

The Cooling of Inhabited Buildings^{*}

THREE papers were presented on this subject, each of which considered it from a somewhat different viewpoint.

The first, by J. F. H. Koopman, of Delf, Holland, considered the problem as applied to "The Cooling of Living and Other Rooms in the Tropics." At the start he states that the problem is unsolved up to the present except in certain isolated cases.

The natural desire for cool air in the warm countries has caused even savage men to devise means for securing it, among which he notes the cultivation of a plant which has the property of causing water to evaporate six times as fast as it would naturally; then there is a vine which is allowed to grow over a pot; others put up wooden blinds to their huts and sprinkle these with water; in all cases the air entering the room passes over or about these devices, causing an evaporation of the water, with a consequent reduction in temperature. Any process based on the evaporation of water, where the air for the rooms comes in contact with the water, thereby causing it to evaporate, he considers not good practice, for the reason that the humidity is usually very great and any increase is to be avoided.

Fans cannot be recommended, for they simply move the air, but do not cool it. The only method giving satisfactory results is where mechanical refrigeration is employed, which at present is too expensive for general use.

In considering the cooling of the air in any locality, the meteorological records for every hour of the day must be known.

Plans of a dwelling are shown, and the following conclusions reached, which, he says, may be considered generally valid for the tropics.

The conclusions are:

1.—The wind pressure is greatest in the warmest hours of the day.

2.—The differences between the maximum day temperature and the minimum night temperature are greater in the warm months than in the cold months.

3.—The relative humidity of the air is least during the warmest hours of the day.

I believe that a sufficient and economical cooling of tropical buildings may be attained by attention to the following conditions:

- (a) The building must be faultlessly insulated and provided with well-closed double windows and doors (the latter with so-called air vents).
- (b) With the exception of the air inlets and outlets, the house must be quite closed; thereby human health and the durability of furnishings will be safeguarded.
- (c) Walls, floors, ceilings, as also ducts, should be of stone of the greatest capacity for absorbing heat. This material must not pollute the air.
- (d) The storage ducts are placed on the ground floor, or if there is not enough room there, or other reasons make it necessary, in the attic.
- (e) The airing during the day is aided by the wind, the inflow openings being provided with pressure heads and the outflow with suction heads.
- (f) The ventilating plant should be so designed and operated that there is a slight superpressure in the rooms during the day, so that no warm outer air can enter. Care must also be taken that the air introduced into the rooms does not deposit moisture.
- (g) During the night the air is for the most part circulated through the storer, and a small percentage only goes through the building, so that not only cooling of rooms but also of walls is achieved, so that this second storing assists the day cooling. The circulation of the night air is done by a fan, but in special cases it can be done by deflectors if there is sufficient wind. The quantity of air passing through a bedroom in one hour should not be more than six times the contents of such room, to avoid unpleasant draughts.
- (h) Where dry night air and clean water are available evaporation of water should be employed in the ducts to increase the storage. Here care must be taken that all water

^{*}An article from the Bulletin of the American Association of Refrigeration.

sprayed in the ducts evaporates during the night, so that the moistening of the day air may be avoided. For the same reason the use of water during the day is objectionable.

- (i) If one has cool, clean water, but not in sufficient quantities for completely effecting the air cooling, such cooling can be used additionally. A moistening of the air will only take place if the air be exceedingly dry, otherwise the cooling of the air will generally be combined with a decrease of its moisture.

Cooling of Living Rooms in Africa.

The second paper, by Mr. Bourgoïn, a naval artillery engineer, under the title "Cooling of Dwelling Apartments," deals principally with the problem as it is presented in the Soudan.

He discusses the relative temperatures, shows what has been done, and how humidity must be taken into account. He then describes an apparatus for cooling the air, applicable where the air is not too damp. This consists of a series of large galvanized iron pipes or coils, surrounded with either "spiky shavings," coke or similar materials, held in place by metal grating with large meshes. Above these coils is a water tank which distributes the water over the coils and their coverings, and is caught in a basin at the bottom and returned by a pump to the tank above, the loss by evaporation being made up. Through the pipes thus cooled by the evaporation of the water the air is passed and thereby cooled. A fan may be used for increasing the circulation of the air through the material encasing the pipes, thereby increasing the cooling effect. The pipe which conducts the cooled air into the building is insulated. He goes into the matter very fully, and shows calculations for the energy expended and results obtained.

He then takes up the problem where the air is hot and damp and offers two methods. "One consists in keeping the air of the dwelling rooms circulating and in contact with a cold body; by the other, cold air is produced by the adiabatic expansion of a body of air, previously compressed, to the external temperature."

In the first of these he considers the "ice stove," in which the air to be cooled comes in contact with the surface of a vessel containing ice, or cooled by mechanical refrigeration.

This method is completely calculated, with cost of operation.

Under the second method the air is cooled by its expansion, the essential parts of which would be:

First—A motor working an air compressor.

Second—A pipe connecting the compressor with the expanding apparatus.

Third—The expanding apparatus, on leaving which the cold air will spread throughout the premises to be cooled.

The same thoroughness is shown in the calculations for this method as in the previous one.

The paper is a long one and somewhat technical, but will repay the person interested in this subject for reading it.

Cooling of tSock Exchange, New York.

The third paper is by Henry Torrance, Jr., of Carbondale, Pa., and is entitled, "Refrigeration and Ventilation of Inhabited Places." It gives a description of the refrigerating plant installed by the Carbondale Machine Company for cooling the large board room of the New York Stock Exchange. The amount of air cooled is approximately 40,000 cubic feet per minute. This is cooled by passing over pipes through which brine cooled by a refrigerating machine is circulated. It is first cooled to about 60° Fah. and then heated to a temperature about 15° below that of the atmosphere, thus insuring the proper condition from a humidity standpoint. The flow of heat to the room is calculated at 54 tons refrigeration per day. To obtain the results desired there is required the equivalent of 276 tons of refrigeration per day.

The plant is operated intermittently depending on the conditions of the weather. He draws an interesting comparison between total tonnage delivered and that required to overcome heat in room.

The following data gives a good idea of the magnitude of this installation:

Size of room	1,240,000 cubic feet
Temperature of room	75° to 78° Fah.
Outside conditions	85°—85% humidity
Cubic ft. fresh air blown in per min.	40,00 to 50,000
Maximum tonnage required to handle this work.	276
Usual tonnage	200 to 220
Cubic feet in building per maximum ton.	4,500
Sq. ft. exposed area in building per max. ton.	670
Humidity of room runs	60% to 70%
Condensed water running off pan below	

bunker coils

2,00 lbs. per hr.
The plant is operated partially by the exhaust steam otherwise wasted.

Mr. Torrance's paper, unfortunately, had not been translated, so that it could not be read in the Continental languages. There did not appear to have been time for discussion of the two previous papers.

Nearing the Roof.

"I started to work on my twentieth story yesterday," said a busy looking man, "and I tell you I'm making it pay."

"You are an author?" suggests his neighbor.

"Certainly not! I'm an architect."

Dallas, The City of the Hour

By SECRETARY J. R. BABCOCK, Chamber of Commerce.

THE thing that accounts more than any other for the tremendous development in building growth at Dallas is the abnormal volume of business done in all lines of commerce and trade. It is the large percentage of increase in factory production and jobbing trade that is constantly demanding bigger warehouse facilities. It is the coming of a vast number of new firms to the city each year that demands larger and better office buildings. During 1911 some 580 new concerns entered business in Dallas, and the record for 1912 was almost as remarkable, showing 449 new firms.

A stranger in Dallas is probably first impressed with the idea that Dallas needs more streets and wider ones to relieve the congested traffic. There is a constant hustle and bustle everywhere with the whirl and stir of business, and a visitor coming from other sections of the country where there is a retrogression in business and things are more at a standstill, is naturally well pleased as well as surprised at finding so great activity and general prosperity.

Approximately \$10,000,000 was spent in building operations in Dallas in 1912. This is arrived at from the basis that the 1,826 permits which were let at a value of \$4,969,268 in Dallas during 1912, were represented for record at only 50% of their real value. Among the most important buildings that were completed recently is the Adolphus Hotel, 22 stories high, costing \$1,600,000 and one of the most modern and best appointed hotels in the country; the Southwestern Life Insurance building, 16 stories, and the Commonwealth National Bank building, 12 stories, are two of the new steel type of office buildings. Besides these there were constructed 1 nine story, 5 eight story and 5 five story buildings, all of modern, fireproof construction.

Properly accorded to the accomplishments of 1912 was the securing of a site and drafting of the plans for the new Union Terminal Station for Dallas to cost \$5,000,000, a project that has been under way for several years and seriously needed by the city. Actual work on the depot and terminals will be begun about the first of March. It will be one of the most complete, artistic and commodious structures of its kind in the entire South. It was planned by Jarvis Hunt of Chicago, and will be 350 feet long, 210 feet wide by 70 feet high. The general design will be Italian Renaissance and constructed of granite and stone with a monumental facade for the entrance.

Bids have just been received for the construction of the new half million dollar City Hall. The ground is already being excavated and work of

construction will immediately begin upon the acceptance by the Commission of a bid. The building will be four stories in height, of Roman-Corinthian style of architecture, will be 90 by 176 feet in dimension, and will cost complete \$693,000. It will be located on three streets and be one of the most beautiful municipal buildings in America in its appointments and architectural design. The City is also building a two hundred thousand dollar filtration plant, a sewage disposal plant costing \$550,000, is just completing a new city hospital at a cost of \$100,000, and has 13 new school buildings under construction at a cost of \$256,000.

Besides the Union Station, there are several other large building projects for 1913. The Stone & Webster interests have recently purchased a site at the cost of \$1,000,000 upon which they are to begin building within the next few weeks one of the largest interurban terminals in the world. It will cost when completed approximately \$1,750,000, and will have a central terminal building, 60 by 180, twelve stories in height with most modern and complete facilities. This station will be used by all the interurban companies now entering the city, while adequate arrangements are made for sheds for baggage and the parking of a large number of cars.

Dallas' skyline is constantly changing its perspective. No office building in the South can quite compare with the new Busch building which is being rapidly rushed to completion. It will be one of the very few office buildings in the United States designed in Continental Gothic style of architecture and the only one of its kind in the Southwest. The dimensions of the building give it a base 100 by 125 feet and a height of seventeen stories. There will be four high speed electric passenger elevators and one freight elevator. All floors and wainscoting will be done in marble. Particular attention has been given to light and ventilation, and the halls will be wide and roomy. The first five floors are to be occupied by the firm of A. Harris & Company, who will carry an extensive line of women's apparel, dry goods, etc. The remaining floors are to be fitted up into elegant office suites.

Perhaps the most recent building news is the announcement of Sears, Roebuck & Company. This company first established in Dallas six years ago. Two years ago they built their first building, a beautiful five story plant, giving them 96,000 square feet of floor space. In 1912 they added to their plant a nine story, 200 by 166 feet, fireproof building having a gross area of 215,800 square feet. The company decided in January this year that the

largely increased volume of their business would necessitate the immediate erection of a third building. Ground for this building will be broken at once, and every effort will be made to have it completed by October 1st. It will be nine stories and basement, with a frontage of 282 feet and depth of 166 feet, giving it a gross area of 468,120 square feet, and will cost \$625,000. With this addition the company will have a total of 779,920 square feet of floor space or practically 18 acres. In addition they will also erect a three story employe's clubhouse. This clubhouse will be fitted up with a restaurant, lunch counter to accomodate 600 employes at one time. There will be provided an assembly room with a stage, and all means will be afforded for every variety of social, musical and athletic activities as may be developed by the employes.

The Southern Methodist University which was secured for the city of Dallas in 1911 will be opened to students in September, 1913. Dallas Hall, the large central building of this big plant, is nearing completion, while contract was recently let for the construction of two dormitories. The main building will cost \$356,000, will be 246 feet long by 108 feet wide, and four stories high with a large central dome in bronz. The dormitories will be 200 by 67 feet each and will necessitate a combined expenditure of \$280,000. Within a few days plans will also be completed and contract let for the construction of a power plant which will be of adequate size and equipment to take care of the needs of the University as it adds other buildings.

Sanger Brothers, one of the largest wholesale and retail Dry Goods houses in the Southwest, has just purchased a site upon which they will immediately erect a ten story warehouse, to be built of concrete, 100 by 200 feet in dimension, and estimated to cost \$165,000. It will be of the most modern in equipment and facilities, fitted with huge electric freight elevators, and will have adequate room for storing shipping all the goods which they are now required to handle from many smaller warehouses distributed in various parts of the city.

Ground is being excavated for the site of the new ten story Grosman building. This building will be of the steel frame type and will be one of the many new and attractive office buildings in the center of the downtown district.

Harris-Lipsitz have recently made the announcement of their intentions of erecting in the immediate future upon the site lately purchased by them just opposite their present plant, a five story 100 by 100 foot, concrete warehouse. Butler Brothers, the large wholesale merchandise house which opened in Dallas in the spring of 1911 the fifth of their great

distributing houses, are now planning to double the size of their plant. The building which they completed in 1911 is 320 by 165 feet, eight stories and basement, having a gross floor space of 475,000 square feet. The new addition will be of the same massive style of architecture, of steel and concrete construction, and will occupy the other half of the block, 320 by 340 feet.

Site has been purchased, 75 by 200 feet, upon which is to be erected, work to start within the next few weeks, a Chamber of Commerce building 100 by 75 feet, ten stories and basement. It is to be of concrete and steel construction, and to cost \$425,000. The top two floors are to be used as the headquarters of the Chamber of Commerce, equipped with an auditorium, buffet and general club and social accomodations; the first floor to be used for stores, and the remaining floors to be fitted into elegant office suites, a large percent of which will be taken by the various civic, social, and business organizations of the city.

For comparison's sake the following figures are given of the number and value of building permits for the past five years in Dallas:

Year	Number	Value
1908	1,468	\$2,306,098.00
1909	1,691	3,393,683.00
1910	1,760	4,199,040.00
1911	1,684	5,523,373.00
1912	1,826	4,969,268.00

These figures are taken from the city Building Inspector's books and, therefore, should not be compared with the figures given out by many cities on the basis of a 50% greater value.

Real estate sales for 1912 made tremendous gain over all previous years, amounting to \$29,891,651. In 1908 they amounted to \$11,016,889; in 1909 the total sales almost doubled 1908, amounting to \$21,884,114; and 1910 made good increase with total sales of \$26,750,405, while those of 1911 dropped to \$22,737,650.

There are 71 buildings in Dallas of five stories and over in height; there are 76 school and college buildings, and sixteen others under construction; there are, according to the State Comptroller's report of February 4th, \$37,756,088 in bank deposits and \$47,791,601 in total bank resources, represented by eight of Dallas' banks.

Dallas' population on January 1st, 1913, was 120,594; its jobbing sales for 1912 amounted to \$180,455,000; its post office receipts for the year were \$847,323; and its total manufacturing output was valued at \$41,848,454.



Plate by Modern Engraving Co., Cincinnati.

View of the Implement Section of Dallas.



Plate by Modern Engraving Co., Cincinnati.

The Praetorian Building at Dallas.



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Plate by Modern Engraving Co., Cincinnati.
Southwestern Life Insurance Building at Dallas.



Plate by Modern Engraving Co., Cincinnati.

The Busch Building, Type of Dallas Skyscraper.



Plate by Modern Engraving Co., Cincinnati.

The Dallas Cotton Exchange Building.



Plate by Modern Engraving Co., Cincinnati.

Another View of the Dallas Skyline.



Plate by Modern Engraving Co., Cincinnati.

Skyline of Dallas from Oak Cliff End of Viaduct—Longest Concrete Viaduct in World.



Plate by Modern Engraving Co., Cincinnati.
View of Commerce Street in Dallas Looking East.



Plate by Modern Engraving Co., Cincinnati.
Showing Store of Butler Brothers in Dallas.



Plate by Modern Engraving Co., Cincinnati.

The Wilson Building at Dallas.



Plate by Modern Engraving Co., Cincinnati.

The Dallas Public Library.



Plate by Modern Engraving Co., Cincinnati.
Golf and Country Club at Dallas.

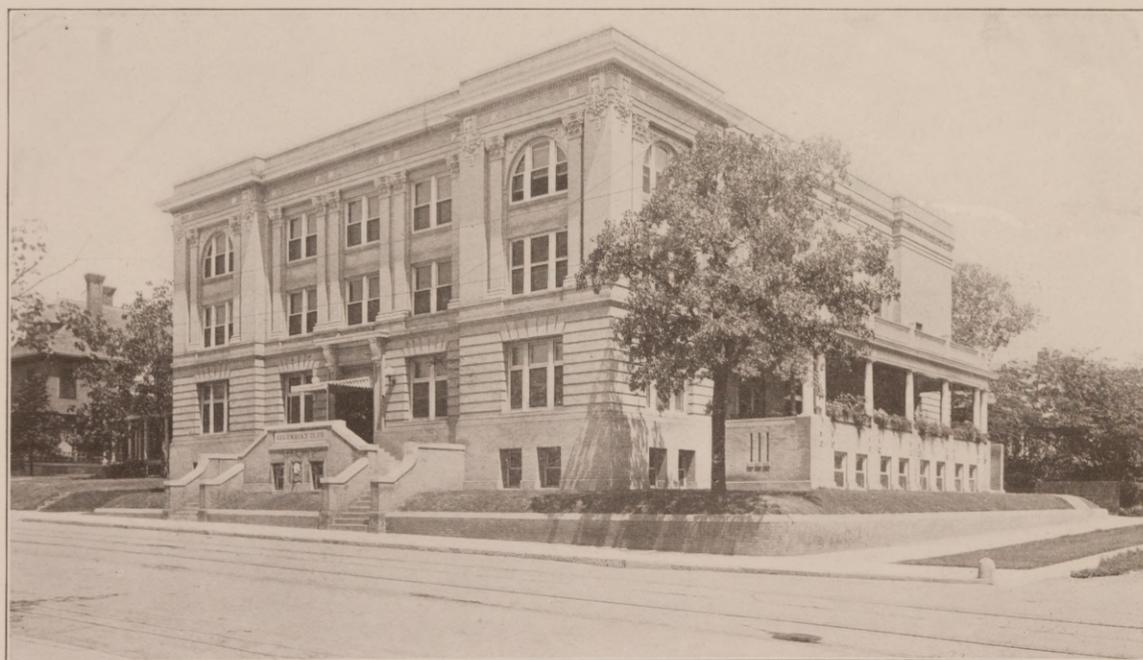


Plate by Modern Engraving Co., Cincinnati.
The Columbian Club House, Dallas.



Plate by Modern Engraving Co., Cincinnati.
One of Dallas' Pretty Suburban Residences.



Plate by Modern Engraving Co., Cincinnati.
Type of a Pretty Suburban Residence at Dallas.

Enjoyable Luncheon for Atlanta Builders

PRESIDED over by its president, Mr. R. M. Walker, assisted by the activities of Secretary J. D. Wood, The Atlanta Builders' Exchange held its regular quarterly meeting on the evening of February 27 at the Kimball House where more than two thirds of its membership of 133, together with many invited guests were served a bountiful luncheon in several courses, immediately following which was a short business session, dispensing with the roll call. The financial statement of secretary Wood showed that the organization was in a flourishing condition; that its physical condition in point of membership had increased wonderfully since the organization of the exchange, which was referred to by President Walker in his address before the body. He urged the members to use the exchange and to help the officers and directors in making the organization a success.

To Issue Bulletin.

To add to the many helpful features of the exchange, the officers and directors have decided to issue a weekly bulletin in which will be given everything of interest which should be brought to the attention of the members, such as new contracts and information of a co-operative nature where one member could help another. A copy will be sent each member and possibly to the architects also, which will keep members better posted in regard to the work which the Exchange is doing and thus have a tendency to get each member more interested.

The Exchange goes on record as objecting to the inserting an eight hour work day clause in the city charter, also they object to the thirty per cent recall clause being reduced to twenty per cent,

which was made in a recent request by the Atlanta Federation of Trades.

A Fireproofing Talk.

Present at this meeting was Mr. H. B. McMaster, Commissioner of the Associated Metal Lath Manufacturers, Youngstown, Ohio., who came to Atlanta especially to address the builders at this meeting on the subject of fireproof construction, which he illustrated by means of pictures thrown on canvas. His talk and the exhibition of the pictures were most helpful and instructive, eliciting many enquiries which were answered by Mr. McMaster. The speaker was tendered a vote of thanks by his audience for having given such an entertaining talk.

A Working Exchange.

The Builders' Exchange have most commodious offices at 1510-1511 Candler Building where Secretary Wood, always courteous and accomodating, is in attendance to answer any enquiries relative to the inside workings of the exchange as pertains to the general public welfare. He has recently compiled a very helpful little booklet which contains a classified list of all the membership, their telephone numbers and street business address.

Every first and third Thursday of each month there is held at the offices, a directors meeting at 11:30 a. m., to which as many members as can attend are urged to be present. The exchange is open each business day where plans and specifications are kept on file of all important work to be let which the members are likely to be interested in.

The next annual meeting and election of officers for another year will be held in May.



Plate by Modern Engraving Co., Cincinnati.

Scottish Rite Cathedral at Dallas.

The Meaning of City Planning^{*}

By ARNOLD W. BRUNNER.

TEN years experience often changes a person's point of view: it certainly did in my case. With part of the check for \$55 which I received for my first month as a teacher in the Chicago public schools, I opened a savings bank account and felt that I had laid the foundation for a competence. A decade later, when I drew a check for \$120—the maximum salary for our grammar school teachers—the balance in my pass book made it evident that, with an income which had been steadily increasing, my rate of accumulation was inadequate to gather the retiring fund that I have always regarded as necessary for the maintenance of my standard of life.

It was with me as with many other wage earners—increased expenses incident to the realization of social ambitions, a decrease in the earnings of other members of my family, and the much mooted high cost of living had combined to make my position undesirable. In short, events were not shaping their course in the way that I had planned and I set about analyzing my way of life with the view of discovering a remedy.

My father was a carpenter by trade and recognized as a good mechanic among his associates. As a young man he had attempted to operate as a contractor, but failed, and went into the employ of a real estate firm, where he gave excellent satisfaction in building suburban homes under his employers' specifications and management.

In looking back over his career, it became evident to me that his failure to make a success of contracting was because he lacked executive ability. Here was my opportunity. If it was lack of organization which had led to my father's failure in contracting, why could we not work together in building small suburban homes for sale, capital and management to be supplied by myself, the work to be done by my father?

This plan had many features to commend it. During the ten years that I had been teaching school I had been able to save sufficient to finance a project of this kind and my work also enabled me to have a considerable amount of spare time which could be devoted to looking after the business end of the undertaking. Furthermore, in the suburb where we live small houses are in demand, so that there seemed little likelihood of difficulty in selling any we might build at profits that would enable the capital which I had accumulated to bring far greater returns than it was earning in the savings bank. In addition, this plan would provide employment at

which my father could work according to his inclination, which was really a matter of necessity, owing to uncertain health that had accompanied his advancing age. This had been the cause of preventing him from finding work as a journeyman carpenter for several years past, although he complained bitterly of his enforced idleness.

In starting to operate on this plan, my first step was to consider every possibility of reducing production costs. My father's knowledge of markets for and the cost of building materials helped me greatly in mastering this end of the business, and, at his suggestion, we arranged to agree in advance upon a fair price for the carpenter work on each building; then he would be able to put in as much time each week as he felt inclined to do. Also, it was decided to let contracts for plumbing, masonry, et cetera, to individual contractors.

This cleared up everything but my plans, and I decided to eliminate architects' fees by designing my own houses. In starting upon this part of the undertaking, I got out a number of blue prints which my father had accumulated and entered upon a study of the principles of architecture. Many of these plans were too far out of date to be of any direct value, but they all served my purpose in supplying ideas for use in the problem upon which I was engaged.

My first efforts in designing consisted of combining the best interior features of the plans at my disposal and housing them in an exterior which complied with present-day styles in architecture. But neither of the plans developed in this way seemed good enough to warrant adopting it for my first venture in building. So after securing some preliminary experience in this way, I branched out into purely original work, and succeeded in producing plans for an eight-room two-story house that satisfied me in all particulars.

The result of careful estimates made by my father and myself showed that a building could be erected according to these plans for a total cost not to exceed \$4,800, while a suitable fifty-foot lot was available for \$1,750. These figures made it appear that the transaction could be turned with a liberal profit, and on March 17, 1908, the work was started. Late the following June this house was finished and on July 17 a sale was effected which netted me a profit of \$974.11, as shown in the table setting forth the results on the houses that I have built and disposed of during the past four years. In two cases the sales were made through newspaper advertising, while a local real estate agent found purchasers for the other two buildings. But for convenience, all expenditures involved in mak-

^{*}An address before the National Conference of City Planning at Boston, in 1912.

ing the sales, such as advertising, commissions and transfer charges, have been tabulated under the head "Cost of Building."

The details of producing each of these houses were conducted on essentially the same lines that the average contractor would follow. Such work as masonry, plumbing and gas fitting, the installation of a heating system, plastering, and shingling, was let out to separate contractors. One or two carpenters were also hired for about a week to assist in erecting the framework. The building was then left for my father to complete at his convenience.

As I was financing the project, I made a point of dealing directly with the different men to whom these contracts were let. At first, there was a tendency on the part of some of them to regard a woman in business as a sort of lamb to be shorn of her fleece wherever a chance offered; but the contracts which I made these men sign soon convinced them of the impossibility of advancing far along these lines, and with my father's assistance I was able to enforce rigid specifications.

The tabulated data presented below shows how I stand as a result of the four houses which I have completed.

House No.	Cost of Building	Cost of lot
1	\$4,775.89	\$1,750.00
2	5,225.75	1,800.00
3	3,950.35	1,350.00
4	3,200.15	1,000.00

House No.	Sale Price	Profit Secured
1	\$7,500.00	\$ 974.11
2	8,250.00	1,224.25
3	6,000.00	699.65
4	5,000.00	799.85

Total Profits	\$3,697.86
Fees for Nineteen Sets of Plans at \$75.00	1,425.00
Gross Earnings	\$5,122.86

In addition to the returns set forth in the table, these ventures have also been the means of providing lucrative employment for my father.

Added to the profits which have resulted from the sale of these four houses, another source of income has been opened to me, the results of which are included in the table. While work was progressing on my third house, I received a letter from a real estate company, with which I have done business, asking me to call upon them at my convenience. On the following Saturday I was shown into the office of one of the members of this firm, who stated the purpose of his request to see me with the characteristic directness of the American business men.

"Miss Cavanaugh," said he, "we are about to build a number of houses on different pieces of suburban property owned by this company. We have been favorably impressed by the architecture of the three houses that you have built recently, and believe that you could produce satisfactory plans for our use, if we could arrange agreeable terms with you. Our company will have a considerable amount of this work to be taken care of, and is prepared to make you an offer of \$75.00 for each complete set of plans that are accepted for use by our contractors."

Surprise and gratified pride struggled for the leading position in my thoughts. I was an architect, and here was an opportunity for lucrative occupation on Saturdays and unoccupied evenings, which, as it was entirely different from my routine duties at school, was essentially a relaxation. Needless to say, I accepted this offer.

Without meaning to boast, I may say that I have been uniformly successful in incorporating the ideas outlined by my new clients into the plans that I have prepared for their use, so that they have all been disposed of, with nothing more laborious than a few minor changes in certain instances. During the past two years, I have had nineteen sets of plans accepted by this company.

And as I look back over my short, but successful career, it all seems so simple and the requisite knowledge so easily obtained that I wonder why more women are not taking up this work, especially since the home is woman's realm, and no one should know better than she how to design it for convenience, comfort and beauty.

Arts and Crafts Association.

An association of ladies, the Carolina Arts and Crafts were recently formed at Charleston, S. C., and has been wonderfully successful.

The handicraft on exhibition and for sale is truly artistic. Both ladies and gentlemen have their work at the rooms of the Arts and Crafts under the Commercial Club. Wood carving done on mahogany and beautiful mahogany furniture are noticeable features.

This Association is not only aiming to push and encourage all handwork, but is going in to be of use in a charitable way. Its members are preparing for a large sale to take place about the middle of December. A generous percentage of this sale will be used for a charitable purpose, one which will appeal to the best sentiment of the people of Charleston.

Members of the Association believe that the city has needed a corporation to encourage its hand workers and to increase public interest in its artists. Charleston has good material, all that is necessary to push it to the front.

The Personal Side

Write Us a Letter.

We want our readers to feel that The Southern Architect and Building News is their paper, and that what interests them interests its publishers and subscribers. We will therefore appreciate most highly any communications, experiences or suggestions, or marked copies of local papers containing items of news pertaining to the interests of the fraternity.

Visiting in the South.

Franklin H. Wentworth, secretary of the National Fire Protection Association has recently visited various cities in the south in the interest of fire protection work. The tour was taken as a result of the enthusiasm aroused by his talk at the recent meeting of the American Institute of Architects, in which he advocated the co-operation of the institute with his association, both of which advocate informing the public of all matters pertaining to architecture and sound building construction. His stopping at various cities was by invitation of the local chapters and architectural associations.

Opens His Own Office.

Architect Harry E. Lindley, who has for some time been located at Macon, Ga., as the representative of the architectural firm of Hentz & Reid, of Atlanta, who were the architects for the new Georgia Life Building, in Macon, has resigned his connection with that firm and has opened offices of his own in the Georgia Life Building. Mr. Lindley has made many friends throughout the state and is well equipped in architectural experience. He is secretary of the recently formed Georgia Architectural Association.

Architects Assemble.

T. W. Smith, Columbus, Ga., and P. Thornton Marye and John Dillon, both of Atlanta, Ga., were among the speakers at an informal dinner at the Brookhaven Club, Atlanta, given by members of the Atlanta Chapter of the American Institute of Architects. Haralson Bleckley, president of the chapter, was toastmaster.

New Architectural Firm.

The partnership heretofore existing between Mr. Kenneth McDonald and Mr. W. J. Dodd, archi-

itects, of Louisville, Ky., has, we are informed, been dissolved. Mr. Dodd will be of the firm of Haenke & Dodd, of Los Angeles, and Mr. McDonald of the firm of McDonald & McDonald, San Francisco. The firm of McDonald & Dodd will be succeeded in Louisville by Messrs. Ward & Glossop, with offices in 1500 Lincoln Building, Louisville, Ky.

City Beautifier at Sherman.

M. H. West of Chicago, a landscape architect and civic engineer, has been in Sherman, Texas, to assist the Sherman Chamber of Commerce in devising a city building plan. The Chamber of Commerce proposes to improve the civic attractions of Sherman, clean the city up in modern style.

Locates in Atlanta.

Harry E. Patton, of Rome, Ga., secretary of the Patton Manufacturing Company, contractors and lumber dealers, has resigned his position in Rome, and will bring his family to Atlanta to reside on April 1. Mr. Patton will be connected with one of the large contracting firms of Atlanta.

Office In Pensacola.

Pool & Co., architects, have opened offices in the Brent Building, Pensacola, Fla. They will do general architectural work and superintend engineering work in their line.

Opens Office in Augusta, Ga.

Thomas M. Campbell has opened an office at No. 15 Johnson building at Augusta, Ga., and is already busily engaged in preparing plans. Mr. Campbell was for five years building inspector for the city of Augusta, resigning that position only recently. In addition to his duties as architect he is also professor of architecture in the Academy of Richmond county, being in charge of that department at the academy.

New Augusta, Ga., Firm.

Barnwell, Jones & Barnwell, a well-known Chattanooga, Tenn., firm of architects, has opened an Augusta office at No. 518 Leonard building, B. L. Barnwell being in charge. This firm has executed numbers of important commissions in this section of the county in recent years.

Architectural Techs Win Contest.

High honors have been won by students in the department of architecture at the Georgia School of Technology in the nation-wide competition of the Society of Beaux Arts Architects. Those included in the awards of the New York society are H. S. McCrary, J. C. Dennis, J. M. Russell, F. L. Rand, T. F. Lockwood and J. W. Biggers.

Their winning drawings were on exhibition in

the rooms of the department of architecture recently. The subject of the designs is "A City Church."

Professor Francis Palmer, of Georgia Tech, announces the first preliminary competition for the Paris prize in architecture. This is the largest prize of its kind given in the United States, and the winner is sent to pursue his studies in the Ecole des Beaux-Arts of Paris.

The Paris prize scholar will receive \$250 quarterly for two years and one-half, dating from his arrival in Europe. This competition is open to all citizens in the United States under 27 years of age.

The American academy in Rome also announces its annual competition for the prizes in architecture, sculpture and painting. The fellowship in each of these contests pays \$1,000 a year to the beneficiary for three years, supporting him either at the academy at Rome or in his European travels.

Along with the announcement of these competitions comes word that William Pope Barney, one of the first graduates of the department of architecture at Tech, has won the first prize offered annually by the Society of Beaux-Arts Architects of New York. The subject this year was a sight-seeing barge for the Panama canal.

Strange Woods From The Philippines.

In the interior construction of a house which he will erect at Westwood Park, Mass., W. Cameron Forbes, Governor-General of the Philippine Islands, will use various woods imported from the islands and unfamiliar in western countries.

One of them is called red narra and is similar to mahogany. Tindalo is the name of another variety, which grows a rich red with age. Among the others are acle, which bears a resemblance to oak; molave, an exceedingly hard wood; camagon, very heavy and like ebony; supa, of a brown tone, unlike any native American wood; ipil, more durable than oak, and calantas, which is like cedar and has a similar odor. Of the last there are already in storage in Massachusetts boards 35 ft. in length, 52 in. wide and 4 in. thick. Dungan is the name of another wood that is so heavy and hard that it cannot be used with facility in any building operation.

With the opening of roads into the interior of the Philippine Islands and the development of railroads, it is predicted that the lumber industry will become one of the most important items of their commerce.

Todd Claim Disallowed.

Architect A. W. Todd of Charleston, S. C., who was also a member of the legislation drew certain plans for remodeling the South Carolina state house. His claim has been before the house for a year or

more. Recently following a warm debate, the item of \$5,000 was struck from the appropriation bill.

The original claim for the plans and model was some \$12,000. The matter was the subject of a searching probe by a special committee in 1912, which reported that there were no legal grounds on which Representative Todd could base his claim. Regardless of this report, the ways and means committee saw fit this year to include an item of \$5,000 for Mr. Todd. When the house receded this item was being opposed by Mr. Nicholson, of Greenwood, who was a member of the special investigating committee last year and is now a member of the ways and means committee. He said the press of other legislative duties had prevented him from opposing the \$5,000 item before the committee and he was obliged to take the floor of the house to do so.

Ventilating Rules for New York Schools.

The Board of Education of New York City has issued new and elaborate rules for the ventilation, heating and cooling of school rooms in that city, which are of general interest, and from which the following are taken:

Transoms and other openings from classroom to hall should be kept constantly open at least in part. In buildings not having the plenum ventilation in the halls, windows opening from halls to the outside air should be kept open.

When the temperature rises above 68 deg. the windows should be opened, the heat at the radiators should be turned off. When the temperature falls below 60 deg. pupils should engage in physical exercise.

In schools provided with the artificial ventilation system, the system must be used when the weather is bad and it is deemed to be unsafe to open windows.

The rate in school gymnasiums, halls and passageways is fixed at from 60 to 65 deg.

During the setting-up exercises at 10 and 11 and 2, the windows should be opened from top and bottom and remain open for the two-minute period. During recess, classroom games and other physical training exercises, windows should be opened. In any change of classroom the outgoing class should open the windows and the incoming class close them. When a class leaves the room for recess the windows should be opened. During lunch the windows should be opened when the class leaves the room, and be closed long enough to make the room comfortable.

In other artificially ventilated school houses the principals may, upon assuming formal responsibility for the exercise of their privilege, use the artificial system or not as they may think best. The same rule applies to night schools.

Fourteenth Annual Meeting Builders' Supply Men

THE fourteenth annual convention of the National Builders' Supply Association is now a part of history. A general spirit of prosperity prevailed all the sessions and the delegates are well satisfied with the proceedings and praising the hospitality of the city of New Orleans.

Nearly all of them remained until the close of the Mardi Gras. The convention proper closed with the banquet which was served Friday evening at 8 o'clock, at which there were about 200 guests.

The opening session was held at 2 o'clock Thursday afternoon, Jan. 30, Mayor Behrman making the "welcome to our city" speech. The discussion of concrete was one of the most interesting and prominent features of the convention.

The more general use of concrete in building was advocated and the contention was made that the world is still ignorant of the real merits of this substance.

Waterproofing concrete was a subject treated with lecture and slides by Dr. Maximilian Toch, lecturer on concrete at the College of the City of New York. He showed about 100 examples of concrete construction, beginning with the old Roman structures still intact and waterproof after standing 2,200 years. "On the question of waterproofing concrete," he said, "I don't know whether we can show much improvement over the ancients."

Rome and Pompeii still show wonderful examples of concrete construction, he said, and told of his personal inspection of these cities recently. He spoke for some time on the grandeur of the concrete works in Pompeii. With a number of slides he illustrated a New York dry dock and sea wall which have become practically useless through the disintegration of concrete.

N. E. Newman, president of the Master Builders' Company, of Cleveland, talked about concrete floors. As an introductory, he gave a short talk on the business side of the dealers' business. "Service is of primary importance, and price is the secondary consideration," he said. "The Standard Oil, American Tobacco, National Cash Register and other big companies have been built on the fundamental principle of service," he remarked. "It is your duty to your customer to see that he gets the best service obtainable," he continued. "Concrete construction is comparatively new in this country. Contractors do not give concrete floor finishing the proper attention. The reason that concrete floors are such a vital part of a building is because they receive harder use. The concrete

floor has a multitude of advantages. It is easy to lay, sanitary, does not deteriorate with age and is vermin-proof. A concrete building is free from rats and mice."

The builders almost see the dawn of a new era in their business through the medium of "the new competition," a one-price policy, expounded in a paper by John J. Voelkel, of the firm of J. J. Clake & Co., of New Orleans, talked on a plan proposed by A. J. Eddy, a Chicago attorney. His talk struck a popular note with the convention.

"The American policy of one-price is a time-saving policy and a money-making policy," the paper read. "Gradually it has crossed the ocean and got into Europe. It has a firm hold in England and portions of the Continent. Nearing the Mediterranean and across that water the policy is never heard of. It is second nature to the Oriental to dicker with a customer and charge all the traffic will bear."

The manufacturer came in for a biting sting here when he continued, "Now, the manufacturing world everywhere is on the Oriental basis period. It has as many prices as customers. Comparatively few manufacturers have one priced on their goods. They have a dozen prices sometimes for the same customer—anything to land the order.

"A man cares less about what he pays himself than what his competitors pay. Many a buyer will say: 'It is immaterial to us what we pay, much or less, if we could only feel certain that the man next door was paying the same.'

"One of the objects of the 'new competition' is to bring the manufacturing world into the open—just as the retail shoe trade has been brought out. The time is coming when the manufacturer and dealer's prices will be quoted just as plainly as retail shoes.

"Bring prices into the open is the first word in the new competition. You can't do anything where there are secret rates and discounts. The average salesman works for the buyer because he feels he must make a sale, and he doesn't know how except by cutting prices. All he hears from morning to night is: 'Your prices are too high—too high, bring 'em down.' His bread and butter depends upon landing the order, and when the man says 'Too high' he wires back to his house for a lower figure. The house takes the word of the salesman and sells down to or below cost. That is not a position in which to put a good, intelligent salesman.

"Any salesman can sell by cutting prices, or if he has a 'pull.' The opportunity for the real salesman is at hand. The man who can sell goods at fair prices—prices that will not be shaded at any man's request—will win."

At the banquet James W. Porch talked of New Orleans and her municipally-owned docks. "Last Tuesday we broke a record here," he began. "Forty-five ships were in our port. On that day we did as much business as some ports do in a year. Of that number only five flew the stars and stripes. It is needless to say that the union jack predominated." Mr. Porch made a stirring appeal for more American ships. He said that Americans stayed at home and swapped knives and allowed foreign trade to take care of itself. He told of a trip around South America—covering a total of 16,000 miles—where he met the American flag twice. Once it was attached to an American millionaire's yacht and the other time it was flying to a disabled American steamer.

Election of Officers.

Edward S. Walton, of Youngstown, Ohio, was elected president of the association for the coming year. Vice-presidents were named for the majority of the states. E. H. Michel, of New Orleans, was restored to that position in this state. Others were: D. T. Hargraves, Helena, Ark.; E. J. Waterhouse, San Francisco.; Frank Johnston, New Brunswick, Conn.; Charles E. Bye, Wilmington, Del.; S. D. Lincoln, Washington; E. H. Kriehaver, Atlanta, Ga.; W. W. Nicol, Peoria, Ill.; A. E. Bradshaw, Indianapolis; Owen Tyler, Louisville, Ky.; J. A. Kelley, Jr., Baltimore; B. F. Marsh, Worcester, Mass.; S. A. Mormon, Grand Rapids, Mich.; John Wharry, St. Paul; Howard T. McCutcheon, Kansas City; James H. Allen, Lincoln, Neb.; Walter Schultz, Hoboken N. J.; Henry Schaefer, Buffalo, N. Y.; Georgia Gengnagla, Dayton, Ohio; James N. Thayer, Erie; Edwin D. Ellis, Providence, R. I.; A. S. Gowen, Greenville, S. C.; V. H. Herbert, Jr., Nashville; Tobe L. Marston, Houston; R. E. Boste, Natchez, Miss.; H. H. Plummer, Menasha, Wis.; M. Givens, Charleston, W. Va. Vice-presidents are yet to be named for Alabama and two other states.

W. W. Coney, of Cincinnati, is the only new member of the executive committee. It is composed of President Walton, Retiring President Warner, C. N. Ray, Detroit; Charles M. Kelley, Providence; L. W. Macatee, Houston; Richard Kind, Toledo; R. C. Brown, Oshkosh; James G. Lincoln, Boston, and Walter F. Jahncke, New Orleans. Mr. Jahncke is vice-chairman. Henry W. Classen, of Baltimore, was re-elected treasurer. The secretaryship will be held by Ralph Densmore for a few months,

when the executive committee will appoint a Youngstown man to the place.

Several cities are bidders for the 1914 convention, among them Washington, Atlantic City, Chicago, Milwaukee, St. Louis and Lexington, Ky., and San Francisco. The location will be selected by the executive committee some time next summer.

Supply and Hardware Companies.

Holdenville, Okla.—The Shankle Hardware and Implement Co. Capital \$5,000. Incorporators: A. M. Loftus, Owen H. Rivers, Thomas S. Adams and John J. Shankle.

Cushing, Okla.—The Raedeker-Lumly Hardware Co. Capital \$10,000. Incorporators: J. H. Raedeker, T. M. Lumly, and others.

Newport, Ark.—The Johnson-Avera Hardware Co. Capital \$20,000. Incorporators: T. W. Johnson, A. G. Cloyes and J. B. Avera.

Orange, Va.—The Willis Hardware Co. Capital \$15,000. L. Willis, Jr., president; C. C. Hill, vice-president; J. E. Slater, secretary and treasurer, all of Orange, Va. Object and purposes: Hardware business.

Pauls Valley, Okla.—The Maysville Hardware Co. Capital \$10,000. Incorporators: William G. Burks, Pauls Valley; Clay W. Wilson, Ben C. Elliott, Maysville.

Rockingham, N. C.—The Pee Dee Hardware Co. Capital \$40,000. Incorporators: B. S. Stancell, F. L. Pickett and J. R. McLendon.

Alto, Tex.—The Hogan-Goodson Hardware and Furniture Co. Capital \$20,000. Incorporators: M. J. Hogan, H. V. Sitton and W. S. Satterwhite.

Bluefield, W. Va.—The Sterling Hardware Co. Capital \$100,000. Incorporators: R. C. Morrison, E. H. Smith, J. H. Custard.

Johnsonville, S. C.—The Johnsonville Hardware Co. Capital \$10,000. Petitioners: C. C. Richardson, Arthur Rodgers, W. P. Jenerette and Garrett Peatross.

Spotswood, Va.—The Spotswood Hardware and Supply Company. Capital \$25,000. J. A. Spencer, president; W. M. Harris, secretary and treasurer.

Statesville, N. C.—The Iredell Hardware Co. Capital \$100,000. Incorporators: D. S. Thomas, H. M. Eubanks and others.

Austin, Tex.—The W. H. Richardson & Co. Capital \$100,000. Purpose, hardware business. Incorporators: W. H. Richardson, W. H. Richardson, Jr., and R. L. Richardson.

Greenville, Tex.—The Boykin Hardware Co. Capital \$12,000. Incorporators: J. M. Boykin, L. J. E. Boykin, L. W. Bethel.

Wilmington, N. C.—The Builders Supply Co. Capital \$125,000. Incorporators: E. L. Hinton and others.

Foreign Trade Opportunities.

(Addresses omitted are on file at the Bureau of Manufactures, Washington, D. C. In applying for addresses refer to file number. For convenience in filing at Bureau of Manufactures, please use separate letter sheet for each trade opportunity request.)

No. 10344. Terra-Cotta Building Material.—A report from an American consular officer in Canada states that a resident of his district, who furnishes bank references, desires to be put in touch with manufacturers of or dealers in terra-cotta building material of all kinds with a view of securing the agency for certain territory. As nearly all buildings in the region in question have more or less of this material in them, there would appear to be a good opportunity for its sale.

No. 10488. Concrete Mixers.—An American consular officer reports that a foreign business man is desirous of securing the sole agency for Switzerland of a certain new type of concrete mixer manufactured in the United States. This type of machine is for making artificial stones, and is so constructed that the two materials are subjected to an unusually intensive mixing process by means of air blasts. This method has the advantage of reducing the proportion of cement used, the ratio under the new process being said to be one part of cement to five parts of gravel and sand.

No. 10511. Shooks, Cement, Steel.—An American consular officer reports that an importer and building constructor in his district expects to be in the United States early in March. He is anxious to arrange for the purchase and local representation of the following lines: Shooks, cement, structural steel, concrete steel, terra cotta. His address while in the United States can be obtained from the Bureau of Foreign and Domestic Commerce.

New Government Buildings.

The following new government buildings will soon be erected in the south, and bids on same are being asked to be submitted to O. Wendroth, supervising architect, Washington, D. C., on or before the dates given, these to include wiring and lighting fixtures:

Postoffice at Covington, Va., construction complete, one story and basement, plumbing, etc., April 29.

Postoffice at Oxford, N. C., construction complete, one story, plumbing etc., April 29.

Postoffice at New Orleans, interior finish only, March 13.

Postoffice at Lawrenceburg, Ky., construction complete, two stories, plumbing etc., April 8.

Postoffice at Charleston, W. Va., installation of electric passenger elevator, March 28.

U. S. Quarantine Station, Galveston, Tex., pole line exterior lighting system, March 22.

Postoffice at Weatherford, Tex., construction complete, one story and basement, plumbing, etc., March 24.

Postoffice at Tifton, Ga., construction complete, one story and basement, plumbing, etc., March 25.

Building Operations for February.

Official reports from fifty cities throughout the country show a gain for February of 9 3-4 per cent in the aggregate, as compared with February, 1912; and the first two months gained 14 per cent as compared with the same months of the past year. The gains and losses were about equally divided in the list. Gains of over 100 per cent, for February, were made as follows: Akron, 221 per cent; Cleveland, 193; Indianapolis, 484; Newark, 128; Pittsburgh, 112; St. Joseph, 108 Seattle, 209; Sioux City, 186; Syracuse, 225. For the two months the largest percentage of gain by Indianapolis, 244, and Sioux City, 249. Particulars as to Southern cities will be found in the following tables:

City—	February	February	Per Cent	
	1913	1912	Gain	Loss
	Cost	Cost		
Atlanta	\$ 516,681	\$ 402,337	28	..
Baltimore	723,135	532,070	35	..
Chattanooga	134,855	357,410	..	62
Norfolk	317,359	335,088	..	5
San Antonio	127,390	171,310	..	25
Shreveport	97,129	65,905	47	..
Louisville	553,320	999,860	..	44
Memphis	248,475	602,221	..	59
New Orleans	387,906	149,045	93	..

Gaffney's Stringent Building Laws.

A meeting of the Gaffney, S.C., city council was held recently at which time some very stringent building laws were passed. It will be necessary hereafter that every building erected in the city be inspected by the building inspector and all of the electric light wiring must undergo a rigid inspection. Sergeant A. L. Hallman of the police force was selected as building inspector, while the inspection of the wiring will be done by Superintendent L. V. Gaffney of the board of public works. At this meeting the council also formally accepted the new fire fighting machines, which have just been purchased at a cost of \$5,800.

The International Building Exposition.

The management of the International Building Exposition to be held in Leipzig, Germany, May to October, 1913, has issued a comprehensive list of folders, a set of which has been received and may be seen at the Bureau of Foreign and Domestic Commerce.

Have You Registered?

The Columbus Industrial Index records the following story of an architect in a neighboring town who lost out because he was not registered according to law, which incident might serve to remind others of their possible plight some day. The Index says:

It developed the other day, quite unexpectedly, that there is not a single architect in the city of Macon, in a legal sense, or, rather, wasn't at that time. This statement may sound strange, for Macon, in proportion to population, is quite well blessed with architectural offices, as becomes a live and growing city, in the midst of a live and growing territory. It seems that one of the leading architects here sued a local firm for his commission in designing a business building. His brother-architects all thought he had a good case and were naturally considerably interested in the outcome. It looked like victory—but the lawyers on the other side hadn't been reckoned with. These lawyers, in the disagreeable way that lawyers have, went to the ordinary's office to see if the suing architect had registered, in accordance with the law, and found that not only he, but all the other architects in the city, had failed to register. They then made the point that the gentleman was not an architect, in the legal sense of the word, when he made the contract with the Macon firm, and hence, couldn't sue, as an architect, for his commission. The presiding judge sustained the point and the case went out of court. It was all news to the local architects, who had completely overlooked the fact that such registration is required. And it will probably be news to a great many other architects in other cities of the state.

Fort Worth Builders' Exchange.

An organization known as the Fort Worth Builders' Exchange has been formed at Fort Worth, Texas. The committee on by-laws consists of C. B. Webb, Fred Robertson and I. C. Sweeney.

Buildings Constructed of Asbestos.

Asbestos plaster, used in the same manner as concrete at the present time, will, so a western construction concern believes, solve several problems. It is claimed not only that buildings constructed of such material would be absolutely fire-proof, no matter how hot a fire might be raging on either side, but that the use of such plaster, which is a poor conductor of heat would save fuel in winter and keep interiors cool in summer. Asbestos is also sound-proof, which is an additional feature of importance, particularly in the construction of hotels, factories, and the like.

Several garages have been constructed of the

asbestos plaster, and the large cold-storage warehouse shown in the illustration is to be built in Denver. The asbestos plaster to be used in this building will contain about 40 per cent of what is called ground asbestos serpentine. In the plans for erecting a hotel of this material, it is proposed to use metal lath inside and out, the outer walls to be covered with a 2-in. coat of asbestos plaster, the space between the outer and inner walls to be filled with a mortar of asbestos and granulated cork, and the inner wall to be plastered with a mixture containing considerably less asbestos than the outer wall. The floors and ceilings of this structure would be formed of asbestos concrete, and all doors would be of metal lined with asbestos.

Reconstruct Huntsville Courthouse.

An architect has been employed by the county commissioners at Huntsville, Ala., to take the measurements of the county courthouse and draw plans for its reconstruction and the addition of two wings. The court house is one of the most historic structures in the State, being seventy-six years old and it is one of the finest specimens of architecture of that time but the country has outgrown the building and there is not enough room for the courts and for county officers. About half of the county commissioners want to build a new court house and the others would spend something like \$50,000 in repairs and additions to the old building. The question has become a live one in local politics.

Waycross, Ga., Building Activity.

Building operations in Waycross last month were double the activity for December. Forty-two permits were issued in January as against seventeen for December. There is every indication that very month of the year will be busy in the building work, as many citizens have made plans for the erection of both business and home structures.

Making Leaf Pictures.

The necessary outfit consists simply of a small printing frame such as photographers use and a quantity of commercial blue print paper. The leaves of ferns which are to be the subjects of the lesson are pressed in a book for a few days after gathering; when thoroughly dry each specimen is placed in the printing frame, covered with a piece of blue print paper, yellow side down, and the back of the frame latched in place. The whole is then exposed to strong sunlight until inspection shows the shadows to be deeply bronzed; the print is then removed and washed in several changes of fresh water, when the exact image of the leaf, with all its delicate tracery of veins, will be found shown in white upon a blue background.

New Faces This Month.

The attention of our readers is directed to these new advertisements appearing this month, all representative in their several lines, and worthy the patronage of those interested:

Schouler Cement Construction Co., 142 Frelinghuysen Ave., Newark, N. J., manufacture waterproofing for sliding doors, which is absolute protection against wind, rain, dust or snow. Send for their catalogue and information.

Roddis Lumber & Veneer Co., Marshfield, Wis., makers of beautiful veneered mahogany doors, will be pleased to send their illustrated catalog to any interested parties. Ask for it.

The Walger Awning Co., 1301 Larrabee Street, Chicago, Ill., are the manufacturers of the New Model awning, illustration of which is given in our advertising pages. Write them your wants.

Reed Stone Co., Bedford, Ind., solicit inquiries for quotations on cut stone for all purposes. Send for estimates and prices.

H. G. Robbins, Kewanna, Ind., manufactures metal mitre corners which make a strong, neat corner finish. Ask for prices and illustrated circulars.

Bayley & Sons, 106 Vanderveer St., Brooklyn, N. Y., are the manufacturers of the beautiful semi-indirect "Equalite" lighting fixtures. Ask for catalogue and price list.

New York Blower Co., general offices at Chicago and works at Bucyrus, Ohio, make fans, engines, heaters and ventilators. They also make "Peerless" Air Washers. Ask for their interesting booklet, "Healthful Air."

Merwin Manufacturing Company, at Erie, Pa., manufacturers of "Herringbone" Wall Tile and wish to send a sample to every architect. Send for them now, they are free. It's most scientific, most serviceable.

Leader Iron Works, Decatur, Ills., make the "Leader" Automatic Electric Controller, which is a modern necessity. Write for circular and prices.

Girvan-Nachod Co., 31 E. 27th street, New York City, are engineers and contractors for waterproofing and are dealers in water proofing material. Specifications, designs, estimates and supervision on contracts. Write them your needs.

Safety Door Hanger Co., Ashland, Ohio, make the "Red Rib" door hanger, illustration of which is given in our advertising pages. Printed matter and circulars for the asking.

The Brilliant Gas Lamp Co., 182 N. State street, Chicago, are sole owners and patentees of the "Brilliant" and "Triumph" portable gas lamps. Write for prices and circulars.

Edward E. Buhler Co., 103 Park Ave., handle hooks and bars and are wholesalers in mason's

building materials. They will be pleased to quote prices upon request.

The Standard Screen Co., 1848 West 14th street, Chicago, make shades and screens. Their goods are of the best quality and their prices are right. Let them quote you.

Buckeye Iron & Iron Works, Columbus, Ohio, manufacture wire guards, settees, trellis work, stall guards and wire and iron fencing. Ask for quotations.

Automatic Electric Controller.

The "Leader" Automatic Electric Controller is designed to automatically start and stop the electric motor operating a pneumatic water system or air compressor.

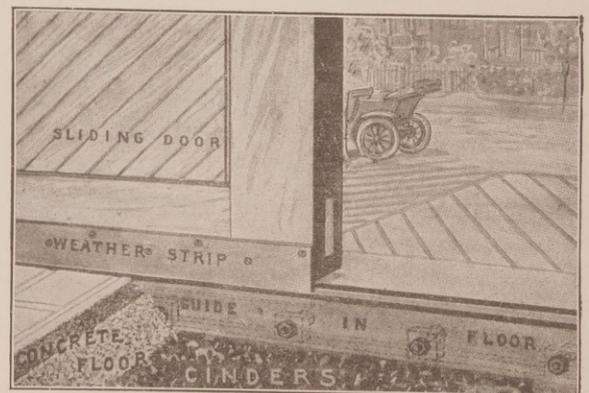
Such a controller may be connected to the motor operating a pneumatic water system, so that the attention of the owner need not be given to starting and stopping it at any time. The same control can be secured over the motor used with an air compressor, the pressure in the air storage tank regulating the operation of the controller.

It is, therefore, of the greatest importance that the automatic controller upon which so much depends, shall be an absolutely reliable device, and so constructed that it will operate day in and day out for years, at the pressures to which it is set, and also that it shall be compact and properly protected from dirt or moisture that might affect its reliability.

This controller is made by the Leader Iron Works, Decatur, Ills., who will be pleased to furnish more information upon request.

Weatherproof Sliding Doors.

As successors to the Standard Paving Co., the Schouler Cement Construction Co., 142 Frelinghuysen Avenue, Newark, N. J., have added a new line to their business, that of the Scholer Patent



Sliding Door Guide and Weather Strip and are making a great success of this wonderful invention which is made of metal and will not wear out. Is

simple to apply and is absolute protection against wind, rain, snow and dust.

Herewith is shown just how this weather strip and guide is applied and looks when in working order. It is a most effective weatherproofing and is guaranteed to give satisfaction.

This firm is also contractors for re-inforced side walks and stable floors and is well equipped to carry out any contract intrusted to them, either large or small.

Where Kees Metal Corners are Used.

Every carpenter knows what a particular job it is to cut and bevel the ends of the weather-boarding to make a perfect mitre corner. No matter how skillfully the work is done, the joints are bound to warp or spread open in time.

By using Kees Metal Building Corners, a perfect mitre corner is secured with an immense saving of labor and the corner is stronger, more durable and better looking than if the boards are joined in



Residence of Mr. E. T. Tramp, North Platte, Nebr. Cost \$8,000.. Contractor, Howard McMichael. Siding Finished with Kees Metal Building Corners.

the usual way. A corner like this will never open. Compare with the older style corner board construction, there is a saving in both time and material. (No corner boards are needed.)

The corners are made of galvanized iron, shaped to fit the beveled corner formed by the siding, and pierced with nail holes. They are treated so that they can be painted the same as wood.

A circular showing a number of handsome buildings on which the corners were used, has just been issued by the F. K. Kees Mfg. Co., Beatrice, Neb.

They will be glad to send it to any reader of this paper, together with samples of the corners.

Cameron Portable Crane.

Among the many useful articles handled by the Standardizing Co., 78-80 Broad street, New York City, is the Cameron Portable Crane, light, handy, all steel, of great strength, for use with any type of chain hoist.

The company handles overhead tramways, trolleys and switches. Write for their illustrated booklets and prices.

Lansing's New York Office.

Herewith is shown the New York offices of the Lansing Company, whose plant is located at Lansing, Mich. This is a fine eight story building located at 288-289 West street. There the firm will carry the largest stock of trucks and barrows carried



at any warehouse in the country, and will also have a complete line of concrete machinery, carts, etc.

Here the firm will be glad to welcome all of their friends when in New York, where every facility is had for the dispatching of their growing business in the east.

Griffin's Notile Hard Finish.

Architects and builders everywhere are always interested in the best grades of plastic cement roofing. The Griffin Roofing Co., 506 West 26th street, New York City, direct attention to their slag and tile roofing, Sparham Fireproof roofing cement, cornices, skylights, etc. They also construct watertight floors and cellars and contract for asphalt work. Write them for prices.

Dynamo Electric Bells.

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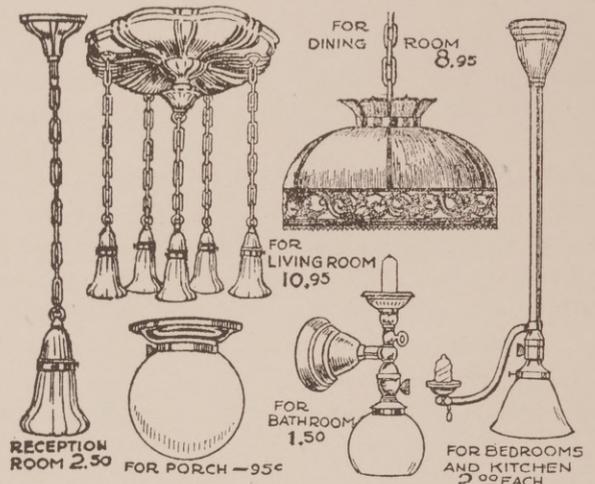
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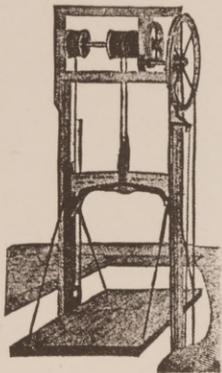
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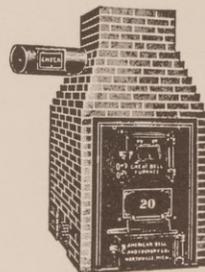
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Building and Construction Department

Public Buildings.

Waycross, Ga.—Arrangements are being perfected for asking bids for constructing addition to city hall. Alderman Allen S. Morton has direct charge. Harry D. Reed, mayor.

Daytona, Fla.—C. O. Chamberlin has purchased Palmetto Hotel property and proposes to erect hotel building to cost \$500,000 or more. In summer, Mr. Chamberlin conducts a hotel in the Adirondacks.

Birmingham, Ala.—Expected that Board of Roads and Revenue of Jefferson county, Dr. R. F. Lovelady chairman, will receive this week from Architect Harry Wheelock, this city, plans for addition to county courthouse; \$60,000 to \$65,000. (Previous reference.)

Jasper, Ala.—Plans by Architects Smith & Carter, Montgomery, Ala., for jail to be erected for Walker county have been accepted by Board of Commissioners: three stories; interior finish of enamel; bathtubs for women prisoners; enamel toilets and shower baths; concrete stationary furnishings for cells; hot and cold water; steam heat; front will have trim of marble and terra cotta; capacity of 141 prisoners. J. W. Shepherd, chairman of Board, Jasper.

Thomasville, Ga.—City awarded contract to Contractor Gribben, Thomasville, for erection of addition to hospital at cost of \$7,000; addition will consist of five rooms, to be used for operating purposes; elevator will be installed in main building. The Mayor.

Athens, Ga.—Contract has been awarded to Van Dorn Iron Works, Cleveland, O., to erect jail for Clarke county; cells, cages, locking devices and entire equipment; \$10,485. Contract awarded by Board of Commissioners of Clarke county, Athens.

Tampa, Fla.—Chairman J. L. Hackney of Board of Commissioners of Hillsboro county, favors erection of woman's building on county farm of brick instead of frame, and the Board will pass upon matter at its next meeting. Built of brick, the structure would cost about \$5,000 to \$6,250. Board approved plans for construction of frame building.

Atlanta, Ga.—Contract has been awarded to McDaniels & Calmes, this city, to erect addition to Red Men's building; reinforced concrete; vaults; elevators; about \$100,000.

Talladega, Ala.—Contract has been awarded to R. P. Farnsworth & Co., to erect Masonic Temple for local lodge; two-stories and basement; stores on first floor; lodge and club rooms on second floor; heating plant; \$15,000. Farnsworth & Co., are constructing postoffice building in this city.

Washington, Ga.—LaFayette Lodge, F. & A. M., awarded contract to J. B. Chafin, Postoffice box 86, Washington, for alteration of building; two stories;

brick; 150x27 feet. Plans by Mr. Chafin.

Lakeland, Fla.—Contract to erect 5-story hotel building has been awarded to McGucken & Hyers, Tampa, Fla.; reinforced concrete; \$115,000. Plans by Architects McIver & McKay, Ocala, Fla.

Apalachicola, Fla.—Contract has been awarded to George H. Marshall, this city, to repair armory; metal roof.

Birmingham, Ala.—Contract has been awarded to Carroll Blake Construction Co., this city, to remodel offices for Pratt Consolidated Co.

Hopkinsville, Ky.—Dr. E. S. Stuart has donated \$25,000 for the erection of a hospital here.

Louisville, Ky.—Trinity Council No. 230, Y. M. I., have engaged Architect J. J. Gaffney to prepare plans for a \$15,000 annex to their club house, which will include gymnasium, running plant and steam vacuum heating plant.

Louisville, Ky.—A municipal market-house is proposed for Louisville. The commercial club proposes a \$500,000 bond issue for this purpose.

Bryan, Tex.—The commissioners court is arranging to build a new county jail, and has employed Professor Sam J. Fountain of the architectural engineering department of the A. and M. College as architect for the new building.

Hammond, La.—A \$50,000 public building will be erected in Hammond.

New Orleans, La.—The commission council has accepted the additional donation of \$25,000 made by Andrew Carnegie for the erection of a colored branch library and a donation for the extension of the central library.

Thibodaux, La.—Thibodaux will get a \$50,000 public building.

Holly Springs, Miss.—A \$20,000 public building will be erected here.

Meridian, Miss.—Plans have been prepared by Architect P. J. Krouse for remodeling the Board of Trade building at a cost of \$10,000.

Burlington, N. C.—The Alamance Medical Society will erect a \$20,000 hospital between this city and Graham. J. W. Cates, secretary of the Chamber of Commerce, has submitted plans drawn by architects, which were decided upon as the most probable plans for the institution. A committee has been appointed to take under advisement plans, location, etc.

Hendersonville, N. C.—Charles A. Carlson contemplates a \$50,000 hotel here.

New Bern, N. C.—The Catholics contemplate erecting a hospital here.

Rocky Mount, N. C.—It has been announced that Drs. L. W. Kornegay and J. L. Lane of Mount Olive, and Arthur Staley of Aurora will build a three-story hospital here and following this

there comes the statement that local physicians, Messrs. Speight, Quillen, Whitehead and Battle, have formed a corporation, bought a site and will soon begin work on building.

Winston-Salem, N. C.—Prof. H. A. Hayes has leased the Webster hotel and will remodel the building.

Anderson, S. C.—The Pickens Hotel will be converted into a building for the Y. M. C. A.

Columbia, S. C.—\$225,000 will be appropriated for the erection of a postoffice.

Columbia, S. C.—The secretary of state has issued a commission to the Woman's Building Co., of Columbia, with a capital of \$40,000. The building is to be constructed by the club women of the city.

Spartanburg, S. C.—Plans are on foot to erect a pellagra hospital in the city.

Oakdale, Tenn.—M. J. Walker will erect a three-story hotel.

Knoxville, Tenn.—R. Graf & Sons have drawn plans for the East Tennessee building at the National Conservation Exposition grounds. The building will be 100 by 150 feet, and will be built along modern lines. The finishing material will be stucco.

Dwellings and Apartments.

Americus, Ga.—A. C. Crockett awarded contract to Shaw Brothers Company, Macon, Ga., to erect residence recently described; cost \$8,000 to \$10,000; plans by Architect T. F. Lockwood, Murrah building, Columbus, Ga.

Atlanta, Ga.—Cochran & Cleveland, this city, have contract to erect three residences for J. M. George, one-story, frame; \$3,000 each.

Atlanta, Ga.—W. A. Thacher, this city, has contract to erect residence for W. C. Hall.

Augusta, Ga.—Contract was awarded to J. W. Siebert, this city, to erect residence for Mrs. N. B. Schiveers; two stories, tin roof; hot air heating; tile bathroom; hardwood floors; \$11,000; materials will be purchased by contractors. Plans were prepared by Architect C. K. Lawrence, Jr., this city.

Birmingham, Ala.—Journey & Chamblee, this city, have contract to erect two-story, frame residence; plans by Architect Bem Price, this city.

Birmingham, Ala.—Contract has been awarded to Miller Bros., this city, to erect residence; plans by Architect Bem Price, this city.

Bradentown, Fla.—Contract has been awarded to Price & Son, this city, to erect bungalow for Henry J. Beck.

Jacksonville, Fla.—Contract was awarded to Barnes & Chaney, this city, to erect residence for G. W. Smith.

Lakeland, Fla.—Contracts has been awarded to Marshall & Sanders, this city, to erect parsonage

for First Methodist Church, two-stories; \$5,800.

Manchester, Ga.—Contract has been awarded to Corley Lumber Co., this city, to erect 6-room residence for A. B. Smith.

Opelika, Ala.—Contract has been awarded by John T. Smith for erection of residence; two-stories; brick veneer.

Robertsdale, Ala.—Contract has been awarded to D. S. Comstock, this city, to erect residence for L. Glendinning; two-stories; 28x45 feet; shingle roof; grates; \$3,500.

Troy, Ala.—Contracts for erection of residences have been awarded by Mrs. T. F. Murphree, 5-room bungalow, and Mrs. Lochrane Hilliard, 6-room bungalow.

Birmingham, Ala.—Contract has been awarded to Utilities Construction Co., this city, to erect apartment house for Judge A. C. Howze; three-stories and basement; twelve apartments for families; 86x50 feet; brick and concrete; each apartment will have individual hall and sleeping porch; \$25,000. Plans by Architect Edgar L. Love, this city, who awarded the contract.

Columbus, Ga.—Mrs. Henry B. Woolfolk awarded contract to W. C. Lunsford, Columbus, to erect \$10,000 apartment house; two-stories; frame; four apartments of six rooms each; thoroughly modern appointments; metal roof; gas and electric lights; plumbing; tiled bath rooms. Plans by Architect T. F. Lockwood, Murrah building, Columbus.

Bradentown, Fla.—S. J. Geiser has begun construction of residence.

Atlanta, Ga.—Permits for erection of residences which will be built by day work have been issued as follows: C. F. Rodgers, two-story, frame, \$3,500; A. C. Brown, one-story, frame, \$2,200.

Atlanta, Ga.—Residence will be erected by Marshall Johnson.

Atlanta, Ga.—Dillon-Morris Co., has permits to erect two-story, frame residences to cost \$3,500 each.

Augusta, Ga.—Mrs. Alice Hunt will erect two two-story residences at cost of \$4,900 each; permits issued.

Augusta, Ga.—Permits issued to A. R. Peters to erect one-story residence at cost of \$2,300.

Birmingham, Ala.—Permits for erection of residences have been issued as follows: Henry Westall, two-story, brick veneer, \$7,000; W. L. Sessions, two-story, frame, \$3,000.

Birmingham, Ala.—Architect Wm. Leslie Welton, this city, is completing plans for frame residence to be erected by Jay Smith.

Birmingham, Ala.—Architect Bem Price, this city is contemplating plans for two-story, frame residence to be erected in Norwood.

Birmingham, Ala.—David Mimms has permit to erect two one-story frame residences: \$3,000.

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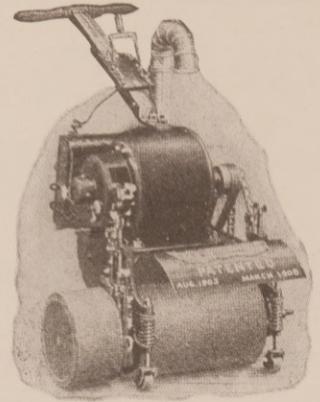
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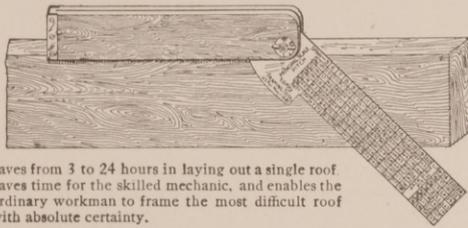
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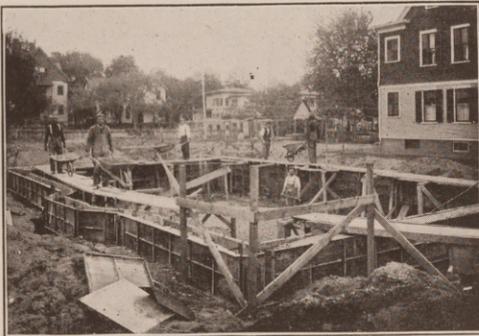
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Claxton, Ga.—James H. Rushing is contemplating remodeling dwelling; modern conveniences.

Columbus, Ga.—John S. Bleecker contemplates erecting residence but has not yet decided definitely; sketches submitted.

Columbus, Ga.—John T. Fletcher will erect residence; frame and brick; hotair heating; metal or slate roof; cost, \$5,000; plans will be prepared by Architects T. W. Smith & Co., Garrard building, Columbus.

Columbus, Ga.—Fred E. Fletcher will erect bungalow; cost, \$3,000 to \$4,000.

Columbus, Ga.—C. F. Pekor is considering erecting residence but has not yet reached decision.

Columbus, Ga.—Bids are being received for erection of residence for G. I. Yarbrough after plans by Architects T. W. Smith & Co., Garrard building, Columbus; stucco; hardwood floors; metal tile roof; cost \$6,500.

Columbus, Ga.—R. E. Farish will enlarge and remodel residence at cost of from \$7,000 to \$8,000; second story will be added; frame construction; interior finished in white enamel, with mahogany doors; hot-water heating; hardwood floors; construction by day's labor. Plans by Architect T. W. Smith & Co., Garrard building, Columbus.

Jacksonville, Fla.—Permits for erection of residences have been issued as follows: J. H. Blodgett, two-story, frame, \$2,200; John H. Balster, two-story, frame, \$2,500; G. W. Smith, one-story, frame, \$3,000.

Jacksonville, Fla.—Bungalow to be occupied as Winter residence will be erected by Al. Bryan, Cleveland, O.

Kissimmee, Fla.—J. M. Miller plans erection of residence, it is reported.

Lincoln, Ala.—T. W. Ogletree will erect residence.

Macon, Ga.—Mr. Miller, attorney-at-law, will erect \$5,000 brick residence after plans being prepared by Architects Hentz & Reid, Candler building, Atlanta, Ga.

Miami, Fla.—Plans are being prepared by Architect August Geiger, this city, for residence to be erected here by resident of St. Louis, Mo.; reinforced concrete; white stucco; tile roof; eight rooms; two-story front porch, to be screened and have sitting room on first floor and sleeping rooms above.

Miami, Fla.—H. J. Luders, lumber merchant of Chicago, Ill., will erect \$10,000 residence here and also \$2,000 garage; reinforced concrete; residence will consist of 10 rooms; hard pine trim in interior; garage will be two stories high, the second story being used for living apartments; ground broken for construction of residence.

Miami, Fla.—George Orr has begun construction of concrete bungalow to cost \$3,500.

Miami, Fla.—Charles W. Lee, cotton broker of

Chicago, Ill., will erect handsome winter home here.

Miami, Fla.—Charles T. Plummer, Redland, Fla., will erect handsome residence on lot bought for \$4,000.

Miami, Fla.—Col. W. C. Lemert, this city, and Bucyrus, O., may erect winter residence here.

Mobile, Ala.—Mayor John G. Brown, Fox Lake, Ill., has purchased tract near here and contemplates erecting sixteen bungalows to be occupied as winter residences.

Savannah, Ga.—Permits for erection of residences have been issued as follows: J. K. Culver, one-story, frame, metal roof; Frank Herman, cement block, metal roof; H. E. Wilson, two-story, frame, metal roof; Snedeker & Carson, one-story, frame, metal roof.

Sandersville, Ga.—A. Louis Evans will have residence remodeled at cost of about \$3,500; porch columns; hardwood floors; plumbing; electric lights; plans being prepared by Architect Curran R. Ellis building, Macon, Ga.

Thomaston, Ga.—R. E. Rushin will build 8-room bungalow.

Tuscaloosa, Ala.—John D. McQueen and Henry A. Snow contemplate erecting residences, but not immediately.

Vienna, Ga.—E. F. Powell has had plans prepared for residence.

Vienna, Ga.—Judge D. L. Henderson, P. A. Lennard and J. N. Hargrove are reported as considering erection of residences.

Atlanta, Ga.—Dr. W. E. Lambright will erect \$45,000 apartment house after plans prepared by Architect A. F. N. Everett, The Grand building, Atlanta, three-stories; 6 six-room apartments, six four-room apartments and three three-room apartments; building will have exterior of light press brick; red tile roof; roof garden; front of building (90 feet) will consist of two wings with a court between them opening on the street; court will consist of a sunken garden, four feet below the street level; work of construction will begin at once and building is to be completed by September 1.

Miami, Fla.—W. E. McClarm, Duluth, Minn., is said to intend erecting apartment house on lots which he has just purchased.

Tampa, Fla.—W. P. Bethea has permit to erect apartment house. \$4,500.

Louisville, Ky.—Permit issued to Jacob Stengel, brick veneer dwelling; \$4,500.

Louisville, Ky.—Permit issued to Josie C. Eblen, two brick veneer dwellings, \$6,500 each.

Louisville, Ky.—Permit issued to Charles Fitzgerald to erect frame dwelling at cost of \$4,400. B. H. McDowell, two brick dwellings, to cost \$3,500 each.

New Orleans, La.—S. Haspel will erect a two-

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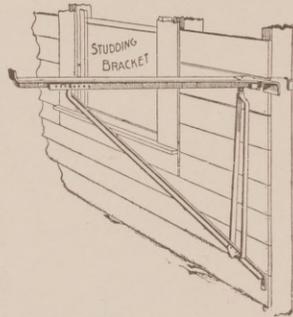
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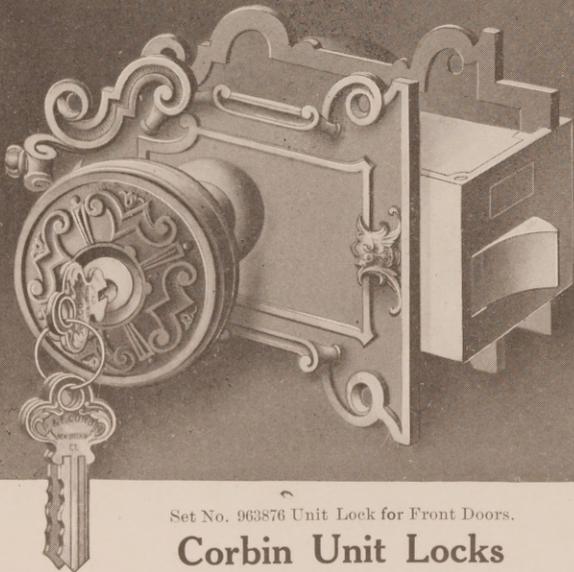
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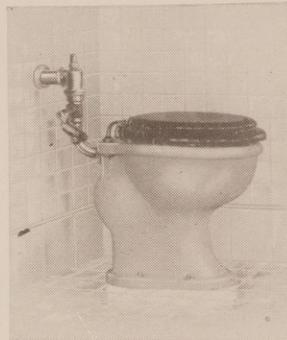
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story brick residence at a cost of \$7,000. The contract will be let in a few days.

New Orleans, La.—Permits issued for the erection of a double two-story residence to cost \$4,000 by the Excelsior Homestead Association. C. Davidson, to erect a single two-story residence, to cost \$3,200. H. Weidner, to erect three double cottages, to cost \$3,000. L. Feibleman will erect a two-story brick residence. Bids are being received.

Belmont, N. C.—Architect Louis Asbury of Charlotte, is preparing plans for ten-room residence to be erected by J. W. Stowe.

Charlotte, N. C.—Plans are being prepared by Louis Asbury of Charlotte, for a \$20,000 residence to be built for C. P.

Fort Bliss, Tex.—B. B. McCutcheon and N. N. McCutcheon will each erect a residence to cost \$20,000 each.

Galveston, Tex.—Brewer W. Key contemplates erecting a brick residence to cost approximately \$35,000.

Houston, Tex.—The Russell Brown Co., to build a 12-room residence. The cost will be \$14,000.

Houston, Tex.—Permit issued to H. House to make repairs, \$3,500.

W. A. Wilson, remodeling, \$3,500.

The Russell Brown Realty Co., has been granted a permit to erect a two-story stucco residence to cost \$7,500.

San Antonio, Tex.—H. Tolle, Sr., to erect an apartment to cost \$4,000.

Norfolk, Va.—Plans have been prepared for the erection of an apartment to be erected by Mrs. Sarah Bennett.

Richmond, Va.—J. W. Huss to erect a detached two-story brick dwelling to cost \$7,680.

Richmond, Va.—R. Lampton, to erect a two-story brick dwelling, \$4,000.

Banks and Office.

Dothan, Ala.—Contract has been awarded by Houston National bank to erect addition to its building; \$30,000. New furniture and fixtures will be installed.

Savannah, Ga.—Bids for construction of building for the Hibernia Bank will be opened from Monday owing to delay in arrival of L. M. Mowbray of Mowbray & Uffinger, New York, who prepared the plans.

Savannah, Ga.—Fleming G. Tinsley and associates are reported to contemplate erecting 6-story office building.

Tampa, Fla.—Tampa Electric Company, J. C. Woodsome, general manager, will erect office building; 60x55 feet; two-stories; cost, \$40,000; first floor will be utilized as display room for electric lighting and heating appliances; second floor will

be devoted to the executive offices and accounting department. Construction will soon begin.

Ashdown, Ark.—H. G. Sanderson will erect a two-story office building.

Little Rock, Ark.—Theodore Sanders has prepared plans for a three-story brick building to cost \$50,000. The building will be erected for Louis Koers and J. E. Skillen.

Fort Myers, Fla.—The First National Bank will erect a building of stone and marble.

Atlanta, Ga.—Announcement is made by W. T. Gentry, president of the Southern Bell Telephone and Telegraph Company, that the company will erect a building.

Charlotte, N. C.—The Union National Bank has awarded the contract for remodeling their building. The improvements will cost several thousand dollars.

The building occupied by the Western Union Telegraph Company is being remodeled. The improvements to be made by the company will cost in the neighborhood of \$20,000.

Greenville, S. C.—It is reported that the Southeastern Life Insurance Co., is planning the erection of a skyscraper. The new building will be 14-stories high and will be of reinforced concrete.

Carlsbad, Tex.—The San Angelo Telephone Company is to erect a new telephone exchange building in this city.

Palestine, Tex.—The Royall National Bank will remodel, equip building and vaults, including safety deposit vault.

San Antonio, Tex.—The National Bank of Commerce will erect a building. No permanent plans have as yet been made.

Norfolk, Va.—The Ledger Dispatch Co. will erect a fire-proof building.

Bluefield, W. Va.—The Saxon Lime and Lumber Co. will erect an office building C. B. Fuqua, secretary.

Morgantown, W. Va.—E. M. Everly will erect a three or four-story office building.

Stores.

Birmingham, Ala.—Culpepper Construction Co., this city, has contract to erect one-story, brick store building for D. O. Whilldin.

Lavonia, Ga.—Contract has been awarded to J. W. Queen, this city, to erect building for J. E. Conwell; brick.

Athens, Ga.—Col. James M. Smith Lexington, Ga., will erect store buildings on lots which he has purchased here; press brick; plate glass.

Bartow, Fla.—Brick store building will be erected by J. N. Hooker.

Bartow, Fla.—Wilson Hardware Co., has begun construction of two-story, brick store building.

Birmingham, Ala.—Collins, Scott & White have

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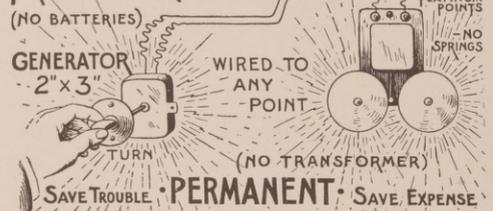
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1154 Monadnock Building CHICAGO
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permit to erect building; four-stories; brick; \$30,000.

Birmingham, Ala.—Permits for erection of store buildings have been issued as follows: A. L. Fulenwider, one-story, brick, \$4,500; Martin & Roundtree, one-story, brick, \$2,500; Wylam Mercantile Co., one-story, frame, \$3,000.

Bradentown, Fla.—J. F. and W. H. Vonderipe will erect building to contain stores; brick or stone.

Jacksonville, Fla.—N. Farris has permit to erect building; three-stories brick; \$11,000.

Miami, Fla.—W. G. Coates of Coates Transfer Co. will erect building to contain stores; concrete blocks.

Mulberry, Fla.—A. G. Long and Henry P. Payne will erect store building 125x60 feet; one story; press brick front; lumber and brick bought.

Rome, Ga.—W. J. Nunnally has permit to erect brick store building; \$3,000. Permit issued.

Sarasota, Fla.—Sarasota Improvement Co., will erect two-story brick block, 31x100 feet; second floor will be devoted to offices; plate glass front. The company also contemplates extending building occupied by Highsmith, Prime & Co., and installing new front.

Savannah, Ga.—M. Millensky bought two three-story frame dwellings on East Broughton street and will convert them into stores.

Savannah, Ga.—Estate of Jacob Raders will remodel building bought for \$10,000 into two storehouses.

Nashville, Tenn.—Permit issued to Dan C. Buntin, to erect a block of one-story buildings, \$25,000.

Memphis, Tenn.—Contracts for two buildings to be erected by Henry Loeb have been let. One, costing \$30,000. It will be two-stories. The other is to cost \$7,500.

Beaumont, Tex.—A modern three-story structure will be constructed by the Phelan-Josey Co. The company is capitalized at \$100,000.

Crockett, Tex.—Architect James F. Brooks, Palestine, Tex., is preparing plans for a 50x100 two-story business house to be erected for M. Bromberg.

Morgantown, W. Va.—Fred Erd has awarded the contract for erection of a three-story building.

Morgantown, W. Va.—M. G. Brown will erect a business house and J. P. Wolf will enlarge and remodel his building.

Denison, Tenn.—Improvements costing several thousand dollars will be made on the Piner block. The corner building now occupied by D. K. Thompson will be raised one-story, making a two-story building on this corner. A forty-foot plate glass front will be put in.

Palestine, Tex.—Bids will be opened this week

for a 25x100 two-story business building for P. B. Ezell, this city.

Port Arthur, Tex.—Warren McDaniel will erect a business building.

Roanoke, Va.—Permit issued to S. H. Kress and Co., to construct three-story brick storehouse, to cost \$35,000.

Churches.

Ashland, Ala.—Baptist Congregation will erect \$10,000 brick edifice after plans prepared by Architect R. H. Hunt, Chattanooga, Tenn.

Gainsville, Ga.—Church building will be erected by congregation of Grace Church; 45x125 feet; three aisles. Bids will be asked. The Rector.

Nashville, Ga.—Methodist congregation will build addition to building and remodel interior at estimate cost of \$1,500; seven class rooms will be provided; plans have been submitted by an architect. Rev. Mr. Griffin is pastor.

Savannah, Ga.—Second Christian Church has purchased lot on which it will erect church building, construction not to be begun immediately. Rev. Sam J. White, pastor; N. W. Taylor, Elbert Sims, D. I. Harrison, J. L. Kent, W. E. Prescott, J. L. LaHommedieux, C. E. Faust, Julius Sack, W. N. Vining, M. L. C. Purvis, J. E. Henry and W. F. Barnett, members of the board.

Adairville, Ky.—The Baptist congregation will erect a house of worship to cost approximately \$14,000. Rev. W. E. Mitchell, pastor.

Alexandria, La.—Plans are being prepared for a Sunday school building to cost \$20,000 which will be erected by the congregation of Emanuel Baptist church.

Dunn, N. C.—The Methodist congregation has raised about \$15,000 and will begin the erection of a brick church at an early date. The Baptists have brick church at an early date. The Baptists have ten thousand dollars; have selected plans and will begin work immediately.

Greenville, S. C.—First Baptist and Buncombe Street Methodist have decided to build new houses of worship. It is expected that work will begin as soon as plans are ready.

Greenville, S. C.—The Buncombe Street Methodist congregation contemplate erecting a \$50,000 edifice. The building committee consists of G. L. Anderson, W. S. Griffin, J. A. McCullough.

Houston, Tex.—Plans are being drawn for a church to be erected by the Dominican Fathers. Father Heagin, of Louisville, Ky., can give information.

Norfolk, Va.—The Men's Bible Class of the Park Place Baptist Church will erect a home. S. E. Morris is interested.

Richmond, Va.—Plans have been considered for improving the Barton Heights Baptist Church at a cost of \$7,000.

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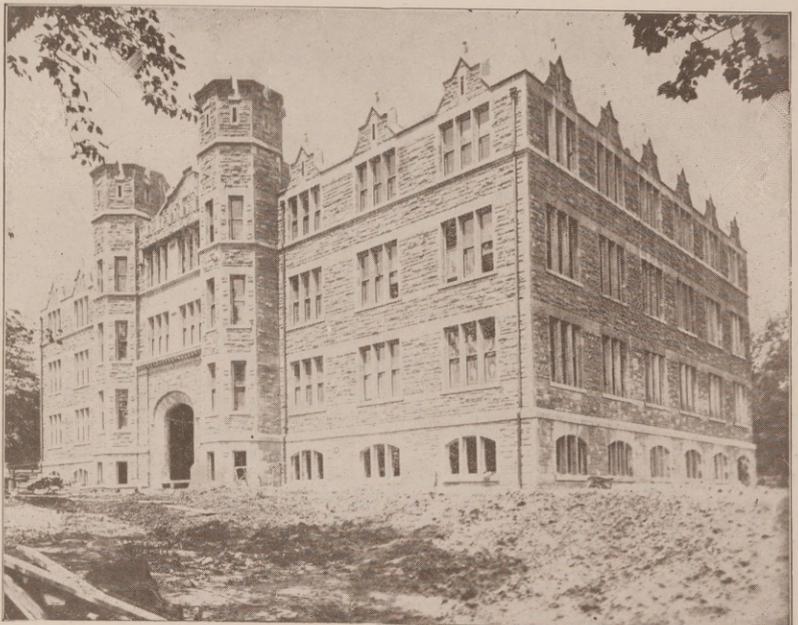
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Schools and Colleges.

Tuscaloosa, Ala.—Board of Education has plans for school building to be erected. The Secretary, City Board of Education.

Eclectic, Ala.—Building will be erected for Elmore County High school to replace one that was burned; brick; Principal, J. J. Yarbrough; H. J. Willingham, state superintendent of public instruction, Montgomery, Ala.

Macon, Ga.—Twenty-five sets of plans have been submitted for the high school building to be erected by Bibb county board of education. Committee of which T. D. Tinsley is chairman will pass upon the plans this week. C. H. Bruce is superintendent of schools.

Selma, Ala.—Bids are wanted for construction of municipal High school building. J. L. Clay, mayor.

Abbeville, S. C.—The sum of \$20,000 has been appropriated for the purpose of establishing the John De La Howe industrial school for destitute children in Abbeville county between Abbeville and McCormick.

Greenwood, S. C.—Architects Casey & Vance, of Greenwood, and Anderson, have plans ready for the aBiley Military Institute building. There are to be two buildings, three stories each.

Nashville, Tenn.—Additions and improvements involving an expenditure of over \$25,000 are in immediate contemplation by the Trevecca Bible School for Christian Workers. Rev. J. O. McClure can furnish information.

Bristol, Va.—Rev. B. K. Southerland, financial agent for Emory and Henry college, has launched a campaign to raise \$75,000 within the bounds of the conference, the money to become a part of an endowment and building fund of \$200,000.

Sherman, Tex.—Architect Chas. A. Page has obtained the contract for the construction of a new \$60,000 ward school at Sherman.

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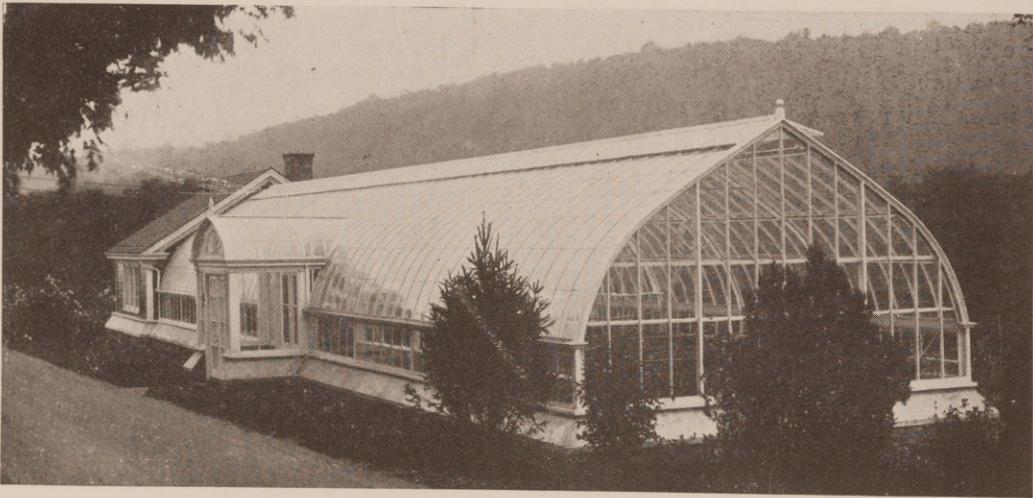
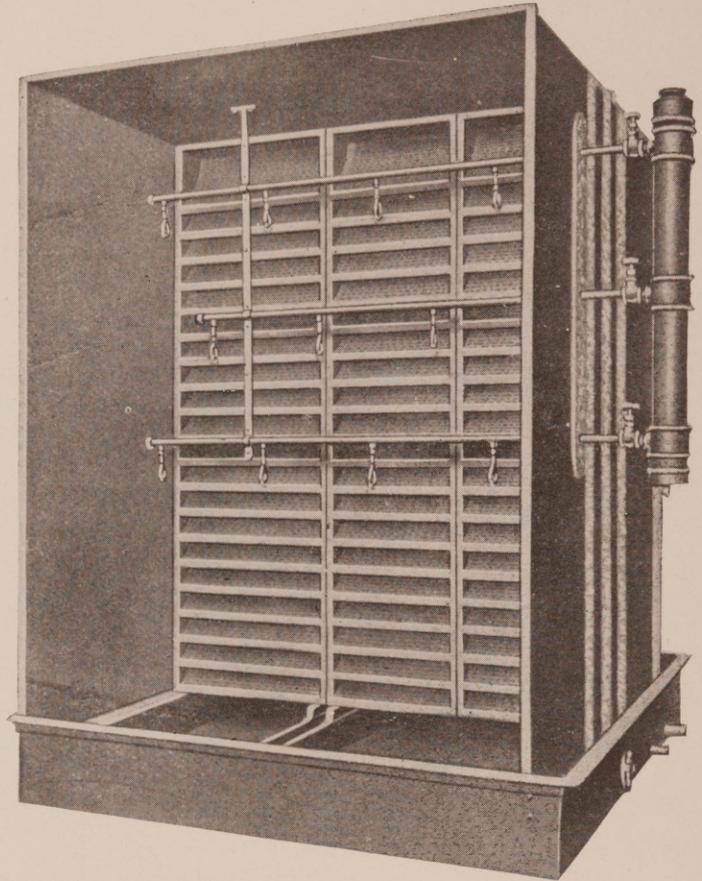
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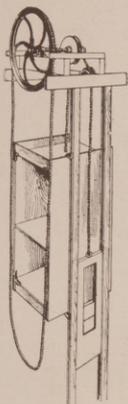
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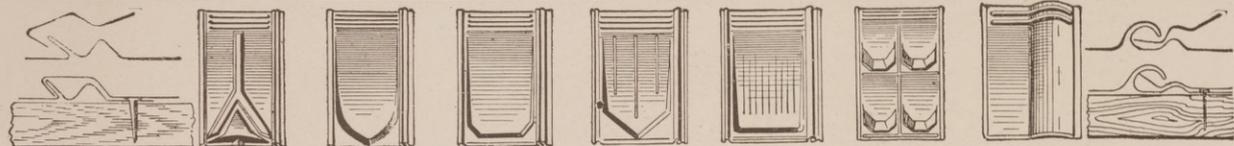
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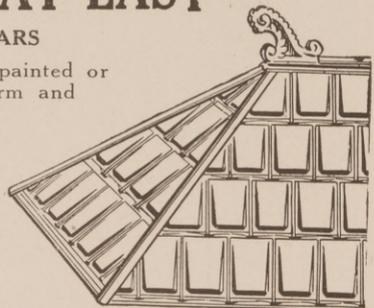
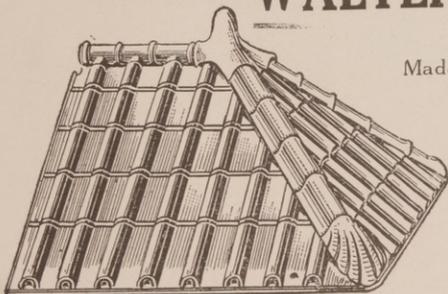
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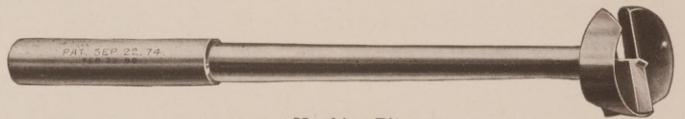
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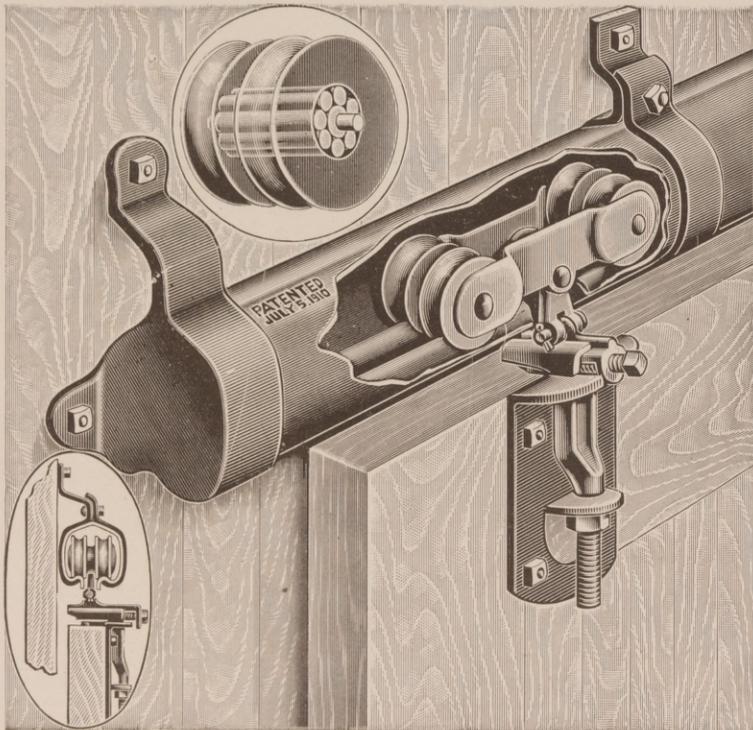


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