

ARCHITECTURE

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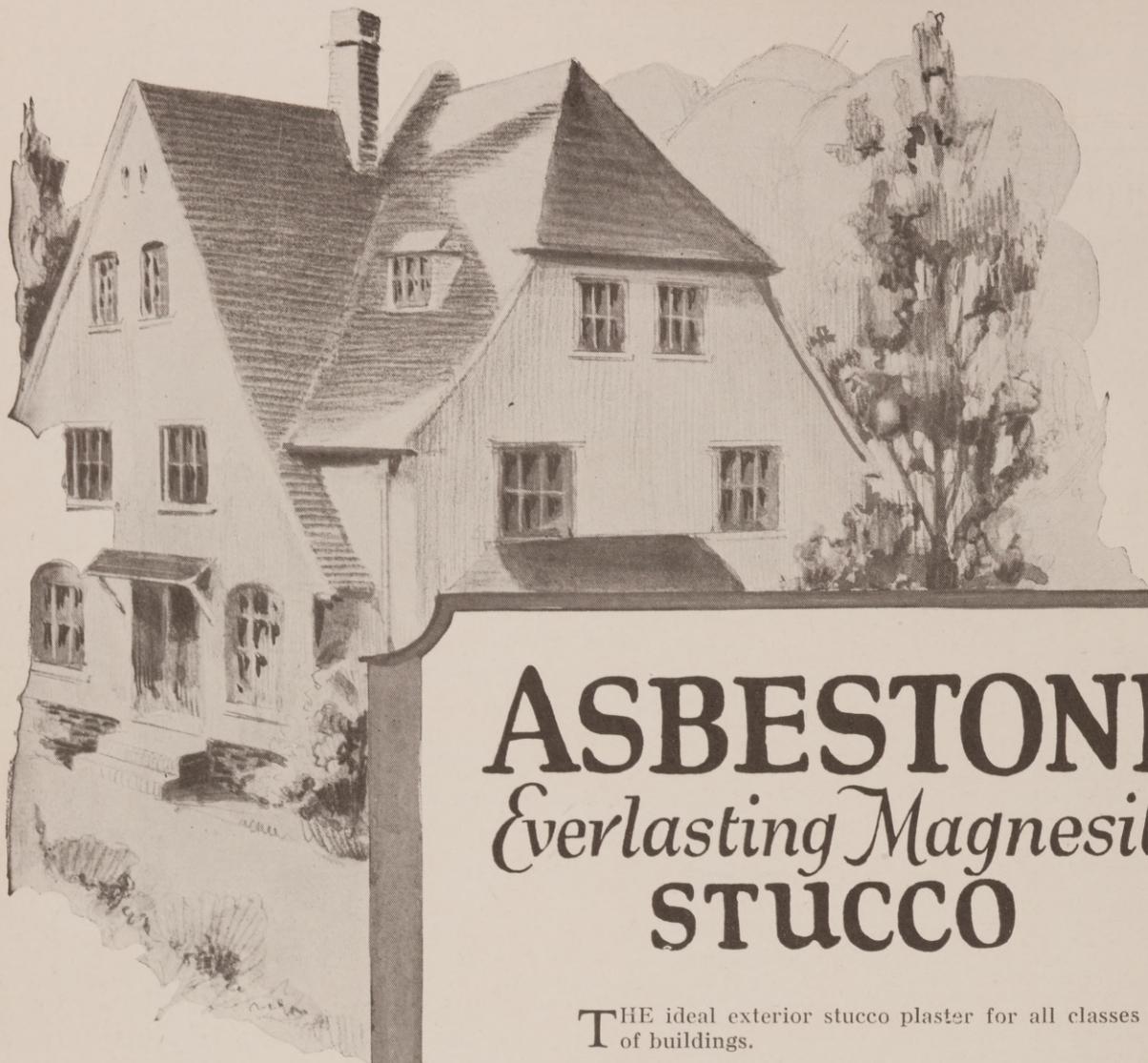
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THE EDITOR'S PAGE

A THOUGHT WORTH WHILE.

IN the article appearing in this issue entitled, "Southern Architecture for Southern Homes" the author, Mr. Albert A. Chadwick has given us a thought that we feel should be impressed upon the minds of every architect in the South and eventually brought to the attention of the public.

In the rapid development of the new South we seemed to have lost all respect ARCHITECTUALLY for the old, and completely lost sight of the beauty, dignity and charming characteristics which were so admirably incorporated in the architectural style which our forefathers adopted and followed throughout the early years when this section of our great country was being settled.

Today we stand on the verge of losing forever that style, which through its superiority to any that has been developed in recent years, is thought of when one speaks of the architecture of the South. The old houses that were the proud work of our ancestors are fast decaying, and yet we do not seem to realize that when these are gone we lose forever the very earmarks of the old South, and an architectural style that would rival in beauty and inspiration any that this country or any other ever knew.

It is time that we were waking up to the possibilities that are before us for drawing inspiration from these old houses and creating an architectural style for the new South that will be a part or rather a continuation of the old style and adopt it for our present day needs.

While the houses that are now being built in the South are very pretty and have a charm that is pleasing, yet they are absolutely void of that spirit which was characteristic of the architecture that was known and admired in the years gone by.

As Mr. Chadwick has said in his article, practically every section except the South has made a study of its old architecture and having found in it beauty and strength of character has caught the spirit and interwoven it into their present day style.

Surely by study and thought we can give to the South an architectural style that will at least express in a small degree that beauty and inspiration of the old South which is ours by right of inheritance. If we are to accomplish this end it

is imperative that our present school of architects take serious thought of this matter and begin at once some movement that will bring about a revival of the old style, for if it is left to the future generation it will be too late, for as we have said before the old houses are fast disappearing.

While a great many of the old houses are faulty in design yet there are many that contain details that are as perfect as any work that has ever been done in this country, and fortunately the owners of a great majority of these old buildings have retained throughout the years the same beautiful surroundings that help to mold the character of the house itself.

If we will but catch the spirit, beauty and strength of character of these houses of the old South and incorporate their main characteristics into our modern houses, and give them the same beautiful surroundings, we are sure that the whole South will welcome this revival of our architectural style.

The Significance of the Fine Arts.

"THE Committee on Education of the American Institute of Architects has produced this book for use as a textbook in American colleges, and for general reading and study by the public, with the purpose of arousing interest in the fine arts and creating a better understanding and appreciation of them." This sentence is from the introductory chapter by a member of the committee. The book proper is divided into two parts. Part I deals with the general subject of architecture, with chapters devoted to classical architecture, the architecture of the middle ages, the renaissance and modern architecture. Part II is devoted to the allied arts, with chapters on sculpture, painting, landscape design, city planning, the industrial arts and music, and an epilogue on the "Significance of Art." Each of the ten chapters of the book is written by an architect or artist who has devoted most of his attention to the subject of which he treats, as for example, Ralph Adams Cram on the architecture of the middle ages, and Lorado Taft on sculpture. It contains 483 pages, with 128 page plates, printed in legible type on good stock and bound in blue cloth stamped in gold. Marshall Jones Co., Boston, Mass.; \$3.50 net.



There is a charm about this old house that one can never forget, with its chimneys of field stones of variegated color, the foundation being of the same material which blends so well with the white plastered walls and the sloping roof. Its quaint windows with the old fashioned shutters add another charm to this house, while the surrounding grounds with weeping willows and small shrubbery create an atmosphere that lends a distinctive feeling of dignity to the place.



Southern Architecture for Southern Homes

By Albert A. Chadwick.

AMONG the things of most value to a community are its local traditions, its local atmosphere through them the community gets that character that distinguishes it from other communities. So, when you destroy the traditions and atmosphere you go a long way towards destroying the individuality of the place; you produce a nonentity. There is nothing that tends more to preserve traditions, to create atmosphere than the architecture of a town's homes and the setting and surrounding of those homes. These for the perpetuation of an indigenous architecture is of grave importance and yet we of the South are letting our own architecture gradually disappear. In the rush of modernity it is being swept away by a flood of imported styles.

Various other parts of the country have architectural styles that are both characteristic and suited to the local climates and habits. The most of these are what are known as Colonial. Thus New England has rather simple, somewhat austere houses depending largely on the detail of their entrances and cornices, and on careful fenestration for their character; New York and New

Jersey have their story-and-half houses with gambrel roofs that they have inherited from their Dutch ancestors. In Pennsylvania the architecture was somewhat more pretentious, houses being built largely of stone or brick with more elaborate detail. California has a style peculiarly her own, inherited from the Spaniards. The first four of these states long failed to see the beauty of their old buildings. It was not till the last of the nineteenth century that they awoke to the fact that while they were going to England, France, and Italy for inspiration that they had an architecture of their own that was worthy of perpetuation. Since then they have made a careful study of their Colonial homes, making careful, measured drawings of the more interesting details and have developed and adapted their architecture and are using it with great success. California was the last to awake, but under the influence of a group of capable architects they are adapting and using their Spanish Colonial types and are now equal to the best—even if they haven't surged ahead of the other parts of the country.



In the towns and villages of the South there are smaller houses of almost equal interest. In Georgia these houses were mostly built during the Greek revival and many of them have Greek Corinthian or Doric Columns with deep cornices. In Alabama the Greek is combined with Spanish. And at times one sees the pure Spanish save where the tile roofs of Spanish architecture has given place to low tin roofs and the stone cornices to wood. Of course these old houses that are still standing are not entirely adapted to our modern needs and some of the design is faulty, but the spirit is there if we would only study it and capture it, and it is a style that is easily adaptable.



The South alone seems apathetic, blind to the beauties that we have inherited. How long are we to disregard them? Georgia, Alabama and Florida all have their old houses that are exceedingly interesting. Old houses with broad porches, high ceilings, big fluted columns; houses that are stately, majestic, gracious and hospitable, set in grounds shaded by old water oaks and magnolias, flouted with crepe myrtle, jassamine and roses. Between the yards or screening off out-buildings are old brick walls often whitewashed or ivy covered. When we see one of these old homes there comes an instinctive feeling that there lives a family of breeding and culture, a family that is loyal to the best there is in it.





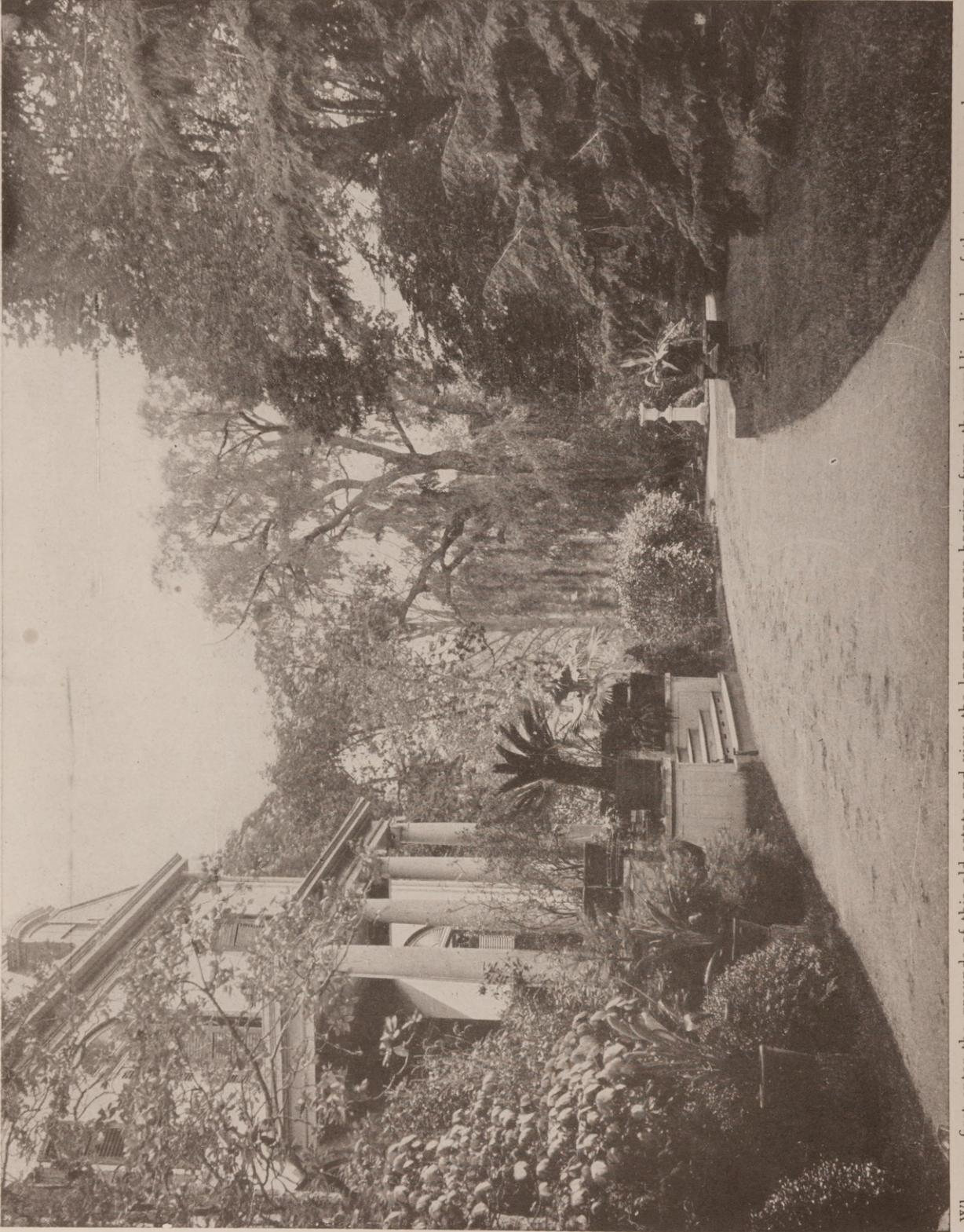
I don't know that we are much to blame for running after fake Gods; for many years the South was impoverished, it lacked educational facilities and there was no great amount of building. We are farther from the sources of inspiration than our Northern cities so it has taken us longer to awake, architecturally. Now that we are beginning to appreciate better buildings most of our architects either come from the North or have been trained in the North and it is not surprising if they follow the lead of the men of the East and give us New England Colonial, English and Italian architecture—anything but our own

style. Then "A prophet is not without honor save in his own country," and a client is apt to look with disfavor on the houses he has known his whole life. He wants people to see that he has a new house, he dislikes things that are old and only too often an architect must do that which he would rather not do in order to please a client.

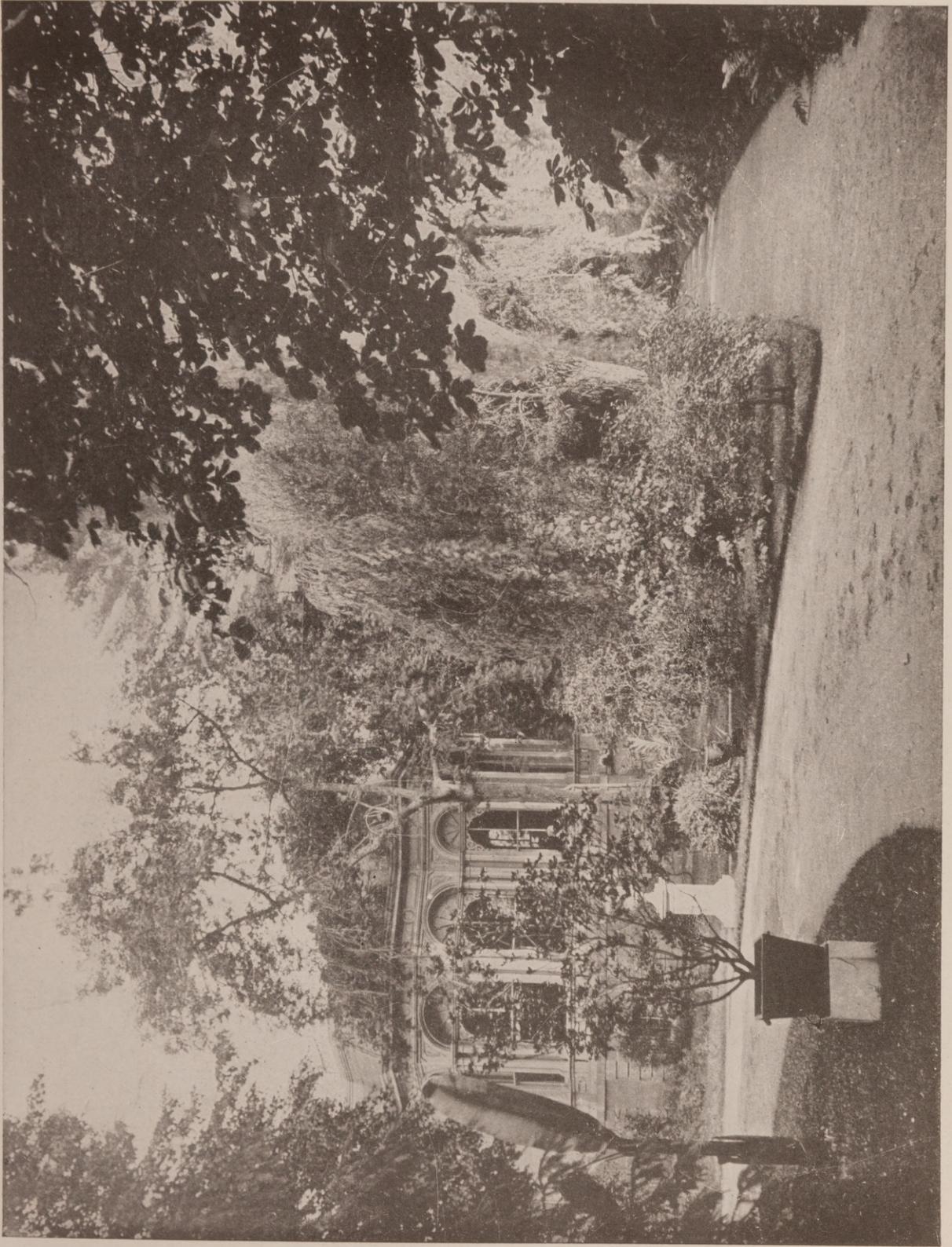
We may admit the above exigencies and condone a certain laxity but if we do not act quickly we are apt to act too late. One by one the old buildings are going and some day we are apt to wake up and find them gone and we will.



WHERE HOUSE AND GARDEN MEET



When we first enter the grounds of this old estate and view the long grey moss hanging from the rambling limbs of the trees we catch at once the spirit of hospitality which awaits us at the doorway. In this view we can almost see the hoof prints of the fine carriage horses along the driveway which were the proud possession of the aristocratic owners of this old Country House.



When one looks about the grounds of this old house and sees the weeping willows with their boughs almost reaching the ground, with the carefully laid out walks and drives, with box plants here and there, with plots of green grass and blooming flowers at every turn, you do not have to be told that you are walking through the grounds of an old Southern Estate. This view is of "Longwood," the home of Sargeant Prentiss, of Mississippi.

be without any definite record of the real architecture of the South—not even a decent photograph. Then they will be lost forever. We should get out and take good photographs of these old buildings, measure them and make good detailed drawings. These are the essential initial moves, because we cannot all go and see the actual buildings, we must, most of us, do our studying from books.

But these are only the preliminaries, the furnishing the architects with the necessary tools. The essential thing is to translate them into buildings and to do that we must study them, learn what are the essentials that go to give character to these old buildings and last we must use it and adapt it. Instead of building some English-Georgian house, build a house modeled after, say, some old house of La Grange, Athens or Montgomery. Give them characteristic surroundings and the results will be startling. Not that I would slavishly copy the old work, but I would catch the spirit of it and imprint it on our modern homes and even on some of the smaller public buildings such as city halls, court houses, churches, and libraries. If we can do that we will go far towards doing away with our present architectural anarchy and our towns will gradually become real Southern towns once again.

Of course this cannot be all accomplished in a year or two years, it means steady work by a number of men for many years to come. It can only be done gradually, a building here and a house there, and constant attack through all possible educational channels. First, the architects must be brought to appreciate the beauty of these old buildings and the possibilities for adaptation, and then the public must be gradually educated to appreciate them.

There is one danger that always comes when we seek to revive a style, and that is the danger

of slavish copying. We get out books and see old buildings that are interesting and “crib” them cold regardless of what is good and what is bad, and there is a great deal that is bad. In fact it has been the history of most revivals that at the first the bad features were emphasized more than the good. The proper thing to do is to become so familiar with the style that we come to know the details to which it owes its character and then design our houses without reference to books. But above all we must give the houses appropriate settings—a house is dependent upon its settings as a beautiful woman is upon her clothes. Put a good house on a barren lot and it is without beauty, while very often we overlook the sheer ugliness of a house and even think it is beautiful because of its surroundings. If you take a formal house, suited to a city and put it on a wooded hill it is ridiculous. The study of the accessories is equally important with the study of the houses themselves, garden walls, gateways, fences, walks, out-buildings, all add their quota of character. Besides these there must be carefully chosen plants, the rejection of exotic and foreign plants and the use of those trees, those shrubs and flowers that our grandfathers used and loved.

If we will only do this we will be going far to establish the beauty and character of our Southern towns and cities. Even more than that it would react on the character of the people; there would be something to gratify civic pride, something to honor, something to bind us more closely to the hills and plains that we now love so well. What is more we would be putting our section of the country on a par, architecturally, with other sections of the country. We would not be copying New York or Chicago but we would have an architecture of our very own that we should be proud of and that outsiders would admire.





VIEW OF FRONT ELEVATION



VIEW OF SIDE ELEVATION

Photo—By Thurston Hatcher

HOUSE OF MRS. RYBURN G. CLAY, ATLANTA, GA.
 PRINGLE & SMITH, ARCHITECTS

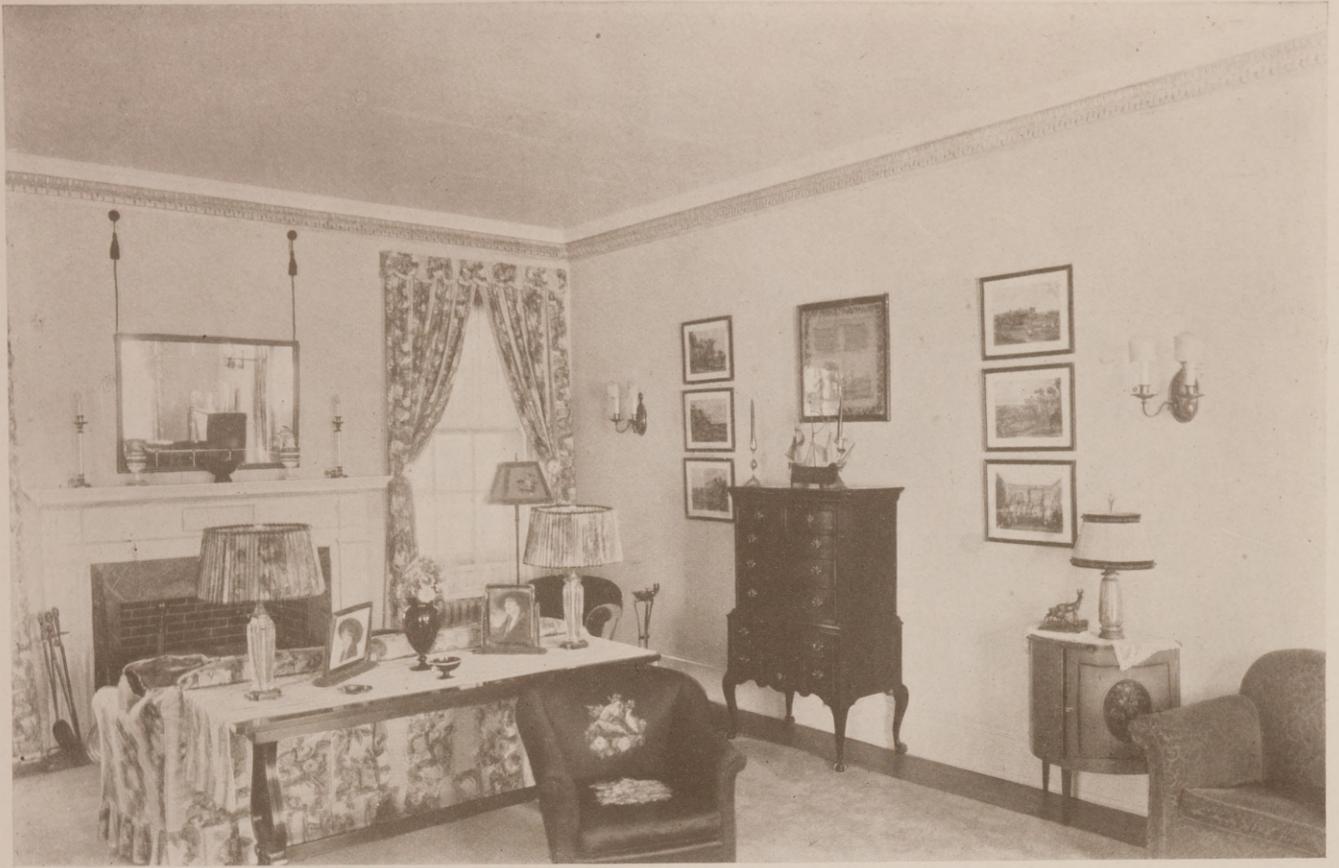
W. E. Browne Decorating Co.
 Decoration—by N. P. Pendley



VIEW OF ENTRANCE HALL



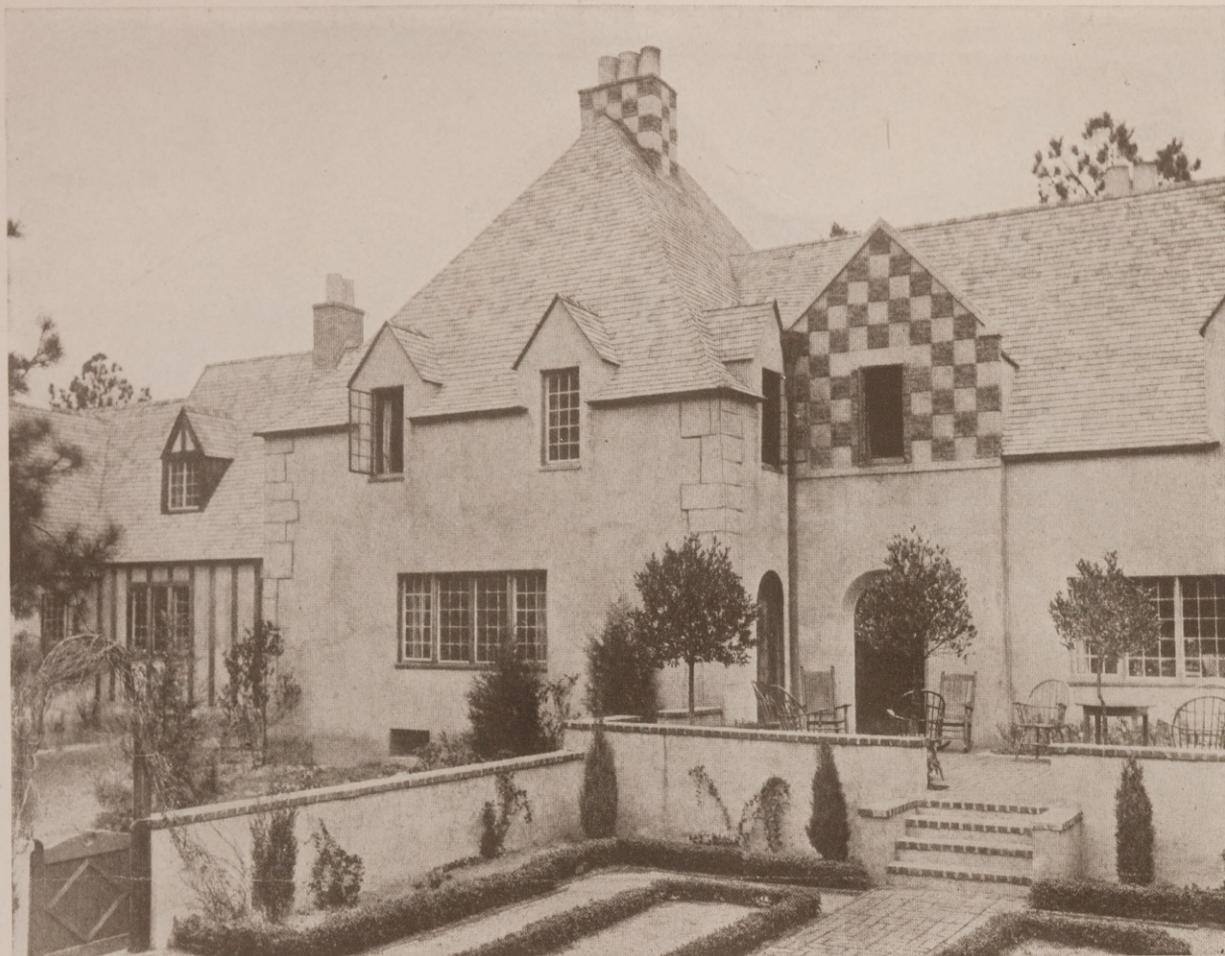
VIEW OF DINING ROOM
HOUSE OF MRS. RYBURN G. CLAY, ATLANTA, GA.
PRINGLE & SMITH, ARCHITECTS



VIEW OF LIVING ROOM



VIEW OF BED ROOM CHAMBER
HOUSE OF MRS. RYBURN G. CLAY, ATLANTA, GA.
PRINGLE & SMITH, ARCHITECTS



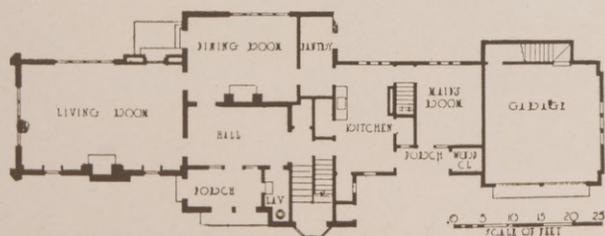
VIEW OF GARDEN SIDE
 HOUSE OF MRS. A. P. L. DULL, SOUTHERN PINES, N. C.
 AYMAR EMBURY II, ARCHITECT

THIS beautiful house situated in one of the most charming spots in the South is rather unique in its design yet pleasing in every respect.

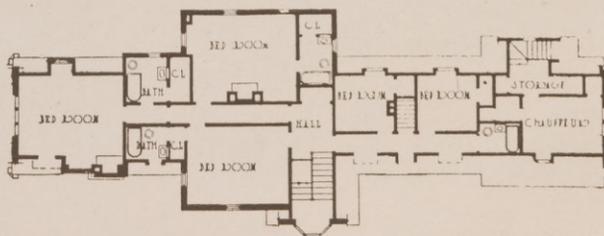
The exterior walls are constructed of terra cotta, stucco, cast concrete and brick, the brick being used to give an additional charm to the exterior finish which adds accent to various parts of the building. A portion of the main facade where the method of laying the brick with bluish headers secures a bold and strikingly decorative diaper effect. Other uses of brick in combination with plain surfaces supplies necessary accent and character are found in the facings of a minor gable and in the principal chimney where brick

are laid in squares alternating with stucco panels, which recalls certain French practices which renders the house quite distinctive. The general color scheme of the exterior includes buff in the stucco, red of the brick and a bluish hue on the roofs, supplied by the stained shingles. The low walls which enclose the terrace and the gardens, which are built upon two different levels, are of the same colored stucco with which the house walls are covered, and the walls as well as the steps are topped with brick which is also used for the paving of the terrace and garden walks.

Oak and yellow pines are the material used for the interior finish, and the floors are of black gum.



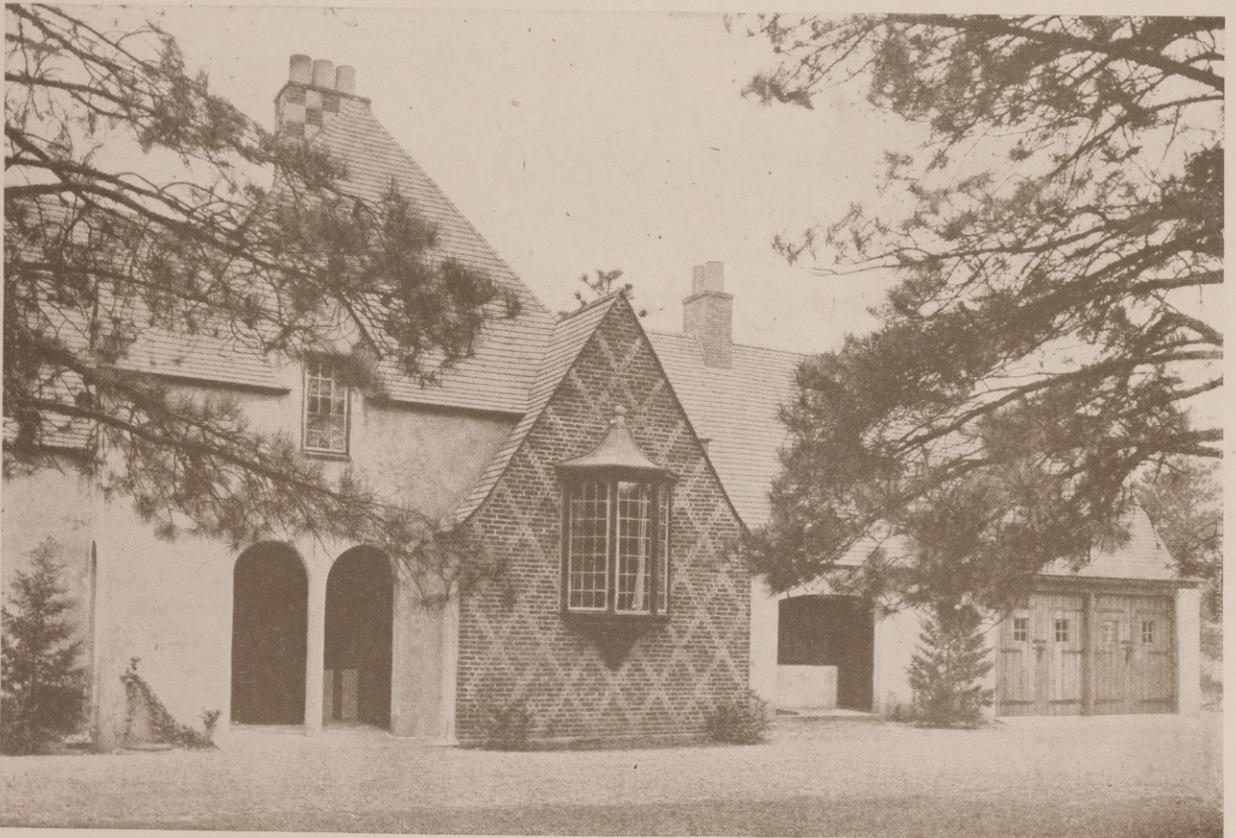
FIRST FLOOR PLAN



SECOND FLOOR PLAN



ENTRANCE FRONT FROM APPROACH



Photos by Eddy's Studio

ENTRANCE FRONT AND SERVICE WING
HOUSE OF MRS. A. P. L. DULL, SOUTHERN PINES, N. C.
AYMAK EMBURY II, ARCHITECT



EXTERIOR VIEW



LIVING ROOM

HOUSE OF MR. K. K. KIRWANS, ESQ., GUILFORD, MD.

WILLIAM H. EMORY, JR., ARCHITECT



DETAIL OF ENTRANCE DOORWAY

House of Mr. K. K. Kirwan, Esq., Guilford, Md.

William H. Emory, Jr., Architect.

THIS house is located in Chancery St., Guilford, the finest development of its kind in Maryland, if not in the United States. The design is colonial, the lines being very simple and farm house in character throughout the interior as well as exterior.

The first story and gables are built of a very beautiful local quarry stone, generally grey, with rusty stone varying in color from light almost yellow to rich dark browns. The stones are very skillfully laid with about $\frac{3}{4}$ " joints, pointed with very light grey mortar.

The second story built to give the appearance of long dormers, is covered with cypress weather-

boarding 10" to the weather, painted ivory white.

The roof is of rough unfading green slate random widths, the exposure being graduated from 9" to 4". The interior of the house is trimmed throughout with western yellow poplar painted ivory white. The main stairway is quite plain, with small turned newels, square balusters and round mahogany hand rail.

The floors throughout the first floor are quartered white oak and all other floors are edge grain Georgia pine. All floors are stained very dark brown.

The house was completed about six months ago, at a cost, with the garage, of \$26,000.00, and cubes about 55 cents.



RESIDENCE FOR MR. A. L. PARKER

A. L. PARKER RESIDENCE, DALLAS, TEXAS.
ANTON F. KORN, ARCHITECT, DALLAS

Courtesy—
Dallas Architectural Club.



EXTERIOR VIEW



VIEW OF LIVING ROOM
HOUSE OF MR. HENRY WAGSTAFF, JR., ATLANTA, GA.
L. E. CROOK, JR., ARCHITECT



WING OF LIVING ROOM SHOWING STAIRWAY

House of Mr. Henry Wagstaff, Jr., Atlanta, Ga.

L. E. Crook, Architect.

OUR Southern climate is well suited for various styles of architecture when residence work is considered. One of the most adaptable is the New England Colonial, and the house illustrated here situated among Southern Pines reflects the spirit of the houses of the quiet old New England village with its ancient elms. There is simplicity of charm in these old houses with the dark roofs, the green shutters hung against broad clap boards, and the perfect detail of the ornament of the doorways, cornices and porches.

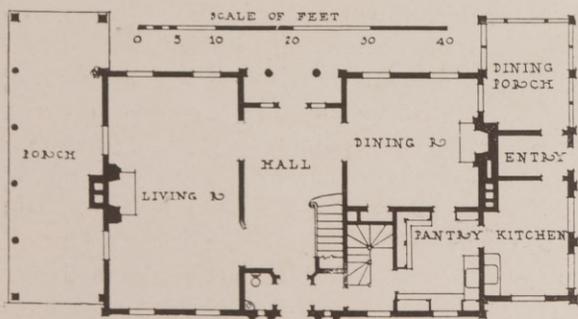
The entrance doorway of the house of Mr. Wagstaff takes precedent from the well known Pine Apple Doorway, one of the loveliest of the old examples. The windows in the living room and dining rooms go down to the floor accentuat-

ing the vertical lines of the exterior and affording ample light to the interior.

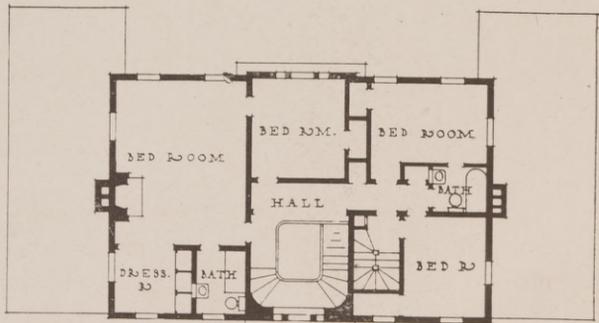
The porch is treated in a light manner to conform to the architecture of the main body of the house. The plan throughout being very compact, the interior being treated in a very simple way. The ceiling height on the first floor is only eight feet and six inches. The living and dining rooms are treated in the simple Italian manner, with stained wood ceilings and broad shallow beams, with roughed plastered walls of caen stone color. The second floor consists of two bed rooms and bath and a large sleeping porch with ample closets. In every detail the house is arranged for convenience and yet it is as charming in appearance as any small house in the South.



VIEW FROM DRIVE ENTRANCE



FIRST FLOOR PLAN



SECOND FLOOR PLAN

HOUSE OF E. L. FORD, ESQ., ST. JOSEPH, MO.

ECKEL & ALDRICH, ARCHITECTS

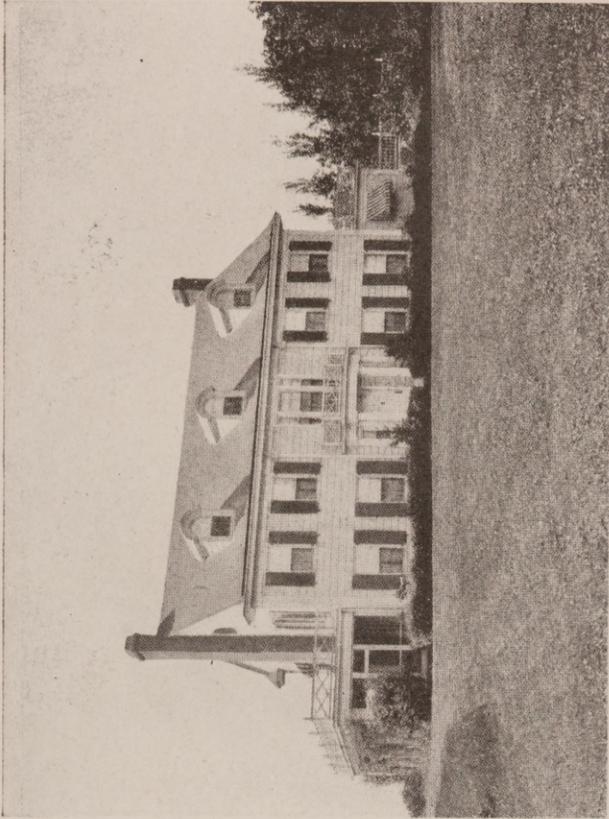
HOUSE OF F. L. FORD, ESQ., ST. JOSEPH, MO.

Eckel & Aldrich, Architects.

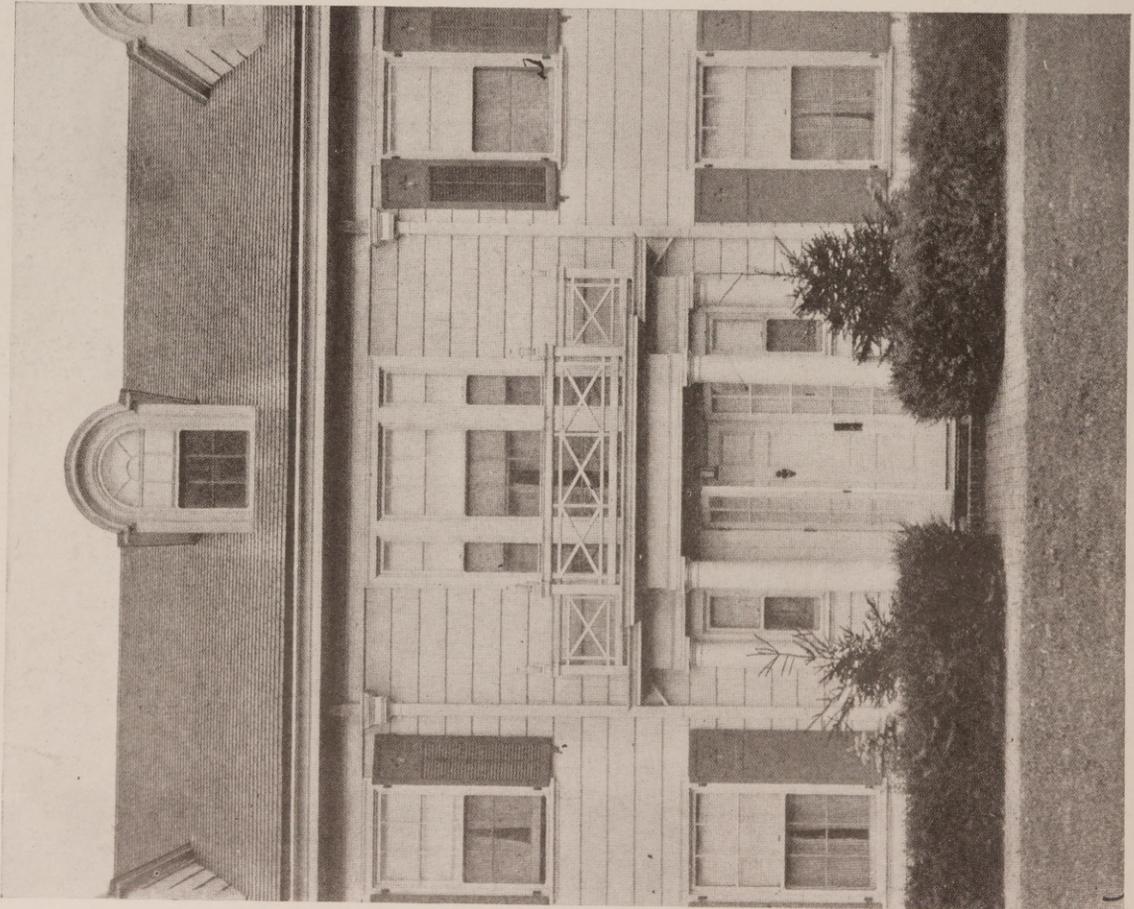
THE walls of this house are of specially sawn cedar shingles two feet long and finished in white, the cedar shingles upon the roof being stained a weathered silver grey while the blinds are bronze green.

The finish throughout the interior of the house is of clear birch. Floors in the living room, dining room, stair hall and stair landings are of a quarter sawed oak; other floors in the first and all in the second story are of edge or comb grain quarter sawed yellow pine. The cost of this per cubic foot when the contract was let in 1915 was 24 cents.

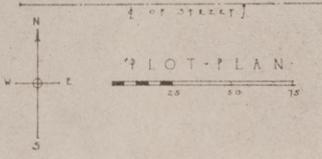
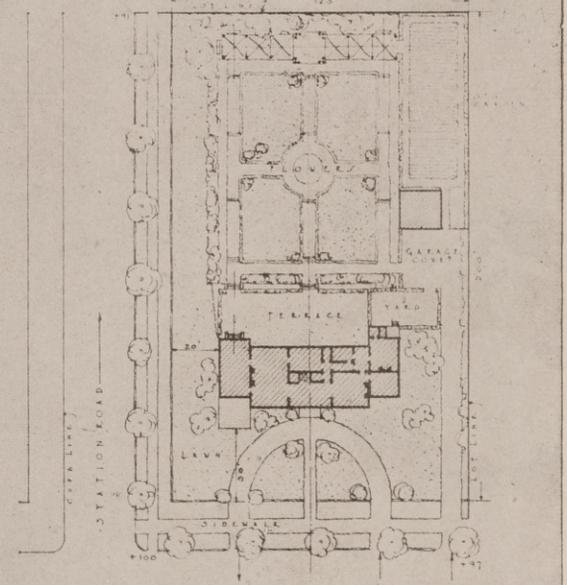
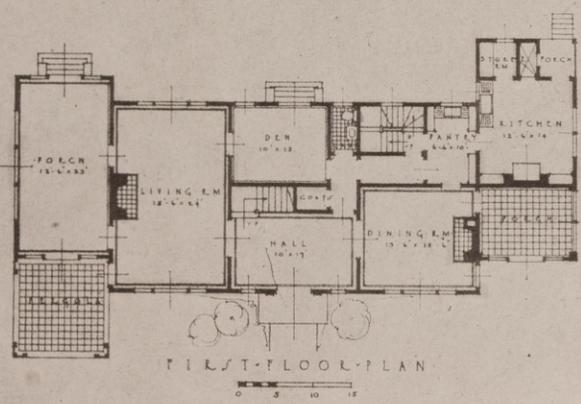
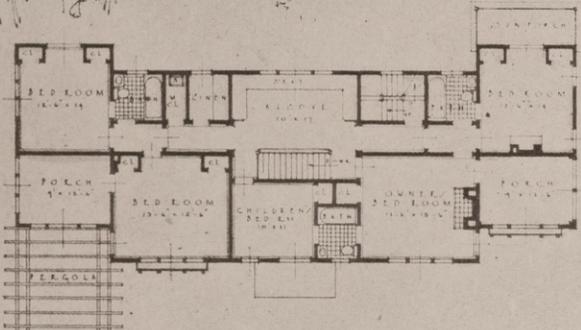
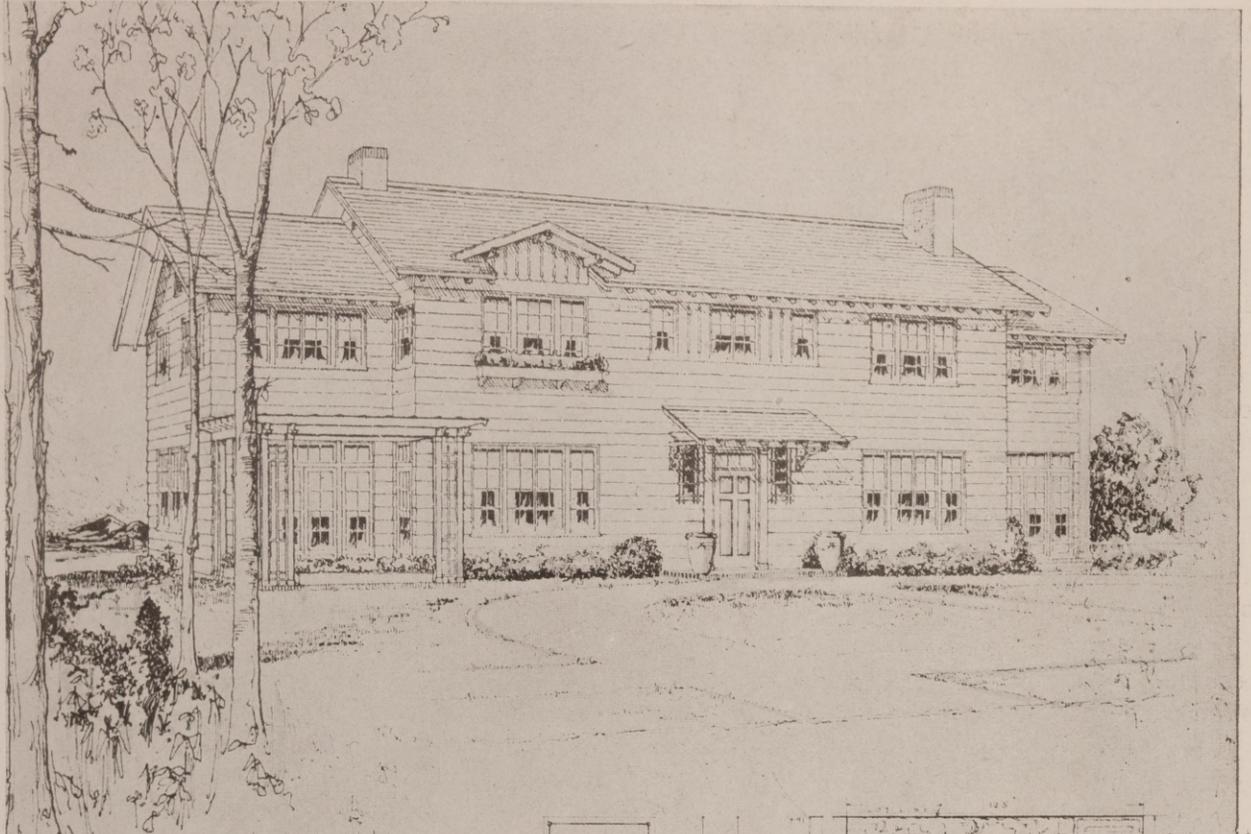
The designing architects were given complete charge of the planning and laying out of the grounds, and the house and its surroundings were developed as one complete work, which is shown by the appearance and dignity of the whole. The planting was done with the view in mind of increasing the apparent size of the setate and to create privacy by screening neighboring buildings.



VIEW FROM LAWN



ENTRANCE DETAIL



- CVRAGE -	
MAIN HOUSE	25' x 50' x 3 1/4" 39,000
E & W WINGS	15' x 24' x 25' x 2" 14,352
PERGOLA	15' x 15' x 12' x 1/2" 50
KITCHEN PORCH	5' x 15' x 12' 780
TOTAL 54,702	
FULL BASEMENT UNDER MAIN HOUSE	
PORCHES FIGURED AT TOTAL CVRAGE	

• SUBMITTED BY •
• WHITE PINE •

• DESIGN FOR A WHITE •
• PINE HOUSE TO COST \$12,500 •

DESIGN FOR RESIDENCE
BY CLIFFORD EVANS, DALLAS

Courtesy—
Dallas Architectural Club.



HOUSE OF MRS. M. E. JUDD.

Crutchfield & Gosnell, Architects.

THE residence here illustrated is located at Dalton, Georgia, and although it is a remodelled house the greater part is new.

The style of architecture used is of the late English School, with heavy slate roof, stuccoed walls with brick exposed in places giving additional charm to the exterior finish, stone sills, steps and entry. The construction is of hollow tile.

Inside the house we find the interior finish to be of oak on the first floor, the library being panelled to the ceiling in oak and stained a soft brownish grey which gives it a very old look. It has oak beams and mantle and the beams in the hall are very heavy and of the same material. The office and garden room are of grey flemish tile with glazed insets, and the kitchen, breakfast room and pantries have floors of Linotile.

The rooms of the upper story are all finished in enamel and the floors are of oak with the exception of the bath room floors which are of tile.

In every respect this is a very charming small city house.

HOME OF MR. FRANK DAVIS.

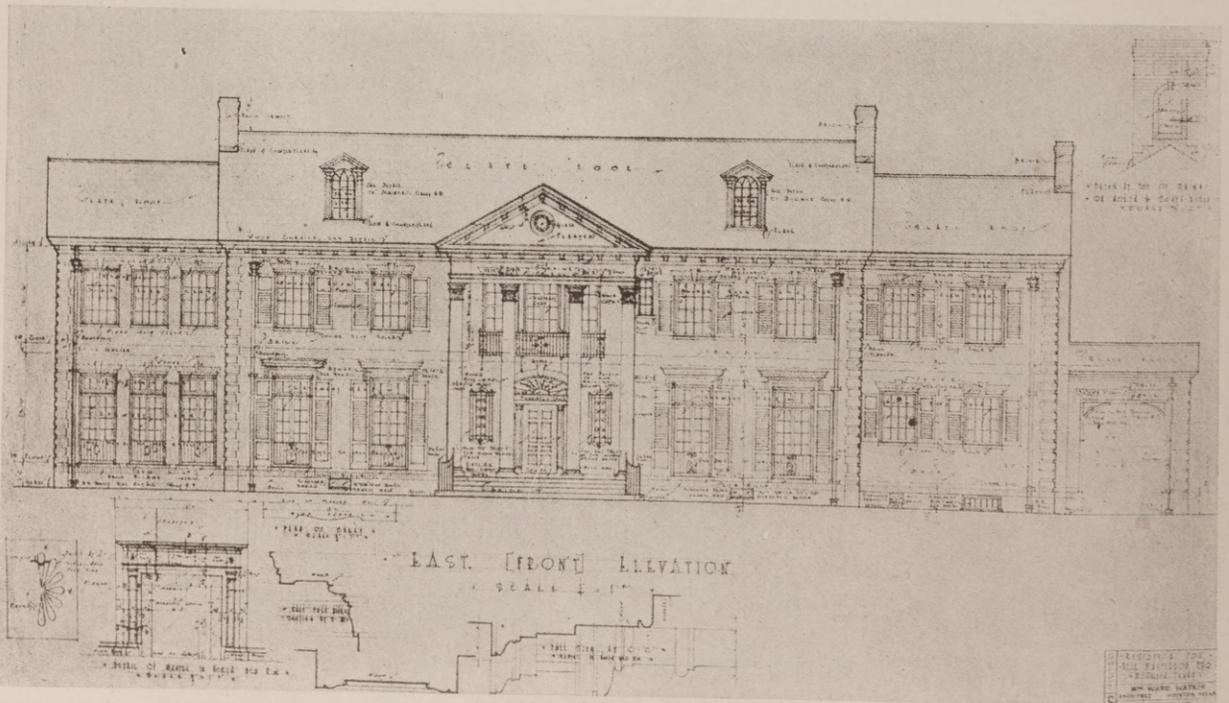
Lockwood & Poundstone, Architects.

THE home of Mr. Frank S. Davis at Montgomery, Alabama, is a type that is unusual in the South and a type that is very interesting.

Its inspiration comes from the quaint thatched cottages of England. The counter part of the thatched roof is obtained by the use of creodipped shingles that are stained to a straw-like color. The shingles are bent to a radius and so produce heavy overhanging eaves that are very attractive to the eye. The heavy appearing roof and the hanging eaves lend to the building the cozy like atmosphere that is characteristic of the cottage. Mingled with this atmosphere one detects symptoms that are remindful of the one-and-a-half-storied Dutch Colonial homes.

The walls are of rough textured brick that range in colors from straw to red with the red predominating. The joints are wide, flush struck joints. The windows, blinds and doors are painted white.

On the porches we find the posts and beams of oak—hand-hewn and stained. Carefully designed and beautiful fenestration catch and holds the interest of the on-looker.



NEIL MASTERSON RESIDENCE, HOUSTON, TEXAS.

WM. WARD WATKINS, ARCHITECT, HOUSTON

Courtesy—
Dallas Architectural Club.



HOUSE OF MR. FRANK S. DAVIS, MONTGOMERY, ALA.
LOCKWOOD & POUNDSTONE, ARCHITECTS.



HOUSE OF MRS. M. E. JUDD, DALTON, GA.
CRUTCHFIELD & GOSNELL, ARCHITECTS, CHATTANOOGA, TENN.

PERSONAL MENTION

Chas C. Wilson, architect, has taken into partnership with him G. R. Berryman, the manager of his office at Wilson, N. C., and hereafter the practice will be conducted under the firm name of Wilson & Berryman, with offices in Columbia, S. C., Gastonia, N. C. and Wilson, N. C. Before joining Mr. Wilson three years ago, Mr. Berryman was connected with the offices of the Supervising Architect of the U. S. Treasury Department, as Supervising Superintendent of Construction, with headquarters in Atlanta, and with jurisdiction over all Post Offices, Custom Houses, and U. Texas. Mr. Berryman will now have general S. Court Houses of the South from Washington to charge of all field work of the firm, covering its entire territory.

Mr. William F. Stone, Jr., formerly associated with the late Otto G. Simonson, architect, desires to announce that he will continue his practice at 1122 Munsey Building, Baltimore, Md.

William F. Stone, Jr., has opened an office at 1122 Munsey building, Baltimore, Maryland. Mr. Stone was formerly associated with the late Otto G. Simonson, architect, at the Maryland Casualty building, Baltimore.

Mr. Lewis Davis Brumm has opened offices for the practice of architecture, at 412 Calumet Building, Miami, Fla., and desires manufacturers' samples and catalogues.

Mr. M. Louis Kroman announces that he will be engaged in the practice of architecture and engineering, with offices at 921-922 Woodward Building, Birmingham, Ala.

Messrs. Pendleton S. Clark and Walter R. Crowe announce the formation of a partnership for the practice of architecture, under the firm name of Clark & Crowe, with offices in the Krise Building, Lynchburg, Va. Manufacturers' catalogues and samples requested.

C. Shears has opened offices at Boonville, Missouri, where he will carry on a general contracting business.

Gebhart and Schaeffer, architects, have opened offices at 507 Keith building, Dayton, Ohio. They were formerly in the U. B. building, Dayton.

W. W. Jaekle, architect, announces the removal of offices from 1300 U. B. building to 310 W. Second street, Dayton, Ohio.

Louis T. Rouleau has opened an office at Room 203, 1415 K street, N. W. Washington, D. C., where he will practice his profession of architecture.

Charles Schebrel, painter and decorator, will be located at Boonville, Missouri.

The offices of the representatives for I. P. Frink, Inc., in Cleveland and Cincinnati, Ohio, have been changed. The Cleveland office is now located at 992 The Arcade, and the Cincinnati office at 601 Second National Bank Building. A new office has also been established in Buffalo, N. Y., with an address at 310 Mutual Life Building.

Southern Architect & Building News,
Atlanta, Ga.

Gentlemen:

I note in your February number, a cut entitled "Study for the Stephen F. Austin School, Dallas, Tex., by Lester N. Flint Co., Architect."

I beg to advise you that the Stephen F. Austin School was designed by Messrs. Dewitt & Lemmon, and Wm. B. Ittner, Associate Architects, and not by the above mentioned firm. In the Year Book of the Dallas Architectural Club the sketch by Mr. Flint was improperly entitled the Austin School.

I beg that you will be kind enough to make a correction of this misprint.

With high esteem, I am,

Yours very truly,

R. P. Dewitt.

W. B. Ittner, Architect, St. Louis, Mo.

We take pleasure in calling to the attention of our readers this correction.

VAN RENSSELAER P. SAXE, C.E.

Consulting Engineer

STRUCTURAL STEEL
CONCRETE CONSTRUCTION

Knickerbocker Building

Baltimore, Md.



Building Construction

Present Day Problems of the Building Industry*

By John W. Cowper.

President, Associated General Contractors of America.

THE construction industry, rated as the second of importance in the nation, has gone forward in the past year with a tremendous stride, the grand total in volume of work done being the largest of any year in our history. I have not the complete figures, but in building construction alone the total approximates \$4,000,000,000, of which over 40 per cent was for housing or residential purposes, in part making up the very great deficiency in this type of buildings brought about by the war.

With this great activity in the building industry, we have seen costs of construction rise sharply. Assuming 1913 as 100 per cent, building costs rose to over 270 per cent at the peak in 1920, and, at the end of 1921 they have declined to approximately 160 per cent, which, I believe, considering the post-war conditions, was very near what we might have expected as normal. But with the increased construction in 1922, prices have again risen, until in December the record shows that they have reached 190 per cent.

While labor, both skilled and common, is now receiving as high, if not the highest, wages of any time in our national history, and with the indications pointing to demands for further increases, you will agree, considering the fact that wages are approximately 45 per cent of the direct cost of building, that we are probably facing a period of higher costs of construction which, if continued, will prove to be a serious check to the healthy progress of the construction industry. We must find a way to stop this trend towards higher prices, and while we believe in sane ideals and ambitions for the so-called laboring class of this country, a continuance for this present spree of short hours and high wages is bound ultimately to result in their detriment.

We are suffering from a shortage of labor in all industries, and particularly in construction. The supply of workmen is not keeping pace with the demand, which in itself is an unsound condition. We need, and should have, a revision of our immigration laws so as to permit of a suffi-

cient number of immigrants, those to be of a superior quality (and the latter is more important than the former), based on a selective system, elastic as to the numbers admitted and regulated by the needs of our industries; and this law should by all means include a provision for examination by proper authorities of the prospective immigrants at the port of embarkation, the unit of admission to be by families and not individuals, for our own good and, just as important, for the good of the immigrant and of humanity.

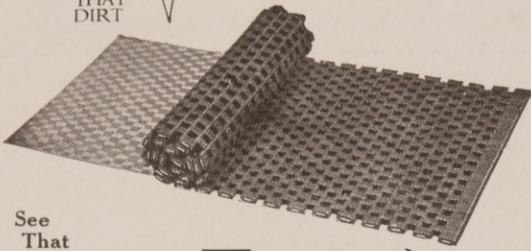
We are dependent in this country, to a large extent, upon foreign countries for our supply of labor, and from them it is our duty to make, as well as from the younger generation of our citizens, the artisans and skilled mechanics that we require. It is, therefore, necessary that we should advocate the establishment of trade or vocational schools, and, by all means, we must develop to its highest possible degree the apprenticeship system in all lines, not only for the purpose of supplying ourselves, from a selfish standpoint, with the mechanics we require, but to build up our citizenship and help every man to a higher plane in life.

I should like to refer to the American Construction Council, organized about a year ago, of which Mr. Franklin D. Roosevelt, former Assistant Secretary of the Navy, is the head. This Council, composed of all elements of the construction industry, consists of engineers, architects, contractors, manufacturers of construction materials and labor, will be what its name implies, the great headquarters of the construction industry, where, periodically, every element can get together to discuss and iron out differences between the public and themselves, as well as any differences that may exist or arise between the different elements of the industry. In other words, this Council will be the clearing house, as well as the mentor, of the construction industry.

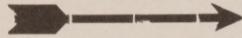
We commend, for the consideration of the American Construction Council, the combating of the erroneous propaganda which has been fed

Underfoot versus Overhead

SEE THAT DIRT



See That Reinforced End



Standard Sole Leather Mats

Any size made to order. For Lobbies, Stair Treads, Elevators and in front of Elevators.

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These firms are impressed by the policy of our company cooperating effectively with dealers, placing them in a position to better understand the successful methods used to market our product. The personnel of our company consists of men who have had over ten years practical experience in magnesite construction and application. The most modern methods of mixing are used. Our careful grading of aggregates insures greatest possible density. Our product is made of all pure minerals—nothing to become porous or pervious to the elements. When you are in the market for Magnesite Stucco let us demonstrate our real service to you.

Our Flooring Department is at your service and will cheerfully forward estimates for installing Granatile composition floors, base and stair treads of a material which is sanitary, resilient, fireproof, durable and economical.

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Absolutely impervious to moisture, unaffected by the action of acid and easily kept clean—what material for a toilet seat could be more sanitary than hard rubber?

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is ideal for installation of the better grade residence jobs, and for public buildings it is the cheapest seat in the long run because replacement is never necessary.

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to the public in a wholesale manner, without facts to warrant it, that public work should be done without the aid of those skilled, experienced and regularly engaged in that line of work, who are the only ones able and competent to render such services efficiently and at the smallest costs; and we might extend these same principles to other lines of commercial industry. Due to timidity or political disadvantage, the construction industry as a rule has not stood solidly against this menace to taxpayers, as well as their own industry, and it is high time that the public should be informed of the true facts.

We must combat in ourselves also any elation that may come from being charged with making large profits. We like to be thought of as successful, but as an industry we are certainly blessed with a high percentage of failures, and we must not forget that we are engaged in one of the most hazardous of occupations. Our losses are often enormous, our competition extremely keen, and our profits far below the general average of other industries; but even these tremendous losses which we suffer in our private business will be as nothing compared with the losses sustained by taxpayers of this country if it ever enters into an era of public construction by political appointees without qualification, competency or experience in such hazardous undertakings. Private industry will always be able to perform the great works of the country better than public effort, with all the favoritism, expediency, incompetency and inefficiency that accompanies the latter.

We, gentlemen, are often done an injustice by the shaping of public opinion through incorrect, unfair and untrue publicity by demagogues and other uninformed persons, and it should be the function of this Council, when fully and completely organized, to take cognizance of all matters affecting the construction industry, and, upon the most reliable information obtained from thorough investigation, voice the true facts, so that public opinion may arrive at a fair conclusion. The public usually, I believe, is fair if given the facts, and its conclusions, if an evil exists, will in time correct that evil. On the other hand, if the conclusion has been a wrong one, based on misstatements, when given the fair conditions, I believe public opinion is just as ready to accept that condition, even though it may not be what it desires.

*Address at annual convention of Associated General Contractors of America, Los Angeles.

Glenn Estate's New \$400,000 Office Building.

Atlanta, Ga.—General contract has been awarded to the George A. Fuller Company of New York for the erection of the \$400,000 office building which the Glenn Estate will erect in this

city. The building will have dimensions of 80 by 90 feet, 10 stories, of fireproof construction with a concrete frame, foundation and floors. It will be of face brick and limestone and will be covered with a slag roof.

Waddy B. Wood of Washington, D. C. is the architect, and Bealer & Biggers of Atlanta, the supervising architects. Thomas W. Marshall of Washington is the engineer. In addition to the general contract, awards have been made to Harry Alexander for the electrical work, and to the Otis Elevator Company for elevators, both of New York.

Developments for St. Petersburg Include \$750,000 Casino—To Lay Out Townsite and Develop Subdivisions.

St. Petersburg, Fla.—The development of 3000 acres of land located between St. Petersburg and the bridge head of Gandy Bridge, now under construction, has been announced. The property is owned by J. M. Elliot, one of the promoters of the Gandy Bridge, N. J. Upham and C. Perry Snell, who will undertake the development. There is 20 miles water front.

Mr. Elliot plans to construct a \$750,000 casino with the various features that accompany an enterprise of this kind, including an 18-hole golf course and acre estates for winter residents. It is the purpose of Mr. Upham to lay out a townsite and develop subdivisions on his holdings, while Mr. Snell, who owns the Coffee Pot golf courses of 27 holes, will build an additional 9 holes and improve a sub-division of 300 lots.

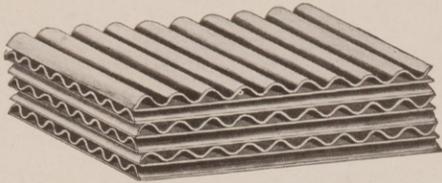
The three owners will connect Coffee Pot Bayou, Smack's Bayou and Pappy's Bayou, together with several inland lakes, with a system of canals and lagoons. One of the features of this phase of the development will be a boat livery which is planned by Mr. Snell.

Structural Steel Code Proposed.

Another step recently taken will help simplify problems of the structural man and help standardize construction codes. A committee of prominent engineers, working under the auspices of the American Institute of Steel Construction, has compiled a code that will govern the design, fabrication, and erection of structural steel.

It is proposed for incorporation in the building codes of all cities, and if so incorporated will result in a better co-ordination between these codes. As it is framed by experienced engineers it is authoritative, and the name of the American Institute of Steel Construction gives it additional standing. Copies of it, together with the tables that go with it, may be secured from the Institute, 1052 Leader-News building, Cleveland.

Two Points of Saving for You



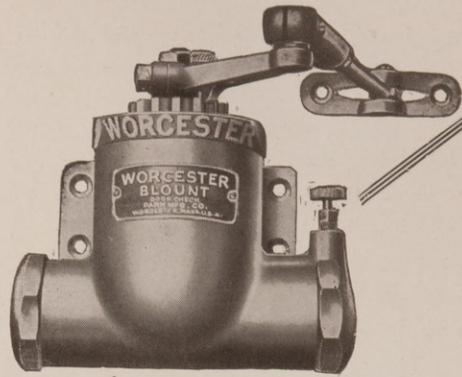
1. Unsurpassed heat insulating efficiency has been obtained through the unique cellular structure.
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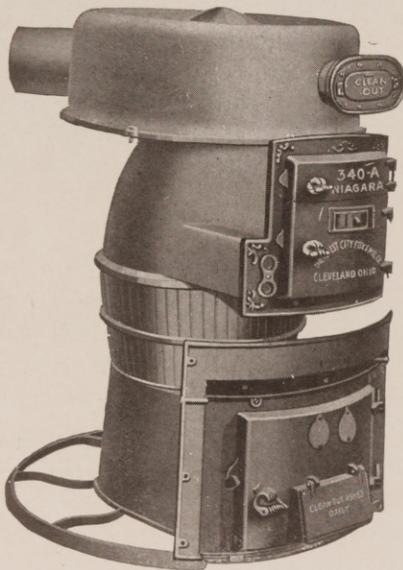
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Outstanding Developments in AESC Work During 1922

GROWTH. There was a notable increase in the work of the American Engineering Standards Committee during 1922. At the end of the year a total of one hundred twenty-one industrial standardization projects were definitely under way, or had already been completed and the standards approved. There were 205 national bodies, technical, industrial, and governmental, co-operating in the work through officially accredited representatives. The number of individuals serving on sectional committees was 917. Thus the work has reached what in industrial parlance would be called a stage of mass production.

Of the projects which have reached an official status, 21 have to do with civil engineering and the building trades; 23 with mechanical engineering; 15 with electrical engineering; 3 with automotive subjects; 12 with transport; one with ships and their machinery; 15 with ferrous metals; 4 with non-ferrous metals; 12 with chemical subjects; 2 with textiles; 4 with mining; and 9 projects with topics of a miscellaneous character.

Clearing House Work. The work constantly ramifies into more and more branches of industry, and the number of cooperating bodies increases with the number of projects. Not only has the scope of the work increased through demands of additional lines of industry, but as the work becomes better understood the number of bodies wishing to cooperate in any particular project increases and the interrelations of projects becomes more numerous and intricate. Hence the clearing-house function of the A E S C in correlating the work so as to prevent the promulgation of conflicting standards, becomes more and more important. For this reason it has become necessary to give careful consideration to the scope and the interrelations of projects, and to the further development of methods of correlating work on related subjects.

Government Specifications. A plan of cooperation between the Federal Specifications Board and the Committee has been worked out by which the specifications of the Board are submitted informally to the Committee before definite adoption. Through this plan the Government receives the criticisms of industry through the organizations which speak for those branches of industry that are concerned with any particular standard. Since the function of the Board is to unify all Government specifications, this constitutes an im-

portant step toward the unification of Government and commercial specifications into truly national specifications recognized and applied by Government and industry alike.

Division of Simplified Practice. Close cooperative relations have been established with the Division of Simplified Practice of the Department of Commerce, thus avoiding duplication or conflict of effort. The work of this Division, which is concentrated upon the elimination of unnecessary types, sizes and lines of manufactured products, has had a highly stimulating effect upon the industrial standardization movement, and has helped to press home to the business man the conviction that standardization is one of the main approaches to industrial efficiency. At the request of Mr. Hoover, the Committee undertook a canvass of its cooperating bodies for suggestions of subjects in need of simplification. It is hoped that this canvass will result in developing new points of attack for simplification in industry.

Interest of Industrial and Commercial Bodies. There has been a decidedly increased interest in standardization work, not only on the part of trade associations, but also on the part of more general commercial bodies. Cordial relations have been established with several of these, such as the Chamber of Commerce of the U. S. A., the National Association of Manufacturers, the New York State Chamber of Commerce, and the Merchants' Association of New York.

Standardization is tending to become one of the most important and appreciated activities of trade associations. Of the 205 national organizations which are officially participating in the work of the American Engineering Standards Committee through accredited representatives, over 120 may properly be classed as industrial or trade associations.

In his recent book on Trade Association Activities and the Law (1922) Mr. Franklin D. Jones has given thorough and careful discussion to the subject of industrial standardization, primarily from the point of view of trade associations. It is universally recognized that standardization is a legitimate and constructive activity of trade associations. The legal aspects of the question were clarified by the publication, early in 1922, of the correspondence between General Daugherty and Secretary Hoover, which is includ-

An Investment in Health!

The "Universal" Sanitary Systems provide a method of sewage disposal to those isolated from the city or town sewer system.

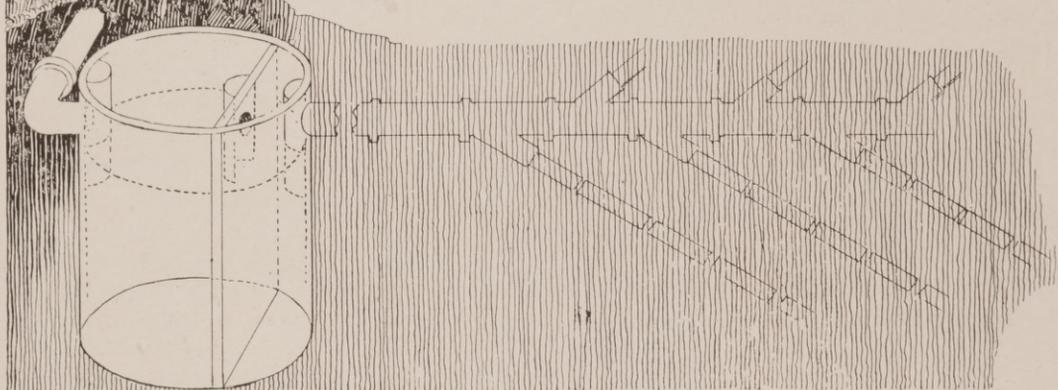
This applies to the country home, farm house, suburban, industrial or mining village.

It is recognized by all health authorities that the disease breeding, soil polluting, unsightly outhouse must go. The "Universal" Septic Tanks solve the problem in a satisfactory way. They will operate with or without running water.

These tanks are inexpensive and easy to install. Write us for prices.

If you are building a new home ask us about our concrete laundry tubs.

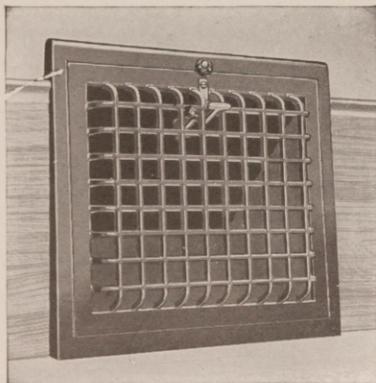
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MORE DURABLE! WILL NOT RUST OUT! MORE SUBSTANTIAL!



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Walworth Registers will last a lifetime—will not rust or warp out of shape. Maximum capacity for a given size. A Register which will appeal to all who use it.

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CLEVELAND

ed as an appendix in the book. This latter discussion has done much to further and extend standardization activities among trade associations.

New Member-Bodies. During the year the National Association of Manufacturers, the U. S. Department of Labor, and the Panama Canal became represented on the Main Committee, increasing the total number of national organizations so represented to thirty-three.

Sustaining Memberships. The resources of the Committee are entirely inadequate to carry on the work entailed in the demands of industry for increased standardization activities. The growth of the work is limited solely by this condition.

The expenditures of the Committee are now at the rate of approximately \$35,000 per year. Of this, only \$19,000 is covered by dues of member-bodies, \$500 annually for each representative on the Committee, with the exception of the Government Departments, which have not yet been authorized by Congress to contribute their share of the expenses of the Committee. The deficit has, hitherto, been made up by contributions solicited from companies closely interested in standardization work.

A plan of permanent financing has just been worked out through sustaining-memberships. Industrial concerns will be asked to subscribe directly. The schedule of subscriptions recommended is on a basis of approximately one cent per thousand dollars of gross annual receipts (that is, total annual business). It is hoped that in this way the income may be increased by at least \$50,000—which will require that the incidence be distributed over a broad range of industries. The total cost is utterly insignificant when compared to the service which the Committee is rendering. With the incidence spread so widely the cost to any one firm is extremely small. The percentage is in fact but a fourth of the percentage of their professional incomes which fifty thousand engineers are paying toward the support of the work through underlying memberships in engineering societies, which constitute nine of the thirty-three bodies represented on the Main Committee.

For companies which for any reason prefer to subscribe on the basis of capital, rather than of gross receipts, the recommended basis is one and one-half cents per thousand dollars of aggregate market value of the corporate securities of the company.

An important service will be given sustaining-members in the form of information bulletins on current developments in standardization work both in this country and abroad. To render this service it will be necessary to add an engineer-

translator to the staff. In soliciting sustaining-memberships, however, the main emphasis will be based on the fundamental service to industry which the A E S C is rendering through its regular work.

It is hoped that a very large number of firms interested in standardization will take advantage of this opportunity to receive a valuable service and at the same time to support a movement which is rendering so important a service to American industry.

Conference Method. The advantages of the conference method of launching work on specific standardization projects become more strikingly evident as experience with the method accumulates. It focuses attention on the subject by bringing the representatives of all interests face to face; thus it gives them an understanding of each other's point of view. Agreements have nearly always been reached more easily than had been anticipated.

Excellent examples of such conferences were the ones on crossing specification, colors for traffic signals, and the numbering of steels.

Preferred Numbers. Considerable study has been given to the general principles underlying standardization of sizes, particularly the system of "preferred numbers," based on convenient geometrical series, which is being adopted by the industries of France and Germany. This scheme is applicable to all kinds of sizes and ratings, and not merely to simple dimensions, and provides for systematic series of sizes by an increase on a percentage basis, from size to size. It is regarded abroad as of fundamental importance, as it is believed that its gradual introduction is leading to great economies in material, labor, and in the work of design: by reducing the number of sizes, ranges, etc, so simplifying the carrying of stocks of parts, gages and tools, facilitating interchangeability; and in many other ways, not the least of which is the great mental economy involved in using the same set of numbers universally, as it were, in engineering work, and in establishing a uniform method of developing standard sizes.

The attention of technical and industrial organization has been called to the importance of the subject and to the need of careful study by American industries to see whether the advantages of such a plan can be made applicable to conditions here. The American Society of Mechanical Engineers considered the subject at one of the sessions of their Annual Meeting, an important paper being presented by C. F. Hirshfeld and C. H. Berry. The A E S C cooperated by arranging for the discussion of the paper by a number of well-known engineers and other specialists from the points of view of a variety of

organizations and industries, which proved to be extremely able and extensive. The paper and the discussion are being published by the American Society of Mechanical Engineers in pamphlet form.

International Cooperation. Cooperation with the foreign national standardization bodies has steadily increased. This has been chiefly in the form of interchanging information, though in some few cases definite steps toward international standardizations have been taken. For example, in regard to ball bearings, definite proposals have been formulated by the sectional committee and presented to the foreign bodies as a basis of international agreement.

BUILDING SAFETY INTO THE PLANT.

How to check plans and specifications for safety is told in a pamphlet just issued by the National Safety Council, Chicago, containing a check list of several hundred items which must be considered if serious hazards are to be avoided.

The pamphlet, which has been prepared under the supervision of the Council's Safe Practices Committee of seventy-five safety engineers, points out that if proper precautions are taken when drawing plans and specifications for new buildings or equipment, many accident hazards can be forestalled—an important matter to the plant engineer in these days of increasing pressure from government and insurance inspectors, compensation laws, and plant safety departments. Such engineering revision—or prevision—it is said, removes at little or no cost, hazards which later could be corrected only at heavy cost, if at all, and insures compliance with both government and insurance demands, the latter resulting in premium reduction.

Under "general plant layout" are mentioned such items as the use of natural topography to eliminate dangerous grade crossings and unnecessary elevating of material with the attendant hazards; proper drainage, proper location of drink-water wells, smokestacks, buildings with serious fire or explosion hazards, etc. Attention is called to the necessity of considering the entire design in the light of future extension of the plant, increase in height of buildings, or change in their use.

Following sections list the items requiring attention, in connection with railroads, roadways for vehicles, and foot ways. Fences, intended for plant protection, may introduce accident and fire hazards if not properly designed, and these are next considered, followed by a section on pipe lines for water, steam, oil, gas, chemicals, etc. Some thirty items in connection with the general design of buildings are listed, and a number on

heating and ventilation, lighting, and toilets, washrooms, etc. The remaining sections are devoted to power supply, both steam and electric; elevators; cranes, derricks and hoists; conveyors; mechanical power transmission; exhaust systems; abrasive wheels; and shop layout and machinery such as are found in a typical manufacturing shop. The list concludes with a section covering the special hazards of a chemical plant or department, this being presented as typical of the special check list which each engineer should develop for his own special industry.

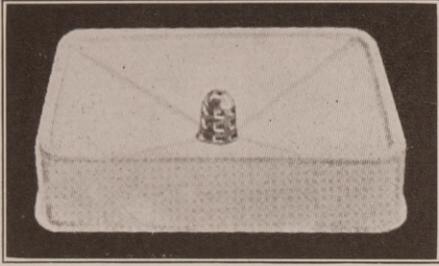
For detailed information on each of the points covered, the engineer or architect is referred to various standards and handbooks, including the safety codes formulated under American Engineering Standards Committee auspices; the Safe Practices pamphlets and other publications of the National Safety Council; federal departments such as the Bureau of Standards, Bureau of Mines, Bureau of Labor Statistics, and Public Health Service; the regulations of the state labor department or industrial commission; underwriters' laboratories, and insurance company regulations. For fire hazards reference may be made to the publications of the National Fire Protection Association and the National Board of Fire Underwriters. A list of these principal authorities is given, with cross references from the check list.

The Story of Steel.

A six-reel motion picture film, "The Story of Steel," has been produced under the auspices of the U. S. Bureau of Mines of the Department of the Interior and the U. S. Department of Commerce in co-operation with the United States Steel Corporation. It will be used extensively in the United States and abroad for the purpose of acquainting the peoples of the world with the many interesting operations employed in the American steel industry.

The film depicts the various processes from the mining of the iron ore to the finished steel product, passing through the transportation period, blast, furnace operations, and the making of steel by the Bessemer, open-hearth and electric processes. The manufacture of rails, axles, rods, wire products, pipe, tin plate and other products of steel are told in a graphic way, and before the picture is brought to a close the audience is shown the many welfare and social activities which are carried on by the United States Steel Corporation for the benefit of its employees.

The film will be loaned without cost to all dependable persons desiring to use it for educational purposes. Application should be made to the U. S. Department of Commerce, Washington, D. C.



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**REFRIGERATOR
DRIP PAN**

It simply cannot overflow because of the high perforated strainer that will not clog even should dirt collect around sides. Made in porcelain enameled pressed steel, and galvanized. All parts of pan slope to center. Can be set without tools when roughing is in. The strainer, tapped wide, compresses gasket against pipe and shoulder of pan.
This PAN was formerly sold through a selling agency but is now being handled by Plumbing Supply Houses or direct from us.

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WATER
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Wonderful, automatic gas water heater. Hot water on the instant at a saving of 50% of the usual cost.

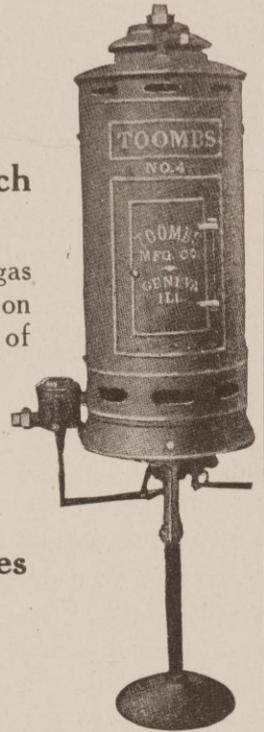
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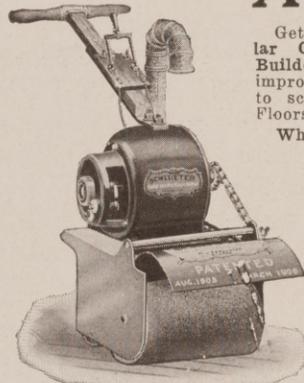
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Why Contractors Encroach on the Architect's Field

Abstract of an Address by J. C. Edwards, President of the Southern California Chapter,
A. G. C., Los Angeles, Calif.



I INTEND to be very frank and name a few of the real reasons why contractors, who feel themselves capable, encroach on the architect's field.

There has been a decided change in the personnel of the general contractors during the past 20 years or even during the past 10 years. Improved methods are definitely eliminating the rule-of-thumb contractor, and the contractor of today feels that he is entitled to the same recognition as the architect or engineer.

Your profession has permitted commercialism to gain such a foothold that, in many cases, completeness of plans and specifications is sacrificed in order that more of the fee may be retained as a net profit. Where this is done controversies arise, extras are claimed, and both owner and contractor are dissatisfied.

Government Red Tape Offset.

The thing that makes government red tape on construction work bearable is the wonderful completeness of the plans and specifications and the exactitude with which one can determine the volume and kind of work to be done.

The custom of calling for such a multitude of alternate bids is not looked on with favor by the contractor. He feels that it is part of your service to the owner to pre-determine the volume of work to be done and the kind of materials to be used.

Contractors feel that in many cases bids are requested and their time consumed in preparing estimates on work, when the architect knows there is not even a remote possibility of the work going ahead; and it is a very common occurrence for a contractor to submit a proposal to an architect and for that proposal to be held for a month or more without being accepted or rejected, the contractor being unable to obtain any information regarding same. This is obviously unjust and should not be continued if it is your inten-

tion to recognize the service rendered to the industry by the contractor.

Draw your contracts so as to show fairness to both parties concerned, the owner and the contractor. Insert an arbitration clause in them so that honest differences may be settled out of court. This may be working a hardship on our friends, the attorneys, but nevertheless it is a most satisfactory way of adjusting disputes.

In your contracts and specifications avoid the shifting of responsibility. I have seen contracts based on specifications which provided that the contractor was to assume all responsibility for plans and specifications complying with city ordinances.

Tit for Tat.

Conditions such as I have mentioned have a tendency to create a desire in the contractor to undertake himself the architectural service necessary to a construction project, and it is with increasing frequency that you hear of it from the larger contracting firms.

Please do not think for one moment that I fail to appreciate the fact that in many instances contractors have, by their unsatisfactory methods, driven the architects to seek a method whereby they might be eliminated.

It is necessary, however, that we tell you our troubles and you tell us yours if anything is to be done to check this tendency to encroach on one another's field.

There was never a truer saying than this: "A man who is his own attorney has a fool for a client." The principle is applicable to construction. We each have a distinctive service to perform and I doubt very much the ability of either of us to successfully assume the other's position.

Our association will heartily endorse any effort on your part to eliminate the undesirable man in the business, because by so doing we both will be rendering a really honest service to the public. Unless such a service is rendered there is no justification for the existence of yours, ours, or any similar organization.

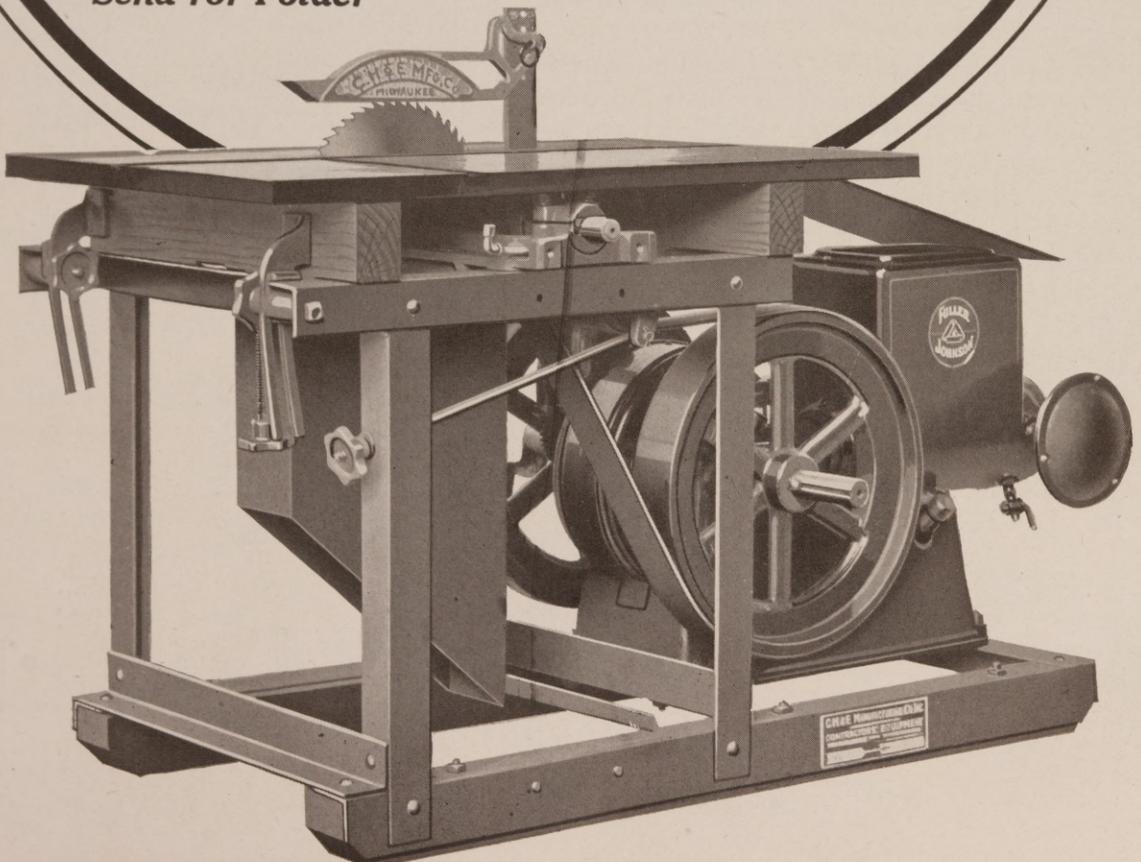
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Southern Building Activity Makes Impressive Showing

Nearly \$139,000,000 in Contracts Let for First Three Months of 1923—Contemplated Construction Totals Over \$433,000,000.

Figures are now available for the first three months of this year on the total number of contracts awarded and to be awarded in the sixteen Southern States as reported in the construction columns of the Manufacturers Record. As an index of the progress and development of the South they are most impressive. The totals show that the building activity both actual and projected for January, February and March of 1923 has been greatly in excess of the corresponding periods of 1922 and 1921. The total in contracts awarded amounts to \$138,941,382 as compared with \$97,465,883 in 1922 and \$47,820,278 in 1921.

The total contracts to be awarded for the three month period is \$433,896,697. This classification includes the preliminary announcement of projects on which work has not yet begun but on which some definite news has been published. The total compares with \$279,589,049 in 1922 and \$140,046,387 in 1921. It is thus something like \$154,000,000 in excess of 1922 and over three times the 1921 figure. It is quite apparent from these figures that the South is in the forefront of the tremendous activity in new construction work so pronounced over practically the entire country. There is a great deal of evidence pointing to the likelihood of all building records being broken during the present year.

The accompanying tables show that the month of March has greatly exceeded the totals for February and January. It shows, in fact the best individual month's total of which the Manufacturers Record has an account. The nearest approach to it is November, 1922 with a total of \$62,116,358. In like manner the total of \$433,896,697 for projected work for the first three months of 1923 exceeds any similar period.

It should be understood that no consideration is given in this summary to the thousands of dwellings, private garages and other structures where the cost of the building is less than \$10,000, nor to the large sums involved in repairs and al-

terations to such structures. Furthermore, it is impossible to make any allowance whatever for a considerable number of developments that reach a fairly impressive total in the aggregate but on which for one reason or another no estimates of the cost are available.

From the standpoint of money involved the Roads, Paving and Bridges classification holds first for January, February and March of this year with a total of \$41,420,727 in contracts awarded. Ranking next are Apartment Houses and Hotels with a total of \$28,982,981. Then follow Miscellaneous Enterprises, which includes all those developments not shown under the other headings, and having a total of \$23,732,542.

SUMMARY BY CLASSIFICATION FOR MARCH.

	Contracts Awarded	Contracts to Be Awarded
Apartment Houses and Hotels	\$14,708,000	\$17,746,000
Association and Fraternal	1,207,274	527,500
Bank and Office Buildings	3,767,562	4,549,500
Church Buildings	1,888,000	2,927,000
City and County Projects	2,218,138	150,000
Dwellings	2,355,007	5,129,918
Miscellaneous Enterprises	12,787,232	144,109,897
Roads, Paving and Bridges	16,786,724	11,962,165
School Buildings	5,007,530	5,550,500
Sewers, Drainage and Water Works	4,694,127	14,081,275
Store Buildings	977,990	5,912,000
Total	\$66,397,584	\$212,645,755

SUMMARY BY CLASSIFICATION FOR FEBRUARY.

	Contracts Awarded	Contracts to Be Awarded
Apartment Houses and Hotels	\$3,066,435	\$9,160,500
Association and Fraternal	444,300	1,525,000
Bank and Office Buildings	6,080,000	9,535,000
Church Buildings	740,127	3,772,000
City and County Projects	1,954,297	535,000
Dwellings	801,545	4,433,250
Miscellaneous Enterprises	6,811,128	50,776,510
Roads, Paving and Bridges	12,184,326	25,443,773
School Buildings	2,053,544	5,954,500
Sewers, Drainage and Water Works	1,344,406	4,740,000
Store Buildings	614,904	1,527,600
Total	\$36,095,012	\$117,403,163

SUMMARY BY CLASSIFICATION FOR JANUARY.

	Contracts Awarded	Contracts to Be Awarded
Apartment Houses and Hotels	\$11,208,546	\$4,100,735
Association and Fraternal	120,000	4,935,000
Bank and Office Buildings	1,530,485	7,537,000
Church Buildings	223,000	3,337,000
City and County Projects	791,249	487,433
Dwellings	1,110,400	4,830,050
Miscellaneous Enterprises	4,134,182	59,310,033
Roads, Paving and Bridges	12,449,677	9,956,598
School Buildings	3,525,553	5,486,000
Sewers, Drainage and Water Works	674,607	2,755,000
Store Buildings	681,087	1,013,930
Total	\$36,448,786	\$103,847,779

First Quarter	Contracts Awarded	Contracts to Be Awarded
1923	\$138,941,382	\$433,896,697
1922	97,465,884	279,589,049
1921	47,820,278	140,046,387

SUMMARY BY CLASSIFICATION FOR FIRST QUARTER, 1923.

	Contracts Awarded			Contracts to Be Awarded		
	March	February	January	March	February	January
Apartment Houses and Hotels	\$14,708,000	\$3,066,435	\$11,208,546	\$17,746,000	\$9,160,500	\$4,199,735
Association and Fraternal	1,207,274	444,300	120,000	527,500	1,525,000	4,935,000
Bank and Office Buildings	3,767,562	6,080,000	1,530,485	4,549,500	9,535,000	7,537,000
Church Buildings	1,888,000	740,127	223,000	2,927,000	3,772,000	3,337,000
City and County Projects	2,218,138	1,954,297	791,249	150,000	535,000	487,433
Dwellings	2,355,007	801,545	1,110,400	5,129,918	4,433,250	4,830,050
Miscellaneous Enterprises	12,787,232	6,811,128	12,449,677	144,109,897	50,776,540	59,310,033
Roads, Paving and Bridges	16,786,724	12,184,326	12,449,677	11,962,165	25,443,773	9,956,598
School Buildings	5,007,530	2,053,544	3,525,553	5,550,500	5,954,500	5,486,000
Sewers, Drainage and Water Works	4,694,127	1,344,406	674,607	14,081,275	4,740,000	2,755,000
Store Buildings	977,990	614,904	681,087	5,912,000	1,527,600	1,013,930
Total	\$66,397,584	\$36,095,012	\$36,448,786	\$212,645,755	\$117,403,163	\$103,847,779

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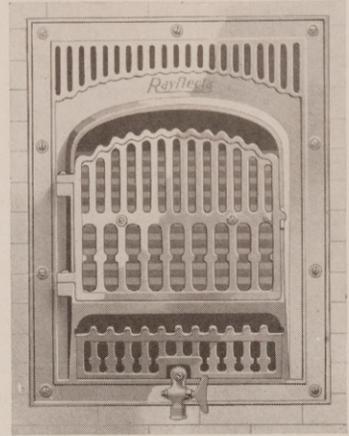
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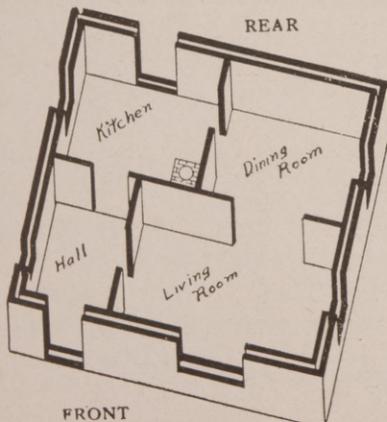
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RULES FOR SAFE CONSTRUCTION OF BUILT-IN GARAGES.

The Building Code Committee of the Department of Commerce, through Chairman Ira H. Woolson of that committee, who is also consulting engineer for the National Board of Fire Underwriters, has given out recommendations for the construction of built-in garages. These requirements were made primarily as a guide in garages attached to or forming part of dwellings; but they have a general application which give them a wider interest.

Following are the rules recommended by Chairman Woolson's committee:

Rule 1. Garage floors shall be of concrete or equally fire resistive and impervious material.

Rule 2. Walls and partitions shall be built to meet the requirements of the standard one-hour fire test.

Rule 3. The combined floor and ceiling construction directly above the garage shall be unpierced, and shall have a fire resistance of one hour. The same rule applies to the roof when the garage is attached to the side of the dwelling.

Rule 4. When a garage is located beneath a dwelling, all outside doors and windows with their frames and sash shall be of standard fire-proof construction and glazed with wire glass.

Rule 5. Openings from a dwelling into a garage shall be restricted to a single doorway. This opening shall be protected by a standard swinging, self-closing fire door, with approved fire resistive frame and hardware. No glass shall be permitted in such a door.

Rule 6. When a doorway connects direct with a cellar or basement on the same or lower level in which there is any heating device or gas fixtures, the door sill shall be raised at least one foot above the garage floor level, or the doorway shall lead into a vestibule which comes with the cellar or basement by a second floor.

Under Rule 2 many materials are acceptable, such as brick, hollow tile, concrete block, or gypsum block four inches thick, or reinforced concrete three inches thick. As a minimum requirement, walls may also be constructed of wooden studs spaced 16 inches center to center, with metal lath attached outside and inside. The outer lath is to be plastered and back-plastered with portland cement stucco, and the inner lath plastered with $\frac{3}{4}$ -inch portland cement or gypsum plaster.

Under Rule 3 ceilings or roofs of reinforced concrete, or some other type of incombustible construction that meets the fire test, are considered best and most reliable.

WHEN BIDS ARE SUBMITTED.

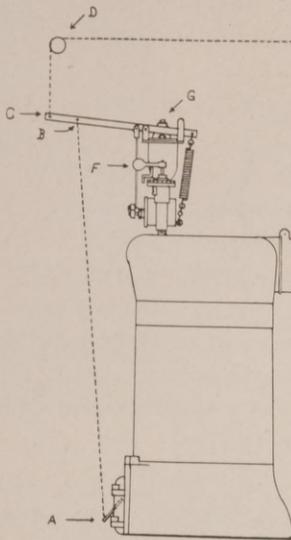
Owners apparently sometimes forget that it costs a contractor money to submit bids. They either do not understand or disregard the fact that there is expense connected with estimating a job and preparing a bid. The cost of estimating is part of the contractor's overhead. Someone has got to pay for this estimating. If the contractor is to make a profit he must perforce pass it along to the owner. If such expenses were to fall upon the contractor, he would ultimately be compelled to go out of business. If a contractor gets on an average one job out of every dozen he figures, the one job must pay the cost of figuring the twelve.

But while the contractor accepts this burden as part of his overhead he should, in common fairness, have an equal opportunity with all others who figure it to get the job. If the owner, the architect, or the engineer supplies him with plans and permits him to figure the work, with the mental reservation that he won't get it anyway, they are not only doing the contractor an injustice, but they are increasing the cost of construction. Someone has got to pay for the added expense. The contractor must figure his next job a little higher to cover it. Perhaps the easiest course for the owner to take is to let any contractor who wishes to do so figure the job, while the owner clings to the solacing thought that probably the undesired contractor will not be the low bidder anyway, and even though he be low the owner cannot be compelled to give the job to him. Admittedly it is difficult to tell a contractor that his bid is not wanted, but that is the only fair course to take.

Even more to be deplored is the practice occasionally resorted to by owners of inviting a contractor to figure a job in order that his bid may be used to check the bid of some favored contractor, to whom the owner has the unexpressed intention of giving the contract. Sometimes such bids are wanted to serve as a club to induce some one to take the contract at a lower figure than he otherwise would. This practice was more common a few years ago than it is today. A contractor should never be asked to bid—should, in fact, never be permitted to bid—unless he has an equal opportunity to get the work with every other contractor who submits a figure.

Now comes forward a sub-contractor with a complaint—not a new one, but one that, if persisted in, is calculated to annoy the best-tempered sub-contractor. Suppose you are a sub-contractor, and you submit a bid to a general contractor upon which to base his bid. Suppose he accepts your bid, from among those submit-

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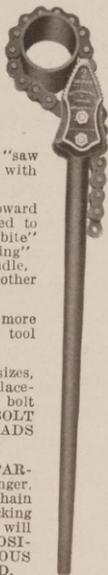
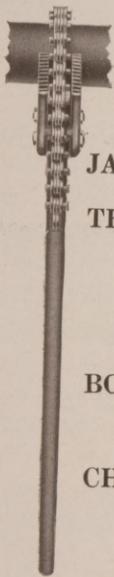
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ted, and uses it as the one upon which he figures his bid. His bid proves to be the low one, and he is awarded the contract. Then suppose he goes around "shopping" for a lower bid on the sub-contract, and, obtaining it, throws your bid into the discard. General contractors who rigidly stick to the practice of giving the subcontracts to the men on whose figures they based their bids, are putting the Golden Rule into practice in the conduct of their business.

Here's another practice that is unfair to the general contractor, says an exchange. It is that of taking entirely new bids, on slight revision of plans, in order to reduce the cost.

In one locality, we are told, the contractors filed a copy of their proposals with the secretary of their local organization, with the understanding that after bids were opened by the architect the figures thus filed would be available to every member, and no contractor other than the low bidder should submit additional figures on a modified bid, unless such modifications amounted to more than 50 per cent of the bid as originally filed.

In another case it is understood that the first, second and third lowest bidders only should submit bids on the revised plans. In a good many instances architects have suggested that only the lowest bidders on the original contract figure the revised plans, and owners have often acceded to it.

Any practice that has a tendency to reduce bids below the margin of safety is a bad one. It is bad for the owner as well as for contractors. Work done at a loss is usually not satisfactory.—Architect & Engineer.

ELECTRIC HEATING OF RESIDENCES.

The electric heating of houses is an accomplished fact in Tacoma, Washington, and an interesting report upon it forms the subject of Bulletin No. 15 Engineering Experiment Station, State University, Seattle, Washington. The bulletin contains 40 pages and is illustrated. It was written by Edgar Allen Loew, Associate Professor of Electrical Engineering.

The municipally owned Tacoma lighting plant was completed and put into operation in 1912. It consists of a hydroelectric development of 20,000 kw., at La Grande, Washington. Power is transmitted over two 55,000 volt transmission lines to the Tacoma sub-stations, from whence it is distributed throughout the city at 4,000 volts.

In 1914 the city decided to stimulate the use of electric heating in order to market as much as possible of the output of electrical energy it possessed. A low energy charge of $\frac{1}{2}$ c. per kw. was

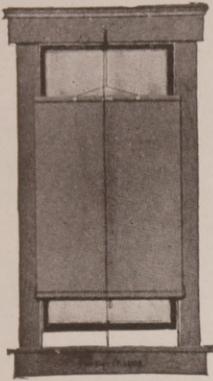
adopted and a campaign inaugurated to induce people to install electrical furnaces and water heaters. The report goes into detail on costs of installation and operation and is decidedly interesting.

The total cost of the transmission and generating system is \$243.00 per kw. During 1919 the average selling price of all energy sold was 1.32 cents per kilowatt hour and the net reported surplus was \$408,309. During the year 1920 a greater number of kilowatt hours was sold and the average selling price was 1.19 cents per kw. hr. approximately, returning a net surplus of nearly \$575,000. The heating business, with its low charge, is looked upon as in the nature of an excess or surplus power load.

The author shows that at the low rate given, the annual cost of heating a house with an electric furnace is practically equal to the cost of heating with a coal fired furnace at \$9.20 per ton. The efficiency of heating by electric heaters located in the space to be heated is 100 per cent. The average efficiency of the coal fired furnace was assumed to be 45 per cent. The best planned, best installed and most efficiently operated warm air furnace yields a maximum efficiency of about 60 per cent. Improvements are gradually being made in coal-burning, house-heating furnaces and 60 per cent efficiency may be obtained with care. If an average efficiency of 60 per cent were attained, electrical energy at a half cent per kw. hr. would be on a par with coal at \$18.00 per ton; or, with coal at \$9.00 per ton electrical energy would be on a par with it if sold to the consumer at 0.25 cent per kw. hr.

The conclusions reached are that when Tacoma has no surplus power to sell the electric heating of houses will cease, except possibly the use of small radiant heaters for special occasions. The cost of water power development is too great to admit of such development for heating purposes. It is out of the question to develop electrical energy for this purpose from steam. The maximum thermal efficiency which would be possible by heating electrically from energy generated in a steam plant is under 20 per cent, while by consuming fuel in furnaces in the home 40 per cent energy efficiency is ordinarily obtained, and 60 or 65 per cent efficiency may be obtained as a maximum. Thus the energy efficiency secured by the latter method is from 2 to 3 times as good as that of the former. Electrical heating need not therefore be regarded as a competitor of wood, coal, or oil, although it is at present remunerative in Seattle in that the energy sold for this purpose helps pay fixed charges on the municipally owned plant.

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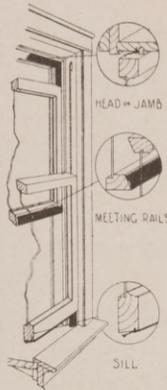
—Are Sanitary—Practical—substantial, and more Satisfactory because of better lighting and ventilation they afford.

—Particularly adapted for Schools Churches, Hospitals, Lodges, Offices and Public Buildings.

This is a well-proven FACT, based on the number of such buildings using them.

Write for Descriptive Literature.

LUTHER O. DRAPER SHADE CO.
Spiceland, Indiana



Taylor Everlasting Spring Bronze Weatherstrips

Are individually packed to accommodate various size windows. Easily installed without removing sash. No special tools required. Hammer and shears does the work. Requires no grooving or planing of sash. Effective on new or old buildings.

Our Dealer Proposition will interest you. Write for circular and samples.

TAYLOR, ALLEN & CO.
MORRIS, ILLINOIS



Contractors and Builders

Can be assured of getting a fine, pure white and easy working finishing Hydrate, always uniform, by ordering

MONARCH

We guarantee every pound.

Write today for prices and information.

The National Lime & Stone Co.
Carey, Ohio



FOR HOMES, ARCHITECTS AND BUILDERS

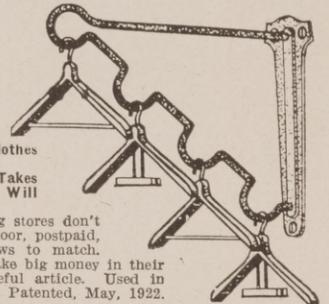
If You Want to Get Full Benefit of Your CLOSET SPACE Use the Compact Clothes Hanger Brackets

They Keep the Suits Apart. They Save Time and Space. They Keep Your Clothes in Order. They Can be Put anywhere Clothes Hangers Can be Used.

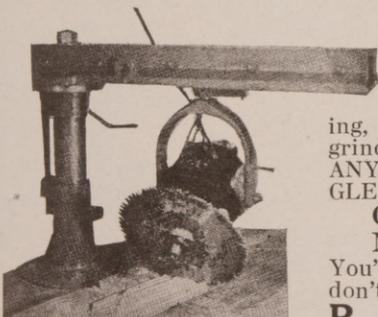
Put one on Your Closet Door—it Takes the Place of the Ordinary Hook and Will Accommodate Four Hangers.

If your hardware or house furnishing stores don't have them, will send direct to your door, postpaid, nicely finished in nickel with screws to match. Price, 25 cents each. Agents can make big money in their spare time selling this new and useful article. Used in every home. Write for particulars. Patented, May, 1922.

Compact Clothes Hanger Bracket Mfg. Co., 1205 C St., Washington, D. C.



THE "DEW-ALL"



Will cut off, rip, dado, tenon, tongue and groove. Do routing, shaping, sanding, carving, grinding, boring ON ANY BEVEL OR ANGLE.

Quick Change No Belts You're the loser if you don't own one.

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Structural Steel Shapes, Beams Channels, Angles and Ship Shapes

Small orders given special attention.

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THE PHOENIX BRIDGE CO.

Engineers, Fabricators and Erectors Bridges and Other Structures of Steel

CAPACITY 60,000 TONS

Small orders given special attention. Works and Engineering Office: Phoenixville, Pa.

THE IDENTIFICATION OF MAHOGANY.

Mahogany enjoys so high a reputation as a wood for interior finish and furniture that it is not surprising that a great variety of woods more or less similar in appearance or that can be treated to resemble mahogany are offered as mahogany, and it is not always easy to distinguish the true mahogany. A means of doing this is now provided in "The Identification of True Mahogany, Certain So-called Mahoganies, and Some Common Substitutes," by Arthur Koehler, specialist in wood structure, known as Bulletin No. 1050, United States Department of Agriculture.

This bulletin describes true mahogany and a large number of woods that have at one time or another been put on the market under the name mahogany. It states that some of these are closely related botanically to true mahogany and others look much like it, while some have only the most general resemblance, and no relationship which under the most liberal interpretation could entitle them to the name.

It also states that the woods now most commonly sold as mahogany in this country are true mahogany from tropical America, "African mahogany," and "Philippine mahogany."

The Portland Cement Association has issued a new booklet in their series treating with concrete construction. The title is, "Foundations, Walls and Basements of Concrete," and much valuable information is presented on these topics. The subject matter deals with small building foundations both of the monolithic and cement block type and in addition to various construction details, methods of calculating loadings and quantities, and some helpful tables for finding the quantities of cement, sand and stone of mixtures of various proportions and the materials required for 100 sq. ft. of surface for varying thicknesses of concrete or mortar, are given. The tables are fully explained and actual examples of their use are given. The treatment of foundation forms is especially interesting as is the method of installing bolts in a concrete machine foundation and the method of foundation layout. The pamphlet is free and may be had upon application to the Association, the address of which is 111 West Washington Street, Chicago, Ill.

Actual Live Loads.

The Building Code Committee of the U. S. Department of Commerce desires to secure data concerning actual live floor loads for all classes of buildings. This information is to be used in formulating their recommendations for floor loads. It is generally agreed that the usual live

floor load requirements are excessive and are responsible for a tremendous waste in building construction. The truth concerning these loads should be the basis of design rather than conjecture on the age-old traditions of building codes. Architects and engineers should investigate these matters and send all data to Mr. Ira H. Woolson, 76 William Street, New York City.

Exposition of Building Ideas.

One of the largest expositions of building ideas ever staged in this country is being planned as a feature to the sixteenth annual convention of the National Association of Real Estate Boards, to be held in Cleveland June 25th to 30th.

The Cleveland Real Estate Board, hosts to the national convention for 1923, has approved and completed the final plans for the national exposition of building ideas.

All classes of building material used in the construction of both domestic and commercial buildings will be on display, each exhibit having a constructive and educational value which, it is aimed, will make this exposition unique

\$2,000,000 Apartment House for Norfolk.

The Garden Terrace Corporation of Norfolk, Va., is planning construction of a 60 family apartment house to be erected on Armistead Bridge road west of the West Ghent boulevard. Herbert W. Simpson is the architect. The new structure is estimated to cost \$2,000,000, and will be of brick and stone with terra cotta trim. It will be four stories high, fronting 200 feet on Armistead Bridge road. All the apartments will have outside exposure. There will be a total of 284 rooms and in the rear of the building a sufficient number of garages will be provided to accommodate all of the apartment tenants. Construction will begin soon.

Gentlemen:

This is to announce that we moved our general office from Jacksonville, Texas, to Coeur d'Alene, Idaho and will engage in the manufacture and wholesaling of WESTERN RED CEDAR POSTS, POLES and PILING.

Will you please give us an announcement of the change in your next issue and send us a copy of the same as we would like to examine it with a view to placing our advertising for 1923.

Thanking you for the favor, we are

Yours very truly,

Hall Bros. Cedar Co.

Stewart's

IRON FENCE STANDARD OF THE WORLD



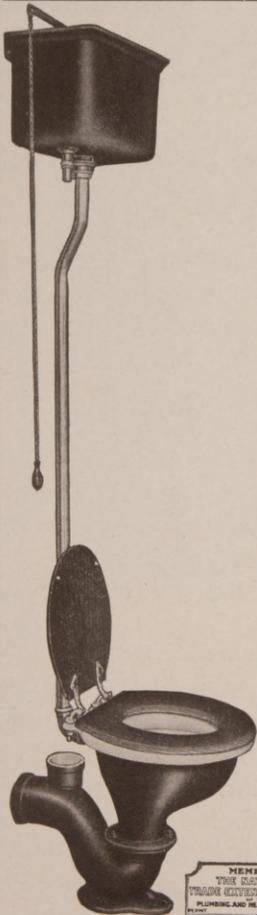
DESIGNS for every purpose—

town houses, suburban homes, country estates, cottages, cemeteries, cemetery lots, school grounds, factories and all other purposes where a neat and substantial fence is required. Send for catalogue.

We also manufacture Balcony Railing, Grilles, Wire and Iron Window Guards, Wire Partitions and Folding Gates.

The Stewart Iron Works Co., Inc.
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"The World's Greatest Iron Fence Builders"



Enameled Iron Water Closets

afford the plumbing trade a splendid opportunity for two different profits. At times sanitary improvements are delayed temporarily or forever by their seemingly high cost. In these cases suggest use of enameled iron hoppers and tanks for economical installations.

This method promotes the sale of Sanitary outfits to a big class of citizens who might feel unable at the time to pay for installation of higher grade fixtures.

Then when your customers have enjoyed these Sanitary conveniences you will be in splendid position to advance the sale of finer Sanitary appliances.

Jones Hollow Ware Co.
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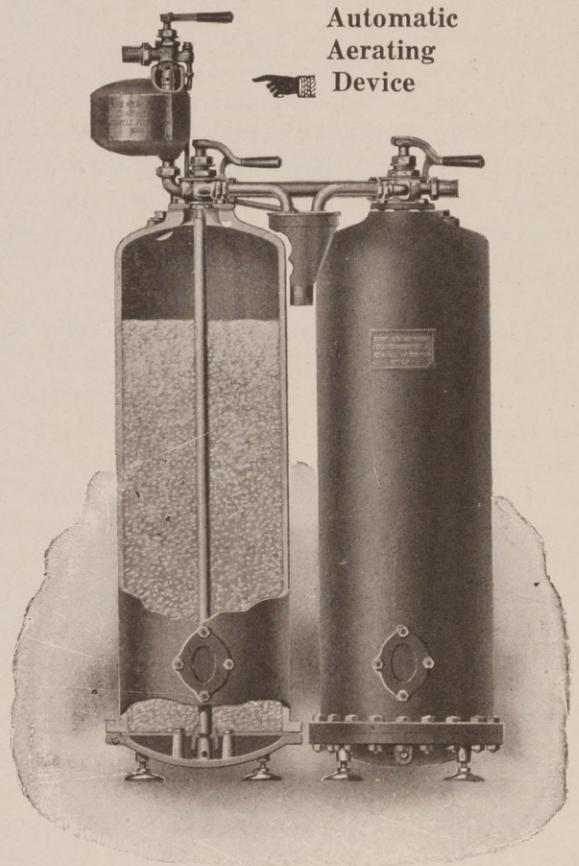
THE Continental Filter

The standard for high-class residence installation for the past quarter century

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it combines these important features:

1. **DOUBLE FILTRATION** — First through sand, then through bone-charcoal.
2. **SLOW FILTRATION**—Obtained by a large filtering area.
3. **THOROUGH FILTRATION** — Filtering material in each cylinder being 3 ft. in depth, making an aggregate depth of 6 ft.
4. **SIMPLICITY OF OPERATION**—Each cylinder controlled by a single valve, making no expert care necessary.
5. **AUTOMATIC AERATING DEVICE**—By means of which the filter beds are thoroughly agitated and aerated each time they are cleaned and the material is thus kept clean and fresh.



Automatic Aerating Device

The New York Continental Jewell Filtration Co.

General Offices: NUTLEY, N. J.
Member Associated Manufacturers of Water Purifying Equipment.

Announcement of New Building Construction

Plans in Preparation on Several Tampa Buildings.

Tampa, Fla.—Contracts will soon be awarded for the erection of several buildings for which plans are being prepared by M. Leo Elliot of this city. Among these, is an office building at St. Petersburg to be erected by the R. M. Hall Development Company at a cost of \$150,000. It will be 50 by 100 feet, 6 stories and basement, of fireproof construction, steel frame, concrete and tile floors, brick and terra cotta exterior, Barrett specification roof and marble wainscoting. Two high speed electric elevators will be installed, together with mail chutes, oil burning boilers and vacuum heating system. Plans will soon be completed.

Bids have already been opened for a store and garage building for C. C. Spencer which will cost \$70,000. This will be one story, about 200 feet square, of brick and steel, tile and cement floor and built-up composition roof. A repair shop will be installed on the mezzanine floor.

Plans have also been completed for a garage to be erected by the Peninsular Motor Corporation at a cost of about \$40,000. It will be 105 by 106 feet, two stories, brick and steel, with a composition roof, tile floors and plate glass show windows, and will be equipped with an electric freight elevator.

Over \$10,000,000 for Improvements to North Carolina Public Buildings in 1923-24.

Raleigh, N. C.—Notable provisions of the recent session of the North Carolina legislature for further permanent improvements of public institutions during 1923-24, include the following: State Hospitals for the Insane: at Raleigh, \$394,000, at Morganton, \$415,000, at Goldsboro, \$315,000; Caswell Training School for the Feeble Minded, at Kinston, \$500,000; School for the White Blind, at Raleigh, \$326,000; School for the Deaf, at Morganton, \$23,000; Orthopedic Hospital at Gastonia, \$25,000; State Tuberculosis Sanatorium, near Aberdeen, \$219,000; Stonewall Jackson Training School for White Boys, at Concord, \$135,000; Samarcand Training School, for delinquent white girls, in Moore County, \$232,000; State University, at Chapel Hill, \$1,650,000; State College of Agriculture and Engineering, at Raleigh, \$1,350,000; State College for Women at Greensboro, \$1,350,000; East Carolina Teachers College, for Women at Greenville, \$1,025,000; Agricultural and Technical College (colored) at Greensboro, \$455,000; Normal schools, five, \$1,-

194,000; State Agricultural building, at Raleigh, \$225,000, of which \$125,000 is for a new State Museum; Negro Reformatory, \$50,000; White and Negro Criminal Insane, \$100,000, (two buildings). This totals \$10,144,000.

The legislature has also provided \$500,000 for the development of its fisheries. This will include the deepening of several inlets from the ocean to the sounds so fish can enter; oyster planting on a large scale in the sounds; the stocking of mountain streams with fish; the establishment of fish hatcheries, etc.

New \$250,000 Hotel for Ormond Beach.

Ormond Beach, Fla.—Bretton Inn, one of the oldest hotels here, will soon be razed to make room for the erection of a new \$250,000 fireproof building which is to be erected by James P. Vin- ing. Plans for the new hotel will be prepared by Magaziner, Eberhad & Harris of Philadelphia, the structure to be of hollow tile and stucco. Every room will be equipped with bath and many will have individual balconies. Open fireplaces will be a feature, and in place of verandas there will be an open air living room overlooking the garden on one side and the ocean on the other. The building will be of Moorish design.

There will also be a club house, 62 feet long, 2 stories, the second floor to be used for entertainment features. It is stated that the building will be financed by G. L. Miller & Company, Inc., of Atlanta.

Awards Contract for \$800,000 Bank Addition.

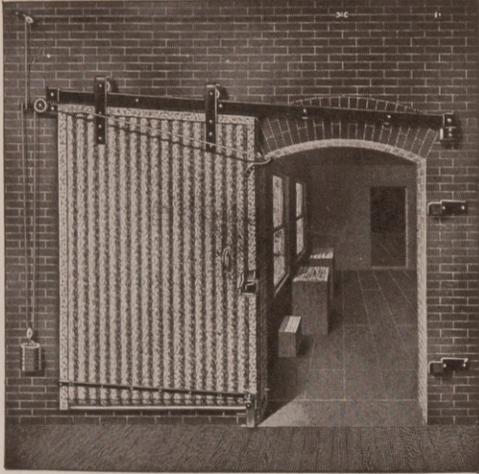
Houston, Tex.—The First National Bank of this city, of which J. T. Scott is president, has awarded contract to the Central Contracting Company, with offices in Houston, to erect the 9-story Fannin street addition to its bank building at a cost of more than \$800,000. The addition will be 125 by 115 feet, and will be equipped with a marble stairway, as well as elevators. Vaults and safety deposit boxes will be installed.

Sanguinet, Staats & Gottlieb of Houston are the architects.

\$219,000 Contract Let for Police and Fire Station.

Houston, Tex.—Don Hall, 614 Carter Building has been awarded the contract for erection of the police and fire station at a cost of \$219,000 for this city. W. A. Dowly, is the architect. The structure will be 100 by 100 feet, five stories high, with steel frame, concrete floors and brick walls.

M & E "ALMETL" FIRE DOORS & SHUTTERS



are fully approved by the Underwriters Laboratories; the Associated Factory Mutual Laboratories; the Southeastern Underwriters' Association, and recommended by Fire Prevention Authorities.

They are built along the lines of correct engineering principles and embody every known feature for effective resistance against fire. Their construction is entirely of non-combustible materials—so rigid and so sturdy they should easily last as long as the building itself. They are easy to operate and in all the best Fire Door investment procurable.



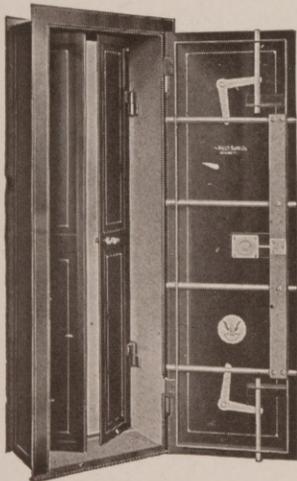
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No. 1AA Fireproof Vault
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Wall Opening

79 High

32 Wide

20 Deep

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MANUFACTURERS OF

Vault Fronts	Vault Linings	Grills and Gates
Omnibuses	Chests	Deposit Boxes
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Fire Proof Safes—Burglar Proof Safes—Manganese		
Safes with Hall's Key-Combination or Time Locks.		

Finest Workmanship—Best Material and Finish



CO-OPERATIVE SERVICE.

This company maintains a department for co-operating with architects or clients in solving problems encountered in selecting and installing vaults.

Prices and estimates will be promptly furnished on application.

Announcement of New Building Construction

13-Story Hotel at Charleston to Cost \$2,000,000.

Charleston, W. Va.—Incorporating with a capital stock of \$2,500,000, the Federal Hotel Company, in which, S. B. Chilton, J. E. Chilton, J. H. Moore and others are interested, has awarded contract to the Ring-Hartman Company of Charleston to build a \$2,000,000 hotel at Dunbar and Kanawha streets in this city.

The site on which the structure will be erected is 20 by 220 feet, overlooking the Kanawha river and close to the center of the business district. The building will be 13 stories high and will contain 424 guest rooms. It will be of fire-proof construction, Indiana limestone and brick with limestone cornices, and will be equipped with a fire tower.

On the main floor, there will be a lobby 90 by 100 feet, and a dining room, 60 by 88 feet. The mezzanine floor will contain a ladies' parlor, men's lounge, writing rooms, etc. There will be a ball room, 70 by 80 feet, which may also be used for a convention and banquet hall. Five dining rooms will be located on the second floor, so arranged that they may be converted into one large dining room, 18 by 112 feet. The building will be equipped with three passenger, one service and one freight elevators.

Bertram Cunningham & Company, Inc., of New York, are the architects.

Atlanta Commercial Exchange to Build \$200,000 Structure.

Atlanta, Ga.—Plans are being worked out by Dillon & Morgan, architects, and the Flagler Company, contractors, both of this city, for the erection of a \$200,000 office building which the Atlanta Commercial Exchange will erect at Exchange place and Ivy street. The building is intended to house the exchange and provide 120 offices for the use of its members. It will be 10 stories high, 40 by 75 feet, and is expected to be complete by October 1.

The exchange floor will be 60 feet long and 22 feet high and will have a gallery along one side for the use of visitors and non-members. There will be 24 private telephone booths in the building and a combination telephone arrangement by which all members will be given the markets simultaneously. A radio broadcasting outfit will be a feature of the equipment.

Officers of the exchange include Robert A. Smythe, president; George W. McCarty, first vice-

president; Samuel Martin, second vice-president; L. G. Neal, third vice-president; W. A. Gilreath, treasurer; and J. Hope Tigner, secretary and superintendent. The building committee is composed of J. R. Bachmann, chairman; J. R. Ellis, Jr., J. J. Williamson, C. L. C. Thomas, Lee M. Jordan, T. N. Hutchinson, W. A. Gilreath, Robert A. Smythe and J. Hope Tigner.

St. Louis' \$5,000,000 Municipal Auditorium Plans.

St. Louis, Mo.—At a meeting of the Municipal Auditorium Advisory Committee subcommittees were appointed to prepare recommendations on features to be embodied in the plans of the municipal auditorium to be erected at a cost of \$5,000,000 from bond issue funds recently voted.

The committees appointed and the chairman are as follows: Community uses, C. G. Rathmann, chairman; convention uses, F. H. Rein; concessions, Thomas H. Glancy; engineering problems, including transportation facilities, approaching and parking facilities for automobiles, Charles M. Talbert; press facilities, E. Lansing Ray.

The local chapter of the American Institute of Architects will handle the details in connection with the selection of the architect.

Contract Let for \$250,000 Masonic Temple at Houston.

Houston, Tex.—Contract has been awarded to Tom Tellepsen of this city to erect a \$250,000 Masonic Temple here for Gray Lodge No. 239, of which Norman Atkinson is chairman of the building committee, and Temple Lodge No. 4, of which G. W. Foster is chairman. The building will be three stories high, fireproof, and of stone construction. Alfred C. Finn of Houston is the architect.

Will Let Contract Soon for \$500,000 Hotel.

Austin, Tex.—Plans are ready for the proposed \$500,000 hotel to be erected in this city by the Baker Hotels, Inc., and construction bids will be opened about April 10. The building will be 92 by 160 feet, 11 stories, of concrete, steel and brick construction, with reinforced concrete floors, roof and foundation.

Sanguinet, Statts & Hedrick of Fort Worth, are the architects.