

THE SOUTHERN ARCHITECT AND BUILDING NEWS

Vol. LII.

JULY, 1926.

NUMBER 7

CONTENTS THIS ISSUE

| | | | |
|---|-------|--|-----|
| COVER DESIGN "Prospect Hill" From Historic Houses of South Carolina —Leiding. Sketch by Alfred Hutty. | | AN ADDRESS BEFORE THE SOUTHERN STATES ART LEAGUE, HOUSTON, TEXAS | 63 |
| FRONTISPIECE | 42 | By Wm. Ward Watkin, Architect. | |
| Aubusson Tapestry in Mayflower Hotel, Washington, D. C. | | EDITORIAL COMMENT | 65 |
| HOUSE OF MR. FRED M. MCGONIGAL, ATLANTA, GA. | 43 | Economy and The City Architectural Bureau. | |
| Felch & Southwell, Architects. | | PERSONAL MENTION | 66 |
| LIBRARY BUILDING, EMORY UNIVERSITY, ATLANTA, GA. | 49 | FROM MANUFACTURERS TO ARCHITECTS | 69 |
| Edward L. Tilton, Architect. | | Review of Manufacturers Literature. | |
| Ivey & Crook, Associate Architects. | | SUBSCRIBERS' SERVICE DEPARTMENT | 73 |
| SCIENTIFIC LIBRARY PLANNING. | 53 | By Edward L. Tilton, Architect. | |
| SOME SMALL HOUSES | 57-62 | SPECIFICATION & BUYERS' INDEX | 107 |
| Adams & Adams, Architects. | | INDEX TO ADVERTISEMENTS | 110 |
| Thomson & Swaine, Architects. | | | |
| Mahan & Broadwell, Architects. | | | |

In the August Number

In the August issue will appear text and illustrations of the first State Capitol Building in Georgia, one of the few standing Gothic structures in the South.

Hentz, Reid & Adler, Atlanta architects, contribute an interesting house built of limestone, being the house of C. C. Case, Esq. Descriptive text and floor plans add much to the value of the illustrations.

There are many interesting old places around Fredericksburg, Va., and an article in this number tells what may be found in this historic city.

Dwight James Baum, New York architect furnishes a fine example of a downtown



HOUSE OF MR. C. C. CASE, ATLANTA, GA.
Hentz, Reid & Adler, Architects.

house, being the residence of John C. Van Glahn, Esq., Brooklyn, N. Y.

Armstrong & Koch, New Orleans, architects, have favored us with text and photographs of one of the finest examples of a restoration problem we have ever had the privilege of publishing.

There will appear photographic plates of four medium priced houses that will be of interest. Specification reports are given in connection with each house.

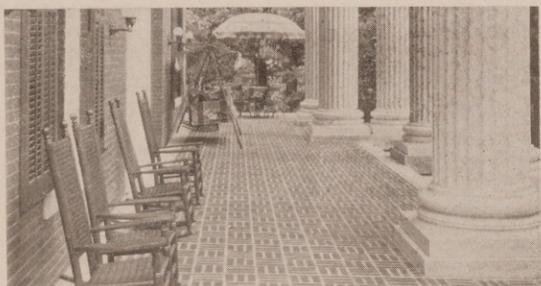
Besides these special subjects will be the usual Editorial Comment, Personal Mentions, and other subjects of current interest.



The Silent Inaudio



Exclusive Features (THE REFILL CHAMBER) (and DEEP WATER SEAL) make it the IDEAL combination for the more pretentious homes of the SOUTH
CAMDEN POTTERY CO., CAMDEN N. J.



A porch of beauty—home of Robert Jemison, Sr., Birmingham, Ala.

The Brick with the Beauty Burned in

AN unusually attractive effect has been created here with **ORIENTAL TILE**. The men responsible for this artistic floor pattern are

D. O. WHILLDIN, Architect.
HARRY WHITE, Contractor.

Oriental tile may be obtained in several colors and shades. They may be made to blend with any surroundings.



STEPHENSON BRICK CO.

2025 FOURTH AVE. NORTH
 BIRMINGHAM, ALA.

T *HROUGH* all ages men have found in architecture the permanent expression of the beauty of their character and of their spirit. The architect of today, so far as in his power lies, is expressing the beauty of his age. This beauty is the first measure of all architecture. It shall make our cities beloved; our colleges and schools inspiring; our homes charming and precious. Neither the complexity of modern demands nor the confusion of modern avenues of artistic expression should lead the architect away from the ceaseless search for the beauty that is possible of attainment in each of his buildings.

WM. WARD WATKIN, A. I. A.



AUBUSSON TAPESTRY USED AS WALL DECORATION
THE PROMENADE, MAYFLOWER HOTEL, WASHINGTON, D. C.

The SOUTHERN ARCHITECT AND BUILDING NEWS

VOL. LII.

JULY, 1926.

NUMBER 7.

House of Mr. Fred M. McGonigal, Atlanta, Ga.

FELCH & SOUTHWELL, *Architects.*

THE house of Mr. Fred M. McGonigal, located on Andrews Drive in the fashionable Peachtree Heights development, is an excellent example of a small house after the Sixteenth Century English style, inspired by certain portions of Sutton Palace, Knowle & Wilton, the use of materials being typical of the style—the main characteristics being a full use of the most easily procurable materials, cut stone, wood and brick.

The exterior walls are Chattahoochee cull bricks veneered on 6" of hollow tile with cut stone trim around the windows and doors, this cut stone trim extending into the rooms and forming the interior trim also. All stone was sand blasted and antiqued. Chips acquired in transportation were not repaired.

The roof is an English shingle tile in 4½ and 6" widths laid with uneven weathering from 4" to 6" and the bottoms of each tile course were varied at random, destroying all true horizontal lines. The ridge poles and end rafters of all large surfaces of roof were furred about 1" to give a sagged effect. The color is natural red with conservative variation of flashes.

The windows throughout are Crittal Cottage Casement with leaded glass, the glass used being D grade giving a close resemblance to Antique Clear Cathedral Glass.

The floor in entrance hall is of brown and black tessellated with black border, the squares being about 8". Floors in living room and dining room are Oak—the living room floor being carpeted to the walls. The library floor is of random width American Walnut boards.

The dining room ceiling is in Georgia pine panelled and stained. The living room ceiling cast plastered strap work beaten out of line with sand bag to produce the effect of the ornament being modelled on the job. All other ceilings in the house are sand finish plaster, the ceilings in the bedrooms being barrel vaulted with a rise of about 3 ft.

The heating is an indirect steam system with Pacific Boiler burning coke, and American Blower Company's Venturafin Fan Units with ducts to all rooms and return ducts from riser faces of steps at all change of floor level.

The plumbing installation includes three baths, servant's bath, first floor lavatory, kitchen and pantry sinks and laundry trays.

The fixtures used in building are from Standard Sanitary Manufacturing Company.

The electric service to the building is carried under ground in lead cable. The house is wired completely for both power and lighting, the two services passing through separate meters. Electric range, electric refrigerator, power service to ventilating fan equipped with variable speed control. Vacuum cleaner and dressing room outlets are all provided amply.

The telephone wires are also carried under ground and the house is provided with inter-communicating telephones, also carried under ground to service rooms over the garage, which is a separate building in the same style as the house, done in cre-dipped shingles of shade closely resembling the predominant color of the house.

The interior mill-work is of Georgia yellow pine painted, except for the ceilings of the dining room and porch, which are stone. The painting is all a two tone job, the under coats being white and the glazing being deep umber.

The interior doors are solid batten doors 1¾" thick, equipped with rustless iron hardware. Certain doors are provided with ornamental strap hinges.

Interior walls are sand finish plaster on the first floor and are painted and glazed the same color as the woodwork. The bedrooms are painted and stippled in complimentary colors.

The building was constructed between the months of February and September, 1925.



Photos by Fishbaugh & Lee

FRONT ELEVATION



REAR ELEVATION

HOUSE OF MR. FRED M. MCGONIGAL, ATLANTA, GA.

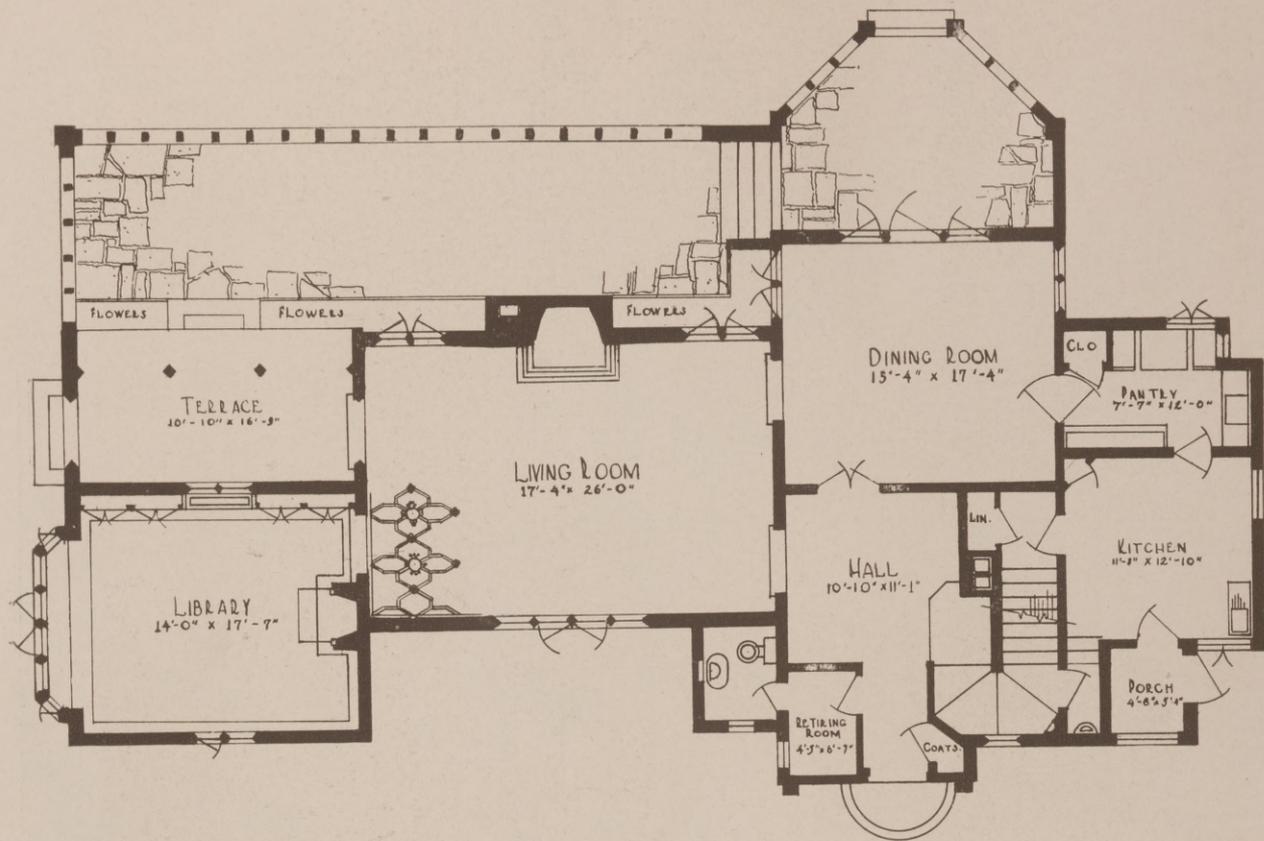
FELCH & SOUTHWELL, ARCHITECTS



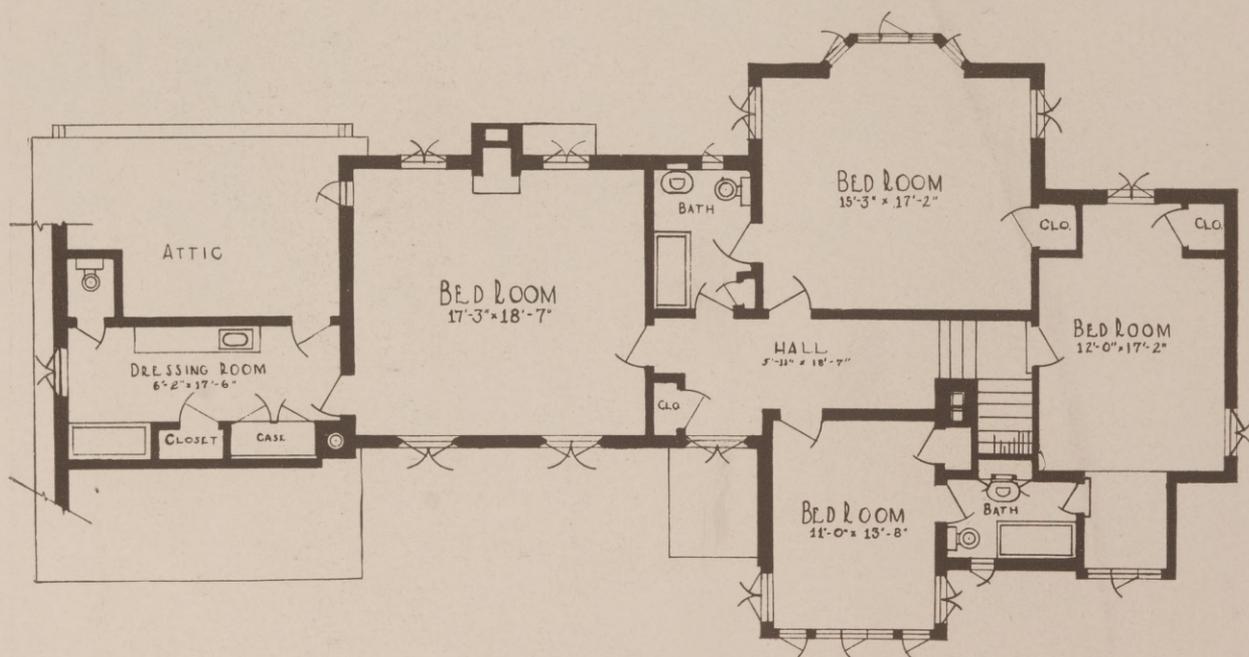
REAR ENTRANCE DETAIL



DETAIL OF KITCHEN END
HOUSE OF MR. FRED M. MCGONIGAL, ATLANTA, GA.
FELCH & SOUTHWELL, ARCHITECTS



FIRST FLOOR PLAN



SECOND FLOOR PLAN

HOUSE OF MR. FRED M. MCGONIGAL, ATLANTA, GA.

FELCH & SOUTHWELL, ARCHITECTS



REAR DETAIL OF LIVING ROOM SIDE



DETAIL OF LIBRARY END

HOUSE OF MR. FRED M. MCGONIGAL, ATLANTA, GA.
FELCH & SOUTHWELL, ARCHITECTS.



LIVING ROOM



LIBRARY

HOUSE OF MR. FRED M. McGONIGAL, ATLANTA, GA.
FELCH & SOUTHWELL, ARCHITECTS

Library Building, Emory University, Atlanta, Ga.

EDWARD L. TILTON, *Architect*,
IVEY & CROOK, *Associate Architects*.

THE Library building for Emory University was made possible through the generosity of Mr. Asa Candler. Its location is ideal at the head of the Campus with an open approach.

The building is designed on classic lines inspired from the Italian Renaissance which is peculiarly appropriate for a library since it symbolizes the literary and artistic re-awakening of the printing press and the beginning of that diffusion of learning which increased with continually greater impetus throughout the succeeding years.

The exterior of the building is faced with marble from Tate, Ga., in white and grey shades with certain members accentuated by the pink marble from the same quarries.

The general arrangement includes a large reading room forty feet wide by one hundred and twenty-three feet long, exclusive of alcoves that increase its overall length to nearly one hundred and seventy feet and gives it a seating capacity at tables for more than two hundred students.

The control and delivery desk command the room as well as the broad stairways that give access from the lower entrance story.

Adjoining this is the cataloguing room and the catalogue cases; also offices for the librarian, assistant, the directors and reference librarian.

On either side are stairs that lead to seminary

rooms on a mezzanine floor, from whose corridors a view is obtained of the reading room.

One of the alcoves off the northerly end of the reading room is devoted to reserve collections.

The entrance floor of the building contains a Museum and offices for the registrar and president of the college with his secretary.

In the well lighted basement are offices for the treasurer of the college, with vault and other rooms for several deans and studies.

The northerly end of the basement contains a receiving room for new books with an adjacent elevator. Also a room for multigraphing purposes.

The rear portion of the building below the reading room is devoted to metal book stacks on three tiers with a capacity for three hundred thousand volumes, all readily accessible from the delivery room on upper floor by stairways, book lifts and pneumatic conveyer.

The delivery room is decorated with a plaster frieze reproduced from the original marbles designed by the Danish sculptor, Albert Bertel Thornwaldsen, and representing The Triumphal Entry of Alexander into Babylon.

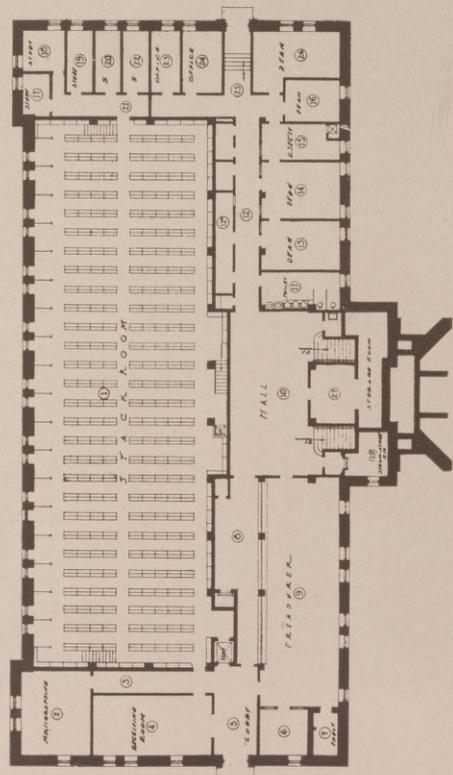
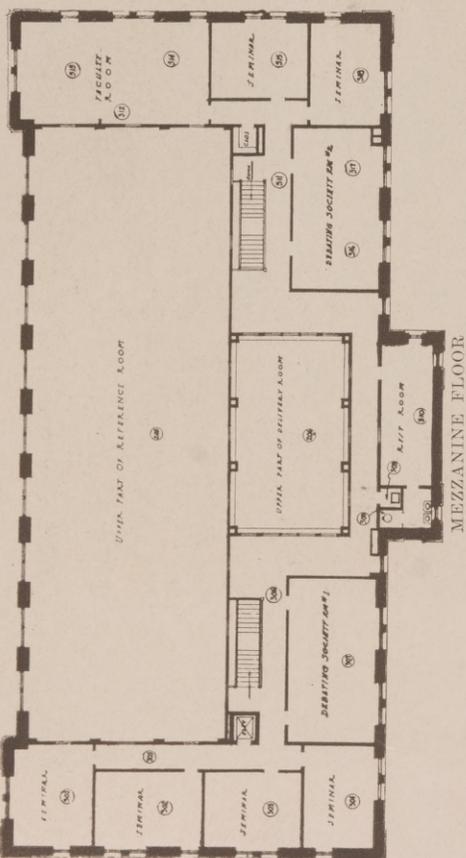
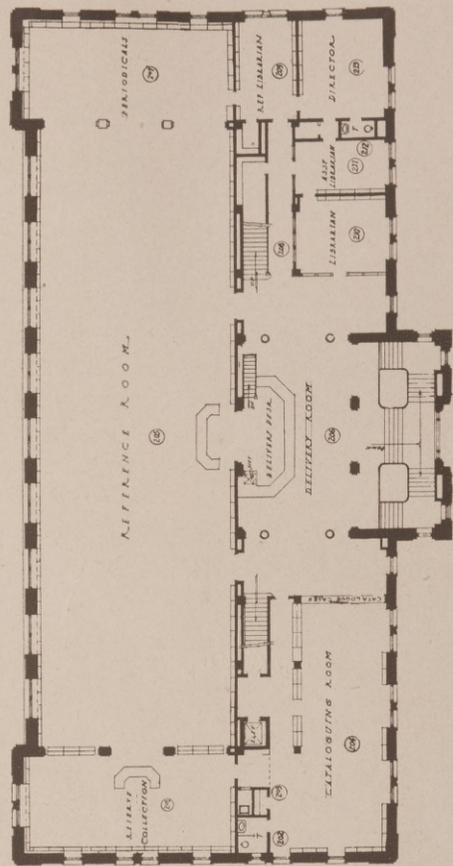
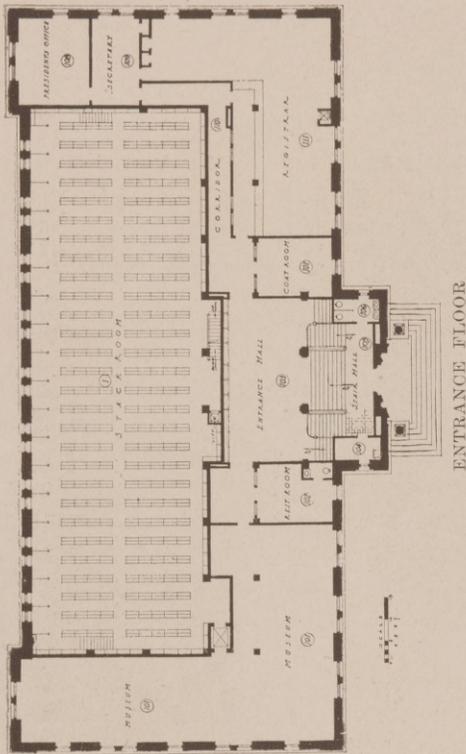
The construction throughout is fireproof, no wood being used except the oak trim wall shelving and furniture.

The heating pipes and radiators are concealed behind the wall shelving in the principal rooms.



LIBRARY BUILDING, EMORY UNIVERSITY, ATLANTA, GA.

EDWARD L. TILTON, ARCHITECT
IVEY & CROOK, ASSOCIATE ARCHITECTS



FLOOR PLANS
 LIBRARY BUILDING, EMORY UNIVERSITY, ATLANTA, GA.
 EDWARD L. TILTON, ARCHITECT
 IVEY & CROOK, ASSOCIATE ARCHITECTS



ENTRANCE DETAIL
LIBRARY BUILDING, EMORY UNIVERSITY, ATLANTA, GA.
EDWARD L. TILTON, ARCHITECT
IVEY & CROOK, ASSOCIATE ARCHITECTS



MAIN READING ROOM



DELIVERY ROOM
LIBRARY BUILDING, EMORY UNIVERSITY, ATLANTA, GA.

EDWARD L. TILTON, ARCHITECT
IVEY & CROOK, ASSOCIATE ARCHITECTS

Scientific Library Planning

By EDWARD L. TILTON, A. I. A.

PROPER library planning may now be called a science, since it is possible to formulate certain rules which, if carefully followed, will produce a methodical and rational result; it is likewise an art, since it calls for a skillful and systematic arrangement of means for the attainment of some desired end. The combination will produce a construction both practical and aesthetic.

The principles involved require the accommodation of the greatest number of readers or patrons under hygienic conditions, and with due care for their comfort, for the housing of the maximum number of books and contents, and for an aesthetic expression of the building's purpose, both within and without. These principles are fundamental, and are applicable to all libraries; they are likewise sufficiently flexible to admit the inclusion of any new discovery which may develop better arrangements as the science advances. The method of procedure is simple. Given a certain appropriation, not over 80 per cent. should be devoted to the construction, including heating and lighting, and from 20 to 22 per cent. to equipment, furniture and fees. The following formula will apply:

$$x = \frac{.80a^*}{bc}$$

In which x equals the size of plan in square feet; (a) equals the appropriation; (b) equals the cost of construction per cubic foot, which for a fireproof building might range from twenty-five to forty cents, and for a non-fireproof building from fifteen to thirty cents, depending upon various local conditions, including prevailing rates of wages and materials; (c) equals the height of the building, measured from the basement floor level to the top of the roof if flat, or half up the slope of the roof if pitched; the height of a basement and one-story building is about 30 feet, and the height of a basement and two-story building is about 40 to 45 feet.

To apply the formula concretely, let us assume the appropriation (a) to be \$150,000, 80 per cent. of which would be \$120,000. If a fireproof two-story and basement library be required, (b) would equal, say, \$.30, and (c) 40 feet, or bc would equal 12, which, divided into $(.80a)$, \$120,000, would give a resultant x of 10,000 square feet, which would permit of a building 100 x 100 feet, 80 x 125 feet, or similar proportions, in deciding which the shape of the lot might be a factor.

With the total appropriation of \$150,000, we should endeavor to house 150,000 volumes (or one dollar per volume), and to accommodate 300 readers (at \$500 each), allowing a maximum of 30

square feet per seat; this would require 9,000 square feet of floor space for the various rooms destined for the use of readers, such as reading, reference, children's, periodical, newspaper and such special rooms as the librarian may demand for medical and historical collections, club rooms, etc.

The 150,000 volumes may be distributed, allotting approximately 100,000 to the stacks and 50,000 to shelving throughout the various reading rooms. The size of the stack may be determined by dividing the 100,000 volumes by 20, which gives 5,000 square feet for a tier of seven shelves, and allows sufficient space for aisles and gangways; this 5,000 square feet may be arranged in two or more tiers, as the exigencies of the case demand, giving 2,500 square feet if in two tiers of seven shelves each; 1,250 if in four tiers, etc. When possible, it is well to allow 20 per cent. leeway to these figures, in order to avoid close stacking and to give some free shelf space. Several advantages are gained by keeping the stacks below the level of the first floor, as in the new Springfield, Mass., Library, and the Somerville, Mass., Library, thereby leaving the valuable main floor space for readers and reference shelving. In the latter building the stacks do not extend to an outside wall, but are lighted by "second light" through glazed partitions, leaving the periphery of the building free for reading rooms. This idea is also applicable to stacks extending vertically through the building, and has several decided advantages. Darkness is better for books than direct sunlight, and an interior stack may be readily ventilated. A plan to be economical and well laid out should have a minimum space devoted to corridors and stairways, and a maximum space for library purposes. In "monumental" libraries recently constructed, only 50 per cent. of the ground area is available for library use, the remainder being given up to walls, halls, stairs, etc. In the Springfield Library the similar proportions on the main floor are 85 per cent. and 15 per cent.

In the imaginary problem under consideration, with a ground plan of 10,000 square feet, we can assume, therefore, that 8,500 square feet of the main floor may be divided so as to allow, say, for the delivery room 500 square feet; for reading rooms, open shelf rooms for fiction, reference and other rooms as the librarian may designate, 8,000 square feet. The basement may need to accommodate heating and mechanical plants besides stack space, which will reduce somewhat the residuum to be assigned to newspaper rooms, lecture room and work rooms for receiving, unpacking, binding, etc. The second floor's available area may also be less

than that of the main floor, owing to possible light wells.

The available areas may, therefore, approximate: basement, 6,500 square feet; main floor, 8,500 square feet; second floor, 5,000 square feet; or a grand total of 20,000 square feet, to be apportioned among the various departments possibly as follows:

| | |
|-------------------------------------|-------|
| Delivery room..... | 500 |
| Several rooms for readers' use..... | 9,000 |
| Stack (area of one tier)..... | 3,000 |
| Catalog and work rooms..... | 2,500 |
| Librarian and staff rooms..... | 2,500 |
| Lecture rooms..... | 1,050 |
| Collections, etc..... | 1,450 |

The lecture room, unless usable for other purposes, is apt to make the least return, and should not, therefore, be too large nor occupy valuable space on the main floors. For a building to cost \$150,000, the lecture room might be in the basement and limited to 150 seats, which at 7 square feet, will require 1,050 square feet to allow for proper aisles; the height to ceiling should be not less than 12 feet, making 12,600 cubic feet and at 30 cents (the cubic foot cost of our building) will represent \$3,780 as the amount invested in the lecture room, the interest on which at 5 per cent. is \$189, to which must be added the expense of light, heat, and janitor's labor. It is usually better economy to hire a hall in a neighborhood for lectures or entertainments likely to attract large audiences and include only a small lecture room in the library building.

The working space and rooms should be ample to insure the proper running of the machinery of administration. Comfortable quarters for the staff, including rest room, locker room and kitchenette, will yield better returns in efficiency and library results than those obtained from a disproportionate lecture room. A good librarian and an efficient staff are as essential to a library as a competent president and faculty are to a college, and it is equally important to maintain an *esprit de corps* and an *esprit d'ouvrage* if the public are to receive adequate return for their financial and spiritual investment. To insure a continuation of such "dividends," the humanistic element should be considered with a solicitude at least equal to that accorded to the machinery of a steamship.

The comfort and convenience of the public are enhanced by the proper location, arrangement and design of the reading room. The collaboration of librarian and architect is here vitally requisite. The size and shape of any reading room can best be determined by plotting out the furniture. The tables should be spaced about five feet apart and the same distance from the walls of the room. The details are too diverse to enlarge upon here, since the individual preferences of the librarian and the require-

ments differ with every locality. But a fundamental condition applicable to every case is that of maintaining a reasonable pro rata cost per reader accommodated. In our supposititious problem we have allowed 9,000 square feet for reading and ancillary rooms to accommodate 300 readers at 30 square feet for each. The appropriation being \$150,000 makes each of the 300 seatings represent \$500 outlay.

The lighting of the library is of paramount importance, and to accomplish a satisfactory result it is well to follow the school house requirements and make the glass area of reading rooms equal to 20 per cent. of their floor areas. The light from the windows will be effective in the room for a distance equal to about one and one-half times the height of the top of window to the floor. Ceiling lighting will be advisable for spaces not properly illumined by the windows.

A module or width of bays approximately 12 feet, will be found to produce a good relation between solids and openings. For our building of 125 feet by 80 feet, there is no common denominator, so we can modify the dimensions to 129 feet 10 inches by 77 feet $5\frac{3}{4}$ inches, which will also produce 10,000 square feet, and give ten modules to the front and six modules to the sides of 12 feet $10\frac{3}{4}$ inches.

Artificial illumination is usually and preferably secured by some electric system. The carbon lamp is yielding to the tungsten lamp, owing to the increased economy secured by its greater power at less wattage. The amount of light required may be roughly figured at one watt (tungsten lighting) for each square foot of floor area when a direct lighting system is used. Indirect or semi-direct will require a little more wattage per square foot. The main floor of our building, with its 10,000 sq. feet, will therefore require for proper direct illumination enough lamps to yield 10,000 watts. If 30 watt lamps be used, there will be a total of 333 lamps, and if three lamps be used to each fixture, there will be 111 outlets; and if each circuit of twelve lamps has a switch, there will be twenty-eight switch outlets, or a total of 139 outlets, at an approximate cost of \$5 each, or \$695 for the main floor. It is not necessary, however, to have so many switches, since most of the circuits can be controlled directly from the panel board. This \$695 may be reduced to terms per cubic foot. The main floor, with 10,000 square feet, may be assumed to have a height of 15 feet or 150,000 cubic feet, which, divided into \$695, gives .46c, or less than one-half cent per cubic foot. The total cubage of our building, including basement and second stories, being 400,000, will require on above basis 1,840 to cover the expense of the wiring for lamps. The panel boards for the several circuits in the reading rooms are best located near the delivery desk, within easy reach of the library attendant.

In addition to the electric light wiring, proper

allowances must be made for an interior telephone system and public telephone connections, for call bells, for standard clock system and watchman's clock, for electric book lifts, for all of which, in the building under consideration, we may set aside \$4,500.

The heating of the library is usually accomplished by a steam system. The number of square feet of radiation is calculated by the Mills formula of 2-200; that is, the sum of the glass area, divided by 2; the solid wall area by 20, and the cubic foot contents of the room by 200. For example, the building we are assuming covers 10,000 square feet, by 40 feet in height, or 400,000 cubic feet; the glass area equals 2,000 square feet (or 20 per cent. of floor area); the wall area equals the periphery of the building (120 + 80 + 120 + 80), 400 lineal feet by 40 feet height, or 16,000 square feet, less the 2,000 feet of glass, or 14,000 square feet. The following formula will apply:

$$x = \frac{ga}{2} + \frac{wa}{20} + \frac{cc}{200}$$

in which x equals the square foot of radiation required; ga equals glass area of windows and ceiling light; wa equals solid wall area; cc equals cubic contents. Applying this formula to the above figures, we obtain the following results:

$$\frac{2,000}{2} + \frac{14,000}{20} + \frac{400,000}{200} = 3,700$$

square feet of radiation. If the radiation be concealed behind shelving or seats, it should be increased by about one-third, or, say, 1,200 square feet, giving a total of 4,900 square feet, to which add 25 per cent. for supply and return pipes, and another 25 per cent. for reserve power in boiler, or 50 per cent. of 4,900 equals 2,450, giving a grand total of 7,350 square feet, which indicates the requisite boiler rating. The cost of this will approximate 75 cents per foot, or \$5,512.50 for heating the building. An additional percentage of radiation should be allowed for walls on north sides and for ceilings under flat roofs, but 5 per cent. of the total appropriation should cover the expense of "direct" steam system.

The mechanical ventilation in an ordinary library building may be limited to the lecture room, and a possible small amount in the shape of "direct-indirect" for certain of the reading rooms, the cost of which would approximate 25 cents additional, or \$1,837.50, entailing the total estimate for heating and ventilating of \$7,350, or one dollar per foot of the sum above. A "plenum" system for the entire building is expensive to operate, and experience shows that when installed the use of the fan is apt to be soon discontinued. The writer has arranged a simple system, first tried at Cleveland and since

installed in many buildings, by which the radiators or coils are concealed back of insulated shelving and supplied with openings at floor and at top of cases to permit the circulation of air. When the shelving runs beneath windows, either high or low, there is an opportunity to arrange an effective method of ventilation by opening the window slightly and inserting a deflector. Even with closed windows there is a continual circulation of the room air engendered by the spaces containing radiation between walls and back of shelving, which act like flues.

The furniture will consist of delivery or charging counter, catalog cases, bulletin boards, tables, chairs, shelving and the various items of equipment for the rooms devoted to periodicals, newspapers, fine arts and special collections, as well as the suite for the librarian and staff, for the cataloging and work rooms, and for the lecture room.

Our building, as before stated, is intended to accommodate 300 readers, and for convenience we can assume the tables will be the standard three feet by five feet size for four persons, making a total of seventy-five tables and 300 chairs. The 50,000 volumes to be distributed throughout the rooms will need about 1000 feet of bookcases, five shelves high in children's room and seven shelves high elsewhere, and will cost about \$3,500. Metal shelving can be installed for nearly the same price.

The stacks form an important adjunct to the library. As before indicated, the amount of stack required may be calculated by multiplying the square foot area of the stack room by twenty volumes if but one tier of seven shelves be required; by forty if two tiers be required, and so on. Conversely, if we wish to know the size of stack room necessary to house 100,000 volumes in one tier seven shelves high, we divide by twenty, giving 5,000 square feet; for two tiers divide by forty, giving 2,500 square feet; for three tiers, divide by sixty, giving 1,667 square feet, and so on. Metal stack construction is an invention of recent years, and its rapid development has kept pace with the modern library demands. There are several makes of metal stacks upon the market, each claiming to have special features of superiority over its competitors. The system originally conceived by Bernard R. Green, and installed in the Library of Congress, has since from time to time, been improved and used in buildings where the conditions imposed heavily loadings of superimposed tiers of floors, and also where compactness, as well as strength, was a desideratum. The weight of each tier of stacks, with its complement of books, may be figured at 125 pounds to the square foot. The cost may be roughly computed at \$2 per square foot of stack room for each tier, or 10 cents per volume.

To summarize the foregoing, we can subdivide

the \$150,000 appropriation under the following heads:

| | |
|---|-------|
| General construction, exclusive of heating and electric work..... | 72¼% |
| Heating work with limited ventilation | 4% |
| Electric work..... | 1¾% |
| Stacks | 7½% |
| Furniture | 6% |
| Lighting fixture | 2% |
| Contingencies | 00½% |
| Architect | 6% |
| | <hr/> |
| | 100% |

After analyzing and proportioning the various elements of the plan as indicated, the architect's skill should be invoked to produce an artistic building. The scientific or mathematical consideration of the problem resembles the human skeleton, which is similar in child and adult, black, white and red men, but the flesh covering may over one be beautiful and over another be the reverse.

It is not possible to give more than general hints in an article of this description since there are many ramifications which lead off into various refinements that make for economy of plan and expression in design.

EDITORIAL NOTE:

This article was prepared for "Library Planning, Bookstacks, and Shelving," a book issued by Sncad & Company, Jersey City, N. J., and it is through their courtesy that we reproduce the article.



PUBLIC LIBRARY, HOUSTON, TEXAS

WM. WARD WATKIN, ARCHITECT



Photos by Tebbs & Knell, Inc.

ENTRANCE FRONT



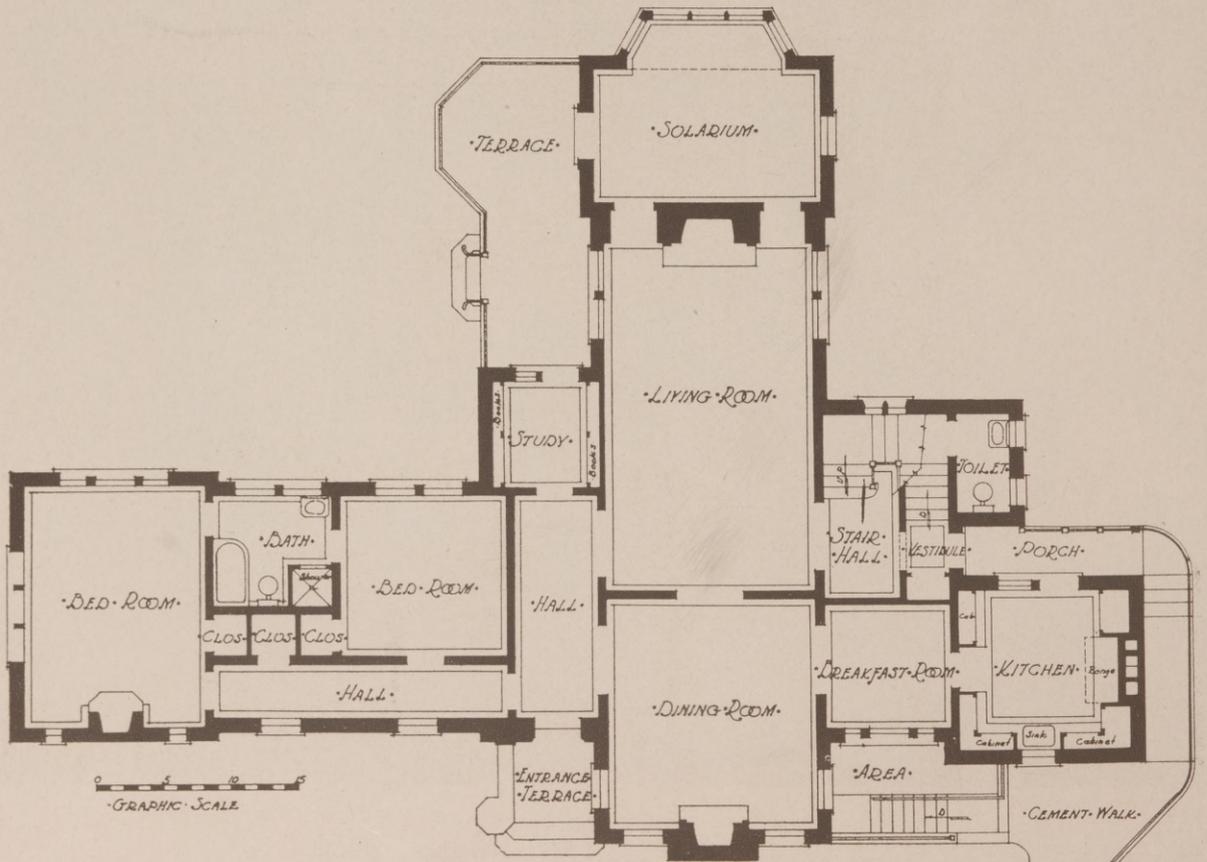
GARDEN SIDE

HOUSE OF MR. C. F. LEWIS, SAN ANTONIO, TEXAS
ADAMS & ADAMS, ARCHITECTS

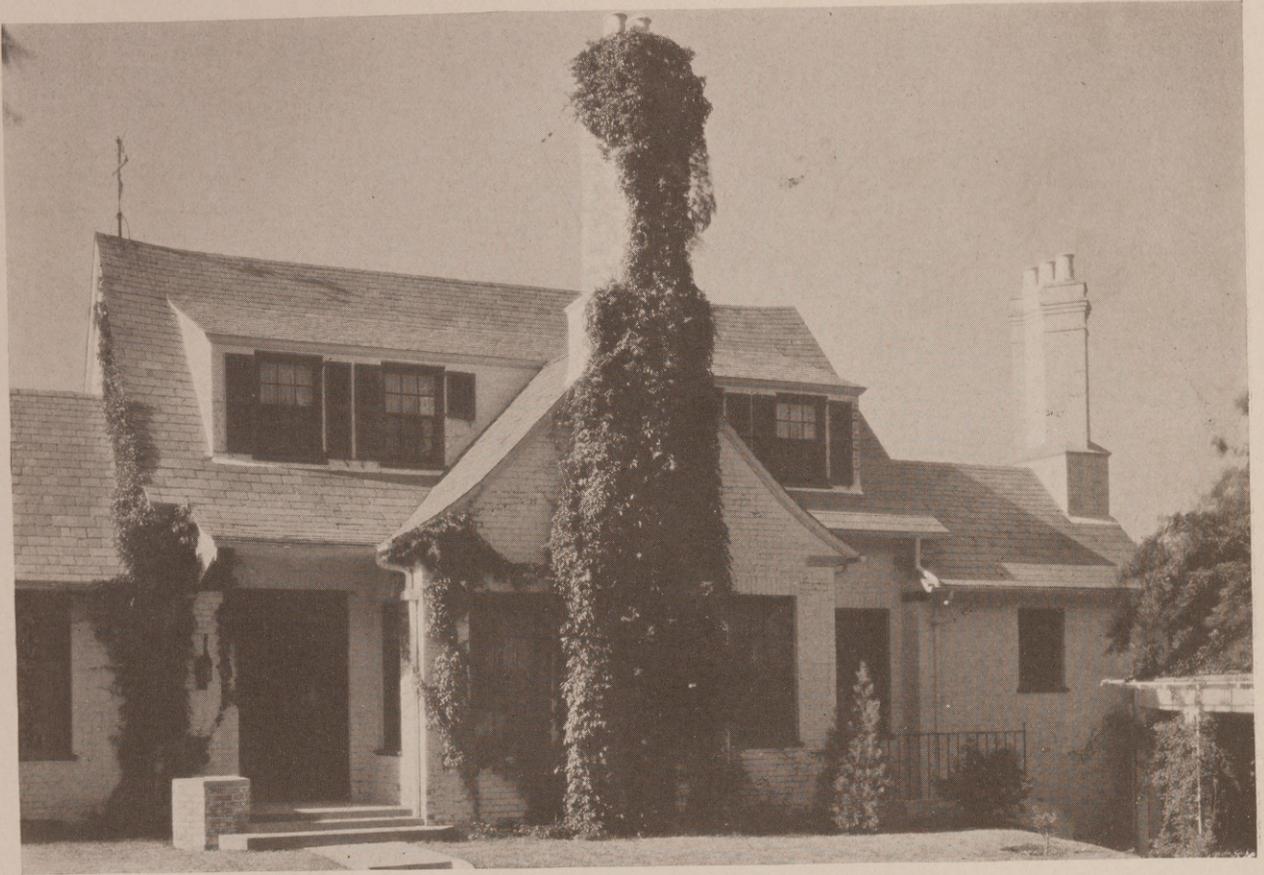


Photos by Tebbs & Knell, Inc.

ENTRANCE FRONT
 HOUSE OF MR. L. E. JACKSON, DALLAS, TEXAS
 THOMSON & SWAINE, ARCHITECTS

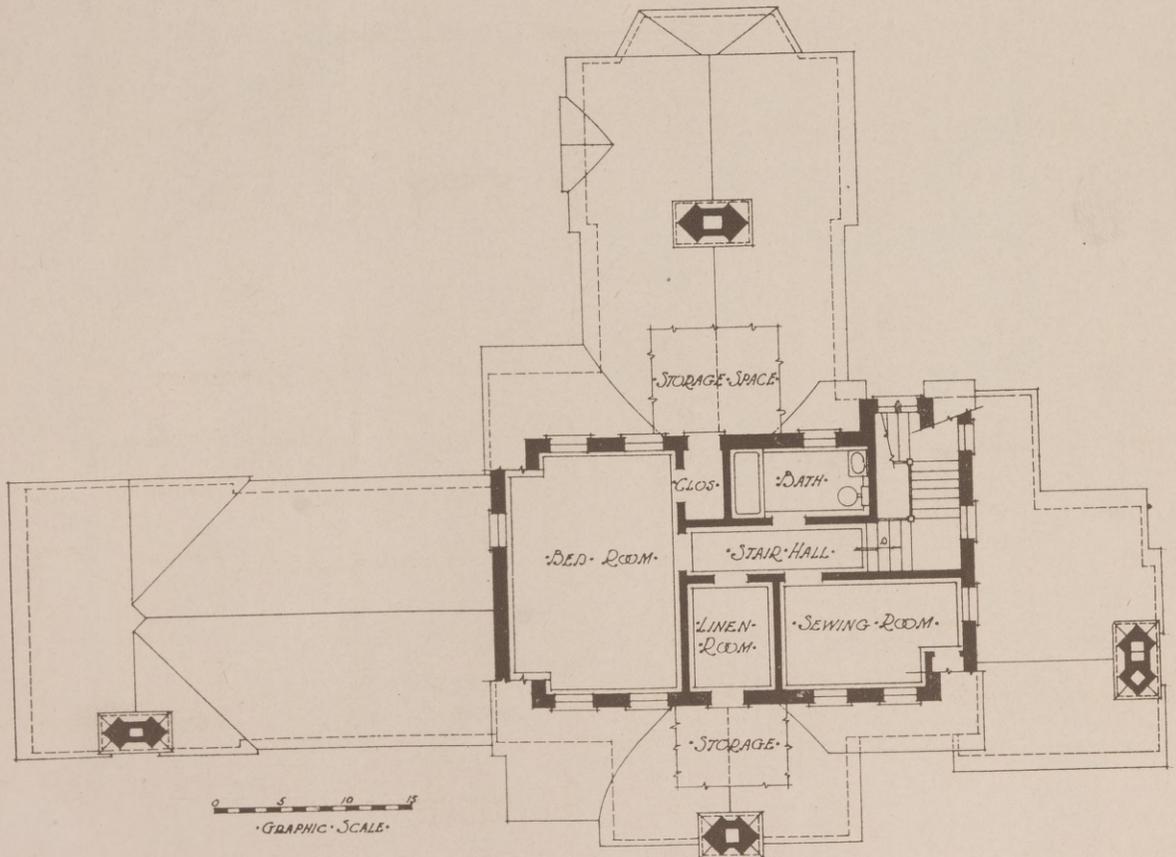


FIRST FLOOR PLAN



REAR DETAIL

HOUSE OF MR. L. E. JACKSON, DALLAS, TEXAS
THOMSON & SWAINE, ARCHITECTS



SECOND FLOOR PLAN

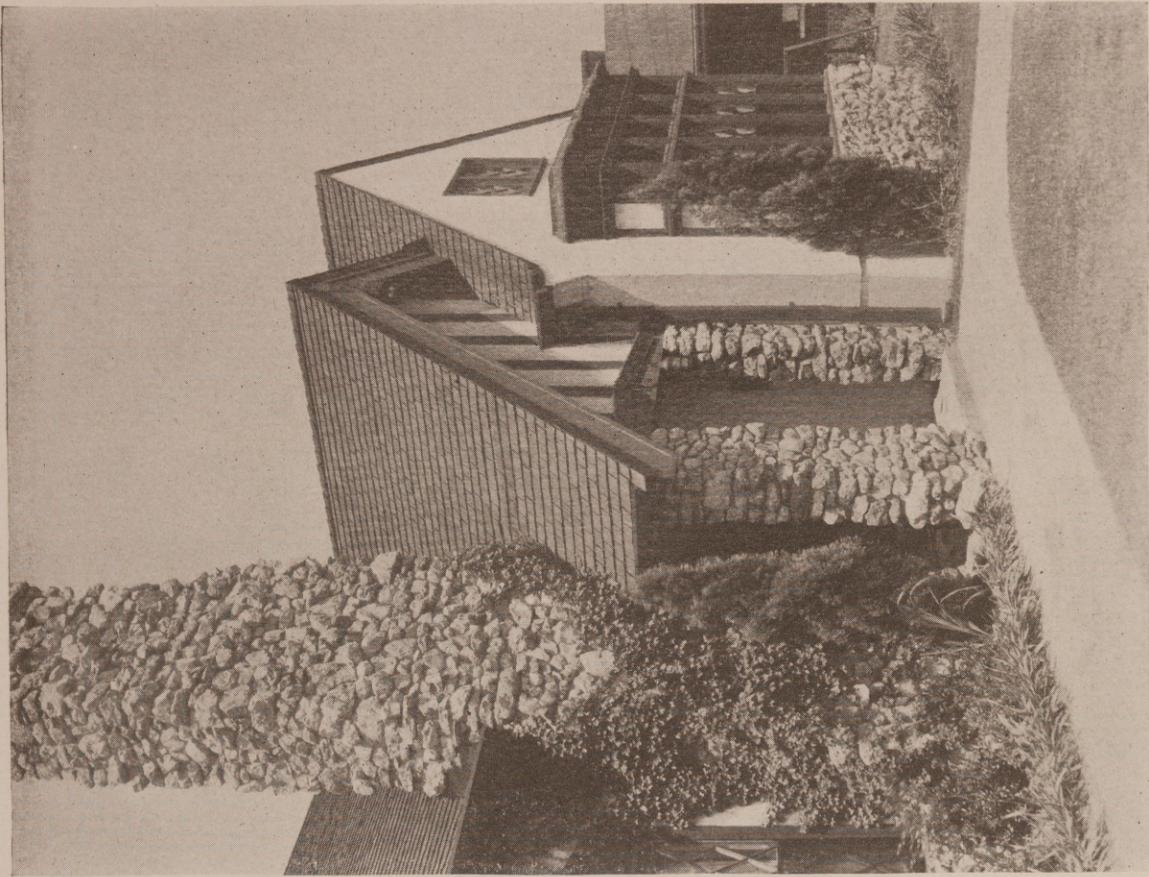


Photos by Tebbs & Knell, Inc.

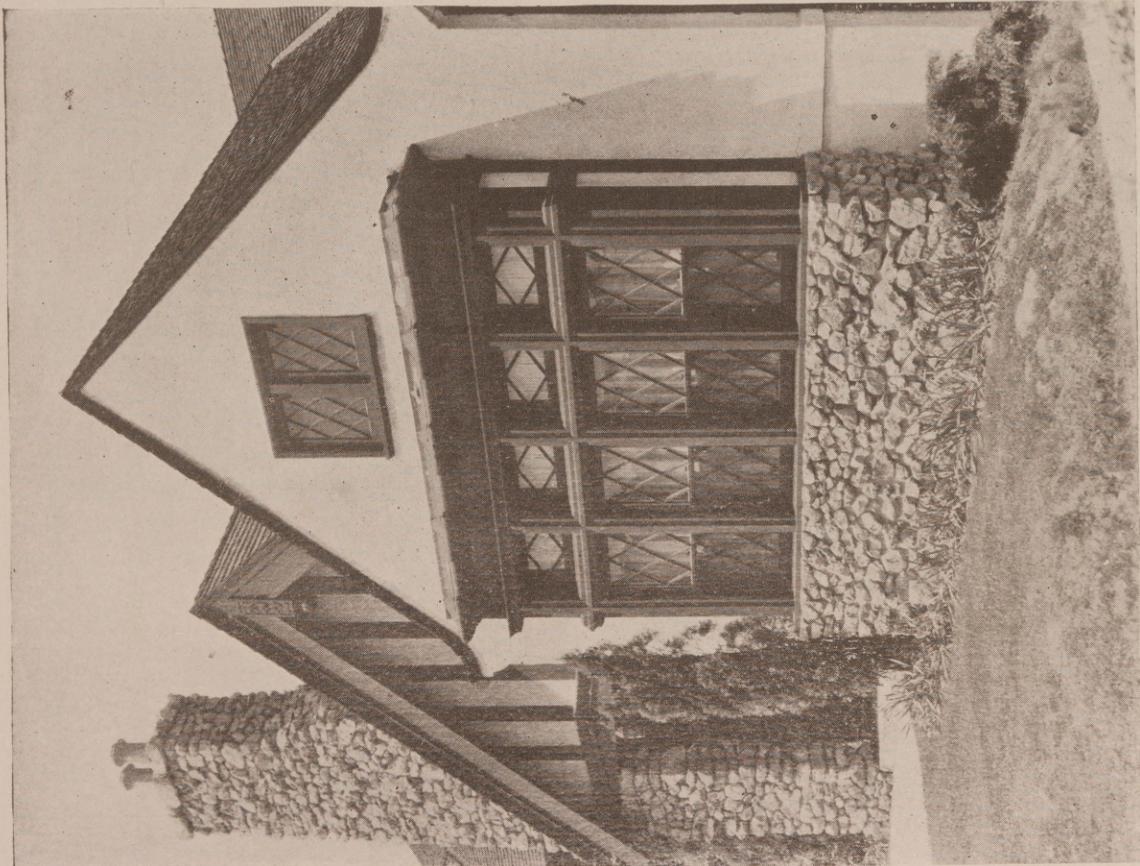
HOUSE OF DR. H. C. SCHMEISSER, MEMPHIS, TENN.
MAHAN & BROADWELL, ARCHITECTS



FLOOR PLAN



ENTRANCE DETAIL



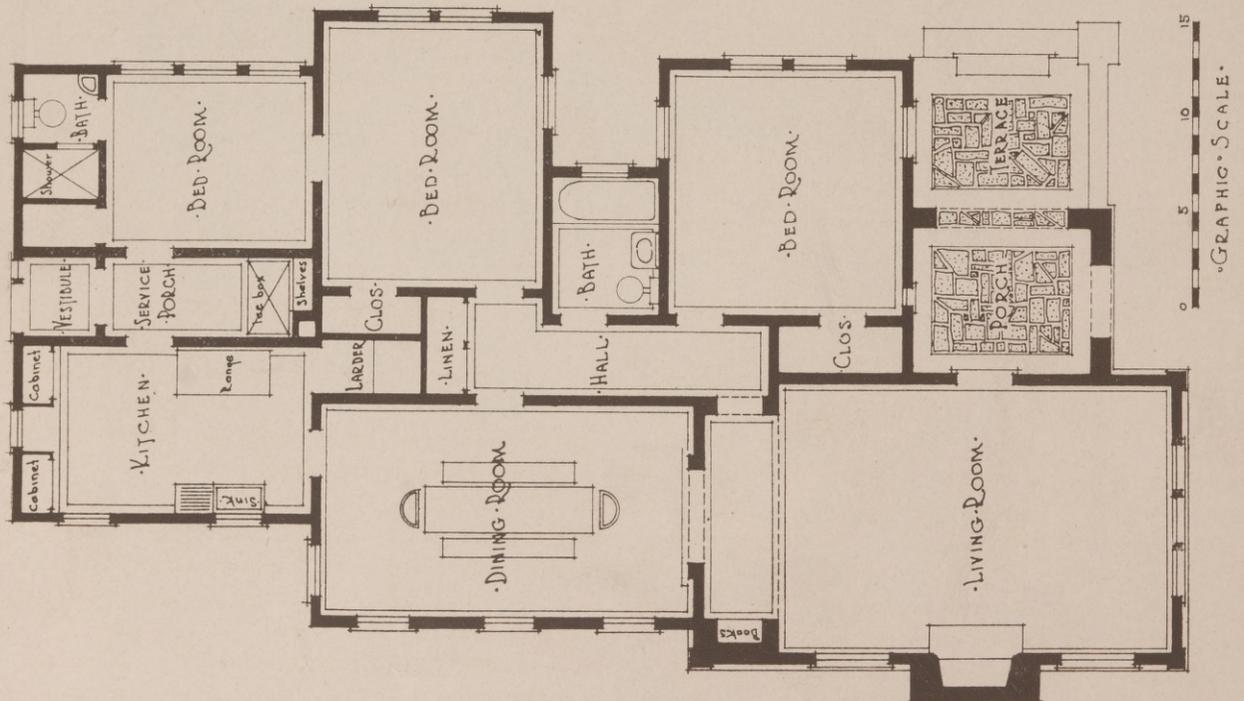
DETAIL OF DINING ROOM GABLE

HOUSE OF DR. H. C. SCHMEISSER, MEMPHIS, TENN.
MAHAN & BROADWELL, ARCHITECTS



Photo by Tebbs & Knell, Inc.

HOUSE OF MR. FRANK T. SWAINE, DALLAS, TEXAS
THOMSON & SWAINE, ARCHITECTS



FLOOR PLAN

An Address Before The Southern Art League, Houston, Texas.

By WM. WARD WATKINS, A. I. A.

THE Rice Institute welcomes the delegates of the Southern States Art League to Houston and to the Rice Institute. We are glad, indeed, that you are here and proud that we may entertain you—all too briefly—among the courts and cloisters of the new University, upon which you will find the dedication to Art embodying the emotions of "Love, Joy, Freedom and Worship, which are forever building, unbuilding, and rebuilding in each man's soul and in the soul of all the world."

The School of Architecture of the Institute welcomes you, who so ably represent the activities and achievements in the Fine Arts among the cities and the states of the South.

A school of architecture is but a nursery of the imagination, for the cultivation of the creative qualities of design, in which beauty shall be ceaselessly sought and occasionally attained. I wish to compliment you on the success of the meetings of this Convention, especially as each meeting has recorded enthusiastically the fulfillment of creative work done during the year, and "the joy of a thing well done."

I need not say to the delegates of this convention that the artist brings art into being by his work and not by his words. For the past two generations every village, town and city of America has heard enough of art talks and art lectures and discussions of the qualities of the Italian Masters in a ridiculous excess, while they have seldom hung a single exhibit of paintings of any merit whatever. We have come close to talking art to death without so much as kindling the smallest sparks of imagination. Your exhibit, and the exhibit of the Grand Central Galleries recently hung in Houston are the beginning of an understanding of painting among our people, and are the example and the stimulant to the young student to reach forward and to achieve.

In my few words today, may I speak of the South and of its opportunities.

The entire South, from the Atlantic to the Gulf, is enjoying prosperity. Beyond prosperity, it is enjoying favorable attention throughout the nation. And beyond that favorable attention, it is enjoying a great growth. That growth is of the most favorable character. It is the migration of American people from the colder and more densely settled states of the north to the southern states, which are by nature gifted with more desirable climate and for the most part with a much more beautiful and fertile country. It is a migration of intelligent, capable and industrious people, able at once to take an interest and active part in the progress and energy of

the south. The result of this migration is growth, in some cases fabulous and unexampled growth. Villages and towns in Florida are becoming cities, and great cities, of tremendous possibilities. Other cities and other states are growing extremely rapidly but less tremendously. Let us remember the charm of the older villages and towns of Florida; what wonderful pictures were the old houses with their wide spreading live oak trees; the lakes and the pines and the palmettos. Let us recall in the less favored towns of other states the charming character of the old wide porched homes with their generous ground. The South had a character in architecture, homely maybe, but a charm that is over-night disappearing.

Cities built quickly are usually built in a commonplace manner. Slower growth in this day and age is more likely to have study and quality.

All of this prosperity stimulates the field of the artist and opens the door to his opportunity, but the work of the artist is needed in the south more today than ever before. In the rush for land development and commercial supremacy, cities are striving to build beyond their needs, and are building in haste. The old character has no influence upon the commonplace rush of the new. Today our buildings are for the most part of a lasting type; they are fire-proof commercial structures, making and giving form, to our cities for the next century and in all possibility for a longer time. And this building is not conceived except as of immediate value, it is for the most part unstudied as to architectural quality, and seldom reflects the simplest essentials of beauty. Above all, it shows no sign of that quality of the architectural tradition of the old South; either the South of the Atlantic seaboard or of the Spanish tradition of the Southwest.

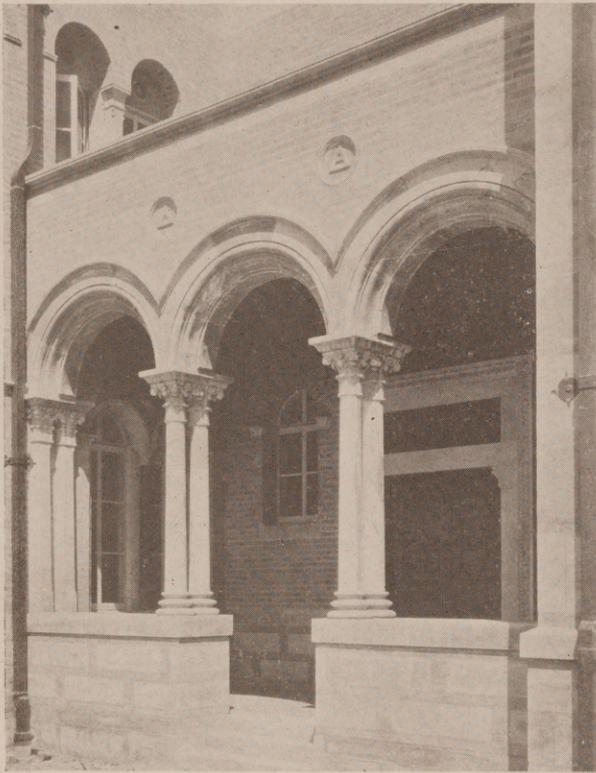
These great cities in which you live and I live have within their power the opportunity to become the most beautiful cities in America. As cities, they are in their infancy. The great spaces are here to be used intelligently; no congestion exists which could not be easily and permanently overcome. The wonderful sunlight is here in which color is ever present and ever needed. Their's is the wonderful foliage of trees and flowers and, above all, a splendid tradition of beautiful architectural past; a past in which the Georgian Architecture of Virginia and the Carolinas mingles with the Spanish of Florida and Texas and the French of the planters of Louisiana. All of these have left a creative art of high merit and subtle beauty.

Within the past year, many of our cities have doubled the number and extent of their permanent city buildings. Do we realize that these alone, if kept in character, with the history of the south, might have already started a scheme of beauty unparalleled in the cities of America?

And their growth is in its beginning. Its trend is toward the commonplace American city of the past generation. It is your opportunity, therefore, and mine, to try to influence this, realizing the enormous possibilities that these southern cities have before them if they will but recognize it.

Therefore, you, in your city, and we in ours,

must carry on the art traditions of the South. We must hold for the beauty that is to be ceaselessly sought; and preserved and cherish the traditions of the South in which there was a beauty great enough to kindle our imagination more and more. We should strive to see that that beauty shall not be lost but shall be continued and made more precious; that the cities of the South become indeed expressions of architecture suited to the South—by reason, history and fitting beauty—and that the South becomes, as is its just and rightful heritage, the symbol of a refinement, charm and beauty, set in a luxuriant and colorful environment.



ENTRANCE DETAIL



TOWER

LABORATORY OF CHEMISTRY, RICE INSTITUTE, HOUSTON, TEXAS

WM. WARD WATKIN, ARCHITECT.

EDITORIAL COMMENT

Economy and the City Architectural Bureau

THE recommendation of the Bond Commission of the city of Atlanta, to employ on a salary an architect to design and superintend the schools that are proposed under the new \$350,000 bond issue, is one that should challenge the serious consideration of every citizen, and cause him to look into the subject fully and exhaustively before according his support or sympathy to such a method of procedure. While this is a local problem in the city of Atlanta, the nature of this recommendation and the problem at hand is of national importance.

The claim is made that the reason for such a recommendation for an architect on a salary basis is to save the city money by relieving them of the architect's fee. It is also suggested that by standardizing the buildings much money can be saved. We choose to believe that such claims are made by business men who are sincere in their beliefs, but are not fully informed as to the work and service of architects, and the real cost of such service, and as to the extent to which standardization may be applied to buildings of this character.

It is common knowledge and is recognized by all that any department or business operated under governmental control, in nearly every instance, cost considerably more than similar operations when carried out under private control. And with this certain knowledge in regard to the principle of the system, we have the experience of others to remind us constantly, of the impracticability of such procedure. This is conclusively shown in the practice of one of the largest corporations in the world. This company maintains forces throughout the country of highly trained and specialized engineers, and draughtsmen of all kinds, who could if so desired by the company, design all of the buildings. But invariably they have all of their buildings designed by independent architects, to whom they pay the regular fee. There could be only one possible reason for this. That the work done by independent architects has been shown from their experience to be better in quality and cheaper in price of the service than the company could do the work for themselves, even with their highly trained forces of engineers and salaried assistants.

The United States Government has tried doing its own architectural work through a department in Washington. Everything has been done to make this department a success. All the designers, engineers and draughtsmen are given civil service exam-

inations, and the entire department is operated under the most favorable conditions. In spite of this, the "Public Buildings" bill which has just recently been made a law, carried with it a clause for the employment of private architects for the \$165,000,000.00 building program of the government. There is a sound economical reason for this, or the big business and the government would not continue to rely upon the architectural profession to design and superintend the construction of their buildings.

There have been many cities that have tried this architectural department scheme and a great many of them have abandoned the idea, though some few still continue to use this system. If the character and cost of the buildings is looked into, it is believed that any one will be convinced that there is anything but economy shown. In some instances the cost of a single building has run up into a sum that amounted to a very large percentage of the entire bond issue of Atlanta. We could mention many cities that have tried out the architectural department system, but it is only necessary to mention one to prove the false economy of such a system.

For about eight years, San Francisco maintained an Architectural Bureau. This bureau was operated under the most favorable conditions and there was every reason for success, but after a thorough test it proved a complete failure. This bureau was headed by various men prominent in architecture and given the title of City Architect, and employed draughtsmen who were subject to Civil Service regulations. The work done by this bureau, in many instances, was quite creditable in achievement, but it was found that the operation of this bureau, including the supervision, was costing from 7½% to 11%.

During the last seven or eight years the employment of architects is of this procedure—The Board of Public Works employs an architect for each school building. Sometimes an architect will have two or three buildings. One man chosen by the Board of Public Works acts in the capacity of City Architect and Advisor to the Board of Education. This man often receives commissions to do maybe several buildings himself. As City Architect and Architect for the Board of Education, he cooperates with them on the buildings designed by other architects. For this service, he receives no additional fee. This man is not a salaried employee. Sufficient work is given to him so that he is able to

serve the Board of Education without additional expense. Naturally this supposes that the Board of Education employs reputable architects who are capable of handling the work successfully. The basis of remuneration is that each architect receives six percent (6%) of the total cost of the work. The Board of Public Works provides a competent inspector for each job. The cost of this inspection is exclusive of the 6% fee to the architect.

The result of this policy which has been in existence all these years is that today San Francisco

has some of the very best school buildings in the entire country. The Board of Education, and the Board of Public Works have long since recognized that the expenditure of the 93 or 94% of the total cost on the building is entirely dependent upon the wisdom of choosing architects and expending the fee of six percent for that portion of the work.

We can see no justifiable reason why Atlanta, or, as for that matter any other city, should adopt such a scheme as is proposed by the Atlanta Bond Commission.

PERSONAL MENTION

Robert Holt Hitchens, architect, announces the removal of his offices from MacFarlane Building to 41 Liberty Trust Building, Cumberland, Maryland. Manufacturers' catalogues and samples are requested.

C. Hobart Sherwood, A. I. A., announces the opening of an office for the general practice of architecture at 226 Bryan Court, Fort Lauderdale, Florida. Manufacturers' samples, catalogues and other publications are desired.

Sanguinet, Staats & Hedrick, First National Bank Building, Fort Worth, Texas, announce that hereafter the firm name of this company will be Wyatt C. Hedrick & Company, same location.

Charles R. Greco, A. I. A., architect; Edward G. Reed, associated; George B. Meyer and Frank J. Hogson announce the removal of their offices to 1031-33 Guardian Building, Cleveland, Ohio.

M. C. Parker announces that the firm of Parker & Crawford, architects, Amarillo, Texas, has been dissolved and that he will continue the practice of architecture under the name of Martin C. Parker & Company, architects, Suite 303, Temple Ellis Building, Lubbock, Texas. Manufacturers' catalogues and samples desired.

Juan Gabriel Molina, architect and civil engineer, 59-447 Merida, Yucatan, Mexico, requests manufacturers' catalogues, samples, etc.

John B. Thomas, architect, announces the opening of offices in The Real Estate Exchange Bldg., Lake Wales, Florida. Catalogues and samples of construction materials suitable for Florida construction are requested.

Announcement is made that the firm of Hickman & Martin, architects, of Rooms 403-405, Swift Bldg., Columbus, Ga., has been dissolved, and the practice of residential and commercial architecture will be carried on at the same address by C. F. Hickman.

Albert B. Groves, Inc., architects, of Suite 2021 Railway Exchange Bldg., St. Louis, Mo., announce their succession to the practice of the late Albert B. Groves, architect.

Howard Steitz, registered architect, of Weathershee Bldg., Pompano, Florida, requests manufacturers' catalogues and samples, etc.

Eugene L. Pleitsch and Robert Marr Price announce that they have severed their connection with Mr. Preston J. Bradshaw to establish the firm of Pleitsch & Price, architects, Suite 1594, Arcade Bldg., St. Louis, Mo.

Killengsmith, Rice, Wilkins, architects, announce the removal of their offices from The Arcade Building to 1217-18 Louderman Building, 311 North 11th Street, St. Louis, Mo.

Clarence A. Koenig, architect, announces the removal of his office from Edmund Bldg., 3621 Gravois, to 2036 Russell Boulevard, St. Louis, Mo.

Charles K. Bryant, architect, has opened an office at 126 Southeast Second Street, Miami, Fla.

Jacob Espedahl and Kaare S. Espedahl have formed a partnership under the firm name of Espedahl & Espedahl, architects, with offices in the Nelson Building, Daytona Beach, Fla.