to a long fire travel. A heating plant that is improperly designed and poorly constructed is bound to be wasteful in fuel."

\*March ''Journal of the American Society of Heating and Ventilating Engineers,'' New York City.

#### PERSONAL MENTION.

W. Henry Mayer, architect and engineer, has moved to his new and more spacious offices in "The Regis," 3327 Montgomery Road, Cincinnati, Ohio.

M. R. Marsh, 609 Trust building, Charlotte, N. C., has just been registered to practice architecture in North Carolina and desires catalogues on building materials.

H. T. Lindeberg, architect, 2 West 47th Street, New York City, announces the opening of a branch office under the management of his associate, Mr. John F. Staub, in Union National Bank Building, Houston, Texas.

Layton Allen, architect, Indianapolis, Ind., and Hubert M. Garriott, architect, Logansport, Ind., are pleased to announce that they have asociated in the practice of architecture. The new firm will be known as Allen & Garriott, Architects, with offices at 401 Lombard Building, Indianapolis, Ind., and 4 Masonic Building, Logansport, Ind. Catalogs and data are desired in both offices to bring files up to date.

### THE

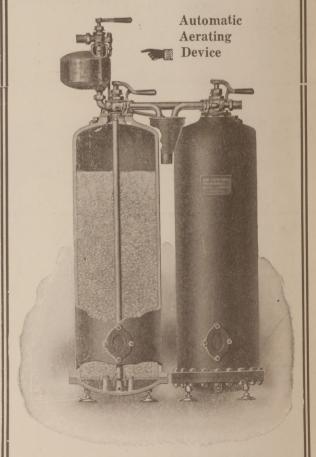
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### Building and Construction News

302



Apartment Houses.

Little Rock, Ark.—Henry G. Leiser will erect 2-story building, 922 Rock St.; \$10,000.

Leeseburg, Fla.—Rigdon Bros. will erect \$16,000 building. 12th and High Sts.; 2 stories; frame; 14 apartments; owners build.

Baltimore, Md.—Stratford Apartment Co. will erect \$70,000 building, Liberty Heights Ave. near Denison St.; 3 stories; brick; 109x96 ft.; J. R. Forsythe, Archt., 232 St. Paul St.; owner builds.

Liberty, Mo.—R. E. Hall will erect \$20,000 building, Franklin and Missouri Sts.; 45x70 ft.; 3 stories; hollow tile and brick; gravel roof; oak and pine floors; vapor heat; \$3000; plans and construction by owner. (Lately noted.)

Springfield, Mo.—Mrs. Virginia H. Prophet will remodel 467 St. Louis St., for apartments; \$15,000.

Tulsa, Okla.—L. A. Hurst will erect \$14,000 building, 308 W. Easton St.

Tulsa, Okla.—Virgil Jones will erect \$11,000 building, 608 N. Boston St.; 2 stories and basement; 4 apartments.

Tulsa, Okla.—Ardena Lewis will erect \$16,000 building, 1111 S. Elgin St.; 2 stories; frame; 4 apartments.

St.; 2 stories; frame; 4 apartments. Dallas, Tex.—Joe Aronoff will erect \$17,000 building, 2933-35-37 Park Row; brick veneer; 4 apartments.

Association and Fraternal.

Fort Smith, Ark.—Woodmen of World, Chester Holland, Chrmn. Bldg. Comm., Knights of Pythias, Modern Woodmen of America, Independent Order Odd Fellows and D. O. K. K., plan fraternal home.

Fayetteville, N. C.—Benevolent Protective Order of Elks will erect store and lodge bldg., Hay and Old Sts.; \$35,000; 50x150 ft.; 4 stories; brick and terra cotta; ordinary construction; built-up roof; concrete and hardwood floors; interior tile; metal ceilings; wire glass; Stiles S. Dixon, Archt.

Chattanooga, Tenn.—Aerie No. 945, Order of Eagles, will erect clubhouse, E. 6th and Cherry Sts.; \$60,000; fireproof; brick; 4 stories; first two floors for business purposes.

Ennis, Tex.—C. M. Banner and Joe F. Houdek will erect \$12,000 building for insurance office and bottling works to replace structure lately noted burned; 50x70 ft.; brick; gravel roof; concrete floors;

F. V. Lauderdale, Archt. Address Mr. Banner.

Norfolk, Va.—Salvation Army will erect building on Talbot St.; 3 stories; brick and stone; Wickham C. Taylor, Archt.; S. B. Williamson, low bidder at \$43,340.

Ridgeville, W. Va.—Knights of Pythias will erect building; Watkins & Co., Archts., 306 Cleveland Ave., Fairmont; bids until July 8 on concrete or tile foundations.

#### Bank and Office.

Walnut Ridge, Ark.—Dr. H. R. Mc-Carroll will erect brick business and office building on Main St., adjoining Oburn Bldg.

Baton Rouge, La.—Baton Rouge Electric Co., T. L. Small, Mgr., purchased site at Florida and 5th Sts., and plans 1 or 2-story office building.

Baltimore, Md.—Eureka Life Insurance Co., 9 E. Franklin St., will remodel 6-story building, 8-10-12 E. Fayette St.; hardwood floors; safes; interior tile; metal doors; vaults; vault lights; ventilators. (See Mchy. Wanted—Elevators).

Baltimore, Md.—Mercantile Bank, Jas. P. Healy, Prest., will remodel building at 120-5 W. Baltimore St.; \$50,000; 21.7x80 ft.; Smith & May, Archts.; Consolidated Engineering Co., Contr.; both Calvert Bldg.

Meridian, Miss.—Merchants' & Farmers' Bank will erect \$30,000 building.

St. Louis, Mo.—St. Louis Medical Society will erect \$150,000 building, Lindell Blvd. west of Mollah Temple.

Fayetteville, N. C.—National Bank will erect \$250,000 building on Market Sq.; 13 stories; steel, concrete and limestone, concrete roof; concrete, terrazzo and hardwood floors; hollow fireproof and interior tile; ornamental terra cotta; metal doors; vaults; wire glass; mail chutes; Stiles S. Dixon, Fayetteville, and Wm. G. Rogers, Charlotte, Asso. Archts.

#### Churches.

Mobile, Ala.—Broad St. Methodist Church will erect church, Government Street Loop; H. E. Palmer interested.

Mobile, Ala.—Northside Baptist Church, Rev. P. G. Carter, Pastor, plans church.

Centerton, Ark.—M. E. Church, South, Rev. W. J. LeRoy, Pastor, will erect church to replace one wrecked by tornado; brick; 75x55 ft.; seat

400; R. H. Hunt, Archt., Exchange Bldg., Chattanooga, Tenn.

Fort Smith, Ark.—First Methodist Church, Dr. Giles Lucas, Chrmn. Bldg. Comm., will remodel building, 5th and Jefferson Sts.; \$17,000, wiring contract to Bert Brooks; plumbing, N. Greathouse.

Fort Smith, Ark.—Lexington Ave. Baptist Church, Rev. P. B. Langley, Pastor, will remodel auditorium and erect Sunday school annex; 2 stories and basement; brick.

Atlanta, Ga.—Cooper St. Baptist Church, Rev. Wm. H. Beiers, Pastor, will erect Sunday school addition.

Macon, Ga.—Cherokee Heights Baptist Church, Rev. Dr. Sledge, Pastor, will erect church.

Baltimore, Md.—Epiphany Lutheran Church, Delaware Ave. near Raspe Ave., Rev. F. A. Hightman, Pastor, will erect 1-story church and 2-story Sunday school building; 40x100 ft. and 40x50 ft.; \$50,000; stone walls; wood frame; Clyde N. & Nelson Friz, Archts., Lexington Bldg.

Ellisville, Miss.—Baptist Church will erect \$10,000 Sunday school building; 2 stories and basement; also remodel auditorium. Address The Pastor.

Gulfport, Miss.—Christian Church will erect building at 15th St. and 21st Ave.; exterior finish of logs. Address The Pastor.

Bolivar, Mo.—Baptist Church will erect building. Address The Pastor.

St. Louis, Mo.—West Park Baptist Church, 5944 Easton Ave.; Rev. P. G. Van Zandt, Pastor, will erect \$100,000 church; front of building and basement in first unit, \$40,000.

Elkin, N. C.—Baptist Church, C. O. Hadley, Chrmn. Bldg. Comm., will erect \$15,000 Sunday school annex; contract let.

Lampasas, Tex.—Methodist Church will erect church and Sunday school. Address The Pastor.

Port Arthur, Tex.—First Baptist Church will erect \$100,000 building. Address The Pastor.

Fallsmill, W. Va. — Methodist Church will erect brick building. Address The Pastor.

City and County.

Birmingham, Ala.—Market—City will erect \$225,000 market house at 3rd Ave. and 23rd St.; 140x200 ft.; 1-story; reinforced concrete; brick walls; tar and gravel or concrete and tile slab roof; tile or terrazzo floors on concrete; hollow fire-

proof and interior tile; rolling partitions; wire glass; ventilators; steel sash and trim; steam vacuum heat; conduit system electric wiring; freight elevator; Martin J. Lide, Archt. and Consulting and Constructing Engr. (Lately noted.)

Elgin, Tex.—City Hall—City will erect City Hall. Address The Mayor. Portsmouth, Va.—Fire and Police Station, etc.—City will erect fire and police station and community hall at Port Norfolk; 2 stories; brick; plans by M. L. Parker, Building Inspector; bids opened July 11. Ad-

dress City Manager.

#### Courthouses.

Cleveland, Miss.—Bolivar County will erect \$75,000 courthouse; N. W. Overstreet, Archt., Jackson.

Hattiesburg, Miss.—Forrest County will alter and erect addition to courthouse; about \$50,000; brick and frame; composition flat roof; tile and wood floors; Emmett J. Hull, Archt., Jackson. Addres Board of Supervisors, Hattiesburg. (Lately noted.)

Rosedale, Miss.— Bolivar County will erect courthouse; 1 story; brick; composition roof; stone and terra cotta trim; terrazzo floors; Kramer & Lindsley, Archts., Kress Bldg., Jackson; contract August1.

#### Dwellings.

Little Rock, Ark.—J. M. Readlinger, Pine Bluff, will erect bungalow, Willow and 2nd Sts.

Washington, D. C.—S. Shapiro will erect six 2-story brick dwellings, 1308-18 Buchanan St., N. W.; \$50,000; owner builds.

Washington, D. C.—G. Van Holsen will erect 2 dwellings, 6014 and 6012 31st St., N. W.; \$9000 each; 1 and 2 stories; frame; owner builds.

Daytona, Fla.—Dr. H. L. Merriday will erect dwelling at Cedar and S. Pametto Sts.

Miami, Fla.—F. C. Kniffen, Hollyoak Del., will erect \$12,000 dwelling on Bay Road, Alton Beach sub- division, Miami Beach; Paist & Patterson, Archts., Miami.

West Palm Beach, Fla.—A. L. Noble and others will erect 20 bungalows, Palm Beach north; \$3800 each.

West Palm Beach, Fla.—Henry Pedley, Johnston City, Ill., will erect dwelling at Community Place. Address W. H. Thompson. Supt., Security Farms Syndicate.

West Palm Beach, Fla.—William Steinmeyer, Johnson City, Ill., will erect dwelling at Community Place. Security Farms Syndicate.

New Orleans, La.—A. Allmont will erect \$15,000 dwelling, St. Charles and Lowerline Sts.; owner builds.

New Orleans, La.—Max Singer will erect \$10,000 bungalow, Calhoun and Feret Sts.; also \$1500 double at Fern and Olive Sts.; owner builds.

Baltimore, Md.—Broring Building Co., will erect 13 2-story brick dwellings, 3801-25 Belair Ave.; total \$35,000.

Baltimore, Md.—Geo. W. Schoenhals, 101 S. Linwood Ave., will erect 18 two-story brick dwellings, 901-35 N. Bentalou St.; 16x57 ft.; slag roofs; hot water heat; \$35,000; Jos. F. Hirt, Archt., 829 N. Luzerine St.; owner builds. (Lately noted.)

Baltimore, Md.—Herbert C. Forrester, 20 E. Lexington St., will erect 5 bungalows, 2220-28 Poplar Grove St.; \$15,000; 1-story; brick.

Columbia, Mo. — Presbyterian Church will erect \$10,000 manse. Address The Pastor.

St. Louis, Mo.—Anselmo & Attilio Beffa will erect 2 buildings, Olive St. near Taylor Ave.; stores on first floors.

Winston-Salem, N. C.—N. S. Booe will erect building on Hyde Ave., West Highlands.

Tulsa, Okla.—Horn & Onan will erect \$15,000 dwelling and garage, Cincinnati St. and Sunset Dr.; 2 stories; brick; also \$5000 bungalow, 1725 S. Quaker St.

Abbeville, S. C.—Abbeville Presbyterian Church will erect manse. Address The Pastor.

Columbia, S. C.—T. W Walters will erect \$10,000 dwelling, 1500 block Pendleton St.; brick; 9 rooms.

Gaffney, S. C.—R. A. Jones will erect 6 dwellings on S. Limestone St.; 6 and 7 rooms.

Hospitals, Sanitariums, Etc. Conway, Ark.—Chamber of Commerce and number of physicians plan hospital.

Little Rock, Ark.—City, Mayor Brickhouse, will complete hospital; \$225,000; fireproof; 5 stories and basement; concrete; 2 electric elevators; Jno. P. Almand, Archt.; bids opened July 15. (Lately noted.)

New Orleans, La.—Charity Hospital, Dr. Wm. W. Leake, Supt., will erect \$90,000 building, Tulane and Villere Sts.; Favrot & Livaudais, Archts. (Lately noted.)

Meridian, Miss.—City, W. E. Hopkins, Chrmn. Hospital Bldg. Comm., will erect East Mississippi Charity Hospital; \$100,000; 4 stories; pressed brick; 234-ft. frontage; wings; Burt Stuart, Archt. (Previously noted.)

Springfield, Mo.—Sisters of Mercy will erect \$175,000 building at St. John's Hospital, N. Main and Nicholas Sts.; Geo. D. Barnett, Archt., 949 Century Bldg., St. Louis. (Lately noted.)

#### Hotels.

West Palm Beach, Fla.—Franklin Sheen Estate; remodel and enlarge 3 stores on Clematis Ave.; \$10,000; metal ceilings; skylights; steel, stone and plate glass fronts; H. G. Mitchell, Contr.

Winter, Fla.—Haven—J. T. Keefe will erect 3-story hotel; \$45,000; 48 rooms; Jno. T. Biggar, Archt., Tampa.

Memphis, Tenn.—Memphis Hotel Co., will expend \$50,000 to remodel Peabody Hotel, Main St. and Monroe Ave.; Hanker & Cairns, Archts.

Newport, Tenn.—Mrs. C. B. Mims will erect hotel on Church St.; 37 rooms; also erect number cottages in connection.



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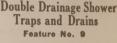
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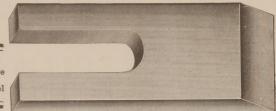


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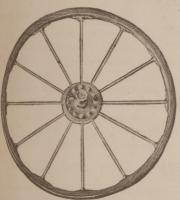
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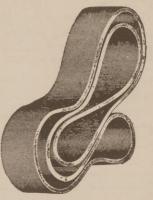
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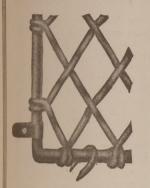
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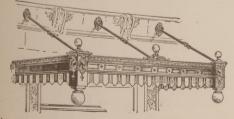
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