

VOL. IV. No. 4.

ATLANTA, GA., FEBRUARY, 1893.

\$2 A YEAR; SINGLE COPIES 20C,

PLASTER YOUR BUILDING WITH

MATERIAL.

It is not an artificial compound, but perfect in its natural state, requiring only calcining to prepare it for use. No acids, chemicals, hair, fibre or ingredients of any kind used in its manufacture, requires only the addition of sand in its application to the wall. More simple in application, uniform, reliable, durable, stronger, cheaper and requires less labor than any plastering material ever produced. Most perfect fire proof plastering material on the market. 30,000 tons used in the United States in 1891, (1 ton Acme will cover same surface as 3 tons of the patent materials that are furnished to the trade mixed with sand.) Nearly 2,000 tons used on World's Fair buildings at Chicago.

Does not require skilled labor. A house plastered with this material can be occupied 4 to 6 weeks sooner than if plastered with lime mortar. Owing to its density it makes a house warmer in winter and cooler in summer. But little more expensive than common lime mortar.

Arlington Hotel, Atlanta, "The Times" building, Chaltanooga, Tenn., now using this material.

Send for samples, pamphlets, prices delivered at any point, and further information to

GENERAL SALES AGENTS,

Please mention THE SOUTHERN ARCHITECT.

Thorn & Hunkins Lime and Cement Co., St. Louis,

APPARA AN OKING



ER AND STEAM HEA

WARM AIR FURNACES

COOKING RANGES

Parties contemplating building or altering will find valuable information by sending for our catalogue.

RDSON & BOYNTON

Heating and Ventilating Engineers.

232 and 234 Water Street, NEW

SAFE SIMPLE AND NOISELESS

No Steam and Consequently no Heat.

ALSO MANUFACTURERS OF

STANDARD HYDRAULIC PASSENCER HYDRAULIC FREIGHT STANDARD BELT

OTIS BROTHERS

38 Park Row,

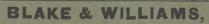
NEW YORK.



irned Indiana O imestone

TURNED COLUMNS, CAPS, BASES, BALUSTERS, FINALS FOR BUILDINGS

Posts, Vases, Founts, Everything in the Turning Line Neatly Executed. Cut-Stone Fronts, Cemetery Vaults, all Kinds of Stone Trimmings, etc.



STEAM AND WATER

Heating & Ventilating Apparatus.

No. 197 WOOSTER STREET, NEW YORK CITY.



THORN'S

Patent Metallic Roofing Tiles



Are the best ever offered to the Building Trade. Endorsed by all the leading architects.

Our standard goods are made of a good quality

of terne plate equal to Melyn grade.

No cheap stock is ever allowed to go into their construction. They can be made of any brand of tin or sheet metal on short notice. We make eight (8) different designs, all having the best side spring-lock ever invented.

If you want a handsome roof, equal in appearance to terra-cotta tile, and more durable than

Write for circular to rthen tile or slate.

THORN SHINGLE AND ORNAMENT CO.

1227 Callowhill Street, PHILADELPHIA, PA.

Quarries at Sanford, Moore County, N. C.

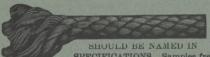
durable and

economical.

General Office, RALEIGH, N. C.

We will furnish a first rate BROWN STONE, beautiful and uniform in color and texture, of any dimension, in any quantity, promptly and at reasonable rates. Railroad shipping facilities excellent. It contains 92 per cent. silica. Crushing resistance, 10,000 pounds to the square inch. Samples sent on application. ***Agents wanted in other cities.

V. H. KREIGSHABER, 8 N. Forsyth St., Atlanta, Special Agent,



SPECIFICATIONS.

AMSON OLID - BRAIDED





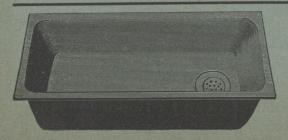


Cheapest Sanitary Bath.

MANUFACTURED BY

The Steel Bath Mfg. Co.

DETROIT, MICH.



"The Cast Sink mast go."

The Columbus Wrought Steel Sink DISPLACES ALL OTHERS. Painted, Galvenized, Enameled. Send for descriptive circular and price list to

The Kilbourne & Jacobs Mfg. Co. Sole Manufacturers.

Оню. Columbus, - -

WORKING DRAWINGS FOR

Published in No. 7 of "The Brickbuilder" with much other matter valuable to Architects, Builders and Contractors.

Subscription Price \$2.50 per Year.

Address,

Brickbuilder Publishing Co., 4 Liberty St., - BOSTON, MASS.

Chas. F. Carpenter.

Louisville Church and School Furniture Co No. 349 Fourth Avenue.

LOUISVILLE,



Manufacture and Sell Church, School, Bank, Theatre, and Office Furniture, Railroad Settees, Store Tools. Furnishers L. & N. Union Depot Louisville. N. N. & M. V. UnionDepot's, Lousville and Memphis.

Slate Stone Blackboards a Specialty.

Ar chitects' and Carpenter's Transit.



C. F. RICHARDSON & SON,

44 Traverse St., Athol, Mass.

Manufacturer of Iron Levels and Leveling In-

SEND FOR PRICES





IMPROVED POWER AND QUICKR RAISING HAND-POWE

POWERS FOR HAND ELE VATORS.

KIMBALL BROS., Anamosa, Ia Get our Prices Before Closing Contracts and Send for Circular "B,"

AMERICAN SPRING HINGES.

NEAT, EFFECTIVE, DURABLE, AND EASILY APPLIED.



FOR SALE BY HARDWARE DEALERS

Manufactured by VAN WAGONER & WILLIAMS CO., 14 Warren St., New York.

Ornamental, Ground, Cut, Bevaled and Embossed

For Dwellings, Railway Cars, Steamboats, Offices, Banks Churches, Etc.

POTTS BROTHERS, M'?'rs 48 and 50 Duane St., NEW YORK Estimates, Photographs and Designs sent on application.



Office, 136 and 138 Mulberry St., New York.

Factory, MAYWOOD, N. J. Responsible Agents wanted in every City

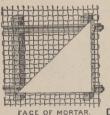
MANUFACTURERS OF

Sectional Tile Wainscoting

READY FOR IMMEDIATE USE. Can be put up by any Mechanic on any kind of Wall or Ceiling.

Portable Hearths, Facings and Firebacks. PATENT ENAMELED TILES FOR ALL USES.

Vrite for Circulars and Particulars



Clinton Wire Cloth Comp'y

76 Beekman St., NEW YORK.

137 Lake Street, Chicago, Ill.

Stears Building, Boston, Mass. WORKS AT CLINTON, MASS.

MANUFACTURERS OF

Patent Metal-Furred Wire Lath. SAMPLES FURNISHED ON APPLICATION



FOR

RIEL GLASS COMPANY

107 North Eighth St., ST. LOUIS, MO.

Before MANTELS AND GRATES Get Cuts and Prices of the Aldine Buying Mfg. Co., Grand Rapids, Mich. Manufacture ARTISTIC MANTELS and the ALDINE FIRE-PLACE

BLACKBOARDS,

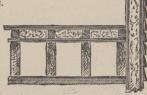
Hearths, Sills, Lintels, Platforms, Steps, Urinal Slabs, &c., &c. Prices promptl furnished delivered at any point.

E. J. JOHNSON & CO.

QUARRIES, BANGOR PA. Office, 38 Park Row, New York.

A House Lined with MINERAL As shown in these sections, is WOOL WARM in WIN-TER. COOL in SUMMER, and is thoroughly DEAFENED.

The lining is vermin proof, neither rats, mice nor insects can make their way through or lire in it. MINERAL WOOL checks the spread of Fire and keeps out dampness.



Sample and Circular Free.

CORRESPONDENCE SOLICITED.

ADDRESS

U. S. MINERAL WOOL CO.,

2 Courtlandt street, New York.



80-Paged Illustrated Catalogue of over 250 Designs of Superior

80 - Pageu
over 250 Designs of Dur
WEATHER VANES,
TOWER ORNAMENTS,
CHURCH CROSSES,
FINIALS, &c.

Mailed to any address for 2-cent stamp half the postage.

T. W. JONES, Manufacturer, 170 AND 172 FRONT STREET, NEW YORK.



J. C. French & Son.

VAULT AND SIDEWALK

LIGHTS

of every Description.

452 Canal Street, New York.

Schenk's Art and Drawing School.

108 and 110 S. 4th St., ST. Louis, Mo.

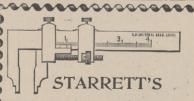
For Lessons in Mechanical and Architectural Drawing. Also Carving in Wood and Modeling for Terra Cotta and Iron Work. Established 1873. Send for Circular.

OOFING SLATE. Dark Blue Strictly Un-

fading Slate. Specially adapted to Churches, Vilas, Cottages

etc. Slate punched and cut to pattern ready for roof. P ices given delivered at any point desired Send for price list.

DAVID McKENNA, Manufacturer, Slatington, Penn.



Warranted Accurate—Best in Workmanship-Latest in design-Finest in Finish—Send for Catalogue.

> L. S. STARRETT, Athol, Mass., U. S. A.

> > 22222222

Superior to Any Other Red Slate in the Market

IN COLOR AND OUALITY

Have Facilities for Immediate Shipment of Large Orders.

THE STANDARD RED ROOFING SLATE.

Write for Price List, etc., to

R. B. Pritchard, Eagle Red Slate Quarry, Middle Granville, N. Y.



Machinery.

COMPLETE OUTFITS

Carpenters, Cabinet-Makers and other Woodworkers without steam power, can successfully compete with the large shops by using our Labor Saving Machinery, latest and most improved for practical shop use. Many of our machines will pay for themselves on a single job.

Machines sold on trial, if desired. Send for Catalogue and Price List, giving full Descriptions, Testimonials, Etc.

The Seneca Falls Mfg. Co.,

184 Water Street,

Senaca Falls, N. Y.

IS THE SAME



THE HARTMAN PATENT STEEL PICKET FENCE

Costs no more than an ordinary clumsy Wood Picket Fence that obstructs the view and will not rot or fall apart in a short time. The "Hartman" Fence is artistic in design, protects the grounds without concealing them and is practically everlasting. Write for Illustrated catalogue with prices and testimonials.

HARTMAN M'F'G CO., - BEAVER FALLS, PENN'A.

Branches:—102 Chambers Street. New York; 508 State Street, Chicago; 73 South Forsyth Street, Atlanta.

SIDEWALK LIGHTS.

CONCRETE ILLUMINATED SMOOTH SURFACE.

Old Style Bull's Eye Knob Protected,

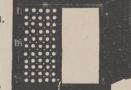
Steam Heating Apparatus,

DIRECT AND INDIRECT RADIATORS. ARCHITECTURAL WORK OF

EVERY DESCRIPTION.

T. H. BROOKS & CO. CLEVELAND, OHIO.

Send for Sample and Catalogue.



Vault Ring.

Illuminated Steel Plate Des.

FOR CHURCHES AND

FIGURE AND MEMORIAL WINDOWS A SPECIALTY.

Designs and Estimates Furnished. THE L. GROSSE ART GLASS COMPANY,

Pittsburg. Pa.

Darquetry Floor

Wax and Weighted Brushes SEND FOR NEW CATALOGVE

S.C. JOHNSON -RACIME WIS.

JUST PUBLISHED.

THE THIRD EDITION OF THE

American Glossary of Architectural Terms

ILLUSTRATED.

The Only Work of the Kind Ever Issued BY

GEO. O. GARNSEY, Architect.

CHICAGO, ILL.,

Editor of THE NATIONAL BUILDER, author of several valuable works on the science of building.

This is a concise and comprehensive compilation of all the terms used in the practice of architecture and the building art. A complete dictionary of over three thousand terms and five hundred beautifully engraved illustrations, comprising a valuable collection of designs never before brought together, and of incalculable value to designers, architects, students and builders. The work embraces historical sketches of all styles and periods of architecture, together with mechanical and descriptive rules and data, useful in all branches of the arts and sciences. One large (8x12) volume, printed on special paper, handsomely finished; sent post-paid to any address for \$2.00.

PUBLISHED BY

The National Builder Publishing Co.,

(Adam's Express Building,) CHICAGO, ILL., U. S. A.

ATTENTION, Architects and Builders!

Did you know that pressed and ornamental brick, equal to St. Louis and Washington bricks were manufactured in the South?

The Coaldale Press Brick

alone enjoy that reputation, having won the first prize at the Alabama State Fair and Augusta, Ga., Exposition. Situated upon the great L. & N. R. R. we insure favorable rates of transportation to all parts of the country. Satisfaction guaranteed, and prices lower than anywhere else. Write for catalogue and prices, or call at our city office, 2017 First Ave., Birmingham, Ala.

COALDALE BRICK & TILE CO., By Jno. W. Sibley, Treas.

Miners and Shippers of

oofling Slate and Slate Black Boards.

SLATINGTON, PA.

FOR INFORMATION ABOUT

WHICH ARE

A necessity in office buildings and hotels, write to the sole makers,

THE CUTLER M'F'G CO. Rochester, N. Y Authorized.

EAGLE BRAND THE BEST.

It is unequaled for House, Barn, Factory or Out-Buildings, and costs half the price of shingles, tin, or iron. It is ready for use, and easily applied by any one. Send stamp for samples, and state size of roof. Sheathing papers at lowest prices.

Excelsior Paint and Roofing Co.

155 Duane Street, New York, N. Y

LOOK AT THIS OFFER!

BEST RANGE in the World for the Money!

No. 7-19 Economist Junior, six seven-inch holes, nineteen-inch oven, Nickel Towel Rail and Patent Oven Door Kicker.



In order to introduce these superb Ranges, we will for a short time only, sell them F. O. B. cars here, with thirty-five pieces of furniture, at \$19.80; and without furniture, \$15.60 net spot cash. Water-box extra, \$2.00. If larger cast or steel ranges are desired, write for cuts and prices.

BRIDGEFORD & CO., Louisville, Ky.

FAC-SIMILE OF THE FLAME DELIVERED BY

A White, Absolutely Smokeless Flame, with any Open Burner.

COSTS &1 OO PER THOUSAND.



Send for Circular giving full information about all kinds of Gas Machines and how and why
this machine does all that can even be done with a Gas Machines

TIRRILL'S GAS MACHINE CO., 39 Dey Street, New York.

The Standard Cement and Builders Supply Co.

Calcined and Plaster Paris Mortar Colors, Plastering Hair. Fire Brick, Ground Fire Clay, Ground Lime, etc. We make a specialty of mixed car load shipments.

Office 26 Wesley Block, 101 North High Street, Columbus, Ohio.

F. WEBER &

Successors to JANENTZKY & WEBER, Draughtsmen's Supplies.

Sole Agents for the United States for

RIFFLER'S PATENT

DRAWING - INSTRUMENTS THE FINEST MADE.

DRAWING PAPERS,

Tracing Paper and Linen, Continuous and in Sheet.

THE SUN AND ECLIPSE BLUE PRINT PAPERS, BLUE PRINT LINEN,

Sensitized and Unprepared.-

Drawing Boards, T Squares, Boxwood Scales, Etc.

Mathematical Instruments, Etcher's and Engravers' Tools,
Paint Boxes,

ARTISTS': MATERIALS.

LARGE ASSESTMENT OF

Works on Art for Architects Fresco Painters, Sculptors and Designers.

1125 Chestnut St. Philadelphia.

918 Olive street, St. Louis, Mo. 5 N. Charles St., Baltimore, Md.

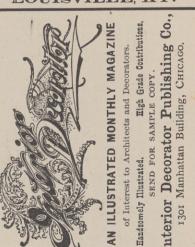
JOHN HUDSON.

Turned Woodenware,

Door Knobs, Base Knobs, Corner Blocks, Plinth Blocks, Newel Posts, Porch Columns, etc., etc. BRACKETS and all kinds of Carpenters' Supplies and Interior Finish. STAIR TURNING. All kinds of Job Turning Solicited.

Power Building, 521 to 527 Third Ave.,

LOUISVILLE, KY.





RECULATE THE STOMACH, LIVER AND BOWELS,

PURIFY THE BLOOD.

A RELIABLE REMEDY FOR

A RELIABLE REMEDY FOR
Indigestion, Billousness, Headache, Constipation, Dyspepsia, Chronic Liver Troubles,
Dizziness, Bad Complexion, Dysentery,
Offensive Breath, and all disorders of the
Stomach, Liver and Bowels.
Ripans Tabules contain nothing injurious to
the most delicate constitution. Pleasant to take,
safe, effectual. Give immediate relief.
Sold by druggists. A trial bottle sent by mail
on receipt of 15 cents. Address
THE RIPANS CHEMICAL CO.
10 SPRUCE STREET, NEW YORK CITY.

This is the only SHINGLE STAIN used on the buildings at the World's Columbian Exposition.



We Challenge anyone to show us a house where our STAIN has washed off.

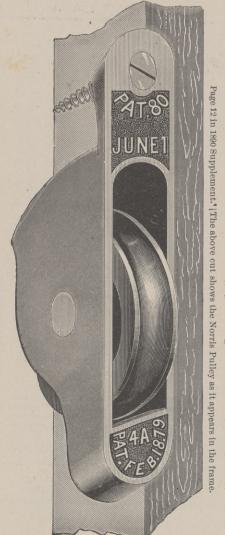
DETXER BROTHERS, Sole Manufacturers,

55 Broad Street,

- BOSTON, MASS.

SEND FOR SAMPLE

A. BALDWIN & CO., Lim., New Orleans, La., and C. W. TANNER & CO., Richmond, Va., Agents



NORRIS PATENT SASH PULLEY.

FOR RIBBON, ROPE OR CHAIN.

Strongest and Handsomest Pulley Made.

OUR PULLEYS, you can readily see, are the only Pulleys made that do not depend upon the screws to hold them in the frame. The pin for the wheel is back of the bevel or lower end of the Pulley, which causes the weight of both sash and weights to pull back—therefore, the more weight the more firmly the Pulley imbeds itself in the frame.

Our Pulleys are made in over 1600 different quanties. They are made with gun metal pins, phosphor bronze pins, steel pins, bronze metal face, bronze metal wheel, bronze metal face and wheel. We make a special groove for chain, which causes the chain to wear twice as long. We also make a special groove for ribbon.

Our selt-lubricating Pulleys, if used a life-time, will always be anti-friction.

We make a specialty of finishing our Pulleys to match the new finish of hardware now so extensively used, such as old statuary bronze, electro bronze and old copper bronze.

We make our Pulleys plain or engraved face, and of bronze metal, or any finish desired.

Architects, and builders generally, concede the Norris Pulley to be the best Pulley in the world.

There are many millions in use. They have been and are used in the finest buildings in the country.

All our Pulleys are numbered, so please order by number, as the number designates size and quality.

Architects wishing a catalogue and samples will please write us, and we will send same free of cost.

Norris Pulley can be had of any hardware house in the country, or address

C. SIDNEY NORRIS & CO.,
BALTIMORE, MD.



VOL. IV.

ATLANTA, GEORGIA, FEBRUARY, 1893.

No. 4.



EDITORIAL.
GENIUS AND ART. EDITORIAL PARAGRAPHS8
A BEAUTIFUL WORK OF ART8
RED IN ARCHITECTURE8
THE CONVENTION AND ITS RESULTS. STANDARD CONTRACT9 ARCHITECTURE OF GOVERNMENT BUILDINGS. WHY NOT GEORGIA MARBLE?
SOUTHERN CHAPTER. OFFICIAL PROCEEDINGS OF SECOND ANNUAL CONVENTION
ORIGINAL CONTRIBUTIONS

OHIGHAL CONTRIBUTIONS.	
ROBERT BURNS. CHAS. W. HUBNER	103
"I AM MY OWN ARCHITECT." A. C. B	103
ILLUSTRATIONS	104
MISCELLANEOUS	104
BUILDING AND TECHNOLOGY.	
VENTILATION OF CHURCHES	105
A SIXTEEN STORY ALUMINUM BUILDING	105

 ELECTRICAL SPARKS.
 D MESTIC USE FOR ELECTRICITY.
 107

 CURRENT LITERATURE.
 108

 TRADES ILLUSTRATED.
 109, 110, 111

 TRADE NOTES.
 111

 BUILDING NOTES.
 112, 113, 114, 115, 116, 117

MISCELLANEOUS NOTES AND COMMENTS.......106

SANITARY SCIENCE.



GENIUS AND ART.

I grant that Genius is by birth divine,
And that from God its power comes to create;
But Art the work of Genius must refine,
To make it truly and divinely great.

-CHARLES W. HUBNER.

T a meeting of the directors of the American Institute of Architects Mr. Alfred Stone, of Providence, was elected secretary, in place of Mr. Adler, resigned; and Mr. Thomas P. Chandler, of Philadelphia, was elected director in place of Mr. Stone. popular architect of Birmingham, ordering The Southern Architect to be mailed to him, says: "I think all the members of the Chapter should take it."

THE SOUTHERN ARCHITECT had the pleasure of a call from Mr. Willis E. Hall, of the well-known firm of Brown & Hall, architects, Winston, N. C. Mr. Hall was at the Chapter convention in Birmingham.

Chant & Co., tin plate manufacturers, of Philadelphia, called upon us recently. His visit was appreciated.

ARCHITECT is making fine progress in its tour around the world. The latest request for sample copies and the latest foreign subscriber come from Catanzaro, Italy.

The first prize for a design of the projected memorial to the memory of Chicago's famous architect, the late John Wellborn Root, was won by Mr. P. J. Weber, a member of the Chicago Architectural Sketch Club. There were eighteen competitors. The prize design of the monument is given in the January number of the Inland Architect. It is a striking and classically beautiful piece of work.

CHICAGO syndicate is now building twenty-five elegant residences in Atlanta's charming suburb, West End. These houses have all modern improvements, electricity, etc., and are models of excellent architecture. The houses are worth from three to four thousand dollars each, and a number are already occupied.

R. C. S. BAKER, the genial and popular Boston agent of the well known Portland Door and Window Screen Company, is in the city. He reports business excellent. The company has in Mr. Baker a first-class representative, who has already made many friends in the South.

A fine advertisement of this extensive manufacturing company appears in this issue of The Southern Architect.

on much cannot be said in praise of the local committee of architects in Birmingham who had charge of the entertainment of visiting members of the Southern Chapter. Their arrangements for the comfort and pleasure of the Convention were perfect, and nothing was left undone to make every guest feel "at home." To these gentlemen and to the proverbial liberality and hospitality of the citizens of Alabama's Magic City, every visiting member of the Convention is indebted for one of the most pleasant events in his life.

HE Macon Evening News, referring to the election of Mr. L. F. Goodrich to the presidency of the Southern Chapter, says: "Mr. Goodrich is the son of the late William H. Goodrich, who was proprietor of the Goodrich Machine Works of Augusta, which was one of the oldest and largest institutions of the kind in the South. President Goodrich's architectural talents are therefore an inherited gift."

ishing institution, held its annual meeting at Toronto on the first Tuesday in February. Cordial invitations were sent by the President, Mr. S. G. Curry, to Mr. Bruce, of Atlanta, ex-president of the Southern Chapter, and to Mr. Goodrich, of Augusta, the new president, to the annual banquet of the association, which took place February 7. These gentlemen highly appreciate the invitations so courteously extended.

His is the season of the year when friends and business houses send greetings and good wishes to each other. Perhaps the most beautiful souvenir and New Year card issued in this country is that sent out by Mr. George W. Harrison, manager of the Franklin Publishing House, this city.

It is an unusually attractive piece of art work and reflects great credit upon Mr. Harrison. A "Dream of the Dead Year" is a poem of rare merit by Major Charles W. Hubner, and is prettily printed and illustrated on the card.—Atlanta Constitution.

Memorial Association has been organized and incorporated at Washington, D. C, for the purpose of preserving the most noteworthy houses at the Capital, that have been made historic by the residence of the nation's greatest men.

Of suitably marking, by tablets or otherwise, the houses and places throughout the city of chief interest to our own residents and to the multitude of Americans and foreigners that annually visit the Capital.

Of thus cultivating that historic spirit and that reverence for the memories of the founders and leaders of the Republic upon which an intelligent and abiding patriotism so largely depends.

The purposes of this association are worthy of all praise.

at Knoxville, January 25th, to protest against the policy of discrimination against American marble and in favor of the foreign article, as shown by the fact that in the contract for marble to be used in the new Congressional Library building at Washington, only \$38,000 was awarded for native marble and \$600,000 was given to foreigners. This unjust discrimination was denounced, and resolutions were unanimously adopted calling upon the congressmen from Tennessee to have the matter investigated and the injustice remedied. A strong petition to Congress was also drawn up and forwarded, stating the facts in the case, and requesting that Congress shall pass a law requiring that, hereafter, in letting contracts for buildings erected by the United States, an equal chance for competition shall be given to the products of American quarries when they are equal to foreign stone.

This matter is one of vital interest, and the quarrymen of every State in the Union should unite with their patriotic comrades in Tennessee, to have this unwise and ruinous policy of discrimination against the interests of our people abolished.

A BEAUTIFUL WORK OF ART.

S E are indebted to the courtesy of the Chicago Architectural Sketch Club for a copy of "Sketches," handsomely bound and containing elegant samples of the work of its talented members. We are informed in the gracefully written "prologue" to the volume, that the contents are the result of work done at odd moments, after working hours, by the members of the Club. It is therefore all the more creditable and deserves the praise of every lover of genuine art. This Club is certainly keeping pace with our progressive century, and is worthily holding its own with the best Clubs of the land in this country and in Europe. The Club is indebted to the generosity and art-love of Mr. Robert Clark for an "Annual Medal Fund," and several of the sketches of winners of these medals are represented in this dainty volume. The book is copyrighted and copies can be had at one dollar each by addressing Mr. Arthur R. Durkee, 1640 Unity Building, Chicago.

ure home government, aptly says the Chicago Builder and Trader, "spending much time and money in legislating on the tariff and other questions of vital importance, would do well to turn their attention to the fact that there is little in foreign markets but what can be excelled at home—and in regard to our marble industry it seems an outrage that so much money should be expended in Italy for an inferior article." This criticism has reference of course to the appropriation of six hundred thousand dollars for the purchase of foreign marbles to adorn the walls and corridors of the new Congressional Library building at Washington. It is to be hoped earnestly that Congress will look into this matter—it is a serious one—and give American stone at least an equal chance with the products of foreign quarries.

erecting a very handsome store-building in that city on Market street for C. C. Bloomfield, with portage entry, red sandstone front, and costing twelve thousand dollars. It is built for retail trade, and more especially for a chinaware store. The first two stores have high ceilings, the wide galleries forming intermediate stories. This virtually makes a six story interior though but four stories outside.

In the central portion of the building is a large well or interior court, in which the main stairs are located. Above this court is a large skylight in the roof, casting a flood of mellow light on each story. The appointments of the building are in all particulars first-class. We give a handsome illustration of the building in this issue of The Southern Architect.

of the design that was prepared by our well-known Atlanta architect, Mr. G. L. Norrman, for the proposed Georgia building at the World's Fair. Had it been built as designed by Mr. Norrman, Georgia would have been represented by a building second to few on the grounds for effective and graceful architectural form and proportion. Georgia made an egregious blunder in refusing to take her proper place in the Columbian Exposition—even as a matter of business and self-interest the mistake is unpardonable. In regard to Mr. Norrman's design, he certainly deserves the complimentary notices which he has received from the architectural press of the country, both as to the merits of the design and the capacity of its accomplished author.

MOVEMENT is on foot to hold a convention of the Governors of the Southern States on the 12th of April, to adopt some method of calling the attention of the world, through the Columbian Exposition at Chicago, to the splendid inducements and opportunities which the South offers to home-seekers and to capitalists desirous of making profitable investments. It is certainly a wise movement, and all the Governors will doubtless attend the meeting. The convention was called by Governor Fishback, of Arkansas, to meet at Richmond. It is to be hoped, however, that Governor Tillman's suggestion that the convention shall meet in Atlanta will prevail. Atlanta's central and commanding location, and her acknowledged pre-eminence as the great representative city of the New South, entitle her to the distinction of being honored by this convention of Southern Governors.

Atlanta will entertain her august guests royally.

R. Wheelock made an excellent toast-master at the banquet, which so brilliantly closed the second annual session of the Southern Chapter. When the hall was opened at ten o'clock, Manager Freeman showed the guests into a superb scene.

The long tables were soon occupied by a happy crowd who paid their respects to the rich and varied menu which had been prepared for the occasion. On the left of the elegant menu cards was the following: Second Annual Convention Southern Chapter of the American Institute of Architects, Birmingham, Ala., January 12, 1893. Committee of Entertainment, Charles Wheelock, T. H. Maddox, D. A. Helmich."

Speechmaking began about midnight. The toasts and speeches were good, rivaling in flavor the choice Havanas and in sparkle the flowing champagne, which filled the intervals of speechmaking. The charming affair wound up long past midnight, members and invited guests joining in a circle around the tables and singing "Auld Lang Syne." Altogether, in the words of one of the enthusiastic participants "It was great!"

by Mayor Fox, of Birmingham, tendering to the members of the Southern Chapter the hospitality of the city, deserve permanent record in the columns of The Southern Architect.

He said: "Birmingham always welcomes to her confines representative bodies of men, but especially pleasing is it to me, as mayor of this city, to meet here the great builders of cities—architects, the genius of whose skill has erected the lofty monuments and towering structures that make grand, beautiful and substantial the cities of our land. To you, gentlemen, we make special bow, doff our hats and turn over the keys of this city. May your stay here be pleasant, and not only profitable to yourselves, but selfishly, let me say, to the people whom you honor with your presence."

Hearty cheers greeted the speaker.

The welcoming remarks of Mr.Charles Wheelock to the visiting architects in behalf of the local committee were also felicitous. He said, in substance that he hoped the stay of the visitors in the representative new city of the industrial South would be alike beneficial to them and to Birmingham; that he felt assured that they could not remain in Birmingham twenty-four hours and fail to experience something of a broadening of ideas and spirits.

Mr. Wheelock was warmly applauded.

WE give an excellent likeness of ex-President Bruce in this issue. We requested President-elect Goodrich to forward us a likeness of himself for this issue, but it failed to come in time. We hope to have the pleasure of producing the cut in our next issue.

RED IN ARCHITECTURE.

T is a healthful and agreeable sign of progress in Augusta, says the *Chronicle*, to see the color red—the terra cotta color—being more and more used in new buildings. It is said that a place is not a city—has not emerged from the town state—until it has used its first piece of building terra-cotta. Terra-cotta is reddish.

It is an encouraging and agreeable sign to see the use of red, pressed brick, red mortar and terra-cotta effects and colors in Augusta building. It betokens an undercurrent of building growth and purification of architectural taste which is well known to and understood by a large class of people. It means not only that there is a period of great building activity in Augusta, but that these buildings of all sorts will be of a better class than heretofore, in better style, handsomer and after the fashion of the rest of the business world.

At one of Augusta's expositions a manufacturer of terra-cotta refused to exhibit, saying that he could not sell a piece of terra-cotta in Augusta—"it was not used here yet." In Atlanta, however, he said, he sold large quantities of it. This would not be found to be the condition in Augusta now.

A red flannel excites a bull. The reason for this is inexplicable, strange, but true. Red is a wonderful color. It stimulates the energies and excites the nerves. The newest and the liveliest towns of the country are what we would call "red towns." Red aspects, red buildings affect business life, making it more vigorous, enterprising and ambitious. Strange that the simple matter of a color could so largely affect a people, but the truth is a psychological one, and is beyond dispute. The best and most attractive and pleasing new buildings in Augusta are red buildings, red brick, red mortar, etc. Augusta is growing red. Let her grow rapidly redder.

THE press generally is taking up the cudgel in defence of the home marble industry against the foreign article. The New York World shows the injustice done by the government in the matter of marble for the new Congressional Library building. It says that the marble of Tennessee, Georgia and Vermont is, in many respects, the equal of the finest found in Europe. Commenting on the same subject the Baltimore Manufacturer's Record pertinently remarks, that so far as appears from the controversy which has resulted, there seems to be no ground for the selection of foreign marbles in preference to the American product other than the fancy of the officials in charge of the construction of the Congressional Library. It would seem far more fitting that this magnificent building should have its interior decorations constructed from American stone, even if such a course should necessitate some additional expense. In point of quality nothing can be said against the American marbles in behalf of the foreign stone. Our marbles enjoy a reputation which ought to entitle them to selection for such a purpose apart from all considerations of cost and public policy. The Tennessee quarrymen claim that they can furnish stone at prices paid for the foreign products, and of a superior quality, durability and color, and under such circumstances, says the Record, there is every reason why the American product should have the preference over all others.

THE SOUTHERN ARCHITECT has already expressed its conviction concerning this unwise discrimination against our native products, and while it may be too late to rescind the action of the authorities at Washington in this particular, yet the power of the press and public sentiment will, we are sure, effectually prevent a repetition of this folly in the future.

THE CONVENTION AND ITS RESULTS.

O Case devote a large amount of our space this month to the record of the official proceedings of the Second Annual Convention of the Southern Chapter of the American Institute of Architects, held in Birmingham, Alabama, January 10-12.

These proceedings will be found interesting to every member, as well as to those architects who are not yet members. The Convention was in every respect successful, and shows decided advance beyond the results of the first Convention. The large increase in membership is very gratifying and the constantly growing success of the Chapter is now beyond peradventure.

The social features of the occasion were delightful and the feeling of harmony and good fellowship which was displayed, indicates the vast amount of good which this organization can do, and has already done, in pro-

moting the social welfare of the profession.

A number of able papers were read, and the discussions were marked by earnestness and a desire to promote the mutual interests of all concerned. A splendid impetus has been given to the Chapter by this Convention, and its great practical business, as well as the pleasant social purposes, will, we are sure, soon manifest themselves by the enrollment on the lists of the Chapter of every reputable architect in the Southern States.

STANDARD CONTRACT.

THE Inland Architect press is the licensee for the exclusive publication of the revised Standard Contract form, adopted and recommended for general use by the American Institute of Architects and the National Association of Builders by the Joint Committee. Concerning this revised contract form the Inland Architect for January remarks: The new form, which is printed elsewhere, shows a marked improvement upon the old in the matter of brevity, but the changes are not as radical as it was supposed they might be after four years of trial, a fact which speaks volumes for the excellence of the first draft and its acceptance by architects and contractors. The architect still acts as agent for the owner, the contracting parties place the architect in the position of arbitrator, and the only change in the form of arbitration committee noticeable is that it is specified that none of the three arbitrators shall have had previous connection with the work. The insurance clause seems to be omitted, and also that referring to transfer of contract by the contractor, and that regarding claims for additional work. On the whole, while the general phraseology is almost entirely changed, and the conditions greatly simplified, the general trend is the same as that of the form so wisely compiled in 1888 by the committee representing the American Institute of Architects, the Western Association of Architects, and the National Association of Builders, and which has since superseded the use of every other form with the majority of architects and contractors in the United States. It should not be forgotten that this contract was the result of the combined experience and thought of the best architects and builders of the United States, brought together during the year of the greatest activity in the Western Association of Architects and the National Association of Builders, aided by the mature judgment of the American Institute of Architects at a time when all thought in architectural lines was most active, and its exponents were enjoying a period of intellectual life never before reached by the profession.

THE excursions tendered the members of the Convention to Bessemer, Howard-Harrison Pipe works and Ensley furnaces were greatly enjoyed. These places are noted business centers, and bespeak the marvelous enterprise of Birmingham and its suburbs. Speaking of this trip the Age-Herald says: "The special dummy train, which was furnished by the Birmingham Railway and Electric Company, left the Caldwell at 8:30 o'clock in the morning and there was a run to Pratt Mines, the Ensley furnaces, Howard-Harrison Pipe works, Bessemer, and intermediate points, and the visitors were greatly interested in what they saw. The train was well stocked with eatables and drinkables, and the excursion party had a great time, returning to the city late in the afternoon. The visitors expressed themselves as greatly pleased with what they saw."

THE fall of De Lesseps, the illustrious French engineer, shows the mutability of fortune, the paltry value of wealth, fame and honors, to which men usually attach paramount importance. How rapid, how terrible the fall-from affluence to poverty, from the highest social position to a common felon's cell! We pity the old man from the bottom of our heart. He was more sinned against than sinning, and is suffering mainly for the crimes committed by others-some of these the grandees of France—association with corrupt and unscrupulous men, "keeping bad company," was the ruin of De Lesseps. The story of the Panama Canal scandal, and that of the most famous of the men connected with it—of the venerable engineer himself—carries with it a moral of profound significance, a lesson which it concerns us all to study with very serious mind, with direct application to ourselves.

T a recent meeting of the Sanitary Association in Savannah Dr. Le Hardy speke of the with which the plan for securing a State Board of Health for Georgia had been received. He said further:

"The time for the passage of a bill for health purposes in Georgia has not vet arrived and will be deferred so long as the people of Georgia regard money spent for the preservation of health a waste. There is but one thing left to drive them into it, and that is fear. If cholera had spread in the United States during the past season we would have obtained a board of health through State legislation, and the convict labor of the State would have been put to work for sanitary purposes instead of being farmed out to some influential citizen to reward him for pulling political wires.

"The question of establishing a State Board of Health has been discussed several times before the Legislature, bills having been presented for that purpose, but so far the efforts have been vain."

This indifference to the adoption of systematic measures for preserving the health of the people is reckless and criminal. If persisted in it will lead to disaster and death. The health of a community depends largely on the vigilance with which the laws of sanitation are enforced, and in measures for preventing the foul gases of defective sewers from poisoning the air with malaria. This holds good even in ordinary times, but with a cholera epidemic threatening us, ready to spring upon us at the first favorable opportunity, the most extraordinary efforts will be necessary to prevent the most fatal and widespread calamity. Why will our city and town governments and our General Assembly continue to trifle with this solemn matter in such a dangerous and shameful way?

THE ARCHITECTURE OF GOVERNMENT BUILDINGS.

THE only discordant architectural note at Jackson Park is the Government Ruilding says Charles Park is the Government Building, says Charles Dudley Warner, in Harper's. It may have been built by the best man in the world, by a good story-teller and raconteur, by an able lawyer, or by a brilliant veterinary surgeon; it is not in harmony with the other buildings, and seems to have been erected according to the spirit of the Federal government, without consultation with the architects. The United States is spotted all over with government buildings, custom-houses, postoffices and court-houses, voted by a generous and logrolling people, and built by a Federal superintendent. Some of these buildings are hideous; some are simply commonplace; nearly every one is uninteresting (some in Washington excepted), and incapable of responding to the demand of art that it should raise a sentiment of pleasure in the breast of the spectator. Now and then the superintendent may have been an architect and an honor to his profession. But it was clearly impossible for one man adequately to cover so vast a field, or have sufficient variety of conception to satisfy art or to meet the requirements of a country so varied as ours in climate, atmosphere and sites. The consequence has been monotony when it has not been something more offensive. There are scores of buildings as much alike in architectural ugliness as loaves of bread turned out of a baker's oven. This is manufacture; it is not art; and it is not worthy of an enlightened country that has money to spare and the whole ancient and medieval world to draw on for instruction, to say nothing of its being the most inventive and ingenious of nations. Now if the construction of these Federal buildings had been given to different architects of genius and reputation in the different States, we should have had not only variety, but noble edifices scattered over the country, many of them worth a considerable journey to see. There was a man by the name of —, who was the architectural boss when the Federal government was spending millions annually in costly constructions. It was probably just an accident that he didn't build our war vessels also. But we were not building many at the time. It will take years and years, and perhaps conflagrations to get over him. But think of the presumption of — in making the design for a Federal building in Boston, for instance, while Richardson was alive! Millions of money wasted, not even for revenue only, nor for protection, but on the theory that a clever man can play the fiddle, or twenty fiddles at the same time, although he has never had a fiddle in his hand. And not only that. These millions might have gone into buildings that would not only have been a lasting credit to the country, but would have been an instruction to the people, would have educated and raised the public taste, and been the most powerful stimulant to the growth of high art in this country. When the president is sick, it is noticed that he does not call in his supervising architect, but summons the best medical skill. When Uncle Sam wants any more buildings, we trust he will allot them, here and there, to skilled architects, who will each, thus chosen, have a noble ambition to serve the country with his talents, and by the aid of the allied arts to erect buildings which shall be admired and praised. Alas! Jackson Park too late shows us how beautiful we might have been. If the talent of the country had been stimulated and rewarded by important public commissions, it is quite certain that the country would have no reason now to fear comparison of its architecture with that of any contemporary.

A BEAUTIFUL SOUVENIR.

Year's card with the compliments of the season to its patrons. It is handsomely embellished with a poem by Atlanta's talented author, Major Chas. W. Hubner.

The Franklin Publishing House is now in a home of its own on Ivy street and Edgewood avenue, one of the handsomest buildings in the city.

It does an immense amount of work in the publishing line. It issues the Code of Georgia, the Penal Code of Georgia, the Report of Supreme Court of Georgia, the Georgia Form Book, the Laws of Executors, Administrators, etc., of Georgia, Digests of Georgia Reports, Field's U. S. History, and History of Georgia Baptists, besides minor publications.

In addition to these the Franklin Publishing Company owns and publishes the *Southern Cultivator*, and The Southern Architect, both handsome publications of their kind.—*Atlanta Journal*.

WHY NOT GEORGIA MARBLE?

on to remark that the owners of marble quarries in Georgia and Tennessee are complaining, that a very large proportion of the marble to be used in the library building at Washington is to be obtained from Italy, and that the discrimination against the marble of this country is unjust. The complaint is well founded, says the News, and should be noticed by Congress. There is no good reason why American marble should not be given the preference in the construction of our public buildings.

It may be true that finer marble can be obtained from Italy, but there is plenty of marble in this country of very fine quality, and it is good enough for our public buildings. It is said by competent judges that there is just as good marble in this country as in any other part of the world. Many architects, however, have a prejudice in favor of Italian marble, and they favor the use of it whenever they have an opportunity to do so. Even if the Italian marble is of a finer quality than any that can be obtained in our quarries it doesn't follow that we must necessarily use it, if the home product will answer our purposes. Marble of excellent quality can be obtained in this State and Tennessee, and at prices very much less than that of Italian marble. There isn't one person in a hundred who could say from a personal examination that Italian marble is better than American, and not one in a thousand who wouldn't be just as well satisfied if American, instead of Italian, marble should be used in the library building. Why, then, should the architects of that building be permitted to put the country to the great expense of importing marble from Italy for the building?

The Georgia and Tennessee marbles excite general admiration for their beauty and quality, and in the buildings in which they have been used they have given great satisfaction. It seems strange that those who are so anxious to build up home industries should be so willing that there should be such a discrimination against home marble, as is shown by those who have charge of the construction of the magnificent new library building at Washington. The Southern Architect hopes that Congress will settle this matter definitely, and for all time to come, in favor of our native marbles.



OFFICERS OF THE SOUTHERN CHAPTER	1893.
L. F. Goodrich, President	Augusta, Ga.
E. G. Lind, Vice President	Atlanta, Ga.
W. P. Tinsley, Secretary and Treasurer	Lynchburg, Va.
DIRECTORS.	

. B.	Woodruf	ř							Macon,	Ga.
. C.	Burke								Memphis, Te	nn.
. H.	Morgan.								Atlanta,	Ga.
om.	. Wood								Sherman, Te.	xas.
. H.	Maddox.							B	irmingham,	Ala.
	· C. · H. om	. C. Burke H. Morgan. om. Wood	C. Burke H. Morgan om. Wood	C. Burke. H. Morgan. om. Wood.	C. Burke. H. Morgan. om. Wood.	C. Burke. H. Morgan. om. Wood.	C. Burke H, Morgan om. Wood.	. C. Burke . H. Morgan om. Wood.	. C. Burke H. Morgan om. Wood.	B. Woodruff Macon, C. Burke. Memphis, Te H. Morgan Atlanta, om. Wood Sherman, Te H. Maddox Birmingham,

AMERICAN INSTITUTE OF ARCHITECTS.

OFFICERS FOR 1893

Edward H. Kendall, President	New York, N. Y.
Alfred Stone, Secretary	Cnicago, Ill.
Samuel A. Treat, Treasurer	Chicago, Ill.

VICE-PRESIDENTS:

Damei H. Builliam, First vice-11	e-identChicago, Ill.
Henry Van Brunt, Second Vice-Pr	esidentKansas City, Mo.

BOARD OF DIRECTORS :

Alfred Stone, Providence, R. I. George W. Rapp, Cincinnati, O. William G. Preston, Boston, Mass W. W. Clay, Chicago, Ill.

Richard M. Hunt, New York, N. Y. E. M. Wheelwright, Boston, Mass. James W. McLaughlin, Cincinnati, O. Wm. S. Eames, St. Louis, Mo.

For three years. Joseph F. Baumann, Knoxville, Tenn. P. P. Furber, St. Leuis, Mo. R. W. Gib-on, New York, N. Y. C. H. Johnson, St. Paul, Minn.

For two years. C. F. McKim, New York, N. Y. William Worth Carlin, Buffalo, N. Y. S. S. Beman, Chicago, Ill. William C. Smith, Nashville, Tenn.

W. M. P indexter, Washington, D. C. George B. Ferry Milwaukee, Wis. George C. Masor, Jr., Philadelphia. Levi T. Schoffeld, Cleveland, Ohio. M. J. Dimmock, Richmond, Va.

STANDING COMMITTEES FOR 1893.

Committee on Foreign Correspondence: Richard M. Hutt, Chairman, New York, N. Y.; William Le Barron Jenney, Chicago, Ill.; Dankmar Adler, Chicago, Ill.; Charles F. McKim, New York, N. Y.; Henry Van Brunt, Kansas City, Mo.

N. Y.; Professor William R. Ware, New York.; Professor N. Clifford Ricker, Champaign, Ill.; T. M. Clark, Boston, Mass.; Professor C. Francis Osborne, Ithaca, N. Y. Committee on Education: Professor Russell Sturges, Chairman, New York,

Committee on Uniform Contracts: Samuel A Treat, Chairman, Chicago, Ill., D. Adler, Chicago, Ill.; Alfred Stone, Providence, R. I.

Committee upon Conservation of Public Buildings: Richard Upjohn, Chairman, New York, N. Y.; Presidents of Chapters.

Committee on Competition Code: Charles E. Illsley, Chairman, St. Louis, Mo. Place of next Convention, Chicago, August, 1893.

SECURE YOUR OWN HOMES.

See no reason why that useful development of modern commercial life—the Building and Loan Association-through the instrumentality of which thousands of wage-workers in our cities have been enabled to secure their own homes, which otherwise they could not have done, could not be made equally available for our rural population. The principle which governs these associations in cities would remain the same, only the methods of application need to be modified to suit the local circumstances.

This building and loan association plan has proved itself practical and beneficial in towns and cities, for the acquirement of homes through small monthly payments, which are scarcely missed and in a few years result in the securing of a home for the beneficiary, and why should it not be just as applicable for that purpose in the country? The money otherwise paid out for rent, goes towards paying for a home for yourself. At the end of seven or eight years you have a home to show for your outlay. What have you to show paying rent to the landlord?

PROCEEDINGS

OF THE

SECOND ANNUAL CONVENTION

OF THE

Institute of Architects. Southern Chapter of the American

HELD AT

BIRMINGHAM, ALA., JANUARY 10TH, 1893.

THE Second Annual Convention of the Southern Chapter of the American Institute of Architects was called to order January 10, 1893, at 12 o'clock M, in the parlors of the Caldwell Hotel, Birmingham, Ala., by Mr. A C. Bruce, of Atlanta, Ga., President.



PRESIDENT A. C. BRUCE.

On behalf of the architects of Birmingham, an address. of welcome was made by Mr. Chas. Wheelock, and also by Mr. Fox, mayor of Birmingham, and was responded to by the President and Vice-President.

A recess was then taken.

2:30 P. M.—On reassembling the roll was called and the following Fellows were in attendance upon the Convention, viz., A. C. Bruce, Atlanta, Ga.; D. D. Woodruff, Macon, Ga.; W. S. Smith, Birmingham, Ala.; T. H. Maddox, Birmingham, Ala.; D. A. Helmich, Birmingham, Ala; Chas. Wheelock, Birmingham, Ala.; L. F. Goodrich, Augusta, Ga.; C. C. Burke, Memphis, Tenn: E. G. Lind, Atlanta, Ga.; Jas. M. Maddox, Birmingham, Ala.; W. P. Tinsley, Lynchburg, Va.; F. L. Rousseau, Birmingham, Ala.

The President, Mr. A. C. Bruce, of Atlanta, delivered the following address:

Officers, Members and Friends of the Southern Chapter:

It is with pleasure I meet you at this our second annual convention, and in laying down the office to which your partiality elevated me a year ago, it seems proper that I should briefly describe what we have endeavored to do the past year, and to also bring before you such suggestions as have occurred to me for the perfecting of our organiztion. The work thus far has been mainly initiative, placing the objects of the Chapter before the architects of the South, securing a charter and in general correspondence to awaken an interest among those we hoped and felt would join with us in attaining our end. Our worthy Secretary has been very efficient in discharging his duties by correspondence and keeping before the profession in the columns of our organ, The Southern Architect, the need of organization, and several times during the past year I have addressed the members and others, impressing upon them the importance of unity of action in this the commencement of our organization. This large and intelligent body of representative men of the Several states before me to-day is but the advance guard of what we hope our annual conventions will be in the future. May the best interest of each and all, and of the profession in general, be promoted by our assembly in this hospitable city of Birmingham.

As yet we are but young in the development of our profession in the South and have had but limited means to encourage its progress as a profession, yet I hope that the younger members will devote all their spare time to the study and development of architecture, from a theoretical as well as a technical standpoint, and endeavor to give a freer scope to its artistic influences, than the older members had in their meager opportunities of study.

I can remember thirty years ago, when quite a young man, I asked an English master-workman how I could become an architect. He replied, "Work in the day and learn the practical; study at night and learn the theoretical; study the works of Nicholson, Pugin, Ruskin, Jones," and others he named. We had not then the benefits of the superior photographs, nor the later photoengraving work, nor the still later beautiful and artistic photogravures to assist us, but relied wholly on the engraved work in the foreign journals, for as yet architectural publications in this country were very rare, the only ones I could get being "Downing's Country Homes," and later, about 1857 or '58 I believe, the publications of Samuel Sloan, of Philadelphia, which found a ready sale in the Southern States, and really from his studies sprung those elegant Southern mansions still seen throughout the States, emblems of an era of refinement slowly passing away. But what do we now see opening to the student of architecture? In every State technical schools with architectural studies as a part of the curriculum; architectural photographs giving a tour through the land of Flowers and Art; all the principal cities of England, France and Italy photographed, so that with a few hours of study he can explore the scenes of months of travel, which formerly only the wealthy and the professor could enjoy.

And not only in the old countries but in our great America the march of architectural progress has kept pace with the spirit of the times. And even in this country it was one of our Southern brethren, Richardson, that, like Michael Angelo of old, had greatness thrust upon him which he did not expect, and perchance it came so thick and fast he had to give up the ghost and leave an unfinished style for the ambitious young men to work out, not on the conditions of Angelo at St. Peter's, that no salary should be inserted in the agreement, but

on the contrary the siren cry of the Angelo of to-day, is, "what about the commission?"

Yet it is a very important fact in this day and generation to keep up the standard of proper remuneration for services rendered. How necessary it is then that as a profession we should possess the requirements of ability and business tact necessary in the administration of our business, that we may be able to give our clients value received for the small compensation we ask, and in the great revival which we see in the works of the rising generation of young architects, the successes of those who have earned a reputation, have been the result of close study, actuated by artistic aspirations worthily won among the closest competitions.

As a profession architecture can boast variety in its labors; great scope is given the imagination and artistic mind as it is unfolded in the studies of design and the theory of construction, the latter being the great object of the means intended, yet not losing the artistic treatment which should always be studied, and after the ideal is formulated on the board, then the masterpiece on which depends the successful carrying out of the work is the specification -defined by one writer as "a written statement of particulars for a certain proposed structure," to formulate which the architect should first have a perfectly practical knowledge of the profession. This is considered one of the most difficult branches of the profession, a duty which cannot be delegated to the draughtsmen or any other employee. How often does an experienced practical builder smile to himself at many of the absurd volumes of specifications exhibited to him to tender on, or execute work from, and which is often the cause of the great difference in bids! It should be simple in language and expressed in a clear, concise way.

As a body we have a great work to accomplish in the development of Southern architecture. Our climate demands entirely different planning and there is a large scope of country to be worked, our prosperous cities, thriving towns and growing hamlets, all add to its varied wants and studies. We have not yet reached the building craze of our western brethren; we have plenty of room to spread out on and plenty of fresh air, and our genial climate demands that we plan for comfort and make room for the occupants without stint or cost.

Let us then in this our second annual convention endeavor to assist each other in discharging the trust in our hands, in every good word and work, as brethren engaged in a profession, as a labor of love as well as for the money benefits we derive, and when we meet on the bloodless field of competition, either in Alabama, Florida, Texas, or Georgia, or in the Lookout Valleys of Tennessee, may we not forget the interests of all as a whole, and not act as if we were destitute of honorable sentiments, and not worthy of association. Let us then co-operate with our Eastern and Western brethren in the profession and reap the benefits to be derived from a united interest in our chosen profession.

I will close by quoting a sentence taken from the Journal of Architecture of Philadelphia, which expresses fully the object of our assembly to-day: "Architects as a fraternity should, by their intermingling and interchange of ideas, by their unremitted and unanimous action, and, if possible, in a broad and all-embracing organization, working from within by and upon its membership, attempt to render the methods and practice of architecture more uniform, raise the average standard of design, and by making all true criteria of architectural merit more generally known and more universally adopted, pave the only highway to the popularity of true architecture which seems at present to be open."

The President: The next thing in order is the report of the Board of Directors.

The Secretary: As Secretary of the Board of Directors I wish to state that but one meeting of the Board of Directors was held in 1892, which occurred at Atlanta, Ga., September 1st. At this meeting the letter ballot, similar to that used by the A. I. A., was adopted. The Board of Directors also instructed the Secretary to have a Certificate of Membership engraved with such conditions shown in its face as render it void after the following annual meeting, a copy of which, properly filled out, to be given to each Fellow, upon the full payment of all dues for the current year. A copy of this certificate is herewith submitted for your consideration. It was further ordered that Fellows of the A. I. A. requesting membership in this Chapter be excused from furnishing photographs or other drawings as evidence of their professional ability, but in other respects the application blank to be filled out by each applicant and indorsed in the usual way.

The Board of Directors held a meeting this morning, prior to the assembling of this Convention, and after considering the applications filed in proper form with the Secretary, they recommend for membership the following named architects, viz.: W. E. Hall, Winston, N. C.: Tom Wood, Sherman, Texas; C. H. Read, Jr., Richmond, Va; G. W. E. Field, Richmond, Va.; J. G. Barnwell, Rome, Ga.; C. C. Wilson, Roanoke, Va.; J. W. McClain, Birmingham, Ala.; E. W. Smith, Lexington, Ky.; Geo. W Stewart, Dallas, Texas; Harry D. Breeding, Huntsville, Ala.; P. S. Rabbit, Galveston, Texas; J. A. Tempest, Houston, Texas; W. A. Bird, Birmingham, Ala.; Wm. Stanton, Vicksburg, Miss.; W. Chamberlin, Knoxville, Tenn.; T. H. Abrahams, Charleston, S. C.; B. B. Davis, Paducah, Ky.; H. H. Huggins, Roanoke, Va.; F. L. Smith, Lexington, Ky.; Geo. E. Dickey, Houston, Texas; J. Riley Gordon, San Antonio, Texas; Henry C. Holland, Houston, Texas; C. W. Bulger, Galveston, Texas; W. T. Walker, Montgomery, Ala.

On motion of Mr. Helmich the report of the Directors was adopted and ordered to be spread upon the minutes of the meeting.

On motion of Mr. Goodrich the letter ballot was suspended and the above named architects were unanimously elected Fellows of the Chapter.

On motion of Mr. Wheelock the chair appointed a committee (consisting of Mr. Lind and Mr. C. Wheelock) to notify the applicants present of their election.

The President: The next thing in order will be the report of the Committee on Charter.

The Secretary: As a member of this committee I beg to report that the Charter has been obtained from the American Institute of Architects and is here for examination by the members present.

On motion of Mr. Goodrich the report of the committee was accepted and the committee discharged.

The President: The next thing in order will be the report of the Committee on Seal.

The Secretary: As a member of this committee I beg to state that the design of the seal was chosen by your committee from a number of designs submitted, and the seal was engraved and furnished by the American Seal Works.

On motion of Mr. Goodrich the report of the committee was adopted and the committee discharged.

The President: Mr. Wheelock, Chairman of Local Committee of Reception, wishes to make a statement regarding the presence of members of the Legislature of Alabama, who are now in the city.

Mr. Wheelock: I wish to state that I have had a conference with several members of the Legislature regarding

the anticipated bills to be presented to the Legislatures of the Southern States in regard to laws controlling the practice of architecture, and it is necessary that we now appoint a time to give these gentlemen a hearing, and I move that three o'clock to-morrow evening be set as the time for this conference.

Which motion was unanimously carried.

At this point Mr. Bassett read an address from Mr. Hubner, editor of The Southern Architect, who was unavoidably prevented from attending:

GREETING OF THE SOUTHERN ARCHITECT

To the Members of the Southern Chapter of the American Institute af Architects in Annual Session in Birmingham, Alabama:

Gentlemen-No profession is more thoroughly identified with the material progress of this section of our country, or more instrumental in developing a taste for the beautiful in Art, than the men who honor the profession of Architecture. No part of our great Republic has cause to be prouder of its representative architects than the South. Along with the wonderful progress of the Southern States since the war in material prosperity and industrial growth, wealth and power, there has been apparent an encouraging development of the art-taste among our people on its architectural side. This finds expression in numerous grand public buildings and handsome private residences; and this practical art-taste has been promoted and fostered by educated and experienced architects in our midst, whose wholesome influences and whose respect for the classic models of their art, have largely contributed in suppressing the vulgar and the bizarre, and in bringing about among our people the good taste increasingly expressing itself to-day in the architectural appearance of our towns and cities, in public edifices and private residences, as well as in the tasteful homes of our suburban and rural districts.

In view of these facts it is certainly a gratifying spectacle to see, gathered in this renowned and prosperous city, a body of men who are co-workers in this grand work, who worthily represent their noble profession, and to whose labor, zeal, fidelity and culture, the remarkable development of the art-taste of the New South, already alluded to, is largely due.

The organization of the Southern Chapter of the American Institute of Architects was a happy thought of those who conceived it, and the results thereof have proved the wisdom of their conception, and its practical value to the profession in the South. All honor is due to the founders and promoters of the Chapter, and they will be held in grateful remembrance as long as the beneficial influences of this organization shall exist.

Beginning with a few zealous members, and under many disadvantages, the Chapter has grown and strengthened and expanded its sphere of usefulness. Nor will it cease its wholesome growth until its sphere shall embrace this entire section, and in its membership shall be found the name of every reputable architect in the South. Its objects and purposes are well known to all. The measures to be discussed and the actions to be enforced are all intended to conserve the best interests of the profession, and of the public; to elevate the profession to the high plane it is entitled to and to keep it there, and to engender and promote the fraternity and harmony so necessary to every organization, and whose effects are so well expressed in the old adage, "in union there is strength."

Proud of its position as the official organ and literary representative of this Chapter, The Southern Architect will leave nothing undone that would foster and advance the objects and purposes of this body. Its management

feels the responsibility of its position, but also its opportunities for good works in a noble cause. Its constant aim shall be to do its duty, and to promote whatsoever is true, and good, and beautiful. To do this to the best advantage, the good will and practical co-operation of every present and prospective member of the Chapter is necessary. Surely we shall not be mistaken in the hope that this good will and practical co-operation will be given us now, and in still larger and increasing measure as time goes on.

As your organ and representative in literature, we greet you, and heartily wish all the members of the Chapter, and the profession everywhere, health, prosperity

and success during the new year!

The President: The next thing in order will be the appointment of a committee to examine the Treasurer's books, and I appoint Messrs. Lind and James M. Maddox on that committee, and request that they make their report to-morrow morning.

The President: The next thing in order will be the appointment of the usual Nominating committees, and I will appoint Messrs. Helmich, Woodruff and Wood as members of these committees, and Messrs. C. Wheelock, Smith and Burke as the other committee, with the request that they report at the afternoon session to-morrow.

At the suggestion of Mr. Goodrich, Mr. Bassett representing The Southern Architect, made explanation of engravings to be published, and recommended that pen and ink perspectives, of any sizes, should be submitted from which to have the cuts made, and that they were usually reduced to 6x9 inches in size.

After a discussion participated in by quite a number of the architects regarding the position that The South-ERN ARCHITECT sustains to this Chapter, the members were earnestly requested to contribute to its columns and illustrations.

A discussion by several of the members brought out the fact that the By-Laws do not state specifically what should be considered as unprofessional conduct, and that preferring charges against a member for making drawings at a reduced price could be construed as a matter of opinion, and therefore further, as a matter of persecution; and that said By-Laws cannot be changed or amended except by publishing the fact at least thirty days before voting upon such a change, and in consideration of the desirability to have specific regulations regarding this and other points that were mentioned. Upon motion of Mr. L. F. Goodrich a committee of three was appointed to revise the Constitution and By-Laws, and at as early date as possible to have the Secretary send a copy of the same to each Fellow (at least thirty days before our next annual meeting), and to give full notice that the same will be changed at that meeting, which motion was unanimously carried and the chair appointed Messrs. Morgan, Lind and H. Wheelock on said committee.

On motion of Mr. D. A. Helmich the Convention adjourned until 10 o'clock to-morrow morning.

SECOND DAY-MORNING SESSION.

The President: Before proceeding with the business before the Convention I wish to state that the hospitality of Berry Bros. has been tendered the architects present, and that carriages will be in waiting, when this meeting adjourns for dinner, for a drive about the city.

On motion of Mr. Lind it was determined that we will adjourn at 12.30 to accept the invitation so kindly tendered by Messrs. Berry Bros

The President: Mr. Lind has a paper to read before this Convention on the "Relation of the Architectural Profession to the Public." He will now read that paper

RELATION OF THE ARCHITECTURAL PROFESSION TO THE PUBLIC.

Mr. President and Gentlemen:

When in the course of human events it becomes necessary for societies to hold annual conventions, it seems equally necessary that somebody should have something to say on such occasions. In accordance with this ancient usage our esteemed President has deputed me to address you on the relation of the architectural profession to the public, and I will do my best to acquit myself of the honor thus conferred upon me.

Past experience teaches that the fewer and shorter the addresses made on such gatherings, the more they are appreciated, and as this is the second annual meeting of the Southern Chapter of the American Institute of chitects, and I want to be appreciated, my paper shall be

brief and to the point.

An experience of over thirty years as a practicing architect entitles me perhaps to lay claim to being the oldest architect in this Chapter. Commencing business in 1858, I have (with the exception of the usual weeks devoted to vacations, etc.) been hard at work ever since. My nose is still kept to the grindstone. Fortune is still Fortune is still smiling upon me, though at a safe and long distance, and though I am not happy, I do not complain, for really "my lines have fallen in pleasant places." Many genuine pleasures have been vouchsafed me in the course of designing and erecting the large number of buildings committed to my charge, by which I think the world as well as your humble servant has been benefited.

To me, the study and practice of architecture has been

a genuine pleasure, and if it could only be divested of its sordid trade-like environments, I know of nothing more fascinating; but I must return to the business in hand—the relation of architects to the public. That is

what we are here to consider.

A good deal depends upon who the public may be; whether Eastern, Western, Northern, or Southern. I have had a little experience with both, especially the three others, but the Southern public comes out on top of everything, architect and all; and that is paying the Southern public a great compliment if it knows how to Southern public a great compliment if it knows how to

According to another ancient custom, I shall now divide my subject into three parts—head, body and tail, with such subdivisions as circumstances may dictate

and your patience will allow.

In doing this I would remind you of the story told of an old Scotch divine, who preaching from the text, "The Devil goeth about as a roaring lion," divided the subject into three heads, as follows:

1st. Who, the devil, is he?
2d. Where, the devil, did he come from?
3d. What, the devil, is he roaring about? So we will begin with-

Who, the architect, is he?

Well, at present he is a man, though in the near future he will be a woman also, for quite a number of the so-called weaker sex are forging their way to the front (I myself have my eye on three at least); and ere many moons have passed away, will be ready to take their place among the faculty, and why shouldn't they? Women have æsthetic tastes, are equal with men at the brush, pencil and pen. They shine in the study, the parlor and drawing room, and why not at the drawing-

To proceed, the architect should be a man of good education; have a natural taste for art and design, and ought to be well grounded in the practical details of the profession, besides having a complete theoretical train-He must know all about style and styles, be fully posted on the history of architecture of every land and clime; thoroughly versed in use and abuse of all known and unknown building materials; he must be an expert mathematician; a first-class engineer, a good deal of a merchant; a smart lawyer, of unquestioned and unquenchable integrity; a modest, affable and agreeable gentleman, always ready and willing to work, with or without pay (money is a very minor consideration, so it would be as well if he were a millionaire), and ought to possess the patience of at least one Job

If we add to all of these qualifications two others, which I was taught in my youth were indispensable, viz., that he should be able to perform on some musical instrument and to speak at least two languages, then

you would have a model man-architect.

I don't know how it is with my brethren about the musical portion of their education, but I take it for granted each one can blow his own horn. And I will guarantee none of you were very long in business before you were able to speak two languages, good and bad,

very effectively.

Now, whether the public expects to find such a rara avis, such a multum in parvo in one man, or whether it would appreciate him if it did, is another question. My private opinion is, that the public cares very little about him any way, and thinks a great deal more of the "practical man," the carpenter who is ever ready to furnish plans for nothing and to put up his building for less. If the public employs an architect at all it is grudgingly, and only because it cannot help itself. He is a necessary evil, a very costly luxury, and the thrifty public has very little use for such. Why an architect should be paid five per cent. for merely a few sheets of drawings and specifications, and how he dare to pretend to be superintendent of a building which he visits only once a day, or perchance once a week, is more than the public can understand. If the public built a house every day, or even every year, it would become better posted, and the architect as a consequence, be in greater demand. mand. But it doesn't. Not one-thousandth part of the public ever builds at all, and the portion that does build seldom does so more than once in a lifetime. So you see it has taken the public and the architect a long time

to get acquainted. Why this state of things should exist is, after all, not entirely the fault of the public. never was a time in the world's history when professions of every kind were so full of pretenders. We have not only "quack doctors," (why "quack" I don't know), but quack everything else, architecture coming in for its

share of the genus.

A young man with a little smattering of drawing and a big spattering of ambition suddenly rushes to the front, opens an office, hangs up his shingle, and blows his horn to such good purpose, that a patron is forth-coming much earlier than to his more intelligent and better qualified rival, the rara avis before alluded to, and for half the usual fees he serves his client, and generally serves him out. But what can we expect for two and a half per cent.? After a few years of practice and the ruination of several unfortunate speculators, he in time acquires a respectable knowledge of the business he only professed to know, has made a living, and goes on his way rejoicing. But in the meantime he has done much mischief to the profession.

No wonder then, with such an experience, if the despoiled client should feel somewhat aggrieved, and telling his tale of woe to others, warn them from the evil door.

As a remedy for this unfortunate condition of affairs, I would suggest that all of our best efforts be used in getting the profession of architecture placed on the same platform with that of divinity, medicine and law, whose professors are not permitted to practice until they have undergone a rigid course of study, passed an equally rigid examination, and then properly certified that they are what they profess to be. The would-be architect would then be stimulated, if not compelled to read up and work for his degree, and it would bring with it not only education, but an amount of respect for the profession and of the profession which never comes to it now.

Having disposed of the head of my subject, I am led, as a matter of course, to the body, or second division:

Where, the Architect, does he come from?

He comes from anywhere and everywhere no land under the sun where an architect may not be found. He is of every clime, every nationality, all sorts and all sizes; and is as necessary to the comfort and wellbeing of mankind as food and clothing.

It would be impossible to enumerate the number and variety of styles which emanate from this vast number and variety of genus, as he made his advent on earth with Adam, the first man, so he will be the last to take his

leave, if he ever leaves at all.

So you see, he is somebody of consequence. necessary evil, he is also a long abiding one. You and I may estimate him at his true worth, but we want the public to be equally sagacious and well-informed.

Time was when the architect and builder were one, but with the increased demand for civilization the one

was one too few. The architect could not find time to plan and build likewise, so a division of labor became necessary, the artist and designer becoming the architect, and the constructor and mechanic the builder, much to the advantage of the employers of both and to the profit of all Thus the architect evoluted into existence, and might spend a very pleasant one but for the thousand and one little annoyances, as common to his calling as to every other; so he takes as little heed of them as

may be.

In the not very distant past the domain of art in this country was occupied almost exclusively by foreigners. The natives of the soil were too busy tilling it and making crops by the sweat of their brows to give much time to luxuries. As a consequence the arts flourished with a foreign accent. Less than fifty years ago the greater portion of the buildings in this country were designed by foreigners, while to-day these reunited States occupy as conspicuous a place in the domain of fine art as any country in the world. The accumulation of wealth by the older generation, as a reward for their constant toil and steady habits, gave to their children the advantages of better education, facilities for travel and a contact with the outer world, which has resulted in an improved race, with minds expanded and enlarged, filled with the love of the beautiful, and purses equally well filled for gratifying their improved tastes. The results are to be seen everywhere in the beautiful and costly buildings which have sprung into existence, so that few countries can boast of superior. The fine arts are cultivated and flourish to an extent hitherto unknown, and if they go on at the same rapid and American pace for another half century, this country will be the most magnificent and let us hope, the best—on top of the globe.

We now come to the tail, or last part of our subject: What, the Architect, does he want? Or, in the expressive language of the divine, what is he roaring about?

He wants recognition as an artist and as a scientist; he wants to be placed in his rightful position before the public he desires to serve. He wants to work for fame as fortune. Wealth is not everything in this life; a little we'll fed and well feed pride and vanity is very acceptable now and then, and very often the best efforts and best qualities of a man are brought out by a little—ever so

little—well-timed praise and commendation.

He wants to be believed in and trusted; he wants his client to feel that in employing him his best interests will be subserved, and his work faithfully performed. He wants to be as promptly paid for his services as a mechanic is for his; and moreover, he wants the same rights as are given the mechanic, a lien upon the building his patience and skill have caused to be erected. While his modesty may be too great to admit of his forcing himself into prominence, he wants to feel that he is somebody, and then he will be somebody; let him feel that anybody can be he, and he will soon be nobody, if he has any pride at all about him; and when he has finished his work and indulges in a commendable pride upon surveying his own creation, he wants to have the full credit of the design, and not have the wind taken out of the sails by such expressions from the secretly gratified owner, "Oh, well you know I designed the building myself, but just got my architect to put it in shape for me." Yes, I often wonder, when I am compelled to listen to such foolish boasts, what the building would have been had the architect not put it "in shape

Now, what an architect does not want is to be classed with the "jacklegs" who never did learn the business nor ever could. He does not want to be invited to go into competition where he is expected to put a dollar "in the slot" and take out a nickel. It is all very well to say "competition is the life of trade," and that it ought to bring out the best points of an architect. Experience does not bear out the statement "The battle is to the strong"—the man in the ring. The race is to is to the strong"—the man in the ring. The race is the swift; the fellow who does the most drumming. short, it is the thick-skinned, half-taught, not-to-be-downed, strong, hearty pushing interviewer who wins the prize. The modest, quiet, unassuming architect who may have spent much money and many years in fitting himself for the art he professes and adorns, has but a poor show in most competitions; and if he enters upon them at all he is almost sure to find the prize awarded to a design as inferior to his own as he may be superior to his opponent.

I need scarcely tell you that in many a competition

the award is made beforehand, and if, out of policy, half a dozen men are invited to send in competitive designs, it is only because the committee wish to get half a dozen ideas for the price of one. That is what the architect is roaring about, and it's enough to make him roar.

One word more about competitions, and I have done. It not infrequently happens—let us hope very infrequently—that after an architect has done his best and won the prize, he finds he has been underbid by a rival, and is forced to accept half the regular fee for his services or leave the prize untouched. Five per cent. is a small remuneration for the services an architect is expected to render. For this he must be held responsible for the safety and stability of the building, see to every minutiæ of detail; must undergo much anxiety, spend many toilsome days and sleepless nights perfecting his work, and when all is done, perhaps has to wait many weary months before he can collect his fees, and that is what he, the Architect, is roaring about.

The President: Mr. G L. Thompson, electrician, is present, and has a paper to read on "Electricity and its Applications to Building and Equipping Buildings" He will now read that paper.

ARCHITECTURE: AS CONNECTED WITH ELECTRICITY.

The principal act in practical electricity is to see that the machine, instrument or battery be properly connected with the wires and other apparatus to be operated. Electricity, however, as connected with architecture, is a subject on which little has been said, and at first thought one might wonder how the two could in any way be connected; truthfully, only a few years ago they were not; but as demands are advancing and increasing every month and year for both architecture and electricity, the two are rapidly and gradually coming together, as without doubt every architect and electrician has experienced.

An architect is seldom, if ever, seen who has not expressed a desire or thought to be more fully posted on subjects pertaining to electricity, and on the other hand there are very few buildings being erected to-day in which architecture and electricity do not display a prominent part.

My desire at this time is to mention a few of the most important subjects in which the two are the more closely related, and although covering a very large field, they can be condensed to such an extent as to be expressed under two headings, namely: "Electric Lighting" and "Transmission of Power."

Referring to the former, each architect present has probably devoted a great amount of time and thought to this subject, when having on hand a building of considerable size which is to be wired for electric lights, or in which an isolated electric lighting plant is to be used.

I will not only suggest for the future, but comment on the past, by saying that, as a rule, in the construction of buildings, no provision is made for properly locating the wires and wiring devices; but this is left for the electrical contractor to find for himself the best location he can, which is generally "a round-about course" in

"an out-of-the-way place."

In commenting I am in no way finding fault, as, owing to the comparatively short time the two have been brought together, there has been no very convenient time in which to refer to the work; but by unison in our efforts the desired result can be obtained, which is through experience, to superintend the erection of buildings of different classes so they will be not only neat in appearance, and safely constructed, but conveniently planned as to the fittings of different kinds. The remark is often made that electricity is in its infancy, and while this is true we must also acknowledge that electricity is here, and must be cared for as well as any other industry.

It is customary, in planning buildings, to make provisions so that the main steam, gas, water and drain pipes are carried through the structure in a systematic manner, which not only reduces the cost of installing, but facilitates and lessens the cost of repairing if needed in future

This plan in connection with electric lighting should also be observed and carried out for the same reasons. Electricity is rapidly coming in general use, not only for store and general use, but for residence lighting; and each building erected should have, if possible, a little space near its center, running from the basement to the attic, in which can be placed the gas meter and main

feeder, the electric meter with its main wires and wiring devices, as well as the batteries and wires necessary for operating the annunciators, burglar-alarms, watchman's clock and automatic gas-lighting attachments. This is not only convenient and desirable, but by concentrating and giving these well-earned, labor saving necessities a place, it makes them more perfect by reducing the chances for a possible interruption to the service, and if additions, alterations or repairs are at any time necessary, it greatly reduces the cost of same.

The space required for this work is of little value compared with the satisfactory results which would be obtained, and depends, in all cases, on the size of the building and the purpose for which it is to be used. In exceptional cases, where the structure is unusually large, a main shaft or riser would be advisable, together with two or more additional ones in remote sections of the building.

Electric current for lighting purposes, where supplied from central station plants, is generally furnished from what is known as the alternating circuits, although there are comparatively a few cities—and generally in the larger ones—where the direct current is used.

When electricity is generated in the building itself this form is known as an isolated lighting plant, and most of the larger buildings are equipped in this way.

The nature of the current from the two machines is entirely different, and a building in which the wiring is adapted for one will, in some cases, not answer for the other; it is, therefore, advisable in the erection of buildings to-day to have the wiring so planned and arranged as to be equally adapted and efficient for either system. This can be easily arranged and the work performed at a slight additional expense, so that a building can be lighted from a central station plant, or, if at any time desired, the necessary machinery can be placed in or near the basement and the current manufactured by the owner.

Another use for which electricity is in quite general demand and in which more advancement will be made in future than in lighting work is the "transmission of power": and while the energy of the greatest electrical minds in this as well as foreign countries is now being directed to this branch of the industry, we have at the present time power delivered at our doors for operating machinery of all kinds, and among the most successful and probably the one more closely connected with architecture is the transmission of power for operating elevators for either freight or passenger service.

Both the electric and hoisting machinery are specially constructed so as to be coupled direct on the same bedplate; and as the machinery only runs when the car is ascending or descending no expense is incurred while the elevator is not in motion.

At the present time there are several hundred electric elevators in successful operation, and as they have only been introduced about two years the prospects in this direction are very encouraging.

There is probably no doubt but that within a very few years this plan will be generally adopted for this service whenever the electrical power can be procured, as the advantages are numerous over any other system.

The electricity or current consumed is recorded by an electric meter, so the actual amount of energy used is paid for—no more or no less.

In conclusion I trust that special care will be taken and more thought given to the better arrangement of electric wires and wiring devices which are to be installed in public or private buildings, in which architecture and electricity are alike advancing hand in hand.

The President: The Secretary has a paper written by Mr. M. J. Dimmock, of Richmond, Va., on "The Practice of Builders Making and Furnishing So-Called 'Architectural Drawings."

Mr. Dimmock's essay was read by Mr. W. E Hall, of Winston, N. C.

THE PRACTICE OF BUILDERS MAKING AND FURNISHING SO-CALLED "ARCHITECTURAL DRAWINGS."

Mr. President:

This is a matter which concerns the profession of architecture generally, but more particularly does it interest those who are located and practicing in the smaller cities and towns where the evil is the greatest.

The Southern States in the past were strictly an agricultural district, and consequently the cities were few and the plantations large, and there was little which led to the study of architecture, and the buildings partook more of the practical than the artistic in design. There were public buildings and many planters' houses which were admirable in design and were planned to suit the wants and requirements of the day and climate, and

some of those are to-day worthy of study.

But a new condition of affairs now exists, and the new South has become manufacturing as well as agricultural; and, as a consequence, her cities are growing and new towns have sprung into existence, and so new architectural conditions are required. The resources of the South are being rapidly developed and capital from home and abroad is seeking investment. Great business schemes are projected; and it is a recognized fact that after maturing a scheme when the planning and erection of buildings is necessary, the first thing to be done by the projectors is to secure the professional services of an architect—one in whom all confidence is reposed—to advise with and prepare plans, etc. of a building which shall fill all the requirements of the special scheme, not only as to arrangement of plan, but also as to appropriateness and beauty of design, and which shall not fall short, but surpass, if possible, other buildings of a similar character. This is a recognized business procedure and the only proper mode of carrying out the scheme in hand. Now, to find this architect and adviser one must first look for an educated man in his profession and one who has had experience in all matters pertaining thereto and is able to study and solve the prob-lem given him in a careful and business-like manner in all its details; and the architect, to do this, must have years of study and long experience and a certain aptness for his profession, coupled with decision of character and a gentlemanly bearing, which are all necessary for success.

These qualifications it would be unreasonable to expect in a builder who has neither had the time nor means of study, and whose early manhood has been spent in the details of probably but one branch of the carpenter's trade. These men have, in some instances, familiarized themselves with a few plans and specifica-tions prepared by architects and have finally essayed the practice of architecture; and in most cases the community loses a good builder and gains a person too large in his own estimation for the honorable trade, and yet greatly too small for the profession he calls "Arch e tect-

uring."
The trade of a builder is a most honorable one, and carries with it great responsibilities; and its emoluments are always satisfactory and often large; and there is always room in any community for a good builder while

there should be no room for a pretender.

It would be impossible in this paper to enter into a criticism of the drawings furnished by builders and to follow them up and examine the buildings erected from them; but suffice it to say, they are in almost every case crude, raw and undigested, and even to the uneducated eye there is something that stamps them as builders' drawings, and the house erected from them is neither in design a thing of beauty nor in plan a joy forever.

The question is how shall we seek to remedy this evil? The fault lay not at the door of the builder; for he, in making these so-called architectural designs, is but supplying a demand of the public, the masses, who are too often ignorant and careless in all matters of architecture, and who, thinking to save the professional fee, will expend often twice the amount of this fee in patching up mistakes in faulty plans and specifications, and inflict on the community a Dolly Varden monstrosity.

We can only hope for an improvement by the gradual education of the public to a higher standard of architecture. That this standard is improving there is little doubt; and here in the Southland, which we all love so well, and in whose development we are peculiarly interested, there is a growing demand for better things, and the public is discriminating between good and bad architecture. This is the age of travel and observation, and much is learned by comparison. Art is now diffusing itself into everything, and this is seen in the simplest forms of household decoration; and the child of to day is surrounded and educated by artistic objects that were not thought of in our boyhood days.

And so it behooves us now, one and all, to strive for

this end; and with unceasing study and the careful preparation of every detail of design, both in small as in large buildings, to improve the architecture of the South, and to place it on a level with that of any other part of this land. Nature has been most bountiful, and the resources of our country are unlimited; and we desire the traveler in the future to pause and admire and study our architecture as well as our history.

At this point Mr. W. S. Smith, of Birmingham, offered a resolution looking to the strengthening of this Chapter by further obtaining a charter from the State of Alabama, which elicited considerable discussion, and was finally referred to a committee consisting of L. F. Goodrich, D. B. Woodruff and F. L. Rousseau, who reported that in their opinion it is inexpedient at this time to take any action, and recommended that the resolution be laid upon the table. Upon motion of Mr. Lind the report of the committee was adopted.

At this point the Secretary stated that there had been a successful attempt made by some members of the Institute to have the dictionaries make a clear distinction between the "supervision" of work by architects and the "superintendence" of work, and that it was understood that such distinction would be in future editions of the dictionaries, and that it was high time that the profession generally were dropping the expression "superintendence" as applied to their "supervision" of work; as superintendence could be furnished only by persons who remained all the while on the building, and this was clearly the duty of the clerk of the works; and the expression "superintendence" should not be used in connection with architectural service.

Mr. Helmich: In view of the fact that the evening session will be occupied by the members of the Legislature, and the amount of work that is yet to be accomplished, it strikes me that we should go into the election of officers at this morning session instead of afternoon, as formerly decided upon, and since Mr. Burke has waived his objection to proceeding before hearing the report of the Committee on the Treasurer's Accounts, I move that we hear the report of the Nominating Committee now.

Which motion was carried.

Mr. D. A. Helmich, chairman of one of the committees, submitted the following recommendation: Mr. L. F. Goodrich for President, W. P. Tinsley for Vice-President, Mr. P. E. Dennis, Secretary and Treasurer. Directors: D. B. Woodruff, T. H. Morgan, Tom Wood, T. H. Maddox and C. C. Burke.

Mr. Charles Wheelock, chairman of the other committee, made the following recommendations: Mr. L. F. Goodrich for President, Mr. E. G. Lind for Vice-President, and W. P. Tinsley for Secretary and Treasurer. Directors: C. C. Burke, T. H. Maddox, T. H. Morgan, D. B. Woodruff and Tom Wood.

Since both committees recommended Mr. Goodrich for President, on motion of Mr. Lind, Mr. W. S. Smith was directed to cast the vote of the Chapter for Mr. Goodrich, which resulted in the election of Mr. L. F. Goodrich as the President for the ensuing year.

A ballot was taken for Vice-President, which resulted in the election of Mr. E. G. Lind as Vice-President for the ensuing year.

A ballot was taken for Secretary and Treasurer and resulted in the election of W. F. Tinsley as Secretary and Treasurer for the ensuing year.

The names composing the Board of Directors, recommended by both committees, being the same, the Secretary and Treasurer was directed to cast the vote of the convention for the Board of Directors, and resulted in the election of C. C. Burke. T. H. Maddox, T. H. Morgan, D. B. Woodruff and Tom Wood for the ensuing year.

SECOND DAY-AFTERNOON SESSION.

3 P. M.—The President: We will now hear the report of the Committee appointed to examine the Secretary and Treasurer's accounts.

Mr. Lind: As Chairman of this Committee I beg to report that we have examined the Secretary and Treasurer's accounts and find them correct

On motion of Mr. Goodrich the report of the committee was received, and the committee discharged.

TREASURER'S REPORT.

Amount collected for dues		
Leaving balance in treasury\$ Amount of outstanding claims of all kinds and not	53	04
paid\$	60	30

Upon motion of Mr. Helmich the report of the Treasurer was adopted and ordered to be spread upon the minutes of the Convention.

Mr. Wood: I desire to read a letter recently received from a Birmingham firm which was evidently intended as a bribe, as an inducement to use the wares and manufactures of this particular firm, which is certainly not legitimate, and all parties so inclined to consider architects as being commodities that are on the market for purchase should be informed that this is a mistake, and that a tender in this direction will ever be considered an insult by the architect receiving it.

And upon motion of Mr. Wood, which was unanimously adopted, it was ordered that this letter be published in The Southern Architect.

On motion of Mr. Wheelock the aforesaid letter was referred to a committee consisting of Messrs. C. Wheelock, Helmich and T. H. Maddox, architects, of Birmingham, to investigate these parties and their methods, and to report the same to the Secretary.

The President: This being the time fixed for the conference with members of the Alabama Legislature, two of whom are present, we will now hear from them.

The Hon. Mr. O'Brien was introduced to the Convention, and made a pointed speech regarding the laws to be presented to the legislatures of each of the Southern States, and said that he was heartily in sympathy with us, as he knew of the many difficulties that we have to contend with as a profession, and that he would gladly introduce any bill into the Legislature of Alabama, that we would formulate, and do all in his power to have it become a law.

At the conclusion of Mr O'Brien's speech Hon. Mr. Shugart was introduced to the Convention and spoke in high praise of the calling of our profession, and said that he was confident that the proper laws would be enacted to regulate the practice of our profession, which in his opinion would prevent many accidents happening from insecure construction, and the many ills arising from improper ventilation, lighting, heating, etc, and that he would assure us that he would use every endeavor to have proper laws, bearing upon this subject, passed by the State Legislature.

At this point Mr. Rousseau made a speech looking to the welfare of the profession in the Southern States, which was pertinent, pointed and well delivered, and was well received by the members present.

Mr. Wheelock: Mr. President, I move, if it is in order, that the place for holding our next annual Convention be now taken up for consideration.

The motion was seconded by Mr. L. F. Goodrich, who suggested that Augusta, Ga., be selected as the place for holding this meeting.

Mr. Wood: I suggest that some point in the great State of Texas be selected as our next place of meeting. On motion of Mr. Wheelock, Sherman, Texas, was named as the place for holding the meeting.

On motion of Mr. Lind, Augusta, Ga., was named as the place for holding the next meeting, and by a rising vote of fourteen to two, Augusta, Ga., was selected as the place for holding the next annual Convention.

At this point, Mr. Bruce, the retiring President, said that he would resign the office of President to his worthy successor, and Mr. Goodrich was escorted to the chair.

On motion of Mr. Bruce, it was ordered that the proceedings of the Convention held in Atlanta, Ga., last February, and the proceedings of this Convention be published together in pamphlet form, which motion was unanimously carried.

The Secretary: Quite a number of our fellows, who for various reasons could not be with us, have written, expressing their regret at not being able to attend this meeting, one of whom is Mr. Nixon, of Atlanta, who has also prepared and forwarded to be read, a paper on the "Problem of Architectural Education."

THE PROBLEM OF ARCHITECTURAL EDUCATION.

In preparing this paper on such a problem I am fully aware that architectural education has been fully outlined by the various institutes of the country purporting to teach the students various branches of the study of architecture in a one, two or three year's course. But the question before us is, what shall constitute the architectural student's course in the practitioner's office so as to combine practice with theory and fit our young men as efficient assistants?

The wealth and luxury of the American nation is fast pushing to the front the architectural excellence of its structures, and it behooves us to look ahead and examine closely whether there may not be some remedy for evils existing.

I will endeavor, in a contemplative way, to discover and lay bare the defects and principal causes.

First—There is a great want of sufficient practical, theoretical and scientific education of the architectural student of to-day.

Second—A want of practical knowledge in the contractor.

Third—A want of acquaintance on the part of the public in the principles of taste and scientific building.

It is too plain to the profession that the limited knowledge displayed by some, claiming to be practitioners in the execution of their work, leads them into absurd extravagances, and who labor under the mistaken-structural meanness for economy, and thus mislead and often discourage the many projects for fine buildings from even being placed in the hands of the more skilled.

The builder, lacking the proper practical and scientific knowledge, enters now upon the work to attempt to carry out these gross absurdities, or further tries to induce and influence the minds of those building to break confidence with the skilled architect and execute the work from haphazard conglomeration of his confused mind, from what the plans were intended to convey, evidence of which appears too often in the preposterously inconvenient and grotesque masses of folly, totally devoid of all taste and architectural structure in our chief cities.

There are some extenuating circumstances sometimes surrounding all this, such as the proprietor attempting to build with insufficient funds, and the employment of a builder without reputation or knowledge.

Of course, we admit that there are competent and honorable members of the building fraternity and the architectural profession are ready to recognize such and are much indebted to them.

The public universally are ready to admit, too, that

they lack the essential knowledge necessary, in a certain measure, to make them understand just what they want, and to what extent they ought to place reliance upon the architectural services employed. They certainly know when to appreciate a well designed and executed building when the proper care has been bestowed upon it. Why, how much of the detail of many of our buildings of to-day are worthy of imitation? But take the buildings of the Greeks, Romans and Europeans of the early and middle ages, and you will find a delightful field of research. But with all this it is a fact that the architect of to-day has less control, or is less able to influence the employer in the design, arrangements or material of the structures put into his hands for skillful manipulation, just as a physician would have in building up the physical condition from the patient's own prescribing. Take for instance the unscrupulous attempts by Buddensieck, and the fruitless efforts of the Albany State capitol of New York, endangering life and property as well as squandering of public and private funds; I ask is it reasonable to expect comfort and credit from the investment?

Knowledge, tradition and science have to be employed in designing and in the execution of edifices, and yet it is often expected from the heterogeneous mass of opinions to combine some daring innovations with ill-contrived plans for an experimental attempt to produce something out of nothing.

Now, all this goes to prove that the architect, builder and public must possess the necessary essential knowledge to be qualified for any undertaking. Integrity must take a hand too, and must characterize the dealings between architect and employer, and acknowledged skill and taste must be recognized for the honorable fulfillment of the work. The public will then pronounce the verdict at completion of the building. Public opinion is respected in this; and must be in all matters. It is the voice of the people, let us respect it in the higher arts and furnish suggestions for a necessary course of instruction and in acquiring such knowledge that will characterize the buildings of a nation.

It is proposed, therefore, that a National College of Architecture shall be established in the United States for the acquirement of architecture and the practice regulating it, as follows:

That after an examination, and the student is found to possess sufficient grounding in common school education, a term of two or three years shall be devoted to a thorough study of free-hand model and perspective drawing, geometry, mensuration and mechanics which shall enable the student to enter an architect's office as pupil, and after three years' apprenticeship, during which term he shall study and qualify himself in the principles of classic architecture and the styles of the middle ages, and practically delineate and trace scaled drawings and visit the various works in course of construction, he shall, after prescribed examination at the college, be acknowledged a member of the Architectural Association with a certificate to such effect, issued him by said college, which shall entitle him to accept a junior position in an architect's office at a stipulated remuneration.

That after a further term of three years, with additional practice as a junior, he shall pass an examination which shall qualify him as senior draughtsman. And after passing a still further examination in the nature and strength of materials, hydrostatics, prices, economy of construction and design and a higher knowledge of mathematics, construction, archeology, ventilation and heating, he shall be entitled to practice as an architect.

By this means I think we should insure excellence, as

a whole and avoid rudeness in design and premature decay and failure.

That every contractor, foreman or clerk of works shall be required to show his certificate of having passed the full course in his trade at one of the acknowledged technological institutes of the country and exhibit a practical knowledge of building in all its branches, and shall pass an examination at said college testifying to his ability in managing all classes of building, after which he shall be entitled to carry on and enter into contracts for the execution of public and private works.

That at our public schools and other places of learning the privilege shall be granted to the student of a course in designing and color (as well as music), that the general public by this means shall imbibe the spirit of taste and skill.

That all persons who shall have received their certificates of qualification shall be deprived of the privilege of performing their function in either an architect's office, or as senior draughtsman, junior assistant or builder, foreman or clerk of works, by reason of unskilful handling of work, if it is proved that they lack the information as herein prescribed, and shall be reinstated only upon a further examination by said college.

That the Board of Examiners shall be appointed annually to conduct all examinations, chosen from among the members of the profession in good standing, which shall also act as referees in public competitions.

In connection with all the foregoing suggestions, there are numerous theories to be considered, such as the maintenance and governance of such a national college, the studies taught, the library, collection of prize drawings and the minutiæ too voluminous to enter into detail now; but suffice it to say, that by the formulation of this institution of architectural learning it is proposed to insure to the public and to the individual the greatest economy, advanced taste, science and skill in building, that will be a credit to the nation and a profitable return for the great outlay of wealth, as well as providing the best means for a thorough, systematic and speedy education in the science and art of building, and which will tend to draw out the best and most honorable talent of the country, and will also insure the builder against the discredit of failure, and will inspire confidence to the investor; and chiefly it will be the means of encouraging proper friendly relations in all business enterprises to the benefit of the laborer, artisan, builder, architect and the public, all working together for the noble purpose of leaving behind standing monuments worthy of the country's pride. A. McC. NIXON.

Mr. Woodruff: In order that the work of the Secretary may be curtailed as far as possible, I wish to offer the following resolution:

Resolved, That all applications for membership in this Chapter in future must be accompanied by the admission fee of \$5.00 before any action can be taken thereon by the Board of Directors, except in cases of Fellows of the American Institute of Architects, or of any of its Chapters, or of State Associations, who shall be admitted without the payment of the membership fee.

The Secretary: I have a letter from the President of the American Institute of Architects, and also one from the President of the Ontario (Canada) Association of Architects, which I will now read.

MR. E. H. KENDALL'S LETTER.

New York, January 9, 1893.

A. C. Bruce, Esq., President Southern Chapter American Institute of Architects:

DEAR SIR—The very attractive programme of your second annual Convention was duly received. The proceedings will evidently be both interesting and instructive.

I am very much obliged to your Chapter for its kind invitation to be present, but a Directors' meeting of the Institute in Washington to-morrow evening, and a hearing on the following day before the Senate Committee on Public Buildings and Grounds, with reference to obtaining plans for government work by limited competition, will prevent my accepting it. With best wishes for a successful meeting, I remain,

Edw. H. KENDALL, Yours very truly, President A. I. A.

27 NORTH STREET, TORONTO, December 30, 1892. To A. C. Bruce, Esq., Atlanta, Ga., President Southern Chapter A. I. A .:

DEAR SIR-I regret that I am unable to accept the invitation of the Southern Chapter of the American Institute of Architects, to be present at its second annual Convention, as I have just returned after an absence of two months, and find that I have a large amount of work to do to get my office in proper shape.

I also regret that, owing to the above reason, I am

unable to prepare a paper to be read at the Convention. On behalf of the Ontario Association of Architects, I wish your Chapter every success in its efforts to forward the interests of our profession. I am, sir,
Yours very sincerely, S. G. Curry,

f our profession.
Yours very sincerely, S. G. Cukki,
President O. A. A.

Mr. Helmich: In order that the necessary bills may be properly framed and put before the various legislatures of the Southern States at as early a date as possible, I move that the President of this Chapter at his earliest convenience appoint three members in each State where this Chapter is represented, and that they co-operate with each other in formulating such bill or bills as will be for the welfare of our profession, and that these individual committees shall press upon their respective legislatures the importance of passing such wholesome and safe laws for the control of the practice of architects as is deemed necessary for the protection and welfare of the public.

Unanimously carried.

The President: I appoint Messrs. Helmich, C. Wheelock and Smith the committee for the State of Alabama.

The Secretary: I should have stated in the report of the Board of Directors, that at their meeting in Atlanta, September 1, 1892, the resignation of W. W. Goodrich, Atlanta, Ga., of membership in this Chapter, was accepted.

On motion of Mr. Lind, the meeting adjourned till eight o'clock to morrow night, in order that the hospitality of the Birmingham Street Railway Company, tendering an excursion to Bessemer, Howard-Harrison Pipe Works and Ensley Furnaces to morrow, be accepted.

THIRD DAY-NIGHT SESSION.

Meeting opened according to adjournment.

On motion of Mr. Bruce, the following resolution was

unanimously adopted:

Resolved, That the thanks of this Chapter be extended to the press of this city, and to all persons who have in any way contributed to the pleasure and success of this meeting, and especially to the persons who have so kindly prepared and read papers upon the various topics before this Convention, and last, but not least, of all, to the Caldwell Hotel for its kindness and attention shown the members of this Chapter during their stay in this city.

Mr. Bruce: I desire to offer the following resolution: Resolved, That the thanks of this Chapter be unanimously extended to all invited guests for the numerous courtesies and pleasant associations during our session.

Unanimously carried.

On motion of Mr Burke, the Secretary was voted \$100 as a recognition of his services, for the ensuing year.

The Secretary returned thanks for the kindness shown

him during the past year, and for the co-operation of the various officers and members, and pledged his best efforts for the control of the office for the ensuing year.

The President: Gentlemen, I wish to speak in praise of the untiring efforts put forward by our Secretary during the past year. I know that his duties were arduous, and I also know that he performed them nobly, and I think that we cannot hold the services of our Secretary in too high esteem.

Mr. Bruce: I move that Mr. Lind be requested to illustrate his treatise on "The Relation of Color to Music."

Which motion was carried, and Mr. Lind illustrated, to the edification and delight of the members present.

The President: I must thank Mr. Lind in behalf of the Chapter for his interesting explanation of the relation of color to music.

Mr. Bruce—the former President: In retiring let me return thanks for the kindness and courtesy shown me during the past year, and I hope that the Chapter in the coming years will be abundantly successful in the objects it has in view, and I desire, also, to return thanks to the Birmingham architects for the kind attention shown this Convention.

Speeches appropriate to the occasion were also made by Mr. Goodrich, the President; Mr. Burke, Mr. Lind, Mr. Rousseau, Mr. Wood, Mr. Woodruff, Mr. Helmich and Mr. Wheelock who said:

MR. PRESIDENT AND GENTLEMEN-The second annual conclave of our Chapter is about closing. I am happy to say that all of our meetings have been pleasant and harmonious, and I trust profitable to all, the recollection of which will ever be a green spot in our memory, and as the wheels of time roll on and the shadows grow deeper and life draws to its close, it will then be pleasant for us to look back through the vista of time and call to mind the reminiscences of this event; then let us so shape our lines on the trestle-board of life, so that when the grand "Architect of the Universe" shall call upon us to exhibit specimens of our skill, our work may be found good work and true work; such work as he is willing to receive. Then, indeed, shall we be entitled to enter that "house not made with hands" eternal in the heavens, and have our names enrolled on the tablet of heaven in letters of gold, bright, glorious and beautiful, for the good work of the true architect that he leaves behind will ever be as legible as the stars on the brow of the evening, and his good deeds will ever shine as brightly on the earth as the stars of heaven, and his good influence will still live when granite columns have crumbled into dust, and the glitter of titled aristocracy has forever faded away. In conclusion, gentlemen, we thank you, one and all, for your presence, and when you leave us to go to your various homes, you will take with you the good wishes and godspeed of a grateful people.

OFFICERS, 1893.

L. F. Goodrich, President, Augusta, Ga. E. G. Lind, Vice-President, Atlanta, Ga.

W. P. Tinsley, Sec'y and Treas., Lynchburg, Va.

Directors.—C. C. Burke, Memphis, Tenn.; T. H. Maddox, Birmingham, Ala.; T. H. Morgan, Atlanta, Ga.; D.

B. Woodruff, Macon, Ga.; Tom Wood, Sherman, Tex. Members.—T. H. Abrahams, Charleston, S. C.; J. G. Barnwell, Rome, Ga.; W. A. Bird, Birmingham, Ala.; Alexander Blair, Macon, Ga.; H. D. Breeding, Huntsville, Ala.; A. C. Bruce Atlanta, Ga.; C. W. Bulger, Galveston, Tex.; C. C. Burke, Memphis, Tenn.; Chamberlin, Knoxville, Tenn.; N. J. Clayton, Galveston, Tex.; Jas. B. Cook, Memphis, Tenn.; W. T. Cotter, Jacksonville, Fla.; B. B. Davis, Paducah, Ky.; P. E.

Dennis, Macon, Ga.; Geo. E. Dickey, Houston, Tex.; M. J. Dimmock, Richmond, Va.; W. T. Downing, Atlanta, Ga.; S. R. Duval, New Orleans, La.; A. S. Eichberg, Savannah, Ga.; Chas. A. Favrot, New Orleans, La.; G. W. E. Field, Richmond, Va.; L. F. Goodrich, Augusta, Ga.; J. Riely Gordon, San Antonio, Tex.; Willis E. Hall, Winston, N. C.; D. A. Helmich, Birmingham, Ala.; H. C. Holland, Houston, Tex.; H. H. Huggins, Roanoke, Va.; J. F. Hutchenson, Mobile, Ala.; E. G. Lind, Atlanta, Ga.; J. M. P. Lindsey, Atlanta, Ga.; J. G. Longstreet, Gainesville, Ga.; T. H. Maddox, Birmingham, Ala.; Jas. M. Maddox, Birmingham, Ala.; J W. Mc-Clain, Birmingham, Ala.; T. H. Morgan, Atlanta, Ga.; Frank Niernsee, Columbia, S. C.; A. McC. Nixon, Atlanta, Ga.; G. L. Norrman, Atlanta, Ga.; P. S. Rabitt, Galveston, Tex.; C. H. Read, Jr., Richmond, Va.; F. L. Rousseau, Atlanta, Ga.; Carl Ruehrmund, Richmond, Va.; E. W. Smith, Lexington, Ky.; F. L. Smith, Lexington, Ky.; W. S. Smith, Birmingham, Ala; Wm. Stanton, Vicksburg, Miss.; Geo. W. Stewart, Dallas, Tex.; Thos. Sully, New Orleans, La.; J. Arthur Tempest, Houston, Tex.; H. C. Thompson, Nashville, Tenn.; Albert Toledano, New Orleans, La.; W. P. Tinsley, Lynchburg, Va.; W. T. Walker, Montgomery, Ala.; C. Wheelock, Birmingham, Ala.; H. B. Wheelock, Birmingham, Ala.; C. C. Wilson, Roanoke, Va.; Tom Wood, Sherman, Tex.; D. B. Woodruff, Macon, Ga.

THE speeches made at the convention by two wellknown members of the Alabama Legislature, Hons. Frank P. O'Brien and John T. Shugart, on the proposed law for the protection and regulation of the profession of architecture, were well received and timely. These gentlemen pledged their best efforts to secure the passage of a just and reasonable bill. Mr. O'Brien stated his views fully, and gave forceful reasons why State legislatures should enact laws for the protection of architecture. While enacting laws for the prevention of malpractice in medicine and surgery, and dealing with other questions affecting the lives and well-being of the people, they should look to the safety of buildings. A man who was not versed in the science of architecture should not be permitted to plan buildings in which human beings were to live or to work. He did not wish to do any man harm, said the speaker, but as regards architecture he felt something like he did in respect to drugs. He would not like to swallow a prescription compounded by a man who knew nothing of pharmacy.

THE SOUTHERN ARCHITECT hopes that the work of influencing our State legislatures on this vital matter so auspiciously begun at this convention, will be followed by similar efforts in every State of the Union.

PANIEL QUILP, proprietor the Auditorium, is erecting in the rear of his Auditorium what is to be the handsomest electric light station in the South. The Southern Engineering Co., of Louisville, are now fitting up this plant and when completed April 1st will be one of the most complete electric light stations in the country, and will be without exception the handsomest and most complete station for isolated theatre lighting. In the boiler room they will place two 125-h. p. boilers of the tubular pattern, built especially for them by the Brownell Company, Dayton, Ohio, and will also reset and install with, the two new boilers a 100-h. p. boiler now in use, connecting the three in battery with handsome full fluse front.

Boston capitalists are on a visit to Columbus, Ga., with the view of developing the vast water power of that city.

CONVENTION PERSONALS.

Mixed Paints Manufactory, of Detroit, honored the convention with her handsome and genial presence. She is a lady of fascinating address, and is one of the most successful of commercial travelers or "drummers" in this country.

The paper on electricity as a motive power, read by Mr. G. L Thompson, of Atlanta, manager of the Isolated Lighting Department of the General Electric Company of this city, was a very able one, and was listened to with great interest. He is thoroughly conversant with his subject.

Mr. Zack Castleberry, of Atlanta, representing Pellegrini & Castleberry, was one of the conspicuous visitors. He is everybody's friend, and made friends of everybody present. The specimens of terra-cotta work he distributed will be pleasant mementoes of the occasion.

The Coaldale Brick and Tile Company, of Birmingham and Coaldale, exhibited an excellent collection of the various patterns of brick manufactured by this well-known firm.

Mr. Charles A. Conklin, of the Charles A. Conklin Manufacturing Company, of Atlanta, spent several day very pleasantly with the Chapter.

Mr. Lucien E, Davis paid a profitable visit to Birmingham by eloquently advocating the merits of the Southeastern Adamant Plaster before the members of the convention.

Ably but modestly Mr. James P. Robinson, manager of the Atlanta branch of the Groves Elevator Company; of Rochester, N. Y., sustained the reputation of his excellent house.

The Thorn & Hawkins Lime and Cement Company, of St. Louis, had specimens of their fine Acme Cement Plaster to show the members of the Southern Chapter.

The Caldwell House, quite as famous in the traveling world as the Kimball of Atlanta, distinguished itself by the excellent manner in which it provided for the comfort and pleasure of the members of the convention. It is a model hotel, perfect in its appointments, and its management leaves nothing undone to make this house one of the favorites of the South. The banquet prepared by the Caldwell will long remain a fragrant memory to every member of the Chapter and invited guests.

Berry Bros., of Detroit, manufacturers of hard oil varnishes, treated the members of the Southern Chapter to a carriage drive through the city and its many points of interest. The drive was greatly enjoyed by all.

The editorial desk of The Southern Architect is also indebted to this popular firm for a handsome inkstand, tendered as a souvenir.

Merchant & Co., the extensive tin plate manufacturers, of Philadelphia, were splendidly represented by Mr. Diebold, a gentleman of pleasing address and deserved popularity.

Mr. G. C. Gardner, of the well-known Gardner Sash Balance Company, Chicago, represented his company in person. He made many friends, and expressed himself as being delighted with the occasion.



ROBERT BURNS.

Read at the Burns' Celebration, January 25, 1893.

EAR to every Scotchman, dear to every man who honors manly independence, and to whom friendship, love, truth and patriotism are as a voice from heaven, when they are interpreted by the muse of Poetry, and illumined by the splendor of genius—dear to all such is the name of Robert Burns.

Let us not speak of his faults and his frailties—the dross purged from the fine gold of his genius by the purifying fires of suffering. Long ago a pitying angel, dropping tears of divine mercy upon the page that recorded them, blotted them out from the book of God's remembrance.

This day is sacred to the memory of Scotland's most illustrious son. On the shores of the Congo, the Ganges, and the Nile; in the primeval forests that skirt the glaciers of Alaska; on the palm-fringed banks of the Amazon; on the islands that slumber in the bosom of the South Sea; in the dark fiords of Norway, and on the frozen steppes of Russia—wherever the loyal heart of a Scotchman beats, you will hear his name spoken in tenderness, and will find a green wreath laid upon the altar of memory, sacred to Robert Burns.

In the rich man's palace, and the poor man's hut; on the deck of the ship that proudly breasts the billows of the Pacific, and in the frail fisherman's boat, tossing within the shadows of the stormy Hebrides, you will hear the witching music of our minstrel's harp, and listen to the deathless songs he sang.

Homer, Shakespear, Milton, Dante, Goethe—leave them to the immortality of their fame; give unto each his niche in the Temple of the Ages; gaze upon them with reverence, as you would gaze upon the unapproachable glory of the stars—but let us take Robert Burns to our hearts and into our homes. He shall be to us the interpreter of our affections. He shall sit at our table, its honored guest, when we drink a cup to the memory of "auld lang syne." We will laugh with him, and we will weep with him. He shall kindle the pure flame of religion, and of domestic happiness, as he paints for us the homely picture of the Cotter's Saturday Nightabove all, we shall open to him the holiest recesses of our hearts, and bid him sing the hopes and fears, the joy and the pain, the glory and the gloom, of the divine passion of Love! This shall be his niche in the Temple of Fame while the world stands, and the heart of Humanity remains true to its highest aspirations, and its noblest emotions.

Earth has many a spot around which cluster hallowed associations, holy ground, which we approach with unsandaled feet. Marathon and Thermopylæ; the Tiber and the Rhine; Runnymede and Bannockburn; Mount Vernon and Westminster—these bring to mind the mighty deeds and majestic names that shed imperishable glory upon the pages of History, or that symbolize whatsoever is great and glorious in the genius of our race.

No less worthy of honor and veneration is the spot where stands the humble mud-walled cottage in Ayreshire, in which Robert Burns was born, and also the spot, more sacred still, in the old kirkyard of Dumfries, where his ashes lie buried. There he can still be found—for it is the peculiar privilege of the Poet to make himself immortal, and to blend the divine part of his being with the very elements of nature. Every daisy in Scotland prints his name in living light on field and hill; every breeze whispers it; every rill and river repeats it; every sky-lark sings it; every cataract, blowing its silvery trumpet from the steep, proclaims it; and old Ocean himself, as he clasps fair Caledonia in his mighty arms, blends with the majestic harmony of his breaking waves the tender music of his name. Aye! its sound has lent to the speech of his native land a sweeter cadence, a tenderer grace, attesting the truth of the saving: "Let me write the songs of a people, and I care not who makes its laws."

Standing, in imagination, at the poet's grave, celestial radiance suddenly seems to flood the spot with almost unbearable splendor, and methinks I hear a voice, now

"Like all instruments,
Now like a lonely flute,
And now it is an angel's song,
That makes the heavens be mute,"

speaking unto me. It is the Genius of Scotland, saying: "Would'st thou see his monument? Look around! Behold, its everlasting foundations are laid upon the granite bases of the world; its mighty columns are the heavenward-soaring mountains; its dome is the arching sky, jeweled with stars. My Scotland is his tomb. In the hearts of my children shall his spirit live forever!" Atlanta, Ga. Charles W. Hubner.

"I AM MY OWN ARCHITECT."

The expression, "I am my own architect," is frequently used by men and women who are about to undertake the erection of a residence, either in the city or country.

People who are guilty of indulgence in this form of vanity may be divided into two classes. The first are those who, as they express it, draw their own plans and employ an architect only for the purpose of designing the elevations and other "unimportant" matters. They are frank enough to confess that, while they have large ideas, their ability as draughtsmen is not worth mentioning. They disdain to cultivate such mere mechanical skill.

The second class comprises those gifted individuals who are able to draw the entire set, which are handed over to the unfortunate builder securing the contract:

In reality the tragedy of the transaction does not fall upon the builder, whose life is made miserable during the work, but upon the neighbors and residents of the locality, before whose horror-stricken faces are constructed the hideous exteriors that result necessarily from the barbaric practice of the fine art. How much better would the building look if designed by a skillful architect in charge of the work?

A. C. B.

an architect for use in superintending and guiding the construction of a building is by no means settled as a matter of law. It sometimes becomes a question of grave importance to the architect, and to the owner as well, by reason of the large interest involved. The only wise and safe thing for architects to do is to make a contract in writing in all cases before entering upon an employment, and provide in the contract who shall own the plans if work is abandoned, as well as when the building is completed.



AN ILLUSTRATED MONTHLY FOURNAL,

DEVOTED TO THE INTERESTS OF ARCHITECTS, BUILDERS AND THE

HARDWARE TRADE,

OFFICIAL ORGAN

SOUTHERN CHAPTER OF THE AMERICAN INSTITUTE OF ARCHITECTS.

PUBLISHED BY THE

SOUTHERN ARCHITECT PUBLISHING CO.,

65, 67, 69 and 71 Ivy St. and Edgewood Ave. ATLANTA, GA.

TERMS OF SUBSCRIPTION:

IN THE UNITED STATES AND CANADA.

ONE COPY, CNE YEAR IN ADVANCE, - - - - - - - \$2.00

IN GREAT BRITAIN, IRELAND AND COUNTRIES OF POSTAL UNION.
ONE COPY, ONE YEAR IN ADVANCE, - - - - - \$2.50

Advertising rates furnished on application.
All remittances must be made by Post-office Money Order, Express Money Order, Registered Letter, Certified Bank Check, or Draft. We will not be responsible unless above means are complied with. Make all orders payable to The Southern Architect.

We shall be pleased to receive from architects, engineers, builders, and others articles treating on matters of interest to architects and the building trades.



In order to make this journal a true representative of Southern architecture, we will be glad to receive from architects and draughtsmen designs of buildings for illustration in these pages.

Store building for C. C. Bloomfield.—Hunt & Lamb, architects, Chattanooga, Tenn.

Residence for Fred. M. Scott.—Nixon & Lindsey, architects, Atlanta, Ga.

Initiation Sketch —for A. S. Club, by Denny.

seventh annual meeting at Wheeling, West Virginia, January 11th. Members claim that it was the most elegant and profitable meeting ever held. A large number of delegates was present from the leading firms of the country. A resolution was unanimously adopted pledging the Association against the use, for roofing purposes, of iron lighter in gauge than sixty-four pounds to one hundred square feet in the flat. The semi-annual meeting will be held at Piqua, Ohio, next July. Charles Connor was elected president, James Hicks, vice-president and R. J. Hyndman, secretary and treasurer. A splendid banquet closed the meeting.

N interesting foreign exhibit at the World's Fair will be a model of the Island of St. Thomas, Danish West Indies. It is about eight feet by four, built to a scale of six inches to the mile, painted in natural colors, showing the roads, country houses, ships and steamers in the harbor and the pretty town of Charlotte Amalia, with its two old legendary towers of Blackbeard and Bluebeard. It will be set into a table enameled in black, edged with gold with terra-cotta paintings of various spots of interest on the island, the whole being covered with plate glass.

lies Alabama City. In Alabama City is a furniture factory erected several years ago and standing ready for use, waiting for the right man. He has come in the shape of an Atlanta syndicate. Colonel Kyle owns the factory and he has leased it for five years, with the privilege of ten, to the Atlanta people. E. S. Morris is president of the company that will operate it; E. W. Kendall, vice-president and manager; Thomas Kirke, secretary and treasurer, and W. F. RePass, superintendent. The Gadsden, Ala., Leader says:

The company starts with a paid up capital of \$10,000 and contracts that assure the successful operation of the plant for several years. They have on hand 12,000 feet of lumber and have contracted for a sufficient quantity to keep things hustling for at least twelve to eighteen months. They will begin with a force of thirty skilled workmen, with expectation of increasing the force at an early date,

churches in England and Western Europe, says a London paper, is the presence in the walls of large numbers of jars. They are embedded in the masonry with the neck turned toward the interior of the church and the mouth opening into the place.

For a long time the openings were supposed to be holes in the walls, but a closer examination a number of years ago, on one or two of these old buildings, disclosed the fact that the openings were the necks of jugs. Most old churches—churches erected from the eleventh to the seventeenth centuries—have them, and in some they are present in great numbers.

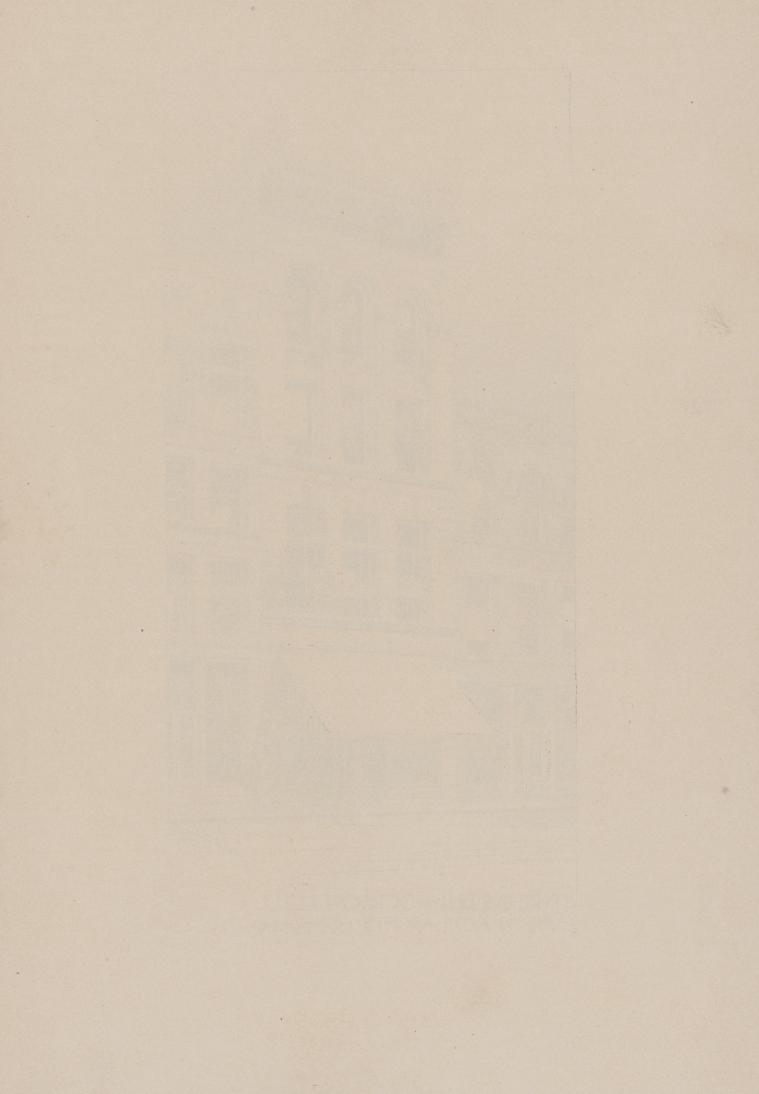
A church in Leeds has over fifty, while this number is considerably exceeded in some of the old French churches, nearly two hundred having been counted in the cathedral of Angouleme.

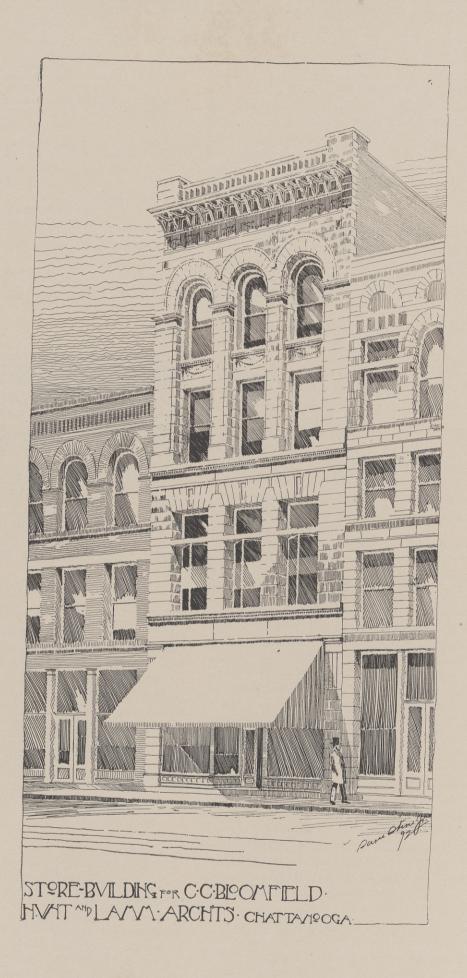
The explanation of their presence is easy. They are placed in the walls with a view to bettering the acoustic properties of the building.

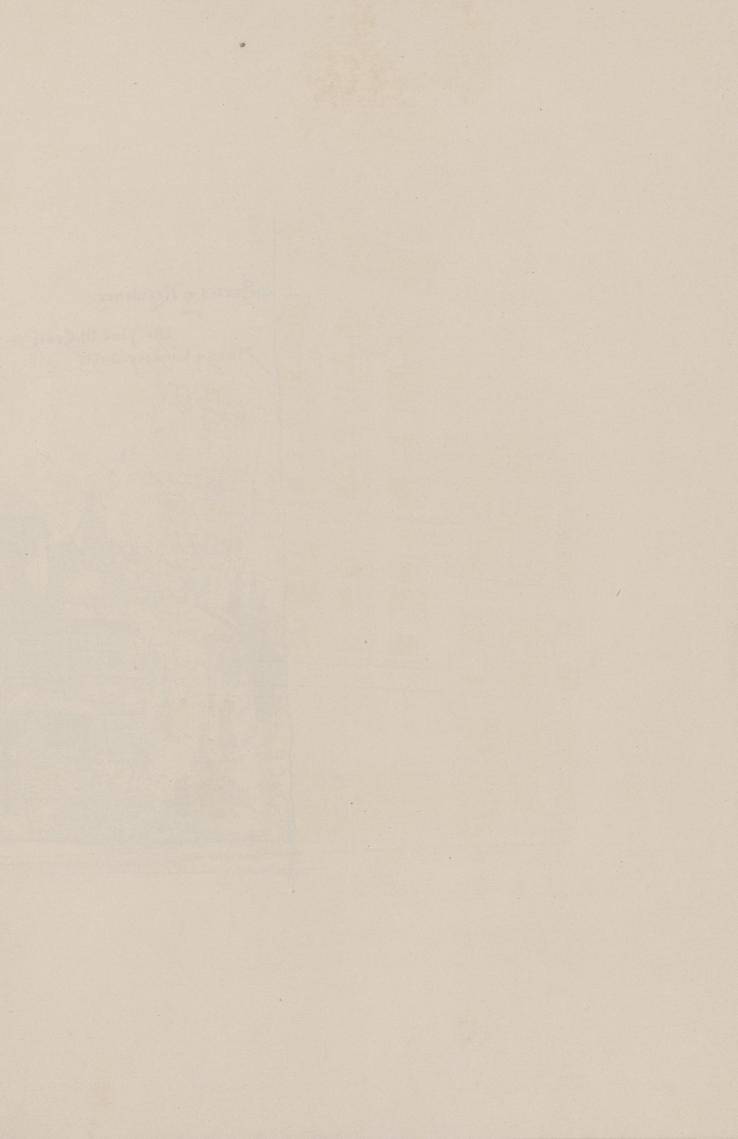
The efficiency of the device is open to question.

CHERE are some architects, says the Chicago Builder, who invariably accept the lowest bid without regard to the possibility of the work being done without loss at the price bid, or in fact, without regard to any consideration except getting the work done for the least possible money. Other architects do not always accept the lowest bid. They know-a rare qualification in an architect-what good work is worth, and they can tell whether a bidder has gone so low that he cannot do the work properly and save himself. Sometimes they see that a contractor has underbid from a mistaken idea of the work to be done, and in such a case, if they are honest men, they will call the attention of the contractor to his mistake and either throw out his bid altogether or allow him to bid again. Some one may say this is not strict business; that the architect is not responsible for the contractor's mistakes, etc. This is all very true; but fairness as well as honesty is always the best policy; and while an architect may gain a temporary advantage by accepting a bid which he knows will involve the contractor in a loss if honestly carried out, yet he will not gain by such a policy in the long run. Besides, the best work is seldom done under the lowest bid, and it is eminently true in building that the best is the cheapest. Take the item of plumbing, for example. Does any one imagine that poor plumbing is cheap at any price?

The stove works at Sheffield, Alabama, have been completed.

















THE THE THE THE TENT OF CHICAGO

of ventilation been found to be more difficult of solution than in large public buildings. We might say in regard to many, if not most, of these that in this particular matter bad is the best result that has been attained. It must also be admitted that the state of churches generally proves the rule above stated, but not by way of exception.

We may well ask, why is this? Surrounded with spacious windows, furnished with ventilating panes, with several doors and with a high and arched roof, why is it that their atmosphere during times of worship is often offensively close? In different cases we should probably find different structural deficiencies contributing to this result, with, however, the same consequence in all—deficient aeration.

One, if not the principal, fault in the construction of many of the older buildings is the want of outlets, or of a sufficient number of them. Such openings as do exist are better fitted to act as inlets than as exits. In buildings thus constructed a change for the better would be most fittingly inaugurated by the formation of two or more roof outlets with revolving cowls. The allotment of floor space is also an important consideration. This, however, is a rule contrived with a reasonable regard for health considerations. It is only in the event of overcrowding that all individual rights are overwhelmed in the common crush, and wholesome breathing air becomes more scarce than standing room. The gallery system, also, if adopted on any considerable scale, is open to adverse criticism. By accommodating more sitters it necessarily increases what we may call the breathing surface, while at the same time it lessens the available air space. If constructed at all, the gallery ought to be of the lightest description compatible with due stability. The correction of the evils we have thus briefly touched upon, and especially the formation of roof outlets to promote escape of heated and impure air, will go far to obviate such occurrences as that of ladies fainting in church, which under present conditions is only too common.

A large cooperage plant is now being erected at Livmore, Texas.

The Anniston Novelty Works have been established at Anniston, Ala.

A SIXTEEN-STORY ALUMINUM BUILDING.

ural world with its commercial buildings, and the method of construction invented by its architects has come to be denominated as the Chicago method. Astonishing as are many of the buildings that have gone up, they will certainly be eclipsed in novelty by the structure which Owen F. Aldis and his associates will erect at the northwest corner of State and Madison streets. The building has been planned by Holabird & Roche, and the specially novel feature about it is that there will be in the exterior not a single piece of wood, stone or brick. It will be an aluminum building. The entire exterior, with the exception of the plate glass, is to be sheets of this silver-like metal.

The construction of the building itself will be on much the same plan as the ordinary shell construction of the high buildings here. The structure will be erected to the full height of sixteen stories, however, before any of the material that answers for the walls is put on. The sheets of aluminum will be three-tenths of an inch thick, and twenty inches by four feet in size. They will be cast with an ornate design raised on the face, and will be finished with a portion of the plate burnished and a portion of it left with the natural metallic luster. The sheets will be held in place by ornamental aluminum strips bolted on next to the window casing. Back of the aluminum sheets will be fireproofing, and the strips about the windows will be backed with a solid filling of cement. Twenty tons of aluminum will be used to cover the surface of the structure. As the cost of the metal is seventy-five to eighty cents a pound, it will be seen that this feature of the construction is scarcely an economical one. The plates are not composed of pure aluminum, but of alloy composed of about 90 per cent. of aluminum and 10 per cent. of copper and other metals.

A feature of this building which will be almost as striking as the material of its exterior, will be the size of the windows. There will be two rows of windows on the State street front running to the full height of sixteen stories, and three rows on the Madison street front, and these windows will be twenty-two feet across. Another novel feature of the construction will be in the method of laying the floors to prevent damage by water in case of fire. The difficulty in the construction of tall buildings for mercantile purposes has been in the danger that was run from damage in case of fire, no matter how completely fire proof the construction might be, for if the fire were to occur in any goods on any floor the damage resulting from a flood of water would be as great to the floors below as if the flames went through the whole building.

It is proposed in this building to lay the tile floors in cement, completely covering the whole area, so that there will be no chance for the water to leak through from one floor to another. The pillars extending from one floor to another will be put in a position on top of the tile flooring. Arrangement there will then be made for an outlet for the water through the outside from each floor, so that there might be a fire upon any floor of the building and the stock upon that floor flooded without damage to any of the goods on the floors below. The interior of the building is to be furnished in mahogany, and altogether it promises to stand as a most remarkable piece of architecture. It is estimated the cost will be in the neighborhood of \$700,000. The appearance of the structure, composed entirely of plate glass and shining pieces of aluminum, will be as striking as it is novel.

The last decade was an era of great progress in the South.



OF Cannot contend that bad plumbing is a de-S sirable thing, says the Washington Building Register, but as even the devil is said not to be as black as he is painted, so the plumber is charged with many things for which he is not responsible. The assaults upon the plumber are principally epidemic during the fall and winter when a species of fever is quite prevalent. The fact that the catch basins of the sewers are generally empty and permit the effluvium to escape, turns people's minds to sewer gas as the cause of the diseases. We are inclined to think that the illness referred to has nothing to do either with the plumber or sewer gas, but is rather a type of low fever which owes its origin to undue exposure after sundown during the late summer and fall months. As this class of fevers become much more infrequent during the winter and spring, the contention that it is attributable rather to the autumnal weather than to sewer gas seems reasonable. The people who work in sewers constantly inhale whatever gases are there developed and are as healthy as any members of the community, and the plumbers who are obliged to cultivate an acquaintance with more sewer gases thrive equally as well. We are disposed to challenge the practice of charging these emanations with all diseases whose obscurity forces the physician to resort to it as a scapegoat to charge them to. We are also glad that in relieving the sewer gas of the common accusation against it, the plumber is also exculpated from the charge of causing illness through his bad house work.

N improved system of ventilation was recently introduced in the great hall of the new Sorbonne in Paris, the principle resorted to being that of maintaining the walls at a higher temperature than that of the air which they enclose. In order to accomplish this a mixing chamber is located beneath the auditorium and hot and cold air are mixed to the temperature desired; the air is forced into the auditorium through a great number of small holes in the floor and in front of the seats, the openings being covered by a wire netting. Before the entrance of an audience the walls are thoroughly warmed by forcing air heated to 200 degs. into a conduit which delivers the air into a space behind the moulding and close to the floor. The wall is thus heated to a temperature of 100 degs.—a temperature which, by radiation, will keep the audience comfortable, at the same time ventilating the hall with air at 60 degs. derived from the mixing chamber. All downward cold draughts are thus prevented, the currents of air all being upward, owing to the heated surface.

WAGES IN EUROPE.

FROM a recent report of the Bureau of Labor Statistics we learn that blacksmiths receive \$9.62 per week in England, \$4 in Germany, \$5.81 in France, \$5.38 in Belgium, \$3.18 in Austria. Carpenters receive \$9.75 in England, \$4.11 in Germany, \$6.20 in France, \$4.07 in Belgium \$5.10 in Austria. Cabinet makers receive \$6.22 per week in England, \$4.25 in Germany, \$6.14 in France, \$5.66 in Belgium and \$4.40 in Austria. Machinists receive \$9 per week in England and \$4.60 in Germany-no figures at hand for France, Belgium and Austria. Painters receive \$8.92 per week in England, \$4.82 in Germany—no figures as to other countries. Machinists, \$7.19 weekly in Great Britain and \$4.60 in Germany. Laborers, \$5.29 per week in England, \$3.11 in Germany, \$3.93 in France, \$3.77 in Belgium and \$3 in Austria. Printers are paid twenty cents per 1,000 ems in England, and receive \$6.64 per week in France, \$5.94 in Belgium and \$3.95 in Austria; bricklayers, \$7.75 per week in England, \$4.21 in Germany, \$5.74 in France, \$4.56 in Belgium and \$3.55 in Austria; masons, \$8 per week in England, \$4.07 in Germany, \$5.33 in France, \$5.22 in Belgium and \$3.73 in Austria; farm laborers, \$3 per week in England, \$3.06 in Germany, \$3.10 in France, \$2.72 in Belgium and \$3.50 in Austria; coopers, \$6 in England, \$3.97 in Germany, \$5.58 in France, \$5.17 in Belgium and \$3.64 in Austria; shoemakers, \$6 per week in England, \$2.95 in Germany and \$2.90 in France.

that is wofully neglected by many housekeepers—is strongly emphasized by one of our city contemporaries when it says that the neglected backyard is the most successful incubator of zymotic diseases in existence. Their germs may burst into unhealthy vigor in untrapped sewers and dirty sink pipes, but the filthy backyard is where they grow to their greatest power to wage devastating warfare upon humanity; it is there that the typhoid waxes strong and spreads itself in its pride.

There are few backyards that would pass an examination for cleanliness and purity at this time of year. All during the cold days of winter it is very convenient for Mary, or even the mistress herself, to open the kitchen door and quickly throw the greasy dishwater or similar liquid refuse out on the snow. It saved them time and trouble and a considerable amount of chilling. Of course they didn't know they were planting the seeds of disease, but they were.

The warm sun awakens life in them, and that life is seen at work on the lives of the children of the house. It is the duty of every householder to see that his backyard is given a thorough cleaning, its refuse moved to a place where it can do the least harm to human health, and a powerful disinfectant scattered where it formerly lay.

Slacked lime is good; carbolic acid is better, but the cleaning must be done in any event. The outlay will be inexpensive; the income will be enormous in the saving of good health and good lives as well. Clean your backyards and disinfect them. You owe it to your children and your neighbor, and he owes the same to his and to you.



DOMESTIC USE FOR ELECTRICITY.

THE dream of the housekeeper and electrical enthusiasts has been to see cooking and heating done by electricity, says the Electric Age. Electricity has been applied to almost everything else, and the people have not been able to understand why houses cannot be heated and cooking done by the same means. Elsewhere in this issue we describe and illustrate some apparatus designed for heating, cooking and performing other work where portable and concentrated heat is required. There is no question as to the many advantages possessed by such applications of an electric current. In cooking, for instance, the heat is turned on at the moment it is wanted and applied just where it is needed, and there is practically no waste; whereas, in the case of a coal fire, much heat is lost in the process of bringing the temperature up to the required degree. With electric heat, however, the full degree of heat is available in a moment, and there is no long waiting for it to cool down as in the case of coal fires. The total absence of all the disagreeable features of coal fires, such as handling coal and ashes, etc., is another great argument in favor of electric heating, and the possible extra cost for current would be more than offset by the satisfaction and enjoyment resulting from its use. In the summer time what could be more convenient than electric heat to cook with? What is there that is as near the ideal method of heating and cooking than such use of the electric current? of these advantages are now available in any house where an electric-light current enters, or can be put in; but as to the cost of electric current for such purposes we are not advised. Considering its advantages, however, thousands of householders would be glad to pay the extra cost for the luxury in having such heat. On the other hand, central stations, where the current is generated, would derive an immense benefit from an extensive use of current for such purposes. It is a question with most of these stations how to make them pay during the daytime. If electricty should become extensively used for domestic purposes, as indicated above, the problem would at once be solved, as the greatest demand for current for house uses would be made in the daytime.

F. Woodrow in Age of Steel, the removal of garbage, the perfecting of sewerage systems and the distribution of urban population in suburban additions are all in line with the duty of enforcing healthy conditions. The old-time mill or factory,

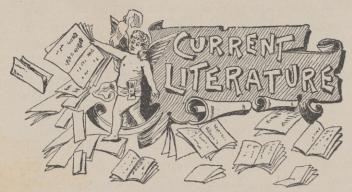
with its sparsity of elbow room, its close and vitiated atmosphere, its blockaded windows and its dustenameled workers is slowly but surely giving way to the modern plant, where light and air are in adequate supply, and structures erected in accordance with the best principles of architecture are fully abreast with the latest science and the broadest wisdom. There is much, however, yet to be done. Dirt is yet calling for the broom and the drainage pipe. Homes and mills are still in lack of oxygen and light, while in some lines of industry sanitary conditions are persistently ignored. In some of our larger cities, where tenement house work is in vogue, conditions are practically horrible. In those dingy dens, where a sunbeam is a stranger, and a visit of pure and sweetened air is unknown, where a pansy would cease to live and a linnet forget his song, human beings in pursuit of butterless bread and weak tea, live out the drama of life, and close a tragedy by sharing a coffin with a cockroach or a rat. These ulcers on the social body are in grim evidence of the remorseless cupidity of men who, to amass a fortune, maintain a stoical indifference to the process. It was from these slums, with their poisoned air, their bitterness of circumstances and their unheeded tragedies, that the Huns and Vandals of civilization have come to convince the world that the dirt that soaks through the skin finally stains the soul.

overnor McKinley, of Ohio, in his message to the legislature, recommended that attention be directed to the welfare of the motormen and conductors on street railways. There are in Ohio 12,000 of this class of workers, he says, and he thinks that electric and cable street-car companies should be required to provide vestibules on the cars for the protection of motormen and conductors from exposure to severe weather. He suggests, furthermore, that this class of roads might well be subject to the laws governing steam railroads. Therefore a bill was passed by the legislature in accordance with the governor's recommendation.

land, they have introduced a new style of bridges, the invention of Ferdinand Huddleston. The bridge has two spans, a long and a short one, is in one piece, hinged on the pier between them, so that as one side goes up the other goes down, the latter going into a pit provided therefor, and one span balancing the other. The movement is given by hydraulic power.

The General Electric Co., of New York, are erecting in Louisville, at the corner of 10th and Monroe streets, a large electric light and power station which will be completed early this summer, from which they will supply commercial electric lighting and power surface.

THE readers of THE SOUTHERN ARCHITECT will do well to confer with the General Electric Company whose Southern office is located at 10 Decatur street, Atlanta, Ga., for any information desired regarding either Edison or Thomas-Houston Electric Apparatus, or for proposals to wire public or private buildings for electric lights.



T was Charles Faxon, long since dead, and who at one time was an editorial writer on the old Louisville Journal, who wrote "The Beautiful Snow," one of the famous poems to which a half dozen writers have entered their claims as author.

GARPER'S Young People is publishing an interesting series of articles by Lieutenant Peary, narrating some of his adventures in the arctic regions. In a recent number the Lieutenant described the house in which his company spent the winter, and gave many interesting particulars concerning their sojourn within its walls. Illustrations from photographs help to make these articles exceedingly interesting.

TONE, of Indianapolis, now issues in magazine form, and the character of its contents is in keeping with its artistic make-up. The February number contains the first of a series of profusely illustrated articles on the "Chateaus of France," by Louis H. Gibson, architect, who has visited them in person and writes of them in a practical vein.

The Penrhyn slate quarries are illustrated and described, as are also the sandstone interests of Northern Ohio.

The architectural features of the World's Columbian Exposition at Chicago are fully discussed by Charles Dudley Warner in the Editor's Study in Harper's Magazine for February. One of his conclusions is that the distinction of the Columbian Exposition "is not its magnitude; it is not that it contains the largest building ever erected in the world; it is in its beauty, its harmonious grouping, its splendid landscape and architectural effects." And he expresses the opinion that this result has been reached by the exercise of practical good sense on the part of the commissioners in allowing free play to individual genius, and in recognizing and encouraging American art.

EHE February number of The Art Amateur, New York, is a particularly interesting one. For a frontispiece there is a fine reproduction of a spirited study of a head by Alphonse Legros, late Slade Professor at University College, London, which is an admirable example of the artist's pencil work. "Greta's" Boston letter deals with the threatened extinction of the Art Commission, Mr. Sargent's painting for the Library building, the memorial exhibition of Foxcroft Cole's work and the Chanler Scholarship. There is a concise and pithily written account of the New York Water-Color Club Exhibition, and also that at the Century Club of Pre-Raphaelite pictures. Next comes the first paper of an illustrated article on the Vanderbilt prints, which has a beautiful little reproduction of Rembrandt's etching of himself. The article on Prud'hon and Mlle. Mayer is profusely illustrated with fine reproductions of the master's work, including his charming pastel portrait of Mlle. Mayer. .

O'RELL, who considers Riley our greatest poet, speaks of an affecting instance of Riley's efficiency as a reciter, at the banquet given in honor of Henry Irving and Ellen Terry at the close of their last season in America. O'Rell relates that a plain, homelylooking man, on a simple announcement, arose and recited "Down to Old Aunt Mary's." The French critic states that, ordinarily callous, he found at the close of the homely recitation that tears were coursing down his cheeks, and that every one else present was similarly affected; while Ellen Terry, the emotional queen, was so overcome that she had to be removed from the banquet hall.

IMELINESS is the striking characteristic of the principal contributions to The North American Review for February. The leading feature is an able article entitled "How to Revise the Tariff," by the Hon. William M. Springer, Chairman of the Committee on Ways and Means of the House of Representatives. Springer's position gives him the right to speak authoritatively. Two articles which are sure to attract wide attention in view of the recent scandals in Paris, which even threaten the republic, are Admiral Ammen's "Recollections of the Panama Canal Congress of 1879," and Madame Adam's entertaining and instructive paper on "Criminal Law in France" Under the title of "Changes in the Church of England" the Very Rev. Robert Gregory, Dean of St. Paul's, contributes some interesting reminiscences of the Oxford movement and its leaders. "Boons and Banes of Free Coinage" are discussed on the one hand by the Hon. R. P. Bland, who sets forth, with marked frankless, his views on the Monetary Conference recently held at Brussels, and on the other hand by John Harsen Rhoades, President of the Greenwich Savings Bank, who considers the question of savings banks and their depositors as affected by a premium on gold, while the "Depositor's Point of View" is forcibly presented by A Depositor in a Savings Bank. Senator John T. Morgan, of Alabama, makes a strong plea for "Government Aid to the Nicaragua Canal," in his article under that title, and declares that the people will build this canal if no government takes it in hand.

THE history of electric street railways for the last five years is that of almost unequaled development. The figures showing the growth of the system are interesting.

At the close of last year there were in this country 10,599 miles of street railway, with 55,877 cars. Of these 4,061 miles were electric and 8,892 cars were electric. The total of horse, cable and electric mileeage had increased during the year 1891 1,490 miles, but electricity standing by itself had increased 1,538 miles. The total of horse, cable and electric cars had increased during the year 3,826 cars. Of this number 3,300 were propelled by electricity. There were at the end of the year seven times as many miles of electric road as cable, and almost twice as many electric cars as there were cable cars. There at the end of the year, something over 400 electric railroads in operation in America.

Last March it was estimated that of the sixteen cities in the United States having over 200,000 inhabitants, fourteen, or 87 per cent. were equipped with electric roads. Of the forty-two cities having between 50,000 and 200,000 inhabitants, fourteen, or $97\frac{1}{2}$ per cent., had electric roads. Of the remaining 391 cities, with a population of over 8,000, it is said that there are not a score that have not electric roads, or are not preparing to introduce the system. March every one of the larger cities referred to as the exceptions in the above percentages have fallen into line with the formal approval of this compara-tively new method of rapid transit. The investment

to date is said to reach over \$100,000,000.

LANE'S PATENT STEEL PARLOR DOOR HANGER.

The Lane Parlor Door Hanger differs from others in several important respects. Among the chief points of superiority may be noted, first, that it is made throughout of steel instead of cast iron, thus avoiding all danger or probability of breakage. How much annoyance and expense may be caused by an inaccessibly defective hanger or track in a furnished house, those who have had such experience need not be told. The wheels run on a single steel track. This track is not liable to such derangement as swelling or shrinking, or springing out of shape from furnace heat or humid air, but is thoroughly durable. The track being secured to one partition instead of two, as in the case of the common double wood tracks, is not subject to derangement from unequal settling of said partitions. The wheels of this hanger are made with a center of the very best sole-leather, the edge of which forms the rolling surface. This leather is a solid disc extending quite to the axle, and is firmly pressed and held between steel discs by means of steel nuts on a steel axle. The use of the leather in the wheel causes it to run with the noiselessness of a bicycle and the wear on the leather being a rolling one only, renders it practically indestructible. The extreme simplicity of this hanger and frack makes its erection easy, and cost for labor very light; some carpenters say, taking but a quarter of the time required for other kinds, and no cutting of doors; so that, if at a The Lane Parlor Door Hanger differs from others in several

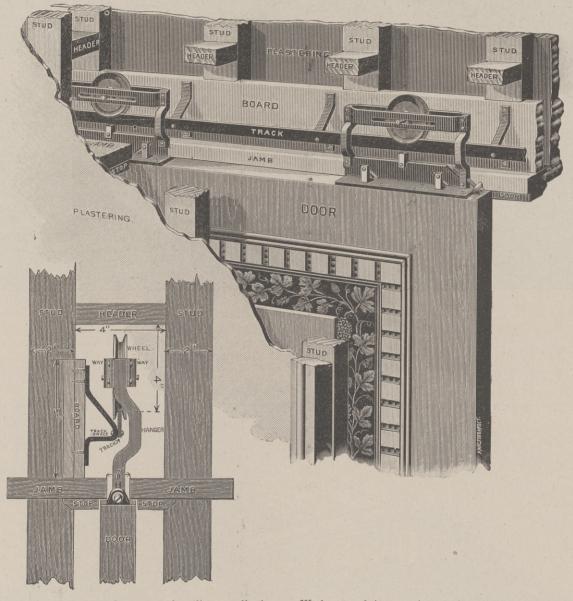
The use of fret or grille work seems to be steadily on the increase, and there is scarcely a house now built with any pretension to beauty which does not require more or less of it.

The fretwork made by C. S. Ransom & Co., of which we an example on 2d page cover, is very largely used by architects and decorators to enhance the beauty of their work, and it is not unusual to put from \$500 to \$1,000 of this work in a New York or Philadelphia house.

Philadelphia house.

The constant aim of Messrs. Ransom & Co. has been towards high-class work, feeling that the American people are being rapidly educated in what is correct in art, and that their judgment is correct has been amply proved by an order of over \$5,000 for the princely residence of Mr. Wallace C. Andrews, 5th avenue and 67th street, New York, on which over \$150,000 were spent for decorations alone, and by orders for the palace of Mrs. James Abercrombie Burden, 5th avenue and 72d street, New York, and for the great million dollar pile of the Hon. Whitelaw Read at White Plains, New York.

They have also recently executed orders for Mrs. Alexander Mitchell, Jacksonville, Fla; for Mr. Wm. D. Cleveland, Houston, Texas, and for numerous others in all sections of the United States and Canada. Though the fretwork made by Messrs. Ransom & Co. costs a trifle more than ordinary fretwork; the difference in cost is much more than made up by the much greater beauty of the design, workmanship and finish of their work.



greater first cost, the expense when erected will generally be found much less than where the cheap grades of hangers are used. Avoidance of doors warping. We accomplish this by using one track only, the hanger suspended directly beneath it, and the middle of the door fastened to the hanger, so that the whole weight of the door is suspended plumb from the track, tending to keep it straight and true. The principle is well known to the horseman as applied to his whip. The axle of the hanger wheel does not run in a solid box, but is of the anti-friction type, and most people now recognize the great superiority of anti-friction hangers over the old style noisy hard running kind with fixed bearings. Each hanger may be adjusted independently of the other by the use of a screw driver and without derangement of any part. The stop we make of steel, and place at the rear of the door and midway; the door thus will strike square as it should do. We make the stop on the gravity principle, and if either door should need to be run out into the passage way, a knife blade may be inserted at the side and rear edge of the door, turning the stop one-quarter way around, when the door will be free to pass out.

Manufactured by

LANE BROTHERS,

Poughkeepsie, New York. expense when erected will generally be

Poughkeepsie, New York.

We beg to advise you that we have bought out the business of the Detroit Heating and Lighting Company, so far as relates to the sale of the Bolton Hot Water Heater. The managers of this business were connected with the Detroit Heating and Lighting Co. from the time it began to push the Bolton until a year ago, and are familiar with the heater in all its points. You may expect the same attention and consideration, and service in every respect, as you have been accustomed to receiving from the former manufacturers. We intend to advance the interests of the heater in every proper and judicious way, and trust we shall have your co-operation in keeping it in the eminent place it occupies among heaters. You may be sure that your interests will be carefully protected in every way, and we hope that your business in this line will be even larger and more profitable during this and succeeding years than it has been in the past.

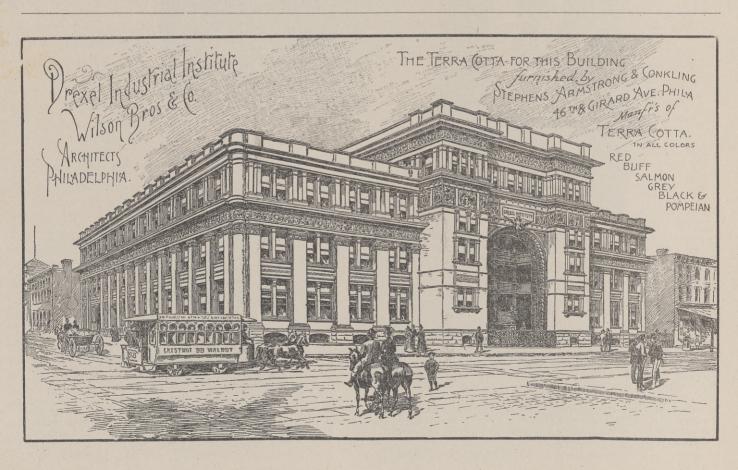
An important consequence of this arrangement is the abandonment of contract work. It is and will be the policy of the Capitol Heater Co. to take no contracts under any circumstances, but to turn over everything to the local trade, whom we will assist in every way to work up a profitable business.

CAPITOL HEATER CO., Detroit, Mich.

N. & G. TAYLOR CO.'S TIN PLATE WORKS, PHILADELPHIA.
Interior view of one of the Buildings.



The genuine Taylor Old Style brand of roofing tin is made in the stacks to the right. Notice the entire absence of machinery in these stacks. No acid, no flux, no rolls, nor any artificial means used to create an appearance at the expense of the quality in making this plate, which is the finest that can be made at any cost.



THE REX MOULDER.

PATENTED-FOR FOOT, HAND OR STEAM POWER.

This is a new edge moulding or shaping machine designed for carpenters, cabinet makers and all wood workers who desire to finish straight, circular, curved or irregular work with moulded edges.

It is designed especially for edge moulding, using cutters up to one inch face, but if desired the spindle can be readily adjusted so as to cut beads, flutes or other styles of mouldings, in the center of a four-inch panel.

It is strong and thoroughly made, has iron frame, steel spindle and shafts, Babbitt metal lined boxes and hardwood table.

The spindle is easily and accurately adjusted up and down by simply turning a hand-screw, and has adjustable boxes to take up the wear.

The power is transmitted by a chain belt and gears, doing away with any slipping or lost motion.

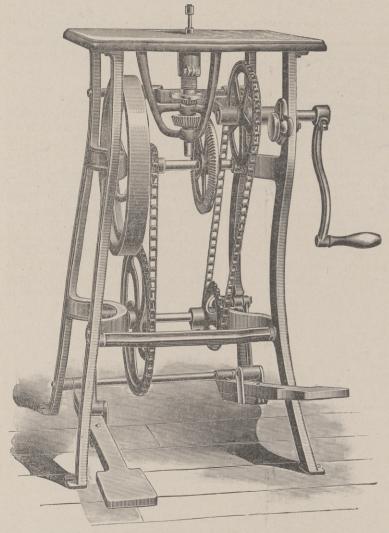
The power is transmitted by a chain belt and gears, doing away with any slipping or lost motion.

The foot power has a walking motion, by which much greater power can be obtained with less fatigue than with any other kind in use, and it enables the operator to run the machine with both feet, sitting, or one foot, standing, as desired.

The speed by either foot or hand power is such as

standing, as desired.

The speed by either foot or hand power is such as to insure smooth, clean and rapid work. With the use of this machine articles may be made rich and costly in appearance that otherwise would look plain and cheap. Once used, this machine will be found indispensible to almost every wood



The moulding cutters furnished for this machine are reversible, and the spindle may be run either way to suit the grain of the wood. Weight of machine, 170 pounds. Boxed for shipment, 250 pounds. Manufactured by the Seneca Falls Manufacturing Company, 184 Water street, Seneca Falls, N. Y., who also make a full line of foot and hand power machinery for wood and metal workers.

We will state for your information that we shall establish at Savannah, Ga., this month a branch of our tinplate business, carrying the most of our stock at that point, which we will use merely as a di-tributing depot, importing direct from England to Savannah. The facilities afforded there for this business are so favorable as to induce us to make this new departure, which we apprehend will be quite satisfactory to ourselves and to the large number of tinners and metal workers who look to us for supplies.

Yours truly, Chas. A. Conklin Mfg. Co.

The Coaldale Brick and Tile Co., Birmingham, Ala., have recently secured order for the pressed buff and ornamental brick for the new Methodist church, Dexter avenue, Montgomery, amounting to about 150 thousand pressed brick. Also for several business blocks at Birmingham. The handsome Atheneum at East Lake, just finished, is Coaldale pressed brick.

Our factory at Stanhope, N. J., was partially destroyed by fire December 1st, by which we lost all stock on hand. We started to rebuild at once, so as not to delay orders, and expect to be in running order by latter part of current month.

Yours respectfully,

UNITED STATES MINERAL WOOL Co.

Trade Notes.

The elegant residence of Mr. T. H. Bell, Peachtree street, Mr. G. L. Norman, architect, sketch of which appeared in our November number, will be screened throughout by the Portland Screen Co., Portland, Maine.

F. S. Hutchinson & Co., manufacturers of the Paragon Self-Retaining Dumb Waiters, 6th street and West avenue, Long Island City, N. Y., have added to their business the Brock Flexible Fence, which they expect to handle through their waiter trade.

The largely increased business of the Western branch of Cartright Metal Roofing Company, of Philadelphia, has necessitated their removal to larger and more commodious quarters. They now occupy No. 84 Adams street, instead of 134 VanBuren street, Chicago, Ill.

Do You NEED Screens?—"The Willer" window screens and screen doors are warranted the best in the market for fine residences and other buildings. We have a special catalogue on above subject, which we mail free upon request to anyone interested. These goods are made to order only. Send us your list for estimate. Address

WILLER MANUFACTURING Co., Milwaukee, Wisconsin.

Dear Sir—Although your normal interest in lead pencils may not extend beyond the coveted possession of a goodly supply of Dixon's "American Graphites," we shall try and excite it somewhat more by handing you what is said to be an exceedingly handsome and complete catalogue of lead pencils. This catalogue, which is sent you under separate cover, is not intended for general distribution, but we shall be glad to send a copy to all dealers in stationery. Strictly speaking, Dixon's "American Graphite" Pencils are the only ones which can claim to be American products in every particular, and they are readily matched against the finest product of any part of the world.

Yours respectfully, Jos. Dixon Crucible Co.

To the Trade.—The increased demand for the Lunkenheimer brass and iron specialties, and the introduction of new products, has compelled us to double our capital to \$500,000, and as soon as possible our manufacturing facilities. This will place us in position to give all orders even more prompt and satisfactory attention than heretofore. The company now transacts its business as the Lunkenheimer Company, with officers as follows: Edmund H. Lunken, president; C. F. Lunkenheimer, vice-president treasurer; D. T. Williams, secretary. A continuance of the liberal patronage heretofore bestowed is respectfully solicited. Faithfully,

The Lunkenheimer Brass Mfg. Co.,

Cincinnati, Ohio.

The Bailey Reflector Co. write us that they have just received an order from Rev. J. H. Judson, a Presbyterian minister, Hangchow, China, for lighting his church, so you see the popularity of their reflectors is not limited to this country. In fact, they are being placed in all parts of the inhabited world, India, Japan, Egypt, Turkey, Mexico and the South American countries. They are constantly growing in favor, demonstrating clearly what has been claimed for them so long—that they are ne plus ultra for lighting churches and public buildings. Any one desiring to light a church, hall, theatre or public building will certainly make a mistake if they do not write to the Bailey Reflector Co. before purchasing. They have been advertising with us for a long time, and we have never heard any complaint about the merits of their goods, and it affords us pleasure to recommend them as an honorable, high-minded and upright house to deal with. to deal with.

The hotel and baths to be erected at Warm Springs, Ga., to cost \$25,000, 1,200 feet above sea level, we intend to finish in time for this season's patronage, by June 15th. While the amount given, \$25,000, is for hotel and baths, yet there are many other improvements to be made. Laying off of lots has already been done, which cost many thousand dollars. There have been several beautiful lots sold, on which parties will erect their own cottages. We will make this the most delightful, comfortable and attractive of summer resorts. Buildings to be supplied with all modern conveniences—electric lights, electric bells, water-works, etc. There will also be large ball rooms, billiard rooms and ten pin alley erected separately, and everything that is required to make a delightful place to spend the hot summer months will be done.

L. E. THORNTON, Architect, Columbus, Ga.



Inside Blinds and Screens

SECTIONAL SLIDING BLINDS, PATENT FOLDING BLINDS, REGULAR FOLDING BLINDS,

> WINDOW SCREENS and SCREEN DOORS.

CATALOGUE A.—
Pocket Edition. Free.

CATALOGUE B.—
Window Screen and Screen Door
Edition. Free.

CATALOGUE C. Architects' and Builders' Edition. 50 Cents.

Willer Manufacturing Co.,

MILWAUKEE, WIS.

Send 16 cents in stamps for the Willer March, for the piano, dedicated to this Company by Director Chr. Bach.



ALABAMA.

Mobile. - Messrs. F. & C. L. Hutchinson, architects, have made plans for the following work from their office:

One story frame cottage for F. W. Carmelich; cost, \$3,000.

One-story frame cottage for Geo. Lauber: cost, \$1,500.

One-story frame cottage for Geo. Lauber, cost, \$1,500.

Spires for Mobile Cathedral for Catholic Diocese; cost, \$18,000.

Two-story brick residence for Mrs. A. Hamilton; cost, \$25,000.

Troy.-J. S. Collins, architect, reports the following work from here:

Residence for James Murphree; cost, \$3,450.

Residence for Miss Emma Collins; cost, \$1,200.

Residence for Jos. Coskey; cost, \$3,000, Business prospects are now very good for the year 1893.

Montgomery .-- W. T. Walker, architect, has prepared plans for a-

Residence for J. Norwood, Perry street; J. B. Worthington, builder; cost, \$10,480.

Residence for A. A. January, Perry street; Horton & Co., builders; cost, \$4,550.

Store improvements for J. B. Nicrosi, Dexter avenue; George Lauri, builder; cost, \$1,200.

Residence for R. Thomas, Perry street; Horton & Co., builders; cost, \$7,000.

CALIFORNIA.

Santa Monica. 'Messrs. Peters & Burns, architects, Dayton, Ohio, have prepared plans for barracks for National Home for Disabled Soldiers, United States army; cost, \$23,500.

Hospital for National Home for Disabled Soldiers United States army; cost, \$21,000.

GEORGIA.

Atlanta.—Messrs. Hayden & Wheeler, architects, have prepared plans for-Residence for Mrs. J. C. Black,

Store building for Mr. Greenfield,

Two residences for Mrs. A. L. Thomp-

Messrs. Bruce & Morgan, architects, have prepared plans for a--

Residence for A. C. Briscoe, Residence for H. F. Emery, Residence for J. H. Goldsmith, Family hotel for M. C. Kiser.

G. L. Norrman, architect, has prepared plans for telephone exchange for Southern Pell Telephone and Telegraph Company, corner Pryor and Mitchell streets; M. T. Lewman & Co., builders.

Eight-story store building for John Silvey, Marietta street and Edgewood Avenue.

Atlanta.-J. W. Golucke, architect, has prepared plans for the following work from his office:

Residence for Mrs. J. C. McMillen, Peachtree street; cost, \$15,000.

Residence for Hon. Thos. Finley, West Peachtree street; cost, \$7,000.

Residence for Mrs. Fred. Frank, Rawson street; M W. Land, builder; cost, \$7,000.

Residence for D. P. Morris, Peachtree street; cost, \$12,000.

Residence for A. Fleishbin, Washington street; M. W. Land, builder; cost, \$6,000.

Residence for L. Steinau, Washington street; M. W. Land, builder; cost, \$6,000.

Residence for W. F. Maury, East Mitchell street; J. T. Brown, builder; cost, \$10,000.

Residence for Jas. Austin Burns, Grant street; cost, \$10,000.

Store building for D. P. Morris, junction Walton and Marietta streets; cost, \$10,000. Store building for O. E. & W. P. Mitch-

ell, Whitehall street; cost, \$20,000. Two residences for E. B. Doolittle, South

Butler street; F. O. Heifner, builder; cost, \$6,000. Marietta.-Messrs. Hayden & Wheeler,

architects, of Atlanta, have made plans for a residence for R. B. Trammel.

Thomaston.—J. W. Golucke, architect,

Atlanta, Georgia, has prepared plan for residence for Col. R. A. Mathews; cost, \$9,000.

Columbus.-G. L. Norrman, architect, Atlanta, has prepared plans for a school building for the city of Columbus; Nicholas & Ittner, builders.

INDIANA.

Goshen.-Chas. Chapman, architect, 38 Lakeside Building, Chicago, has prepared plans for a Reformed Church; D. Platter, superintendent of construction; cost, about \$8,000.

C. A. Pooley, contemplates the erection of a residence in the near future with all the modorn improvements.

Messrs. Wing & Mahurin, architects, have prepared plans for a residence for Story & Allis, with all modern improvements.

R. C. Robbins has sold his new house and lot, and will build another in the spring.

Mari n.—Messrs. Peters & Burns have prepared plans for hospital for National Home Disabled Soldiers United States army; cost, \$24,000.

Messrs. Peters & Burns have prepared plans for a hospital wing for National Home for Disabled Soldiers United States army; Messrs. Thornburg & Patton, builders; cost, \$24,000.

KENTUCKY.

Madisonville.—Brinton B. Davis, architect, Paducah, has prepared plans for a store building for S. B. McGinnis; cost, \$4.800.

Murray. - Brinton B. Davis, architect, Paducah, has prepared plans, for residence for Galen Miller; cost, \$3,600.

Paducah.—Brinton B. Davis, architect, has prepared plans for the following work from his office:

Cottage for Rolney C. Davis; cost, \$12,000.

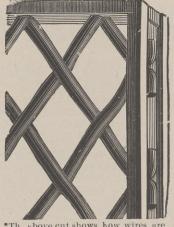
Cottage for H. S. Taylor, Jr.; cost, \$1,500. Cottage for S. D. Caldwell; cost, \$1,600. Residence for Henry Koerner, \$3,600.

Newport.—Messrs. Crapsey & Bearder, architects, Cincinnati, Ohio, have prepared plans for a church building for the Presbyterians, stone front; cost, \$15,000.

MISSISSIPPI.

Natchez.-W. K. Ketteringham, architect, has prepared plans for a residence for Franklin O'Brien; cost \$6.000.

P. L. Murray has prepared plans for a residence for J. Hall; cost \$1,000.



Th above cut shows how wires are secured to grooved iron frame.

ATLANTA WIRE AND IRON WORKS CO.

MANUFACTURERS OF

Wire Railings, Iron Window Guards

AND WIRE ELEVATOR ENCLOSURES.

For Banks, Stores, Offices and Public Buildings, Wire Balcony Railing and Fences, Iron Tree Boxes, Bedsteads, Sidewalk Grating, Hay Racks, Stall Partitions, Etc.

64 North Broad Street,

ATLANTA, GA.

MISSOURI

St. Louis,—Chas. E. Illsley, architect, sends us the following building report for which applications for permits have been been made:

Two and a half story brick dwelling for H. Gidionson; L. J. Mathiason, builder; cost \$5,400.

Six two and one-half story brick dwellings for C. E. Illsley; D. Brennan, builder; cost \$40,000.

One story brick dwelling for J. W. Allen; Kopp & Hardebeck, builders; cost \$3,000.

Three-story brick dwelling for C. A. Cox; S. L. Jones, builder; cost \$12,000.

Two and one-half story brick store and dwelling for Theo. Ricks; J. C. Richers & Son, builders; cost \$3,800.

Two-story brick dwelling for John Meyer; Crosswell & Crawford, builders; cost \$5,000.

cost \$5,000.

Two two-story brick dwellings for C. E. Illsley; E. Priesler, builder; cost \$7,000.

Two-story brick dwelling for Edward Lamb, Thos. Hall, builder; \$3,000.

Two story brick dwelling for Pat Deully; Mr. Newkum, builder; cost \$3,500.

Two two and one-half story brick dwellings for self; Kennett Insurance Co., builders; cost \$10,000.

Two two and one-half story brick dwellings for self; Kennett Insurance Co., builders; cost \$3,000.

Three two and one-half story brick dwellings for self; State Savings Fund Building Co., builders; cost \$15,000.

Two and one-half story dwelling for self; J. McGorgan, builder; cost \$4,000.

Two-story frame stable for John Mathews; Sprague Bros., builders; cost \$2,500.

Three-story brick store and flats for St. Louis Dressed Beef Co.; cost \$11,000.

Two-story brick dwelling for J. Kooer; H. Schnider, builder; cost \$3,100.

Two and one-half story brick dwelling for A. K. Florida; Mr. Newberry, builder; cost \$6,000.

Three two-story brick dwellings for A. K. Florida; Mr. Newberry, builder; cost \$15,000.

Two two story brick dwellings for A. K. Florida; Mr. Newberry, builder; cost

Two-story brick dwelling for self; J. C. Newberry, builder; cost \$3,000.

Two-story brick store and dwelling for self; D. Bulmer, builder; cost \$3,000.

Two and one-half story building; M. A. Scanlan, builder; cost \$3,000.

Brick addition to factory, for Lampell Estate; Mr. Cress, builder; cost \$4,834,

Four-story brick factory for self; Blackmere & Post, builders; cost \$23,000

One-story brick bottling and freezing house for L. Obert; G. Bottinger, builder cost \$4,000.

Two-story brick dwelling; J. H. Mottleman, builder; cost \$3,000.

Two two-story brick dwellings for self; E. C. Pope, builder; cost \$10,000.

Two-story brick dwelling for self; R. W. Sandennig, builder; cost \$4,000.

Two-story brick dwelling for G. H. Brueggeman, Thos. Hall, builder; cost \$7,000.

Two-story brick dwelling for F Girkall; H. Schoemacher, builder; cost \$2,000.

Two-story brick dwelling for John Krieger, builder; cost \$4,000.

Four two-story brick dwelling for M Ryan; cost \$13,000.

Two and one-half story brick dwelling for Zucker & Doerflinger; cost \$2,200.

Two two-story brick dwellings for J. S. Rudolph; B. M. Proty, builder; cost \$5,600

Two and one half story brick dwelling for E. Love; Nicholas Bros., builders; cost \$6,000

Five two-story brick dwellings for J. M. Cornwall; J. J. Roboan, builder; cost

Four-story brick warehouse for Buck Stove Co.; Kennedy & Mattia, builders; cost \$11,000.

Train shed for Terminal R. R. Association; Pittsburgh Bridge Co., builder; cost

Two-story brick store for H. B. Blair; C. Kellerman, builder; cost \$3,500.

Two and one-half story brick dwelling for M. B. Wallace; Nicholson Bros., builders; cost \$6,000.

Four-story brick dwelling and store for G. B. Hall R. E. Co.; M. B. Brown, builder; cost \$13,000.

Two and one-half story brick dwellings for Mrs. S. M. Friede; Brown & Friede, builders; \$6,000.

Five two-story brick store and dwellings for R. E. Robinson; A. & J. Shassere, builders; cost \$18,000.

Seven story brick store for Collier estate; C. E. Clarke, builder; cost \$110,000.

Two story frame dwelling for E. J. Inganetts; J. W. Haynes, builder; cost \$2,600.

Two-story brick addition to seminary for Fanciscan Fathers; cost \$10,000.

One-story brick Power house, for Cass Avenue & F. G. R. R.; R. W. Morrison, builder; cost \$15,000.

Two-story brick dwelling for self; Jas. Mare, builder; cost \$5,000.

Two-story brick dwelling for Mrs. A. Owens; Abrahams & Meyer, builder; cost \$4,000

Two two-story brick dwelling for Sheehan & Lober, R. E. Co.; Jas. Costello, builder; cost \$6,000.

Two and one-half story brick dwelling for Sheehan & Lober R. E. Co.; Jas Costello, builder; cost \$3,500.

Two-story brick dwelling for Sheehan & Lober R. E. Co.; Jas. Costello, builder; cost \$3,000.

Two-story addition to club house for University Club; Wm. Cochran, builder, cost \$5,000.

Two-story addition to stable for N. Peligreen; Wm. Sippy, builder; cost \$7,500.

Seven-story brick factory for J. T. Drummond; R. W. Morrison, builder; cost, \$45,000.

Brick stock house for brewery, for St. Louis Brewing Co.; C. Kellerman, builder; cost, \$30,000.

Two four-story brick dwellings for self J. Flannery, builder; cost \$20,000.

Two-story brick dwelling for self; J. Lynch, builder: cost \$3,500.

Two and one half story brick dwelling for C. Herkenhoff; Wm. Herkenhoff, builder; cost \$2,500.

Two-story brick dwelling for F. L. Mc-Grath; J. Flavin, builder; cost \$6,000.

Two-story brick dwelling for P. Fuchobski; Wieden & Son, builders; cost \$4,500.

Two-story brick dwelling for L. J. Wieler; F. W. Folk, builder; cost \$3,500.

Two two-story brick dwellings for W. C. Eihler; C. H. Sudhoelter, builder; cost \$7,000.

Two-story brick dwelling for M. J. Clark; E. M. Greggersey, builder; cost \$3,600.

Three-story brick dwelling for Mrs. F. Carroll; A. W. Heimberger, builder; cost \$12,000.

Two-story brick store and dwelling for self; Mackie Construction Co., builders; cost \$24,000.

Two-story addition to store for O'Conner & Hardin; M. A. Scanlan, builder; cost \$3,000

Two and one-half story brick dwelling for L. D. Hudson; T. H. Bussey, builder; cost \$5,000.

Two and one-half story brick dwelling for A. L. Beeding; T. H. Bussey, builder cost \$5,750.

Two and one-half story brick dwelling for A. L. Beeding; T. H. Bussey, builder; cost \$5,750.

Two and one-half story brick dwelling for self; T. J. Quinn, builder; cost \$5,000.

Two two-story brick dwellings and double flats, for N. Haggerty; Mr. Dougherty, builder; cost \$16,000.

Two-story brick dwelling for J. Compen; cost \$4,000.

Two and one-half story brick dwelling

for Chas. Meyer; Krance & Son, builders; cost \$7,000.

Two two-story brick dwellings for C. Vielhaber; A. C. Buxton, builder; cost \$5,000.

Two and one half story brick dwelling for Dr. C. Blank; A. Mega, builder; cost \$6,200.

Two two-story brick dwellings for self; W. H. Sher, builder; cost \$5,000.

Two two and one-half story brick dwellings for Conliffe & Schelp; Conliffe Bros., builders; cost \$7,500.

Two-story brick dwelling for self; Nicholson Bros, builders; cost \$4,500.

Two and one-half story brick dwelling for Mrs. J. Wooster; Mr. Kronmueller, builder; cost \$3,900.

Two and one-half story brick dwelling for C. H. Taylor; T. K. Wornner, builder; cost \$10,300.

Two and one-half story brick dwelling for self; W. A. Kinsey, builder; cost \$5,000

Two two-story brick dwellings for self; F. W. Colk, builder; cost \$5,000.

Three-story brick dwelling and store for D. Kline; Bisser Bros.. builders; cost \$5,000.

Five two-story brick dwellings and store for self; H. Furbeck, builder; cost \$14,-000.

Five-story brick store for D. Nicholson; B. Weber & Son, builders; cost \$2,800.

Four two and a half story brick dwellings, for C. H. Tayler; G. Neumeister, builder.

Two-story brick building for self; M. Kirkwood, builder; cost, \$6,000.

One-story addition to Globe foundry; Zwicki & Doerflinger, builders; cost, \$3,500.

One-story brick factory for Myrose & Co.; Schillingran & Hauser, builders; cost, \$3,975.

One-story brick factory for self; Fox Brothers, builders; cost, \$10,000.

One-story car shed, for Lindell; R. R. J. Schench, builder; cost, \$8,000.

One frame church building for the Catholic church; cost, \$2,500.

One-story brick wash house for Home Brewery Co.; C. Kellerman, builder; cost \$6,000.

Two-story brick, alteration to, of wash house, St. Louis Brewery Co.; J. Schench, builder; cost \$4,500.

Messrs. F. W. Folk & Co., architects, have preparted plans for flats for A. F. Haskins, St. Vincent's Place avenue; J. Wilkinson, builder; cost, \$4,000.

Flats for J. Conley, Hammet Place; cost, \$3,800.

Stable for M. Dowling, Tower Grove; cost, \$1,000.

Four flats for Joseph Rinder, Easton avenue; cost, \$7,000.

NORTH CAROLINA.

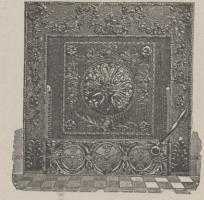
Elizabethtown.—Messrs. Bruce & Morgan, architects; have made plans for a court-house.

Greensboro.—Miss Norma Bonniwell, architect, Hickory, has made plans for a residence for M. C. Teaque; cost, \$2,000.

Newton.—Miss Norma Bonniwell, architect, has made plans for a residence for W. C. Kenyon; R. P. Dakin, builder; cost, \$2.000.

Roaring Gap.—Hill C. Linthicum, architect, of Winston, has made plans for a hotel for Roaring Gap Hotel Company; cost, \$16,500.

THE PEERLESS GRATE



The Grate of the Age.

By far the best known, all the good points possible to attain, intense heat, absolutely clean and free from dust.

Made in many ARTISTIC DE-SICNS AND FINISHES. Thousands in use all over the country. An agency in every city We also manufacture a large line of low and moderate prices, goods to suit all needs. Write us for catalogues.

BISSELL & CO.,

PITISBURG PA.

METAL BEADING A SPECIALTY.

CARVED CLASSIC BEADINGS, Manufactured by JAMES N. STOUT, 74 W. 23rd ST., NEW YORK.



Work will be furnished in any wood or any size—long lengths. For other designs and prices send for catalogue.



BARNES' Foot and Hand Power Machinery



For Carpenters and Builders.

The Only Complete Line of Such Machines Made.

The industrial competition of to-day is so keen that the man who is not properly equipped for his work, will not be able to hold his own. Our machines give the carpenter and builder advantages which he cannot afford to overlook. Send for our Catalogue.

W. F. & JOHN BARNES CO.,

933 Ruby Street,

ROCKFORD, = ILLINOIS.

J. S. THORN CO. Architectural Sheet Metal Works.

MANUFACTURERS OF

COPPER AND GALVANIZED IRON BUILDING TRIMMINGS.

SKYLIGHTS AND STRUCTURES OF IRON AND GLASS.

Metalic Ceilings, Crimped and Corrugated Iron Work and Meta_I

Buildings Specialties generally.

NOS. 1223 TO 1229 CALLOWHILL STREET, PHILADELPHIA.

GEORGIA MARBLE

THE BLUE RIDGE MARBLE CO.

QUARRIES AND MILLS, NELSON, GA.

Are prepared to execute, in the best workman-like manner, all kinds of marble work such as Wainscoting, Tiling, Mantels and Ornamental Work for Buildings.

Estimates for fronts of buildings, or buildings entirely of Georgia Marble furnished on application. Believing that the results of tests our stone has been subjected to for strength and durability are satisfactory, we do not hesitate to commend Georgia Marble to those wanting to use a material combining the greatest service with the gratest beauty. We intend to meet competition on any class of stone.

Atlanta Office and Yard—Corner of Hunter and Butler Streets.

THE GEORGIA MARBLE CO.

TATE, PICKENS COUNTY, GEORGIA

Quarry Owners and Sole Producers of

Creole, Cherokee, Etowah and Kennesaw Georgia Marble, and Contractors for Cut Stone Work.

Satisfaction guaranteed to architects and owners in working out details and producing results contemplated in designs. Plans figured and returned with estimates twenty-four hours after receipt. Our superior facilities enable us to supply material on shortest notice.

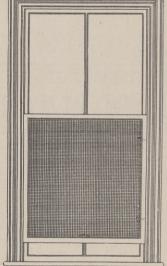
Correspondence solicited.

Portland SCRIEIFIN Company,

-MANUFACTURERS OF THE

BEST PATENTED ADJUSTABLE WIRE, WINDOW AND DOOR SCREENS.

ABSOLUTE PROTECTION AGAINST FLIES AND MOSQUITOS.



PATENT SELF-ADJUSTABLE ** LOCKS AND SPRINGS.

SATISFACTION GUARANTEED.

By permission we refer to the following well known Atlanta architects:

G. L. NORRMAN,

NIXON & LINDSEY,

E. G. LIND,

BRUCE & MORGAN.

Address:

PORTLAND SCREEN CO.,

93 Hanover St.,

Fortland, Me.

Knowledge of Stone

Is just as essential to the Architect as education in mathematics and drawing.

An acquaintance with "Stone,"

The irreproachable magazine, standing at the head of the industrial publications of America, will teach the architect

All he wants to know about Stone,

Marble and Granite. Issued monthly, magazine form, 160 pages and cover Richly imbellished with half tone engravings. Price \$2.00 a year. May be ordered and paid for any time during year, or not at all if you don't like it.

Address

D. H. Rauck Publishing Co.

Indianapolis, Ind.

Card to the Public.

Raleigh.—I seem to have been unfortunate in having had anything whatever to do with the new opera house and new hotel building now in course of construction in this city. Popular criticism, with justice, condemns their finish in unmistakable terms, and those not acquainted with the facts saddle the blame upon the architect, who is entirely innocent in these instances of the incongruities of their design

Perceiving that the original designs, which were pronounced by competent judges of taste to be creditable and meritorious, were going to be tampered with and marred, after considerable friction I was compelled to withdraw my interest from them and their execution, and in the case of the so-called opera house took back my designs to my office, and consequently that building has been put up entirely at randem and without the assistance of any architect whatever.

The upper part of the hotel has been doctored until there is probably nothing in heaven or on earth that can parallel it, and it does seem strange that any one would suppose for a moment that a designer of ever so little skill would be guilty of planning any such excrescences.

Even though there were any features in the plans or designs of these buildings creditable, I would scarcely be entitled to any honor, for they were almost without exception dictated.

Suggestions of my own were hardly honored, and consequently the present abortions are the result. I am far from willing to reflect upon any one, but I do want to exonerate myself from blame where I do not deserve it.

While it is impossible, from certain circumstances, to please every taste in design I yet avow that I have no malice toward Raleigh, and my interest in her is too great to deliberately deface her fair aspect with productions of such a nature, and my skill I hope is sufficient to be superior to them. Respectfully,

A. G. BAUER, Architect.

Wilmington.—J. Appleton Wilson, Baltimore, Md., has prepared plans for an addition to the First Presbyterian church; cost, \$10,000.

James F. Post, architect, reports the following from this city:

Residence for Julia Jacobs, Princess street; J. Sibley, builder; cost, \$2,500.
Residence for J. G. Chadwick, Dock

Residence for J. G. Chadwick, Dock street, between Third and Fourth; J. K. Vaughn, architect; cost, \$1,800.

Wilksboro.—Miss Norma Bonniwell, architect, Hickory, has made plans for a residence for T. B. Finley; cost, \$2,500.

Winston.—Hill C. Linthicum, architect, has prepared plans for the following work from his office:

Residence for J. W. Farrar, Fourth, east cost, \$1,200.

Residence for W. W. Wood, Jr., Bixton street; cost, \$1,200.

Residence for H. H. Reynolds, Spring street; cost, \$1,200.

Residence for W. J. Lupport, Summit street; cost, \$3,000.

Residence for Dr. E. Jones, Chestnut street; cost, \$3,000.

Tobacco warehouse for Jacob Tice, Main street; cost, \$150,000.

Residence for Capt. Sterling Johnston; Woodland avenue, cost; \$1,200.

Remodeling store for Jacob Tice, Main street; cost, \$3,000.

Cottage for Nat C. Watkins, West Winston; cost, \$600.

Residence for Thomas Benton, Sixth street, west; cost, \$2,000.

Cincinnati.-Jacob H. Kuckertz, architect, has prepared plans for brick residence for Aug. Wobst, 24th Ward; Andrew Ford, builder; cost, \$4,000.

Wm. Martin Aiken, architect, has prepared'plans for a residence for E. L. Anderson (Walnut Hills); cost, \$15,000.

Residence for Mrs. J. R. Ingram (Kenedy Heights); cest, \$7,000.

Residence for Fred. Schultze (Walnut Hills); cost, \$5,000.

Residence for John W. Foster (Kenedy Heights); cost, \$5,000.

Dayton.-Messrs. Peters & Burns, architects, have prepared plans for National Home for Disabled Soldiers United States army; Wm. Saint, builder; cost, \$22,000.

Five-story business house and offices; the Davis estate; cost, \$80,000.

Five-story warehouse for E. J. Barney; the John Ronger Company, builders; cost, \$5,500.

High School Interior Work for city of Dayton; the John Ronger Company, builders; cost, \$68,000.

Hamilton.-Max. Reutti, architect, has prepared plans for a warehouse for F. & L. Kahn Stove Works; cost, \$11,000.

Additions to foundry for same; cost \$5,000.

Norwood.-Jacob H. Kuckertz, architect, Cincinnati, has prepared plans for two frame residences for S. F. Safdi; cost, \$1,700.

Toledo.-Messrs. Bacon & Huber, architects, have prepared plans for an industrial school, for board of trustees; cost, \$10,000.

Bicycle works for Lozier Manufacturing Co.; cost, \$12,000.

London.-Messrs. Crapsey & Bearder, architects, Cincinnati, Ohio, have prepared plans for a church building for the Methodist Episcopal church; cost, \$35,000.

Lima .-- Messrs. Bacon & Huber, architects, have prepared plans for a residence

for J. C. Banta; cost, \$8,000.

Residence for E. T. Mitchell; cost, \$5,000.

SOUTH CAROLINA.

Newberrg.—Messrs. Bruce & Morgan have prepared plans for a residence for George D. Newver.

TENNESSEE.

Fountain City-Messrs. Baumann Brothers, architects, of Knoxville, have prepared plans for the following work from their office:

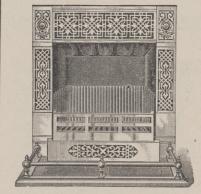
Holbrook College for Prof. Josiah Holbrook; cost, \$30,000.

Residence for Prof. Josiah Holbrook; cost; \$5,000.

Four dormitories for Prof. Josiah Holbrook; cost, \$8,000.

Cottage for ——; cost, \$1,500.

Knoxville.—Messrs. Baumann Brothers, architects. have prepared plans for the following work from their office:



JACKSON

-THE-

VENTILATING

GRATES

the Most Economic of all Good Systems of Heating.

They each heat several rooms on one or different floors by pure outdoor air warmed in the furnace attachment. All parts of a residence should be thoroughly warmed and ventilated.

These grates do it with the outdoor temperature at twenty degrees below zero.

Send for Catalogue M.

EDWIN A. JACKSON & BRO.,

50 Beekman Street, NEW YORK,

_INTON

Sole Proprietors and Manufacturers of

DOUBLE TWIST WARP STIFFENED (Iron Furred.) CLINTON CORRUGATED

Plain, Japanned or Galvanized.

The Most Perfect and Economic System of FIREPROOF Construction

Send for Circular. -

BOSTON, NEW YORK, 199 Washington St.

CHICAGO, 76 Beekman St.

137 Lake St.

FACTORY, CLINTON, MASS.

SHOULD SPECIFY

Not Terra-Cotta,

Nor Iron.

BUT A LIQUID, easily applied to Wood Work of all kinds, and Combustible Materials generally.

IT PREVENTS FIRE by extinguishing the flame.

We Can Show You Some Tests That Will Astonish You.

WRITE FOR PARTICULARS TO

C. W. TANNER & CO., Richmond, Va.

N. B.—The C. & O. Railway Co. fireproofed nearly 2,000,000 square feet of exposed wood work on their wharves and warehouses at Newport News, Va., with RICINATE PAINT AND KALSOMINE.

JAS. L. FOOTE,

SLATINGTON-BANGOR SLATE SYNDICATE, MINERS AND WHOLESALE DEALERS IN

JOEL NEFF.

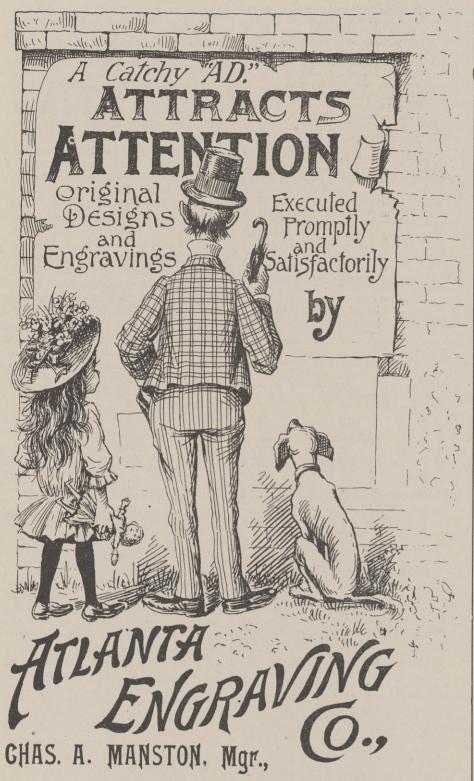
BLACK, GREEN AND RED

INC

AND NATURAL SLATE BLACKBOARDS.

THEIR INTEREST TO CORRESPOND WITH US. SLATINGTON, PA.





8 SOUTH BROAD STREET.



MADE FROM EXPANDED METAL.

Best Metalic Lath made. It is easily applied without stretching or furring, making perfect "key" and solid work. Expanded Metal in other forms is used for Fences, Gates, Window Guards. Etc. Write for Illustrated Catalogue No. 29. CENTRAL EXPANDED METAL CO., 531 Wood St., Pittsburgh, Pa. Give name of this paper.

THE

Is practically tested, both in its LIFT-ING AND FORCING qualities and Architects specially invited into its merits. Circulars and full information from warranted. to examine into its merits.



THE WM. POWELL CO. CINCINNATI, O.

Bank and office building for H. L. Bradlev cost, \$50,000.

Stable for James Conden; cost, \$2,000. Store repairs for T. E. McArthur; cost,

Store repairs for M. J. Conden; cost,

Residence for J. E. Ross; cost, \$5,000. Residence for Edwin Kennedy; cost, \$5,000.

Store building for : Wm. Kirk; cost, \$6,000.

Store and offices for Ed Mapler; cost, \$10,000.

TEXAS.

Houston.-J. A. Tempest, architect, has prepared plans for a bank alteration for Commercial National Bank, cost, \$15,000.

Residence for U. B. Chew, corner Fannin and Dallas street; cost, \$12,000.

Church building for Christ Episcopal church; G. F. Macon, builder; cost, \$45,000. Corner Tease evenue and Fannin street.

Church building for second ward mission, Hamilton and Magnolia street; cost, \$2,000.

Warehouse for R. P. South; cost, \$12,000. Residence for Chas. House; W. M. Van Alstyne, builder; cost, \$5,000.

Residence for Percy Allen; cost, \$2,500.

Paris.—W. G. Barry, architect, has prepared plans for an office building for John W. Rountree; cost, \$10,000.

Residence for J. P. Pierce; cost, \$8,000, Rectory for the Episcopal church; cost, \$1,500.1

Pithian Hall and office, for J. Rountree; cost, \$12,000.

Outlook for the season very good.

Sherman.—Tom Wood, architect, has prepared plans for the following work from his office:

Repairing bank building, for M. & P. National Bank; cost, \$8,000.

Repairing store building, for Frank Cote; cost, \$2,500.

Store building for S. L. Hall; cost, \$4,-

Store building for W. C. Jones & Bro.; cost, \$6,500.

Residence for T. L. Irwin; cost, \$8,000. Residence for Frank Cote; cost, \$5,000.

Residence for Wm. Batsell, jr.; cost \$2,-500.

Residence for the Taylor estate; J. K. Gill, builder; cost, \$8,000.

City hall for city of Sherman; cost, \$15,-000.

Public school building for city of Sherman; cost, \$20,000.

Business is gradually growing; I have several other jobs on the board, can't say what the final action will be. I hope to spread a great deal of "Acme" this year, in fact I wish to paint the State red, using the above mixed brand of paint.

VIRGINIA.

Culpepper.—J. Appleton Wilson, architect, Baltimore, Md., has prepared plans for a church building for the First Baptist church; cost, \$15,000.

Roanoke.-Messrs. Wilson & Huggins, architects, have made plans for eight residences for J. H. Coon; A. L. Marshall, builder; cost, \$15,000.

Petersburg-J. Appleton Wilson, architect, Baltimore, Md., has prepared plans for a church building for the Second Baptists; cost, \$12,000.

A GREAT CONCERN.

Two Large Publishing Houses Consolidate and Will Operate Jointly.

THEIR CAPITAL STOCK WILL BE \$100,000_

The Constitution Separates Its Book and Job Department from the Paper, Uniting with the Franklin Company.

Atlanta Constitution, February 18.

The book and job departments of the Constitution Publishing Company and the Franklin Publishing Company have been consolidated and will make the largest publishing concern in the South.

Both are large establishments and do a heavy business annually. Both have been managed with great skill and sagacity and enjoy an enormous patronage. No pub-

enjoy an enormous patronage. No publishing firms in the South stand above

enjoy an enormous patronage. No publishing firms in the South stand above these.

The consolidation has been under consideration for some time. Yesterday the contracts were signed and the charter is being prepared. As soon as possible the Constitution's book and job branch will be removed to the handsome and commodious building of the Franklin Company at Edgewood avenue and Ivy street.

This is not a sell out by either company, but simply a sort of partnership or joint stock arrangement, entered into because it would save expense and probably produce better results.

The capital stock of the new joint company will be \$100,000. The Constitution needs more room for the publication of the paper and kindred branches of the business. Its book and job department was started about seven years ago and under the able management of Mr. W. J. Campbell has grown to enormous proportions and is the peer of any similar concern in the country. The Franklin Publishing House is older and is owned by Messrs. George W. and Z. D. Harrison. Mr. George W. Harrison has been the skilful manager and has built up a trade and reputation creditable to himself and the city of Atlanta. His company has been wonderfully successful in publishing books. This will be a special feature of the new company. It will be conducted after the manner of the Harpers or Scribners, and with the enormous facilities at command will be able to compete with the great publishing firms of the North.

Both establishments are finely equipped. Their plants will be combined and no facility will be lacking for turning out fine work.

The name of the new company has not been positively fixed.

The name of the new company has not been positively fixed. It may be the Southern Publishing Company. Directors will be elected next week. Until the comwill be elected next week. Until the company is permanently organized Colonel W. A. Hemphill and Mr. George W. Harrison

will act as trustees.

The South needs a great publishing house and the new one will fill the bill.

Every year the publication of books and periodicals grows enormously, and the new firm will undoubtedly take the leading po-

firm will undoubtedly take the leading position in the Southern field.

The Franklin Company erected a handsome brick building last year, designed especially for the publishing business. This building at Edgewood avenue and Ivy street is 50x160 feet and is four stories high. Two stories more will be added, and if still more room is found necessary, there is ample space on the lot, which is 100x250 feet.

there is ample space on the lot, which is 100×250 feet.

The Constitution, under the head of "A Southern Publishing House," says editorially of the foregoing announcement:

"The South has long needed a publishing house strong enough to compete in a measure with those of the North, enter-

prising enough to take hold of ventures promising a reasonable degree of success, and with a management experienced enough to place it on a footing with the best. The demand for such an institution best. The demand for such an institution in the South is so persistent, and the field that is opened before it is so large and so promising that our readers will not be surprised to learn that Atlanta capital and

surprised to learn that Atlanta capital and enterprise have at last concluded to satisfy the demand and occupy the field.

"Two of the largest establishments in the South, which have heretofore engaged in friendly competition, have joined hands and will hereafter accomplish together what they have been striving to accomplish singly. The Franklin Publishing House, one of the largest and most complete establishments of the kind in the South, and the Constitution book and job printing department have combined their printing department have combined their forces, and the combination will represent larger capital, more experience and a greater degree of experience and skill than have ever been gathered together in any book publishing and job printing department in the South.

ment in the South.

"The new company will give particular attention to the publication of books, especially in the subscription department. It will also publish school books, and will gradually engage in the general publishing business. It is entirely a home institution, being provided with home capital and managed by home men. It will occupy with justifiable confidence the large field which the South offers to a book publishing establishment, and will take its place almost immediately among the noted publishing houses of the country." place almost immediately among publishing houses of the country

THE NEW PUBLISHING HOUSE

WHICH WAS FORMED BY THE RECENT CONSOLIDATION

Of the Constitution Job Office and the Franklin Publishing Company.

Atlanta Journal, February 20.

The consolidation of the Constitution job office with the Franklin Publishing Company means the organization of a

Company means the organization of a great Southern publishing company, the capital of which is \$100,000.

The handsome building now occupied by the Franklin Publishing Company on Ivy street will be enlarged by the addition of two stories, and the new concern will occupy the entire structure. The organization will be effected this week and a charter applied for probably in the name of the Southern Publishing Company. Mr. W. A. Hemphill and Mr. George W. Harrison will act as trustees until the new company is permanently organized.

The Journal comments editorially upon

The Journal comments editorially upon the foregoing as follows:

"The necessity for a publishing house in the South with ample facilities at command to meet the demand upon it for school and other books has long been felt. Every other books has long been felt. Every lover of the South and its intellectual and material progress has long wished for such an establishment. It is gratifying intelligence to all interested in Southern development that the Franklin Publishing House, gence to all interested in Southern develop-ment that the Franklin Publishing House, one of the oldest and best equipped con-cerns in the South, and the Constitution book and job office, which is well supplied with material, have been combined, and will form the largest and best equipped publishing house in the whole country. It has a capital of \$100,000. With South-ern capital and managed by Southern men, it is destined to give to the South a house equal to the leading publishing con-cerns of the North. "The publishing house will be in the building on Ivy street, near Edgewood avenue, erected by and for the Franklin at a cost of over \$40,000." "Mr. George W. Harrison, manager of the Franklin for a number of years, whose energy, tact and integrity have given it such a firm footing and standing through-out the South, and who has been State

out the South, and who has been State

printer for a number of years, and Hon. W. A. Hemphill, business manager of the Constitution and ex-mayor of Atlanta, who will be identified with the house, give it the strongest assurance of success.

The South moves steadily onward and the establishment of this publishing house in Atlanta is an important event in its progress."

The preceding announcements, and the editorial comments thereon by the Constitution and the Journal, state the details of this great business combination so fully, and the vast scope and results of it are so well indicated in the remarks of our contemporaries, that but little remains to be said on this line by us. This journal, as well as every other of the many popular publications issued hitherto individually by the Franklin and the Constitution, under the present consolidation will feel the beneficial effects thereof at once, and their patrons will reap the large benefits which will accrue to them and the public by the unlimitimprovements which will soon be visible in every publication of the united companies. This movement means great things for the literary interests of the South and will place this section on a level with those of the most favored in this field of human activity. Another effect, upon which Georgia and especially this city may well congratulate themselves, will be that Atlanta steps to the front as the coming publishing and printing center of the South.

But what we particularly desire to emphasize in this connection is the fact that Mr. George W. Harrison, so long the general manager of the Franklin, and to whose zeal, energy, tact and splendid business ability its success is largely due, is the general manager of the consolidated houses, thus placing him at the head of the largest and most important publishing and printing concern of the South, and which is also the peer of any in the United States.

It is a position which few men in this country could fill successfully; but the long tried business capacity of this gentleman, his high standing in business and financial circles, the positions of trust and honor tendered to him and accepted by him reluctantly, and only from a sense of duty, because he is naturally one of the most modest and unostentatious of men, and the strikingly satisfactory results of his management of the Franklin's interests, are proofs that he will fill the position, with its increased responsibilities and vastly larger business scope, with satisfaction to his associates and with preeminently brilliant results in the management of the affairs of the establishment.

We congratulate Mr. Harrison and those connected with him, as well as the public upon the new regime, and predict for the Franklin Publishing House a career of unprecedented prosperity.

An Unsolicited Testimonial for the Willer Sliding' Blind.

St. Matthews, S. C., Nov. 17, '92.

Gentlemen-Carpenter put up the last blinds yesterday, they are admired by every one who visit our dwelling, and there is nothing in the house that I am better pleased with. My husband's draft has been sent you in payment for same.

Thanking you for the superior job,

I am very respectfully,

MRS. W. W. WANNAMAKER

CANADA.

Montreal.-J. Alcide Chausse, architect, sends us the following report from Canada:

A church building, Cote street, Antoine, Quebec; A. C. Hutchison, architect, 181 St. James street.

A school building, Devins property; J Haynes, architect, 180 St. James street, cost. \$10,000.

Three dwellings for H. Gonie, Ray street; J. B. Resther, architect, 107 St. James

Twenty cottages for F. R. Alley, Amherst Park; J. B. Resther, architect, 107 St. James street.

A public hall for C. E. Leclerc, Laganchetier street; J. B. Resther, architect, 107 St. James street.

Factory for P. P. Labelle, Delominica avenue; J. B. Resther, architect, St. James street.

Four dwellings for F. J. Bizaillon, St. Dennis street; G. Simard, architect, 1585 St. Catharine street.

Four dwellings for A. Brunet, St. Andrew street; J. Alcide Chausse, architect; 1535 Shaw street.

Store and dwelling for J. A. Renaud, St. James street; J. Alcide Chausse, architect.

Residence for Cote street, Antoine, Quebec; J. Alcide Chausse, architect, 1535 Shaw street; cost, \$9,000.

TREASURY DEPARTMENT OFFICE OF THE SUPERVISING ARCHITECT.

Washington, D. C., Feb. 8, 1893.

Washington, D. C., Feb. 8, 1893.

Sealed proposals will be received at this office until 2 o'clock p. m. on the 2d day of March, 1893, and opened immediately thereafter for all the labor and materials required for the excavation, foundations, basement and area walls, basement columns and first floor construction for the United States postoffice building at Columbus, Ga., in accordance with the drawings and specification, copies of which may be had at this office or the office of the Superintendent at Columbus, Georgia. Each bid must be accompanied by a certified check for a sum not less than 2 per cent. of the amount of the proposal. The right is reserved to reject any and all bids or to waive any defect or informality in any bid, should it be deemed in the interest of the Government to do so. All proposals received after the time stated will be returned to the bidders. Proposals must be enclosed in envelopes, sealed and marked, "Proposal for Excavation, Foundations, Basement and Area Walls, etc., for the United States Postoffice Building at Columbus, Georgia," and addressed to W. J. Edbrooke, Supervising Architect.

STEPHENS, 4

Terra-Cotta.

Offices: { 1341 Arch St., Philadelphia. 181 Broadway, New York.

WORKS, 46th St. and Girard Ave., Philadelphia.

Catalogues and Estimates on application.

Buff Gray

Black White Salmon

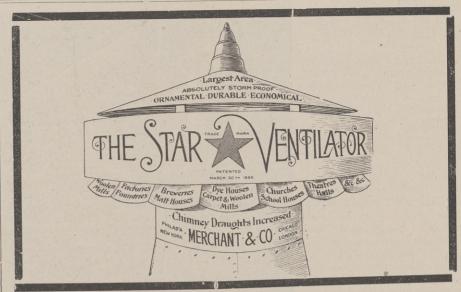
ARCHITECTS AND BUILDERS!

Express plans at my expense for estimates on HEATING and VENTILAT-ING Schools, Churches, Residences and buildings of all kinds in Southern States.

Correspondence solicited. Printed matter free.

JOHN L. EICHBERG,

Memphis, Tenn.



Sewer and Railroad Pipe, Fire Brick, Milled Clay, Urns, Etc.

MACON

GEORGIA

STEAM, HYDRAULIC. HAND, PASSENGER, FREIGHT ELEVA-TORS AND DUMB WAITERS.

Write for Circular.

JAS. H. CURRAN,

132 W. 2nd Street,

- - - Ohio. Cincinnai,

BOOKS ON BUILDING ALLIED ARTS

LATEST PUBLICATIONS.

Palliser's Court Houses, City Halls, Jails, &c. Palliser's Common Sense School Architect-

SPECIFICATION AND CONTRACT BLANKS, ETC.

Full descriptive lists mailed on application; also on all American and Foreign Building Journals with club rates.

Palliser, Palliser & Co.,

4 E. 42d Street,

NEW YORK.

Western & Atlantic Railroad.

4 PASSENGER TRAINS DAILY.

Between Atlanta & Chattanooga,

Union Depots both at Atlanta AND CHATTANOOGA.

Pullman Palace Sleeping Cars between Cincinnati and Jacksonville, Florida, daily.

Púllman and Parlor Chair Cars Daily between Nashville and Atlanta,

It is the historic battle fields route of America—Sherman's line of march.

Be sure your tickets read via Western and Atlantic R. R.

C. E. HARMAN, Gen'l Pass. Ag't. JOS. M. BROWN, Traffic Manager.

GET YOUR Blank Books, Lagers, Journals, Cash Books, Binding, Electrotyping

etc., etc., of

JAS. P. HARRISON & CO.,

(THE FRANKLIN PUBLISHING HOUSE,)
State Printers, Atlanta, Ga.

Consult them before placing your orders.

CARPENTER AND BUILDERS,

CONTRACTOR AND BUILDER. 422 E. Gray street, Louisville, Ky

PROFESSIONAL CARDS.

C. C. BURKE,

ARCHITECT,

282 Main street.

Memphis, Tenn.

MESSRS. CRAPSEY & BROWN,

ARCHITETTS,

40 Wiggins Block, Cincinnati, Ohio.

MESSRS. McADOO & WOOLEY,

San Antonio, Texas.

A. S. EICHBERG,

ARCHITECT.

Savannah, Ga

M ESSRS. HUNT & LAMB,

ARCHITECTS.

Chattanooga, Tenn.

MESSRS. FLOYD & STOUT,

Chattanooga, Tenna

W. G. BARRY.

ARCHITECT.

B. WOODRUFF,

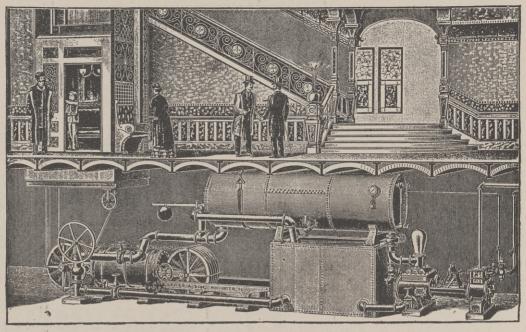
ARCHITECT.

Specialty, Public Buildings. Office, Exchange Bank Building, Macon, Ga.

HYDRAULIC PASSENGER ELEVATORS.

As an essential adjunct to every large office building as well as convenience to the general public and to the tenant, no feature of appliance stands more prominently forth than its passenger elevators. This mechanical appliance has not only rendered practicable the occupancy of high buildings for business purposes, but has, owing to attendant convenience and quick service, brought so great a demand with it for office space that such resources have been and are severely taxed.

The accompanying cut shows the hydrop-neumatic or pressure tank system as manufactured by the



THE GRAVES HYDRO-PNEUMATIC SYSTEM.

Graves Elevator Company, of Rochester, N. Y., a firm long and favorably known not only for the service of their machinery, but for the safety and economy with which the service is obtained. Although the best patented safety appliances are in use on the Graves elevators to prevent accidents, they believe good engineering skill, heavy construction, and first-class workmanship are the best safties known, and their experience seems to justify this conclusion, as in over 2,500 elevators of their make now in use in all parts of the country, including many first-class hotels and office buildings, and they have yet to hear of the first fall or fatal accident caused by any failure of machinery or referies. machinery or safeties.

The Graves elevators in the New Yates hotel, in Syracuse, N. Y., and Wilder building in Rochester, N. Y., are regarded as the finest in the country. In the latter building they are advertised as the fastest elevators in the world. Among those just finished in this city are the Chamber of Commerce building, the Y. M. C. A., the Imman and the Grant office buildings, the latter being the fastest elevator in the South. The Company's Southern office is situated in the Inman building, Atlanta, Ga, J. P. Robinson, Sales Manager.

THE BROCK FLEXIBLE FENCE.

Being plainly visible and exceedingly strong, no barbs or other similar devices are necessary, as animals seeing the fence will seldom come in contact with it, and if they do, it cannot possibly be broken, injured or even stretched by the severest attack, while the attacking animal is repulsed uninjured.

pulsed uninjured.

In economy it excels wire, as it will save fully fifty per cent. of time and labor in constructing and repairing, and over thirty per cent. in the number and size of posts, making it the cheapest fence in the world.

Its durability is only limited by the everlasting propensities of the material used in its construction; and being free from the effects of changes in tempera-

everlasting propensities of the material used in its construction; and being free from the effects of changes in temperature, so damaging to wire, the repairs are almost exclusively confined to the posts. The rails, being made of very best hardwood, will last from ten to twenty years, or longer. This fence consists of ordinary posts and the "Flexible Rail."

The posts are set from eight to twenty feet apart, with staples driven into one side of them, or holes bored through the center of them of sufficient size to allow the rails to play through them easily. The rail is composed of bars of wood, sawed whiteoak rails 1½ inches square and 4 feet long, attached or connected together at their ends by a metal link, in a simple, yet very powerful manner, forming a flexible rail or wooden rope of great strength and of any desired length.

ing a flexible rail or wooden rope of great strength and of any desired length.

These rails are attached to end posts only, and are allowed to play freely through the intermediate posts in such a manner that a strain upon any given point is not confined to that locality, but, becoming a lateral pull, is equally distributed along the whole line of fence.

Four rails of this fence in turning cattle are equivalent to six or eight strand

Four rails of this fence in turning cattle are equivalent to six or eight strand wire, while there is no danger of stock getting entangled in it. Posts do not require to be as large in the ordinary rail fence, because with an endless flexible rail they assist each other.

Very respectfully,

W. E. Brock.

AN ILLUSTRATED MAGAZINE CONTENTS STONE = MARBLE = GRANITE CONTRACTING = BVILDING DH-RANCK - PVB-CQ - PVBLISHERS \$200 Per Year-Single Copies . 25 cen

The Chateaus of France

HAVE at once a structural, historic, picturesque and artistic interest which is not surpassed by any architecture the world has known. They form the highest exemplification of stone architecture. Nearly all of the chateaus of France are of stone. For beauty of detail and for ready adaptability of modern decorative requirements, no better examples are to be found.

With the February number of STONE we shall begin the publication of a series of profusely illustrated

articles on these chateaus. Most of the material will be derived from the work of Emanuel Violle-le-Duc, the well known French architect and author

The Architects of America have never had this matter presented to them. Being, as it is, an architecture readily adapted to modern requirements, picturesque in outline, containing a mass of detail from the simplest to the most complex and elaborate, yet always in good taste and extremely beautiful, it is surprising that it has never been brought to their attention.

To the Stone Workers, we can say that this series of articles will contain a description and illustration of the most beautiful and generally satisfactory stone work that is known in the history of the world. The cuts are of a highly practical character, presenting very clearly methods, forms of construction, details of ornament, and descriptive suggestions of an exceedingly wide range.

This matter is prepared by Mr. Louis H. Gibson, architect, with the help of Mrs. Gibson as translator, who have visited nearly all of the chateaus now in existence in France, and whose long residence in that country enables them, with the aid of other material, to present a highly practical and picturesque collection of material.

STONE is a magazine of 148 pages, after the style of The Century, Scribners, et al. The subscription price is \$2.00 a year.

Note.—You can order Stone sent you and pay for it any time within a a year. Every number contains matter of interest to architects.

THE D. H. RANCK PUB. Co., INDIANAPOLIS, IND.

PROFESSIONAL CARDS.

Southern Engineering Company.

236 Fifth St., LOUISVILLE, KY.

Electrical Engineers and Contractors, Steam and Electrical Construction.

Agents for Interior Conduit Tubing and "Parasite" Rubber Covered Wire. Both necessary for high class electrical work.

ARCHITECTS.

BRUCE & MORGAN, Architects,

Grant Building,

ATLANTA, GA.

WANTED-SITUATION. By an architectual draftsman of eight years' experience in general office work, with good references. Address Geo. Barkman, Hamilton, Ohio.

GILL, MOAD & GILL,

J. S. MOAD. J. O. GILL.

ARCHITECTS AND SUPERINTENDENTS, Dallas, Texas.

B. BRISTOL & SON,

ARCHITECTS,

Dallas, Texas.

GEO. VOGEL. VOGEL BROS.,

ARCHITECTS,

S. E. cor. 4th and Walnut, Cincinnati, O.

W. McCLAIN

ARCHITECTS,

301 North 20th Street, Birmingham, Ala. Reference: A. O. Lane, Mayor; Eugene F. Enslen, Cashier Jefferson county, Sav. Bank; Geo. L. Thomas, County Commissioner; Geo. W. Harris paints, oils, glass and wall paper; J. R. P. Durham wholesale grocer.

SIMONS & HOLMES,

ARCHITECTS,

42 Broad Street, Charleston, S. C.

W. MAAS,

ARCHITECT.

ARCHITECT,

75 Perin Building, N. W. Cor. Fifth and Race Sts. Cincinnati, Ohio.

ALCIDE CHAUSSE

ARCHITECT,

Valuator and Superintendent,
153 Shaw Street, Montreal, Can.,
and 2124 Notre Dame Street,
Ste Cunegonde, Que., Can.

ARCHITECT.

Equitable Building, Atlanta, Ga.

E. G. LIND,

ARCHITECT,

Corner Whitehall and Hunter streets, Atlanta, Ga.

NIXON & LINDSEY,

ARCHITECTS. Grant Building, (4th floor), Atlanta, Ga.

B. J. GOODMAN,

ARCHITECT,

Baton Rouge, La.

MESSRS. FRANKEL & HAYDEN,

San Antonio, Texas.

WILSON & HUGGINS,

ARCHITECTS.

Roanoke, Va.

М. Ј. БІММОСК,

ARCHITECT.

Richmond, ya.

MESSRS. HAYDEN & WHEELER

ARCHITECTS.

Equitable Building, Atlanta, Ga.

FRANK L. SUTTER,

ARCHITECT,

Rooms 7.8 and 9 Barney Building, Fifth Street, opposite Stone street, Dayton, Ohio.

ARCHITECTS,

803 Security Building, St. Louis, Mo.

NORMA M. BONNIWELL,

ARCHITECT,

Hickory, N. C.

H. W. ALDENBURG,

ARCHITECT,

Lexington, Ky.

MACMURPHY & STORY,

ARCHITECTS,

ARCHITECT.

Rooms 1082-1085, Euclid Ave., Cleveland, Ohio.

MESSRS. WILLIAMS & OTTER,

MESSRS. J. W. CLAYTON & CO.,

ARCHITECTS.

AMES MURPHY,

ARCHITECT,

Room 21, Kampmann Bldg., San Antonio, Texas.

W. P. TINSLEY,

ARCHITECT.

Lynchburg, Va.

B. LEGG ARCHITECTURAL CO.

ARCHITECTS.

Fagin Building Opposite Post-Office, St. Louis, Mo. Branch Office: North Texas National Bank Build-ing, Dallas, Texas, O. H. P. Rudesill, Manager.

LEON BEAVER. W. C. HOFFMEISTER. C. T. MOULD.

BEAVER, HOFFMEISTER & MOULD,

ARCHITECTS,

BEAVER & HOFFMEISTER,

ARCHITECTS,

Corner Gay and Vine Streets, Knoxville, Tenn.

A BERT L. WEST, (Fellow American Institute Architects)

ARCHIECT.

No. 1105 Main Street, Richmond, Va. Wm. C. West, Assistant, seven years experience,

ARCHITECT,

127 S. Fourth Street,

R. N. McGRATH,

ARCHITECT,

Office No. 6 Dexter Avenue, Montgomery, Ala.

CLENN BROWN & WILLIS E. HALL,

ARCHITECTS,

Eirst National Bank Bldg, Winston-Salem, N. C.

ARCHITECT,

227 Main Street,

Cincinnati, O.

ALBERT B. BAUMANN. Baumann Brothers,

ARCHITECTS,

Knoxville, Tenn.

MAX DRACH. DRACH & THOMAS,

JOHN H. THOMAS

ARCHITECTS,

Southeast Corner Fifth and Main Sts. (third floor) Louisville, Ky.

ROBERT SHARP.
SHARP & GRUBBS,

ARCHITECTS AND SUPERINTENDENTS,

Public and Private Buildings a Specialty. Room 21, Cole Building, Nashville, Tenn.

RACON & HUBER,

ARCHITECTS,

Chamber of Commerce,

Toledo, Ohio.

HILL C. LINTHICUM,

ARCHITECT,

Correspondence Solicited. Office 414 Liberty Street, (Bitting Block), Winston, N. C.

GUSTAVE W. DRACH,

ARCHITECT,

Rooms 105 and 106 Lincoin Inn Court, 227 Main Street, Cincinnati, Ohio.

FOLK & CO.

ARCHITECTS AND BUILDERS,

1007 Chestnut Street, (up stairs), St. Louis, Mo. Over thirty years' practical experience. Sketches and references cheerfully furnished. Buildings erected on easy payments. All work guaranteed to give satisfaction.

A LEXANDER BLAIR,

ARCHITECT,

556 Cherry Street,

W. K. KETTERINGHAM,

Mississippi. Contractor and Builder, and General Superintendent of any Style Buildings. Prices reasonable.

CHAS. LE VASSEUR.

IVIL ENGINEER AND ARCHITECT.

334 Second Street,

ARCHITECT,

Corner 11th and Main Streets, Richmond, Va.

M. F. GIESEY,

ARCHITECT, Reilly Building, Wheeling, West Virginia.

TOM. WOOD,

ARCHITECT AND SANITARY ENGINEERING,

Public Building a Specialty. Sherman, Texas.

ARCHITECT,

Jarvis-Conklin Building, Rooms 504 and 505, Augusta, Ga.

TAS. FRERET,

ARCHITECT,

28 Union Street, New Orleans.

APPLETON WILSON,

ARCHITECT,

5 E. Lexington Street,

BRINTON B. DAVIS,

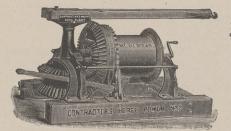
ARCHITECT AND BUILDING SUPERIN-TENDENT,

Opera House Block, Main Entrance, Paducah, Ky Department of hotel and court-house architecture. Also village, town, city, county and State buildings.

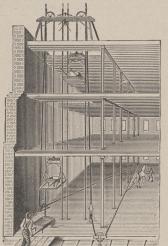
SELF-INSTRUCTION IN ARHCITECTURE.

Send 25 cents for Architectural Reference Book containing full list of books on architecture, recommended by the Royal Institute of British Architects.

C. E. ILLSLEY, A. M. C. E., Architect. Equtable Building, St. Louis, Mo



Our MASONS' MATERIAL ELEVATORS can be used either inside or outside of building. Capacity Horse, 50,000 to 60,000, and Steam, 100,000 Brick; per day. Send for Catalogue and Price-List.



An Improved Duplex Horse Power

For Bridge Builders, Contractors, Quarrymen, Mineral and Coal Miners, and Masons.

IN SLOW MOTION:

Two lines, or one block, - 6
Four lines, or two blocks, - 12

Single line, no block, - 12

Two lines, or one block, - 2

Waisht - 2000 negnds

Waisht - 2000 negnds 1 ton

Weight, 2,300 pounds.

JAMES BOYD, Proprietor, 342 Iglehart Street - - ST. PAUL, MINN.

CHICAGO OFFICE: H. P. STIMSON, Agent, 159 LaSalle Street, CHICAGO, ILL.

ART STAINED GLASS.

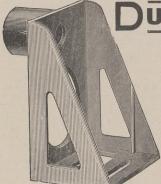
THE SOUTHERN ART GLASS CO.

120 Peachtree St., ATLANTA, GA.,

LEADS THE SOUTH

In Memorial Windows, Ecclesiastic and Domestic Art Glass, Leaded Beveled Plate Glass, Beveled Mirrors, Jewels, Etc., Etc.

There is nothing in Stained, Art, Ornate or Colored Glass that we do not manufacture or supply. Designs and Glass Samples free.



UPLEX OIST ANGER

> ABOLISH THE ANCIENT MORTISE AND TENON AND USE THE DUPLEX JOIST HANGER.

GIVES DOUBLE THE STRENGTH.

SAVES MONEY, TIME AND LABOR

For Sale by all Dealers in Builders' Hardware.

Write us for information,

DUPLEX HANGER CO

23 and 25 Water St., Cleveland, Ohio.

just the thing you want to give you a perfect wall and one that will Last a life-time. It is all prepared ready for using. Endorsed by all the leading architects, builders and plasterers in the United States. If you are thinking of building, send us a postal, and by return mail will send you catalogue, prices, etc. Don't make the mistake of using the old-time lime plaster. Adamant is what you want. Address,

SOUTH EASTERN PLASTER CO.,

Atlanta, Ga.

Savannah, Ga.

P. S.—We are also manufacturers of Calcined Plaster. Write for price

USE THE BEST!

Needs no Grinding. Is Perfectly Fine.

ENE VICTORIA DRY.

MANUFACTURED BY-

The S. P. WETHERILL COMPANY, PHILADELPHIA

And for sale by all Dealers In Paints, Etc., in the South.

HEAT, COLD AND VERMIN PROOF. MOST PERFECT INSULATOR

KNOWN - Deadening sound, prevention of spread of fire.

Storage, Ice House, Dry Kilns, Green Houses, Refrigerators, Safe, Boiler, Covering and for pamphlets and sample, mailed free.

ROANOKE MINERAL WOOL COMPANY, Roanoke, Va.

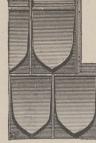
Hartman's Patent Inside Sliding Window Blinds.



A pleasing sub stitute for the old style of hinged blinds; more convenient and more durable, combined with elegance and comfort; slide up and down like sashes; easily moved and stay where placed. Artistic styles and finishes made to order, with slat and panel work of beautiful designs; frame slight and strong; none such can be obtained elsewhere the most popular blind in the market; tens of thousands are in use; agents wanted everywhere. Enclose four cents stamps for 80 page illustrated catalogue. Address style of hinged

HARTMAN SLIDING BLIND CO., No. 75 Beaver st., CRESTLINE, OHIO, U. S. A.

CORTRIGHT NEW SHINGLE VICTORIA'



For Churches, Schools, Residences, etc.

Send for Catalogue and Prices.

Makes a tight roof and pronounced by leading architects the handsome most shingle in the market

Cortright Metal Roofing Co.,

MAIN OFFICE AND FACTORY

Broad and Hamilton Streets, PHILADELPHIA, PA.

Western Office 84 Adams Street, CHICAGO, ILL. Eastern Office: 83 CEDAR STREET. NEW YORK.

Light Hard Oil Finish

For all Interior Work of Public Buildings, Churches and Residences.

We guarantee the best resultshardiness, elegance, durability. No filler needed. One varnish for the whole job.

Louisville references Write us fully: we will try to help you solve any phase of the varnish question.

COLLINS-BEACH VARNISH CO.,

(Established 1884. Reorganized 1892.)

LOUISVILLE,

\$2.00 Per Year

TERIOR

Monthly.

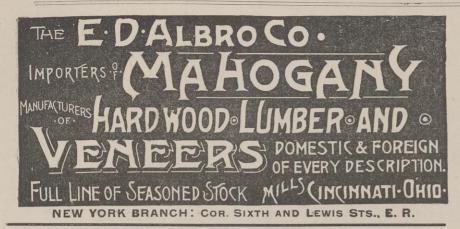
ECORATOR

"Beautiful, Chaste, Elegant."

SAMPLE COPIES FREE.

The Interior Decorator Publishing Co.

> 1301 Manhattan Building, CHICAGO, ILL.



TARD WOOD MANTELS,

TILE AND GRATES.

Gas and Electric Chandeliers.

JOBBERS AND RETAILERS OF

STOVES, RANGES, FURNACES, PLUMBERS AND STEAM FITTERS MATERIAL, BATH TUBS, WASH STANDS, WATER CLOSETS, ETC.

Plumbing, Steam Fitting, Hot Water and Hot Air Heating a Specialty. The largest Galvanized Iron Cornice Workers South.

Be certain and get our prices. Estimates furnished.

Hunnicutt & Bellingrath Co.

Atlanta, Ga.

PORTER ROOFING CORRUGATING IRON CINCINATI, OHIO.



Manufactures of all kinds of Iron and Steel Roofing and Siding.

The Pioneers of the Roofing business in the United States. Can furnish testimonials from every State and Territory.

When writing for our Prices and Illustrated Catalogue, mention the Southern Architect.

Five Times Longer than other paints. Unequaled for Roofs, Boiler-Fronts, Smoke-Stacks, etc.
Send for Circular and Prices. Jos. Dixon Crucible Co., Jersey City, N. J.

THE ARTISTIC WOOD WORKS, at LURAY, VA. Famous Caverns.

Operate the great Polyonal Machinery patented by the N. L. & T. Co.

THE MOST EXTENSIVE WOOD TURNING WORKS IN THE SOUTH

Execute Unique Designs from ¼ inch square to 10 inches square and 60 feet long. High Finish, Perfect Stock, In mitable Execution. All kinds domestic thoroughly seasoned Hardwoods in unlimited supply. Capacity from 5,000 to 20 000 daily. Will execute from "your or our" designs. Send for cata logue, etc.

THE LURAY ART STIC WOOD CO., Luray, Va.

MORSE, WILLIAMS & Co.

Passenger & Freight

Philadelphia, New York and Boston.

JOS. S. COOK & CO., Agents, 41 Broad Street ATLANTA, GA.



ART METAL WORK

In Wire, Brass and Wrought 0000000000000000 Iron, Bank and Office Railings, Elevator Enclosures LUDLOW SAYLOR WIRE CO.

> Decorative Metal Work for theatres, halls and public buildings. Wire Lath Cloth.

STLOUIS, MO.

We solicit correspondence with architects, contractors and builders. Estimates made on original designs.

Write for Catalogue.

Caldwell Hotel.

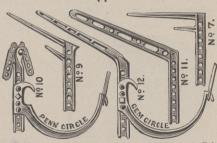
BIRMINGHAM, ALA.

Rates \$2.50 and \$3.00. Rooms with bath Extra.

E. B. FREEMAN, - -Manager. Absolutely Fire Proof.

BERGER BROS.,

Tinners' Hardware and Roofers' Supplies.



Sole manufacturers of Berger's Celebrated Eave Trough Hangers. These Hangers give the trough a handsome paneled appea ance. They are exceedingly strong, handy to put up and a general favorite wherever used Architects adopt them for outside hanging troughs in place of gutters Net formed on the roof.

Also Berger's Improved Pipe Fastener to use on all kinds and sizes of pipe, in any position, either right or left hand.

Long Gutters Pipe Wester Pipe Fastener

Long Gutters, Pipe, Hooks and Fasteners of every description.

Catalogues and Samples Free.

237 Arch Street.

PHILADELPHIA, PA



HOPKINS & ATKINS Washington, D. C., 20 years' experience. Write for information.



SEND IN YOUR SUBSCRIPTIONS

FOR THE

SOUTHERN ARCHITECT.

AMERICAN ROOFING

Our new works are nearing completion, and we will now enter orders for IC28x20 Roofin g Tin \$10.75 per box, in store Philadelphia, EXACTLY THESAME QUALITY and made by £XACTLY THE SAME PROCESS as the American Roofing Plates that we understand are being sold at \$11,50 to \$12.50 per box.

N. & G. TAYLOR CO., Works: -Tasker Street from Meadow to Swanson.

Direct Shipping Facilities:

| Penusylvania R. R. Baltimore & Ohio R. R. | Switch connections with each. Belt Line, Delaware River Wharf at Tasker St., within 750ft

BEST and ONLY INDESTRUC



device for counter balancing a window sash. This is not steel ribbon attachments, pulleys, etc., but differs entirely from all these complications, much more practicable and costs one-half the money. Requires no box frames and will last much longer. Adapted to old as well as new windows. Endorsed by leading architects and railroad companies. Be sure you get the Pullman and not let the dealers substitute the poorer and light cast iron ones in place of ours.

PULLMAN SASH BALANCE CO.,

ROCHESTER, N. Y.



Surveying and Engineering INSTRUMENTS.

Transits, Levels, Compasses, Chains, Tapes, Drawing Intruments, Draw-ing Paper, Profile and Cross Section Paper Field Books, Squares, Triangles, Etc.

.. Catalogue sent on application. ..

L. M. PRINCE, 134 W. FOURTH ST., CINCINNATI, O.



POPPERTS

Patent Weight

Are Superior to all others on account of their being a Weight Blind, the same as any ordinary windows hung on weights. They can be applied to any Old or New House.

Send for catalogue.

Agents Wanted,

POPPERT GEO. 419 Poplar Street. Milwaukee

ADVANCE BUILDING INTELLIGENCE

"The Architect and Contractor," published weekly, gives you advance information of Western Building and Industrial Enterprise.

Subscription, \$3.00 Per Year.

Address

The Architect and Contractor, DENVER, COLO.

THE

INDUSTRIAL AMERICAN.

A Semi-Monthly Magazine, published at LEXINGTON, KY.

Manufactures. Agriculture. Live Stock,

The leading NEW DEPARTURE, interests embodied in our magazine, each one separate from the other. SPECIAL ARTICLES from the pens of COM PETENT WRITERS on the vital questions of the day is one of the leading features.

Subscription Price, \$2.00 Per Year.

See our CLUBBING LIST before subscribing for any paper or magazine for 1893.

Solicitors wanted to whom liberal commissions will be paid. WRITE FOR SAMPLE COPIES.

THE-

NATIONAL BUILDER

A Monthly Journal Devoted to the Building Interests.

Published Monthly at Chicago, Illinois

\$3.00 a Year, Postpaid,

Each issue contains one or more complete sets of plans of dwellings, business or public buildings, drawn to a perfect scale, ready to build from.

The various departments, from apprentice to architect, ably treated and finely illustrated by Geo. O. Gamsey, one of the oldest architects of Chicago.

SAMPLE COPIES FREE



Bent and Beveled Glass, Plate Glass, Sheet Glass.





LANE'S PATENT STEEL DOOR HANGER.

Mirrors Plates

Beveled

The Most Perfect Anti-Friction Hanger in the Market.

The Most Perfect Auti-Friction Hanger in the Market,

Because it is made of steel throughout, except the where which has a steel axle: it will not break; it is practically free from wear; it is almost noiseless in action; it requires no oil; it has a broad bearing on the door, and keeps in line it is by far the most durable; it may be used with any track; it is always in order. LANE'S PATENT TRACK is made of steel and is easily put in position; catches and holds no snow or ice; door hung thereon cannot jump the track; is not subject to decay; requires no fitting, but is ready at once; may be used with hangers of other manufacture. Send for circulars. Sold by jobbes in hardware throughout the United States.

MANUIFACTURED BY

MANUFACTURED BY

LANE BROS., POUCHKEEPSIE, N. Y.



Louisville Wire Works.

Brass and Wire Office Railings, Elevator Inclosures, Window Guards and all Kinds of Wire Work.

SEND PARTICULARS FOR ESTIMATES.

219 West Market St., LOUISVILLE, KY.

Write for Illustrated Catalogue.

Seals with or without water.



Put into the Wnite House bytne U. S. Government. F. E. CUDELL'S

Patent Sewer-Gas

and Back-water Trap, For Wash-Bowls, Sinks, Bath and Wash Tubs, West Cleveland, Ohio.



Cudell Trap. S. ½S. ¾S. R. For venting use vent top



The Great Church LICH



Practical Books on Building and the Allied Arts.

ALL NEW AND LATEST ISSUES.

York City, an elegantly illustrated work, Superb binding. \$1.50
Bell's Carpentry Made Easy, the best work on Carpentry Construction, roof and timber framing, bridge building etc. \$5.00
The Carpenter's & Builder's Complete Companion. \$2.50
The Palliser edition of Nicholsen's Encyclopedia of Ar.hitecture. just issued, 1,300 pages, 215 steel plate engravings, 2 vols., half morocco. \$15.00
Album of Mantels. \$4.00
The American Stair Builder and Instructor. \$2.00
The Modern House Carpenter's Companion (Sylvester's). \$2.00
Palliser's Modern 8 Room Tower Cottage Plans, details and specifications, also showing 6 rooms, etc., etc. \$5.00

details and specifications, also showing 6 rooms, etc., etc.

ISSUED ANNUALLY:

A 64 page Catalogue, giving a full and complete list of all American and Foreign Architect-ural and Building Journals with Club Rates,—lowest prices—mailed to any address on application.

We guarantee to save you money if you send your orders to us for subscriptions to Architectural, Building and kindred trade journals as shown by the following letter:

Canton, O., February 12, 1891.

Messrs. Palliser, Palliser & Co.,
24 East 42d Street, New York.

Gentlemen—Yours of the 10th is at hand, and in reply ber to say that I am well pleased with your agency, and that in the seven Architectural journals which I subscribed for through you, I obtained a saving of about 10 per cent., notwithstanding five were renewals.

Yours very truly,
GUY TILDEN, Architect."

Address all orders and inquiries to the Publishers,

PALLISER, PALLISER & CO.,

42d Street and Madison Avenue,

NEW YORK.

WANTED!

Scrap Lead at the Franklin Publishing House

Edgewood Avenue and vy Street.

Atlanta.

Ga.

Peerless Mortar Colors

Black, Red, Brown and Buff.

These colors are permanent and superior to any article in use. Prepared only by

Samuel H. French & Co.,

PAINT MANUFACTURERS,

Importers, Dealers and Manufacturers of Painters' and Builders' Supplies. York Avenue, Fourth and Callowhill Sts. PHILADELPHIA, PA.

Send for Circular and Catalogue.

Before Buying Dumb Waiters

SEE THE PARAGON SELF-RETAINING!

Which automatically holds load at any point even when loaded to full capacity,

STRONG, DURABLE AND SIMPLE.

The following dealers carry stock and models:

Rice & Born Hardware Co., New Orleans, La. Edw. Lovell's Sons, Savannah, Ga. J. A. Zimmerman, Louisville, Ky. F. H. Davidson & Co., Baltimore, Md. Barber & Ross, Washington, D. C. John Taylor, Wilmington, Del. Patterson Brothers 27 Park Row, New York City. Geo D. Ferguson & Co., Mt. Vernon, N. Y. Barker, Rose & Gray, Elmira. N, Y. McCormack & Dunn, Troy, N. Y. Roberts, Parry & Co., Utica, N, Y. Burham, Black & Co., Syracuse, N. Y. Hamilton & Matthews, Rochester, N. Y. Walbridge & Co., Buffalo, N. Y. L. B. Passman, Elizabeth, N. J. N. T. Bushnell & Co., New Haven, Conn. Church & Morse, Meriden, Conn. Barker, Chadsey & Co., Frovidence, R. I. Duncan & Goodell Co., Worcester, Mass. Burditt & Williams, Boston, Mass. Chandler Barber, Boston, Mass. The Hoyt Co., South Boston, Mass. The Pierce Hardware Co., Taunton, Mass. Rice & Born Hardware Co., New Orleans, La. Edw. Lovell's Sons, Savannah, Ga.

Humphrey & Dodge, Concord, N. H.
J. M. Vance & Co., Philadelphia, Pa.
Bard, Rebu & Co., Reading, Pa.
M. S. Young & Co., Allentown, Pa.
C. L. Shimer, Bethlehem, Pa.
J. S. Osterstock & Co., Fastom, Pa.
Chas. P. Hunt & Brother, Wilkesbarre, Pa.
Hunt & Connell Co., Scranton, Pa.
Stenier & Vorgety, Alleghany, Pa.
The McIntosh, Huntington Co., Cleveland, Ohio.
Morris Hardware Co., Youngstown, Ohio.
The Paige Bus. Co., Akron, Ohio.
C. E. Morris & Co., Columbus, Ohio.
Tischer & Reisinger, Dayton, Ohio.
The Johnson Brothers Hardware Co., Cincinnati, Ohdogson & Howard, Detroit, Mich.
Clemeus Vormegat, Indianapolis, Ind.
Bliss, Bullard & Gormley, Chicago, Ill.
Phillip Gross, Milwaukee, Wis.
H. M. Horning, Waukesha, Wis.
The Northwestern Hardware Co., St. Paul, Minn.
Lobeck & Lim, Omaha, Neb.
Gardner & Co., Kansas City, Mo.
Emil Wachter, St. Louis, Mo.

MANUFACTURED BY

F. S. HUTCHINSON & CO.

Sixth Street and West Avenue, Long Island City, N. Y.

ROOFING

SLATE BLACKBOARDS.

STRUCTURAL SLATE.

Prices given delivered to any railroad station in the United States upon application.

411 Walnut Street, JOHN D. EMACK, PHILADELPHIA, PA.

The Manufacturer and Builder.

ESTABLISHED 1869

Edited by WILLIAM H. WAHL.

Every number of the MANUFACTURER AND BUILDER consists of 46 large quarto pages and cover profusely illustrated with handsome engravings.

It goes to Manufacturers, Mechanics, Engineers, Machinists, Founders, Builders, Artisans, Architects, Plumbers, and in fact to all intelligent men who wish to keep posted on the progress of the industrial arts.

Illustrated descriptions of New Inventions, Wood and Iron Working Machinery, illustrated articles on Constructive Carpentry and Building, Sanitary Appliances, Designs for Houses and numerous other features of interest and value to practical man are contained within the covers of the MANUFACTURER AND BUILDER.

As an advertising medium the MANUFACTURER AND BUILDER is unsurpassed. It reaches intelligent buyers in all sections of the country. Subscription price—\$1.50 per year; 75 cents for six months. Free specimen copy sent on application to

HENRI GERARD, Publisher.

P. O. Box 1001.

83 Nassau Street, New York City.

For BEST ARCHITECTURAL DESIGN of a recently completed

House TVO

THREE PRIZES.

will be paid for photograph of best designed house recently erected costing not over \$2,500. Also prizes for second and third best designs.

For particulars address

THE ARCHITECTURAL ERA.

100 S. Clinton Street, SYRACUSE, N. Y.

Prepared and Rendered in Pen and Ink.

Correspondence Solicited.

2401 E, GRACE ST. F. J. CRAIGIE. JR., Richmond - Va.

BUILDER AND

PUBLISHED WEEKLY.

JAMES JOHN, Editor.

Adopted as the Official Paper of the Chicago Build ers and Traders' Exchange, Sept. 5, 1882.

Subscription in advance, \$2.00 per annum.

Published in the interest of the Architect, Builder and Material Supply Dealers.
Its advantages as an advertising medium cannot be excelled. Address

The Chicago Builder and Trader.

Rocin 1222,

Masonic Temple,

CHICAGO, ILL.

Mining and Scientific Review.

A Journal Devoted to the Mining, Scientific, Manufacturing, Railway and Trade Interests of the Great West.

Office, 1651 Curtis Street, DENYER, COL.

H. L. WADSWORTH, Editor. ROBT. S. BAKER, Asso. Editor. L. O. CAMPBELL, Special Agt.

SUBSCRIPTION PRICE:

\$2.00 Per Year in Advance.

Advertising Rates Furnished on Application

The Clay CHICAGO. ILLINOIS. Record

A Semi-Monthly Journal Devoted to the Interests of

Brick, Tile, Terra Cotta, Pottery and Good Roads.

This Journal is the Official Organ of the Chicago Brick Manufacturers' Association.

Price, \$1.00 per year.

Sample Copies Free.

ALPHABETICAL INDEX OF ADVERTISERS.

Atlanta Engraving Co	Gorton & Lidgerwood Co. 4th page cover Gross Art Glass Co., The. iii Graves Elevator Co., The. 4th page cover Hoselvator Co., The. 3d page cover Hoselvator Co. 3d page cover Johnson, John. 4th 2d page cover Johnson, E. J., & Co. 3d Johnson, S. C. 3d Johnson, S. C. 3d Johnson, S. C. 3d Johnson, E. J., & Co. 3d page cover Kimball Bros. 2d page cover Kimball Bros. 2d page cover Lane Bros. 3d page cover Lane Bros. 3d page cover Louisville Wire Works. 3d page cover Louisville Wire Works. 3d page cover Louisville Wire Works. 3d page cover Morse, Williams & Co. 3d page cover Morse, Williams & Co. 3d page cover Norris, C. Sidney & Co. 7d Co. 3d page cover Norris, C. Sidney & Co. 7d Co. 3d page cover Norris, C. Sidney & Co. 3d page cover Potris, C. Sidney & Co. 3d page cov	Potts Bros. Parker, Edwin C. Parker, Edwin C. Pierce, Butler & Pierce Mfg Co 4th page cove Pitrsburgh Terra Cotta Co 11 Pulman Sash Balance Co vi Pearce Hardware Co 12 Roanoke Mineral Wool Co 3d page cove Richardson, C. F 2d page cove Richardson, C. F 2d page cove Richardson & Boynton Co 1st page cove Slatington-Bangor Slate Syndicate 1 Seneca Falls Manufacturing Co 1st page cove Slatington-Bangor Slate Syndicate 1 Southern Engineering Company 5 Southern Engineering Company 5 Sickles & Co., Geo. B 2d page cove Stephens, Armstrong & Conkling 11 Sutphen & Myer 2d page cove Smith, M. A 15 Southear Art Glass Co 2d page cove Smith, M. A 15 Southear Art Glass Co 15 Southeastern Plaster Co 15 Stevens Sons, H 11 Senaca Falls M'f'g, Co 11 The Luray Artistic Wood Co 17 The Steel Clad Manufacturing Co 2d page cove Ther Standard Coal Co 11 The Luray Artistic Wood Co 17 Thruch All Standard Coal Co 11 The Luray Artistic Wood Co 11 The Luray Artistic Wood Co 11 U. S. Mineral Wool Co 11 U. S. Mineral Wool Co 11 Weber, F. & Co 11 Weber, F. & Co 11 White, Scoot A. 3d page cove
Frink, I. Pix	Pritchard, R. B	Weber, F. & Coi
General Electric Co	Porter Iron Roofing Co vii Prince, L. M	White, Scoot A

CLASSIFIED ADVERTISEMENTS.

FOR LOCATION OF ADVERTISEMENTS SEE ALPHABETICAL LIST.

ADJUSTABLE SHELVING IRONS.
ARTISTS' SUPPLIES.
F. Weber & Co., 1125 Chestnut st., Philadelphia.
ARCHITECTURAL SHEET METAL.
J. S. Thorn Co
AGRICULTURAL IRON WORKS.
J. E. Bolles & Co.
E. T. BarnumDetroit, Mich.
E. T. Barnum
ARTIFICIAL STONE.
ARCHITECTURAL TERRA COTTA.
Stephens, Armstrong & Conkling.
Stephens, Armstrong & Conking. Philadelphia, l'a.
ARTISTIC WOOD.
The Luray Artistic Wood CoLuray, Va.
ACME CEMENT PLASTER.
Thorn & Hunkins Lime and Cement Co.,
BATH TUBS (Porcelain Lined).
BLINDS (Sliding and Patent).
Geo. PoppertMilwaukee, Wis.
BUILDING PAPERS, ETC.
BALCONY RAILINGS.
J. E. Bolles & Co E. T. BarnumDetroit, Mich.
Ludlow Saylor Wire Co
BLINDS (Inside Sliding Folding and Venetian). Willer Manufacturing CoMilwaukee.
BANK OFFICE AND COUNTER RAILINGS.
J. E. Bolles & Co
Ludlow-Saylor Wire Co
BANK OFFICE AND CHURCH FURNITURE.
BUILDERS.
BUILDING MATERIAL.
BENT GLASS.
Ofiel Glass Bending CoSt. Louis, Mo.
M. A. SmithNewark, N J.
BUILDING (Brown Stone).
Carolina Brown Stone CoNorfolk, Va., and Raleigh, N. C.
BLUE PRINT PAPER.
L. M. Prince Cincinnati.

BRASS AND IRON GOODS.
J. E. Bolles & Co
E. T. BarnumDetroit, Mich
Ludlow-Saylor Wire Co
STEEL BATH TUBS.
Steel Bath Mfg. Co
BANK RAILING.
J. E. Bolles & Co
E. T. Barnum Detroit, Mich.
J. E. Bolles & Co E. T. Barnum
Ludlow Saylor Wire Co
BUILDING CASTINGS.
BEADINGS (Carved Classic). Jas. N. StoutNew York.
BRASS GOODS.
J. E. Bolles & Co
E. T. BarnumDetroit, Mich.
Ludlow-Saylor Wire Co
BLINDS (Sliding and Venetian).
Wm. WillerMilwaukee, Wis.
BOOKS ON BUILDING.
Palliser, Palliser & Co., 24 E. 42d st.,
New York, N. Y.
BOILERS (Steel Sectional Tubular).
Gorton & Lidgerwood Co., 96 Liberty st.,
New York.
BOILERS.
BOILERS. Nason Mfg. Co71 Beekman st., New York.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE.
BOILERS. Nason Mfg. Co71 Beekman st., New York.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car Jina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale).
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st.,
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co.,
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo. COAT AND HAT HOOKS. Van Wagoner & Williams & CoNew York.
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo. COAT AND HAT HOOKS. Van Wagoner & Williams & CoNew York. CRIMPED CURRUGATING IRON WORK AND
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo. COAT AND HAT HOOKS. Van Wagoner & Williams & CoNew York. CRIMPED CURRUGATING IRON WORK AND
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo. COAT AND HAT HOOKS. Van Wagoner & Williams & CoNew York. CRIMPED CJRRUGATING IRON WORK AND METAL BUILDINGS. J. S. Phorn Co
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car Jina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo. COAT AND HAT HOOKS. Van Wagoner & Williams & CoNew York. CRIMPED CJRRUGATING IRON WORK AND METAL BUILDINGS. J. S. Thorn Co
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car Jina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo. COAT AND HAT HOOKS. Van Wagoner & Williams & CoNew York. CRIMPED CJRRUGATING IRON WORK AND METAL BUILDINGS. J. S. Fhorn Co COTTON YARNS. Samson Cordage Works, 115 Congress st.,
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo. COAT AND HAT HOOKS. Van Wagoner & Williams & CoNew York. CRIMPED CJRRUGATING IRON WORK AND METAL BUILDINGS. J. S. Thorn Co
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo. COAT AND HAT HOOKS. Van Wagoner & Williams & CoNew York. CRIMPED CJRRUGATING IRON WORK AND METAL BUILDINGS. J. S. Thorn Co
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo. COAT AND HAT HOOKS. Van Wagoner & Williams & CoNew York. CRIMPED CJRRUGATING IRON WORK AND METAL BUILDINGS. J. S. Thorn Co
BOILERS. Nason Mfg. Co71 Beekman st., New York. BROWN STONE. The Car lina Brown Stone CoRaleigh, N. C. BLACKBOARDS. E. J. Johnson & Co38 Park Row, New York. COMBINED FIRE PLACE FURNACE. Edwin A. Jackson & Bros., 50 Beekman st., N. Y. CEMENT (Hoffman & Rosendale). Lawrence Cement Co., 67 William st., New York, N. Y. Thorn & Hunkins Lime and Cement Co., St. Louis, Mo. COAT AND HAT HOOKS. Van Wagoner & Williams & CoNew York. CRIMPED CJRRUGATING IRON WORK AND METAL BUILDINGS. J. S. Thorn Co

ABI	ETICAL LIST.
. [CORDAGE. Samson Cordage Works, 115 Congress st.,
h	CYCLOPÆDIAS Seeger & GuernseyNew York, N. Y
	CEMENT. The Standard Cement and Builders' Supply Co.
h.	Brooks, Shoobridge & Co
a.	Louisville Church and School Furniture Co.,
	COMBINATION FOLDING BATH TUBS.
K.	CORNICES (Galvanized Iron). DRESSED BUILDING STONE.
1.	J. Hoadley & Son
s.	Van Wagoner & Williams & CoNew York DOOR HANGERS.
7	Lane Bros
7.	Portland Screen Co
K.	C. S. Ransom & Co
ζ.	DUMB WAITERS. F. S. Hutchinson & Co., 6th st. and West ave,
D.	ELEVATORS.
7.	Jas. H. Curran
	Morse, Williams & Co
7.	J. E. Bolles & Co. E. T. Barnum. Detroit, Mich. Ludlow Saylor Wire Co.
ζ.	Ludlow Saylor Wire Co
D	FURNACES (Warm Air).
	Richardson & Boynton Co. 232 Water st. New York. FENCING, IRON AND STEEL. J. E. Bolles & Co
s.	J. E. Bolles & Co
G	FENCE WIDE
. 1	J. E. Bolles & Co E. T. Barnum. Detroit, Mich. Ludlow-Saylor Wire Co.

CLASSIFIED ADVERTISEMENTS—Continued.

FENCING (Steel Pickets). Hartman Manufacturing Co., Beaver Falls, Penn., and Atlanta, Ga.	MINERAL WOOL. Roankoke Mineral Wool CoRoanoke, Va United States Mineral Wool Co.,	SASH BALANCES. Pullman Sash Balance CoRochester, N. Y. SASH PULLEYS.
FACINGS AND FIREBACKS. Maywood Art Tile Co136 138 Mulberry st., N. Y.	2 Courtland st., New York. MATHEMATICAL INSTRUMENTS AND DRAW- ING MATERIALS, DRAWING PAPER, ETC.	C. Sidney MorrisBaltimore, Md. SASH CORD.
FIRE PLACES.		Samson Cordage Works, 115 Congress st., Boston, Mass
Aldine Manufacturing Co Detroit, Mich.	L. M. Prince	STAIR WORKS AND SUPPLIES. STAIRWORK, NEWALS, RAILS & BALUSTERS.
H. Stevens Sons	J. S. Thorn Co	J. E. Bolles & Co
Willer Manufacturing CoMilwaukee. FENCES, WIRE.	Sutphen & Myer15 Desbrosses st., New York.	SHINGLES (Metallic). Thorn Shingle and Ornament Co Philadelphia.
Hartman Mfg. CoBeaver Falls, Pa. Atlanta Wire and Iron WorksAtlanta, Ga. FOOT AND HAND POWER.	NATURAL WOOD ORNAMENTS. OFFICE RAILING.	SOLID BRAIDED WINDOW CORDS. Samson Cordage Works, 115 Congress st., Boston, Mass
The Seneca Falls Mfg. CoFOOT LATHE.	J. E. Bo les & Co. E. T. Barnum	SCROLL SAWS AND SAWS OF ALL KINDS. W. F. & John BarnesRockford, Ill.
W. F. & John BarnesRockford, Ill FIRE ESCAPES,	Ludlow-Saylor Wire Co	STEAM AND HOT WATER HEATING. Nason Mfg. Co71 Beekman st, New York.
J. E. Bolles & Co	AND SANITARY APPLIANCES. Hunnicutt & Bellingrath	SCREENS.
GAS ENGINES.	PAINTS.	TRACING AND DRAWING PAPER (Blue Print). L. M. Prince
FOLDING BEDS. GAS FIXTURES.	Excelsior and Roofing Co	W. E Caldwell & CoLouisville, Ky TERRA COTTA (Fire-proof).
Hunnicutt & BellingrathAtlanta, Ga.	PLUMBERS GOODS. The Kilbourne Jacobs Mfg. Co Columbus, O.	Pittsburg Terra Cotta CoPlttsburg, Pa. TERRA-COTTA.
GLASS (Stained Mosaic Leaded). GLASS (Beveled). Rette Proc. 48 and 50 Duane st., New York, N. Y.	PORTABLE HEARTHS. Maywood Art Tile Co., 136 Mulberry st., New York.	TRANSITS, (for Architects and Carpenters.) C. F. RichardsonAthol, Mass.
Potts Bros., 48 and 50 Duane st., New York, N. Y. Sutphen & Myer15 Desbrosses st., New York. M. A. Smith Newark, N. J.	PRINTING. Franklin Printing CoAtlanta, Ga.	TILE (concrete illuminating). J. E. Bolles & Co
GLASS (Ornamental.) Potts Bros., 48 and 50 Duane st., New York, N. Y.	PARQUETRY. S. C. Johnson	U. S. MAIL CHUTES. Cutler Mfg. Co
GLASS (American Window). GLASS (Polished, Rough and Silvered).	PHOTO-OUTFITS. PAINTS.	VENTILATOR CORD. Samson Cordage Works, 115 Congress st.,
GLASS (Plate). Sutphen & Myer15 Desbrosses st., New York. GLASS (English and French).	The S P. Wetherill CoPhiladelphia, Pa. RAILROADS.	VENTILATING GRATE.
GLASS (Bent and Beveled). M. A. Smith	Western and Atlantic R. ROffice, Atlanta, Ga. RANGES.	J. E. Bolles & Co Edward A. Jackson & Bros., 50 Beekman st., New York
GLASS (Stained and Decorated). The L. Grosse Art Glass CoPittsburg, Pa.	ROOFING TILE. Scott WhitePittsburg, Pa.	VARNISHES. Collins Beach Varnish Co
GLASS (Plate French and French Mirrors). GRATES, FENDERS, ETC.	ROOFING MATERIALS. Hunnicutt & BellingrathAtlanta, Ga	VAULT AND SIDEWALK LIGHTS. J. E. Bolles & Co
Bissell & Co	N. & G. Taylor	Luglow Saylor Wire Co
Hunnicutt & Bellingrath Atlanta, Ga. GAS MACHINES.	REFLECTORS. I. P. Frink	Ludlow-Saylor Wire Co. J. C. French & Sons, 452 Canal street, New York. Jacob Mark. New York.
Tirrill's Gas Mach. Co., 39 Dey st., New York, N.Y. GEORGIA MARBLE CO. (Fronts, Trimmings, Steps,	Bailey Reflector Co	T. H Brooks & CoCleveland, Ohio. VENETIAN BLINDS (Inside).
Wainscot Trimmings and Lavatory Slabs). HEATING.	Porter Iron Rofing and Corrugating Co., Cincinnati, O.	Willer Manufacturing CoMilwaukee. VENETIAN RED.
Richardson & Boynton Co. 232 Waters st. New York HEATING (Steam and Hot Water).	Pritchard, R. B. (Red) Peters, E. D. & Co	The S. P. Wetherill Co
Blake & Williams. Nason Mfg. Co	Peters, E. D. & Co. Slatington Bangor Slate Syndicate. E. J. Johnson & Co. Jas. D. Emack. Slatington, Pa. Devid McKenne. Slatington, Pa.	J. E. Boiles & Co. Ludlow-Saylor Wire Co. Atlanta Wire Works
Gorton & Lidgerwood CoNew York. HINGES (Spring).	David McKennaSlatington, Pa. ROOFING SLATE (Blue Rofflng).	Atlanta Wire Works. Atlanta, Ga. Louisville Wire Works. Louisville, Ky. E. T. Barnum Detroit, Mich.
Van Wagoner & Williams Co., 14 Warren st., New York.	E. J. Johnson & Co38 Park Row, New York. ROOF CRESTINGS.	WIRE CLOTH. Clinton Wire Cloth CompanyNew York.
1NTERIOR HARDWOOD WOODWORK. Willer Manufacturing CoMilwaukee.	J. E. Bolles & Co	WIRE WORKS. J. E. Bolles & Co
INSIDE BLINDS (Sliding, Folding and Venetian). Willer Manufacturing CoMilwaukee.	Ludlow-Saylor Wire CoRADIATORS.	Atlanta Wire Works
IRON CORNICE (Galvanized). IRON BALCONIES AND RAILINGS. J. E. Bolles & Co	T. H. Brooks & Co Cleveland, Ohio. RIDGING.	WIRE WORK AND WEATHER VEINS. J. E. Bolles & Co. Ludlow-Saylor Wire Lo.
E. T. Barnum	ROOFING (Iron and Steel). ROOFING PLATE (Tin).	E. T. Barnum Detroit, Mich WOOD TURNING AND SPIRAL MOULDINGS.
INSTANTANEOUS WATER HEATING. IRON WORKS (Architectural and Ornamental).	Merchant & Co	WATER CLOSETS (The Improved "Sypho"). WEATHER VANES, TOWER ORNAMENTS AND
J. E. Bolles & Co	SLIDING BLINDS (Inside). Willer Manufacturing CoMilwaukee.	CHURCH CROSSES. Ludlow-Saylor Wire Co
JOIST HANGERS. Duplex Hanger Co	Hartman Shiding Co Wooster, Ohio. STAINS (Wood and Shingle)	T. W. Jones
LAUNDRY TUBS. C. F. Richardson	Dexter Bros	WINDOW SHUTTERS AND AWNIMGS. J. E. Bolles & Co
LIME. Thorn & Hunkins Lime and Cement Co.,	SCREEN DOORS AND WINDOWS Willer Manufacturing Co Milwaukee.	E. T. Barnum Detroit, Mich. Ludlow Saylor Wire Co
St. Louis, Mo. LAUNDRY TUBS AND MACHINERY.	SURVEY AND ENGINEERING INSTRUMENTS. L. M. Prince134 W. Fourth st., Cincinnati, O.	WOOD MANTELS. WINDOW LINES. Samson Cordage Works, 115 Congress st.,
METALIC LATH. J. E. Bolles & CoPittsburgh, Pa.	SECTIONAL TILE WAINSCOTING.	WINDOW SCREENS AND SCREEN DOORS.
MANTELS. Hunnicutt & BellingrathAtlanta, Ga.	Maywood Art Tile Co., 136-138 Mulberry st., New York. SHINGLE STAINS.	Willer Manu acturing CoMilwaukee. WIRE AND BRASS GOODS.
MORTAR COLORS. Sam'l H. French & Co Philadelphia, Pa.	Dexter Bros	J. E. Bolles & Co
MARBLE (Architectural). Georgia Marble Co	H. Stevens Sons	Ludlow Saylor Wire Co Clinton Wire Cloth CoNew York. WOODWORK (Interior Hardwood).
Blue Ridge Marble CoNelson, Ga. Office, Room 12 Gate City Bank Building, Atlanta, Ga.	L. M. Prince	Willer Manufacturing CoMilwaukee.
Manufacturer's Agent for RAILWAY AND BUILD ERS SUPPLIES.	SKYLIGHTS (Conservatories and Greenhouses). J. S. Thorn Co.	WOOD WORK (Ornamental and Decorative). C. S. Ransom & Co Cleveland and New York. WOOD FILLERS.
MILLED CLAY, URNS, Etc. H. Stevens SonsMacon, Ga MARBLE (White and Mottle Crystalline).	SKYLIGHTS (Metallic). SHEATHING. Manahan Parchment and Moth Paper Works,	WHITE LEAD TINTING COLORS. WOODENWARE TURNED.
Atlanta Marble CoAtlanta, Ga.	Mananan Parchment and Moth Paper Works, 6 Reade st., New York, N. Y.	John HudsonLouisville, Ky.

"HOFFMAN" ROSENDALE

Manufactured only from the BEST ROCK, and adapted for heaviest masonry. In competitive tests, "HOFFMAN" is always ahead.

EXTENSIVELY USED BY THE UNITED STATES GOVERNMENT

Low Freights in Car Load Lots to any part of the South.

For "TREATISE ON CEMENT" and Prices apply to

THE LAWRENCE CEMENT CO.,

67 William Street, New York. ERNEST R. ACKERMAN, General Sales Agents.

Brooks, Shoobridge & Co.

7 BOWLING GREEN. NEW YORK.

ENGLISH PORTLAND CEMENT



This Beautiful, Ornamental and Decorative Wood-work for Doors, Transoms, Arches, and Windows known as **MOORISH FRET-WORK** is manufactured (only) by

C. S. RANSOM & CO., Cleveland, Ohio

and 10 West 28th Street, New York.

It is made of any woods, in any finish, and unlimited designs.

Patented as an article of manufacture, September 15, 1885.



JACOB MARK,

PATENTEE AND MANUFACTURER OF

Concrete Illuminating Tile and Vault Lights

For AREAS, ROOFS, FLOORS, Etc.

Giving 50 per cent. More Light than Other Similar Goods
Made.

Illustrated Circular and Price List sent to any address.

7 WORTH STREET, - NEW YORK.

WORTH STREET, - - NEW YO When directing, mention Southern Architect.

Pat. Dec. 9, 1891.



POLISHED AND ROUGH

BEVELLED PLATES AND MIRRORS A SPECIALTY. STORE FRONTS, STRIPS AND SASH SIZES OF POLISHED PLATE. SUTPHEN & MYER, 15, 17 & 19 Desbrosses St., NEW YORK SEND FOR ESTIMATES.



"10 TO 1.

"GULF STREAM" (HOT WATER) and "EQUATOR" (STEAM) BOILERS.



in

The Most

Efficient in

Surface.

10 Pounds of Water Evaporated per Pound of Coal Consumed.

Send for fully illustrated catalogue, prices and discounts.

NASON MANUFACTURING CO., 71 B ekman St., New York.

BRICK HOUSES.

8 Complete Sets of Plans.

Elevations and specifications published in our special November and December double number sent postpaid for 50 cents or

Free to new subscribers for 1893

Subscription price per year, \$2.50.

"The Brickbuilder." BOSTON, MASS.

AND WATER WORKS

By New and Simple Process for any Kind or Style of Building, no matter where located.

Places a Watering Specialty.

Send for Catalogue.

L. C. HUBER,

1326 W. Main St.,

Louisville, Ky.



JOHNSON AUTOMATIC PERSPECTIVE MACHINE

TRANSFERS from plan to elevation automatically. No lines or measurements required at the P. P. Line. The vanishing points have a range from 100 to 10,000 ft. Write for particulars to SHAW & JOHNSON,

TAMPA, FLA.

SCOTT A. WHITE, TERRA COT

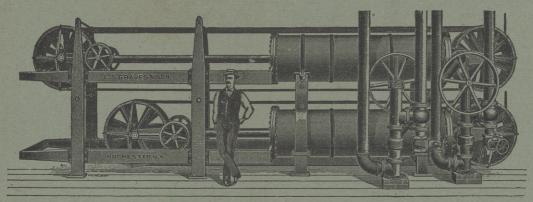
Room 715, Lewis Block,

Pittsburg, Pa

THE GRAVES ELEVATOR CO.

MANUFACTURER OF HYDRAULIC, ELECTRIC, STEAM AND HAND-POWER PASSENCER AND FREIGHT

USE. 2,500 NOW IN



Main Office and Works:

Rochester, N. Y

New York Office

92 & 94 Liberty St

Boston Office:

53 State Street.

Detroit Office:

Hodges Building.

St. Louis Office:

301 Roe Building.

SOUTHERN OFFICE:

36 INMAN BUILDING Atlanta Ga.



RTISTIC WROUGHT IRON CRILLES FOR RESIDENCES, PUBLIC BUILDINGS, ETC.

Iron Fencing, Window Guards, Weather Vanes, Fire Escapes IRON STAIRS, Stable Fixtures, Columns. ROOF CRESTING.

WORK FOR BUILDINGS. IRON BARNUM, Detroit, Mich.



A. C. DOVERS, Agts. Chattanooga, Tenn.



FOR WARMING-

Residences, Hotels, Churches, Stores, Theaters, Schools and Public Buildings by Steam or Hot Water Circulation.

SPECIFIED BY LEADING ARCHITECTS,

ADOPTED BY THE FINEST OF THE TRADE.

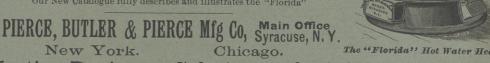
Is cast iron—will last a life-time—cannot be exploded. Has a magazine feed. Will run from 10 to 24 hours without attention. Can be set up in two and one-half hours. Requires no brick work. Can be taken through any door or window.

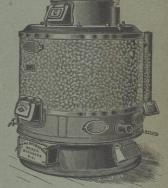
COSTS 25 PER CENT. LESS TO RUN THAN ANY OTHER HEATER IN THE MARKET.

Reputation Established.

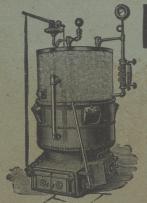
Satisfaction Guaranteed

Our New Catalogue fully describes and illustrates the "Florida"





Wingate & Mell, Heating Engineers, Sole Agents for Atlanta and vicinity



Gorton Boiler-front view

For STEAM and HOT WATER HEATING,

Economical in Fuel, Automatic, Self-Feeding.

Sectional, Tubular Steel

Correspondence solicited from Architects and those interested in Heating large or small Buildings.

Our new book on Modern House Heating furnished on application,

GORTON & LIDGERWOOD CO.

96 Liberty Street, New York.

34 and 36 W. Monroe street, Chicago, 197 to 203 Congress street, Boston.



Gorton Boiler-section view