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CONSTRUCTION

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CONTENTS.

TEXT: pp. 17-24.

EDITORIAL SUMMARY.
A MASTER AND HIS PUPILS.
CONSTRUCTION OF AN OLD VIRGINIA HOUSE.
SOCIETIES.
COMMUNICATIONS.
NOTES AND CLIPPINGS.

ILLUSTRATIONS.

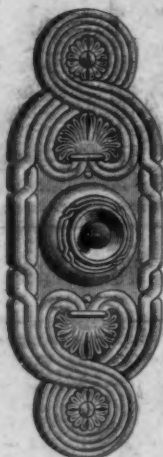
THE CLIFTON HOUSE, RICHMOND, VA.
PLANS AND DETAILS OF THE SAME.

FRONT DOOR OF THE SAME.
HALL OF THE SAME.
MANTELPieces IN THE SAME.
CARNEGIE CIRCULATING BRANCH LIBRARY, TOTTEENVILLE,
STATEN ISLAND, N. Y.

[Additional Illustrations in the International Edition.]

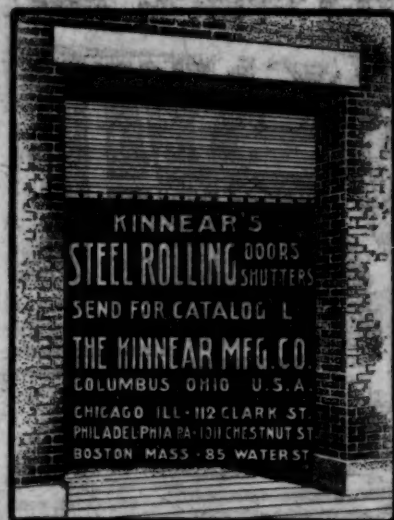
PUBLIC LIBRARY, NEEDHAM, MASS.
PLANS OF THE SAME.
PUBLIC LIBRARY, MENOMINEE, MICH.;—PUBLIC LIBRARY,
MASON CITY, IA.
CARNEGIE PUBLIC LIBRARY, GOSHEN, IND.

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[For Classified List see Cover 3.]

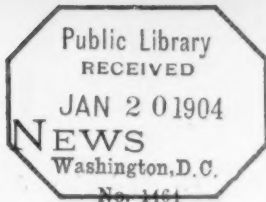
Alphabetical List of Advertisers.

A	F	M	S
American Mason Safety Tread Co.....x	Fisher & Co., Robert C.....i	Makepeace, B. L.....xv	Samson Cordage Works.....viii
American Painting & Decorating Co.....xiii	Flynt Building & Construction Co.....i	Marble Co., W. P.....x	Sargent & Co.....(Cov.) 2
American Tin Plate Co.....v	Folsom Snow Guard Co.....M	Mass. Institute of Technology.....i	Shultz Bolting Co.....xv
Architect and Contract Reporter, The.....ii	Fowle, Herbert.....xv	McKay & Woolner.....xv	Silver Lake Co.....xv
Art Metal Construction Co.....xiii	French & Co., Samuel H.....vii	Means & Thacher.....viii	Simpson Bros. Corporation.....xv
Associated Expanded Metal Co.....xii	Frink, I. F.....M, (Cov.) 3	Merritt & Co.....xii	Sleep, Elliot & King Co.....xv
Atlas Portland Cement Co.....M		Merrill & Whitton Construction Co.....xv	Smith & Co., Edward.....i
B	G	N	T
Batchelder & Co., C. H.....xv	Gallagher & Munro.....xv	National Fireproofing Co.....iii	Taylor Co., N. & G.....ii
Benedict & Burnham Mfg. Co.....M	Gilbreth, Frank B.....xv	Nelson Co., The C. T.....M	Taylor, J. W.....x
Berger Mfg. Co.....ii	Gilbreth Seam-face Granite Co.....xv	Neuchatel Asphalt Co.....viii	Thorn, J. S., Co.....x
Blodgett Clock Co.....xv	Gillespie's Perspective Charts.....ii	New Jersey Zinc Co.....M	Troy Laundry Machine Co.....(Cov.) 4
Broad Gauge Iron Stall & Vane Works.....xv	Globe Ventilator Co.....(Cov.) 3	New York Belting & Packing Co.....ix	Trues Metal Lath Co.....vii
Building News, The.....(Cov.) 4	Goodhue, Harry Eldredge.....xv	New York Metal Ceiling Co.....viii	Tufts College.....viii
Burditt & Williams Co.....viii	Gurney Heater Mfg. Co.....(Cov.) 4	Northern Engineering Works.....x	Tyler Co., The W. S.....M
Butcher Pollak Co.....vii		Northwestern Terra-Cotta Co.....xvi	
C	H	O	U
Cabot, Samuel.....viii	Hartmann Bros. Mfg. Co.....ix	Ohio State University.....i	University of Pennsylvania.....i
Cairns, Hugh.....xv	Harvard University.....i	Okonite Co. (Ltd.).....i	U. S. Mineral Wool Co.....ii
Campbell, Walter M.....x	Hayes, Geo.....vii	Olivo, E. Percy.....xv	
Carlisle, Pope & Co., E. A.....xv	Hecla Iron Works.....ix	Ostrander, W. M.....E	
Chicago & Alton Railway.....E	Helotype Printing Co.....xiv, (Cov.) 4	P	V
Chicago Clothes Dryer Works.....xv	Herszog Telesome Co.....i	Parks & Jeeves.....xv	Valle & Young.....(Cov.) 4
Columbian Marble Quarrying Co.....xv	I	Passaic Steel Co.....xii	Van Noorden Co., E.....vii
Cornell University.....xv	J	Pearson Co., J. O.....E	
Couch Co., S. H.....xv	Jackson & Co., Wm. H.....(Cov.) 4	Perry, W. J.....ii	
Craig, David.....vii	Jager Co., Charles J.....E	Perth Amboy Terra-Cotta Co.....xvi	
Crane Co.....viii, x	Jenkins Bros.....viii	Pitt, W. R.....M	
Crawley & Son, George E.....xv	Johnson & Co., H. A.....xv	Q	W
Credell, F. E.....E	Jones, T. W.....iii	Quimby, William E. (Inc.).....viii	Warren Chemical Mfg. Co.....viii
Cutler Mfg. Co.....ii	Jorath.....E	R	Washington University School of Engineering and Architecture.....i
D	K	Bedding, Baird & Co.....xv	Whittier Machine Co.....x
Dadman, Leon E.....xv	Kearney & Mattison Company.....E	Richer, Brown & Donald.....viii	Williams, John.....x
Deane, E. Eldon.....viii	Kimball Bros. Co.....viii	Richter Mfg. Co.....vii	Winslow Bros. Co., The.....i
Dixon Crucible Co., Jos.....vii	Kinnear & Gager Co., The.....xv	Rider-Ericson Engine Co.....vii	
E	Kinnear-Hood Steel Co.....xv	Robey-French Co.....xv	
Edison Light.....v	Kinnear Mfg. Co., The.....(Cov.) 3	Rockland-Rockport Lame Co.....xi	
Edison Portland Cement Co., The.....vi	L	Rutaw, W. L.....xv	
Elevator Supply and Repair Co.....i	Lafayette Mill and Lumber Co., The.....viii	Ryan, William Curtis.....M	
Elston, A. A.....xv	Lawrence Scientific School.....i		
Erickson Electric Equipment Co.....xv	Ledder, G. G.....xv		
	Loomis-Manning Filter Co.....i		
	Lord & Burnham Co.....viii		



VOL. LXXXIII

SATURDAY, JANUARY 16, 1904



SUMMARY:—

What an Asbestos Theatre-Curtain did in Philadelphia.—The Inferiority of Metal Theatre-Curtains.—The new New York Bridge Commissioner and the Eye-bar Scheme.—Manhattan Bridge, New York.—Death of Jean Léon Gérôme, Painter.—Aerial Navigation and the St. Louis Fair.—Flying-machine Motors.—Union Iniquities in Australia and New Zealand.—The International Sanitary Office. 17

A MASTER AND HIS PUPILS. 19

CONSTRUCTION OF AN OLD VIRGINIA HOUSE. 21

SOCIETIES. 23

ILLUSTRATIONS:—

The Clifton House, Richmond, Va.—Plans and Details of the Same.—Front Door of the Same.—Hall of the Same.—Mantelpieces in the Same.—Carnegie Circulating Branch Library, Tottenville, Staten Island, N. Y.
Additional: Public Library, Needham, Mass.—Plans of the Same.—Public Library, Menominee, Mich.;—Public Library, Mason City, Ia.—Carnegie Public Library, Goshen, Ind. 24

COMMUNICATION:—

A Correction. 24

NOTES AND CLIPPINGS. 24

AN interesting description of the behavior of an asbestos theatre curtain in a fire is given in the report to the Philadelphia Underwriters' Association of the fire which destroyed the Girard Avenue Theatre in October last. This theatre was of old-fashioned construction, but the proscenium wall was of brick, the portion over the arch being carried by a plate girder. The proscenium opening was furnished with a curtain of woven asbestos fibre, painted with two coats of asbestos paint. The curtain had iron rods at top and bottom, to keep it stretched, and was "hemmed" with strips of sheet-iron, riveted through. It was raised and lowered without rolling, by a number of cables attached to the upper bar, and carried to a drum on the stage, operated by hand. The curtain was three feet wider than the opening, the edges running in channels, behind the proscenium wall. All other openings in the proscenium wall were protected by standard fire-doors. The stage had two automatic skylights. Fire broke out on the stage at about half past five in the morning, the asbestos curtain being then lowered. In three minutes after the alarm was given the first engine arrived at the theatre. The whole stage was then on fire, the flames pouring from the skylights, and from all the rear stage windows. The firemen went into the auditorium, but, finding no sign of fire there, although the boxes, galleries and fittings were all of wood, turned their attention to neighboring buildings which were in danger from the fire on the stage. Fifteen minutes later, a second alarm was given, and, on the arrival of the additional engines, the auditorium was examined again, and the report brought that it was full of smoke, but that there was no appearance of fire in it. Some minutes later, a second report was made, to the same effect, although the auditorium was then intensely hot. After another interval of several minutes the entire auditorium seemed to burst into flames, after having been defended by the asbestos curtain against an overwhelming fire on the stage for at least twenty minutes, or three times as long as would be necessary to enable an audience to escape safely. This shows what an asbestos curtain will do if it is lowered. What it will do if it is not lowered was sufficiently shown at the Iroquois Theatre. It does not appear that the Girard Avenue curtain was of any extraordinary quality. The two coats of "asbestos paint," which very frequently means a cheap oil paint with no asbestos in it, are not likely to have been of any advantage to it, and it is not stated that it was made with brass wire woven into it, as is the case with the better class of asbestos curtains; but, although it might probably have been improved, it did its work well.

IT will be observed that the efficiency of any asbestos curtain depends upon its being lowered, just as the efficiency of automatic skylights depends upon their not being nailed up; and the result of the Iroquois fire really shows, not that the present laws in regard to theatre-building are inadequate, but, on the contrary, that they are very skilfully and efficiently framed for securing the safety of audiences in case of fire, and that if they were enforced, such tragedies as that at Chicago would be impossible. The steel curtains sometimes employed in theatres in Europe, which the newspapers think should be required here, are far inferior to a good asbestos curtain for resisting fire. To say nothing of the fact that a touch of flame heats them to redness, so that they set fire to everything inflammable on the other side within reach of their radiation, they warp so, when even slightly heated, as to open their joints, or draw them out of their grooves, and let the smoke and fire through. Woven asbestos has none of these defects, conducting heat very slowly, and remaining in place even when redhot, and architects will probably be glad to have the testimony of the Philadelphia underwriters to its efficiency. At the same time, they should be on their guard, as it appears, against curtains woven of mixed cotton and asbestos, which are sold as asbestos curtains, but, of course, drop to pieces as soon as the cotton threads are burned out, which, in case of fire on the stage, only takes a few seconds. It is said that, since the Chicago fire, the asbestos manufacturers have been called upon for all sorts of fireproof fabrics, not only for theatre curtains, but for scenery, stage carpets and so on. There seems to be no reason why asbestos cloth should not be substituted for canvas in making scenery, but a more difficult problem is to find some substitute for wood for making frames on which to stretch the material, as well as for constructing the bridges, galleries and other temporary fittings with which the stage is generally filled.

THE scheme for a chain suspension-bridge across the East River appears to have been finally abandoned, the new Bridge Commissioner of New York, Mr. Best, having appointed, as Chief Engineer to the Department, Mr. O. F. Nichols, one of the most pronounced opponents of the project. In fact, Mr. Nichols was removed by Commissioner Lindenthal from his position as Consulting Engineer of the Blackwell's Island Bridge, in consequence of his appearance before the Finance Committee of the Board of Aldermen in opposition to the chain plan. Mr. Lindenthal's explanation of the matter was that Mr. Nichols had absented himself from his post without leave, and was rightly disciplined; but the public considered that he had been hardly used for expressing an opinion which he was well qualified to form, and which it was for the interest of the city to have frankly stated; and his promotion is, perhaps, due in part to this feeling. However that may be, Mr. Nichols is an able and experienced engineer, and the city is fortunate in being served by him.

WE owe to the courtesy of the New York Commissioner of Bridges a set of the contract drawings and specifications, together with perspective views, of the new East River suspension bridge. We will not undertake to discuss the technical features of this great project. Even engineers are far from being in accord respecting the practicability of using chain cables on such an immense scale; and rocking steel towers, three hundred feet high or more, form an advance upon the usual construction which finds the world hardly prepared to receive it without question. Whatever the engineering merits or defects of the scheme, there is no question of its artistic interest. Even the rocking towers, with their peculiarly Egyptian entasis, are not without a certain charm, and the stone anchorage masses, the design of which, we suppose, is due to Mr. Hornbostel, are very cleverly treated, and shown, as well as the superstructure of the bridge, in admirable perspective drawings. We do not know whether, under the new régime, Mr. Lindenthal's project will be carried out; but, if not, he and Mr. Hornbostel may comfort themselves with the thought that they have imparted to the designing of bridges a vigorous originality which will not be lost, either upon engineers or architects.

IN the death of Jean Léon Gérôme the world loses a great artist, who, like many of the greatest foreign artists, found early appreciation in this country, many of his best pictures being owned in New York, Boston and Baltimore. Although the modern critics are disposed to call Gérôme old-fashioned and conventional, there is a fire about his work which is never found in that of an inferior or mediocre artist, and his fame is quite safe, whatever the critics may say. Personally, Gérôme was, perhaps, more widely known than any other painter in Paris. He was a kind friend to younger men, and his enthusiasm inspired the public, as well as his many pupils. We remember once being taken to his studio in Paris. Unfortunately, the master was not at home, but the vast, bare room, dusty and untidy, littered with sketches, still-life models and artistic rubbish of all kinds, gave a curious impression of its careless, impetuous and energetic owner. With him the classic school of Delaroche may be said to have come to an end, but Gérôme was a modern as compared with Delaroche. For the last twenty years he had practically given up painting for sculpture, and statues and statuettes from his hand, in marble, ivory and metal, colored and uncolored, were to be seen in every Salon. Two days before his death he invited a party of friends to see a new statue, which he was about to color, and spoke with enthusiasm of his project. On the following day he attended a dinner of the members of the Institute, but went home early. The next morning he was found dead in his bed.

IF M. Santos-Dumont succeeds, as we trust he will, in arranging for a competition at St. Louis this summer for a prize of one hundred thousand dollars for the best navigable balloon, we may hope for a contest of the most intense interest. M. Santos-Dumont proposes, if the arrangement is made, to bring over his new air-ship, and it is hoped that the Lebaudy balloon, the most successful yet tried, will also enter the lists. Besides these, M. Deutsch, the generous donor of the prize of twenty thousand dollars won by Santos-Dumont in 1901, has himself entered the field of air navigation, and has had constructed, from the plans of the distinguished engineer Victor Tatin, a balloon of his own, which has been named "La Ville de Paris," and is nearly ready for its trial trips. It is much larger than any other machine of the kind yet constructed, being about one hundred and sixty feet long, and carries also a sixty-three horse-power petroleum engine, weighing more than a thousand pounds. This gives a much larger motive power, even proportionally to the size of the balloon, than the engine of the Lebaudy balloon; so that, if the new craft behaves well, it ought to attain a much higher speed than has yet been reached by any air-ship. This balloon also, it may be hoped, will appear at St. Louis, where, according to the newspapers, it will meet in competition marvellous machines of American make, balloons which sail without effort in all directions at will; "aviators," on the box-kite principle, which, although so small that they can be held in the hand, rise from the ground and stay, apparently, for indefinite periods in the air, and other extraordinary contrivances. Most of these, it is safe to say, will share the fate of the "mummy of Cleopatra" and the other wonderful curiosities which have been about to figure at so many Expositions, but which, somehow, never reach their destination; but it is to be hoped that the United States will, at least, make a respectable showing in the science which is, within the next generation or so, to bring about the most profound political and economic changes that the world has, perhaps, ever witnessed.

M. CHARLES RENARD, one of the most distinguished leaders of the modern science of navigating the air, has published an interesting and important study of the theoretical requirements for a machine capable of raising itself into the air without the use of hydrogen. According to his conclusions, based on numerous experiments, the matter is one of what he calls the specific weight of the motor, that is, its weight per horse-power of the force which it exerts. With a motor weighing ten kilogrammes, or about twenty-two pounds, per horse-power only the insignificant weight of a third of a pound can be lifted, in addition to the weight of the machine. With motors weighing five kilogrammes per horse-power ten kilogrammes can be lifted; and with machines weighing three kilogrammes per horse-power two hundred and twenty kilogrammes, or about five hundred pounds, can be raised into the

air. Some automobile motors have been made even lighter than this; and, as an example of what may possibly be done in the future, M. Renard shows that, if a motor could be made weighing only one kilogramme per horse-power, an aeroplane, or "hélicoptère," as he calls it, could be constructed which would lift one hundred and sixty thousand kilogrammes, or about one hundred and seventy-five tons, into the air. Although his own experiments have been mostly made with gas-filled aerostats, he says that "aeroplanes, which give a very inexpensive sustaining power, are certainly the flying-machines of the future," and his discovery of the enormous influence, on the sustaining power of such a machine of the specific weight of the motor, seemed to him so important that he thought it his duty, in the interest of the science of aviation, to make it known immediately. As, according to his formula, the extraneous weight which can be lifted by a "hélicoptère" is inversely proportional to the sixth power of the specific weight of the motor, and the square of the weight of the propeller, it is obvious that the energies of students of aeronautics should be directed first to the invention of the lightest possible motor. Certain automobile motors weigh about two and one-half kilogrammes per horse-power. These would, if used on a sufficiently large scale, give a lifting force of more than a thousand pounds, while a motor of half this specific weight, which seems possible, would solve the problem completely, so far as lifting and direct progression are concerned. The methods of setting sail and landing, with aeroplanes, still, however, need study, and M. Renard thinks that vertical propellers offer the only practical means of controlling them on these occasions.

THE New York *Evening Post*, speaking of Mr. Carroll D. Wright's opinion that "Arbitration is not the true solution of labor difficulties," and that the "interference of the public in the relations of the employer and the employé" do "more harm than good," refers to Australia and New Zealand as illustrations of the fact that unionism and compulsory arbitration as practised in those countries are really carried on for the benefit of "a little labor oligarchy." It says that the Australian labor unions "tend more and more to become exclusive," and "in some cases" try to keep newcomers out of the commonwealth, apparently in ignorance of the fact that at least two of the largest Australian colonies some years ago absolutely prohibited further immigration, for the avowed reason that the new arrivals would compete for employment with the older settlers. We quoted in a recent issue from Dr. Victor Clark's official report on labor conditions in New Zealand, showing the comparative poverty, as well as the hopeless apathy, to which compulsory unionism, conciliation and arbitration had reduced workingmen there, and the *Evening Post* mentions a fact which indicates that the labor legislation on which New Zealand prides itself so much has been managed, to a great extent, for the benefit of a few persons. Not long ago, the Premier of New Zealand, in a burst of enthusiasm for unionism, promised that he would bring forward a general law, requiring that members of unions should be given preference in all employment. The shrewder of the union leaders saw that the result of this legislation would be, practically, to force all workingmen into the unions. If all the workingmen joined the unions, the old union men would have no advantage over the others, and, in order to avoid having to share their privileges with any one else, they quietly compelled the abandonment of the proposed bill.

THE Third International Sanitary Congress, which met lately in Paris, took an important step in drawing up a treaty, which was signed by the delegates, subject to the approval of their Governments, for the establishment of an International Sanitary Office, to be maintained in Paris, and to have for its province the more efficient protection of the health of nations, with the least possible obstruction to international commerce. Considering the ruinous effect upon commerce, in times of epidemic, of quarantine measures, often as inefficient as they are unwise, drawn up by ignorant officials in a state of panic, the importance of placing the control of such matters in the hands of an international tribunal of experts, thoroughly acquainted with the situation, and qualified to deal speedily and effectively with the danger at the points where it can be most advantageously met, can hardly be overestimated; and it is much to be hoped that all civilized Governments will receive with favor the proposals which that of France has been designated to make to them.

A MASTER AND HIS PUPILS.

ON the 28th of November, at the Tavern Club in Boston, a dinner was given to Professor William R. Ware by those of his former pupils within reach. It was in every way so enjoyable an occasion to those who were present and brought out so much of interest in the way of reminiscence that the Committee in charge feel sure that Mr. Ware's many pupils throughout the country who were unable to be present at the dinner will be glad to read even a belated account of it. Much of the proceedings, indeed, were of general interest, relating as they did to the beginnings of architectural education in this country; and the fact that the after-dinner speakers now indulged in humorous reminiscences and again in all seriousness acknowledged the depth of their obligations to their one-time master, is at once a tribute to the many-sidedness of his character and gives an idea of the character of the occasion.

After the dinner Mr. Peabody, who presided, read the following address:—

MR. PEABODY'S ADDRESS.

It was with some misgivings that I accepted my invitation to this dinner. Had I really been a pupil of Mr. Ware's? True, I had been a student in his office, but during his absence abroad; and though we lived together in Paris, it always seemed as if it was as comrades rather than as pupil and teacher. But the other day on looking over some old letters I came across a whole packet that he had written me, and I found that all my studies and plans, just as I carried them out were, to a great degree, outlined for me there. More than that, these letters were affectionately addressed to "*Mon cher*" and "*Mon cher petit Bob*" and "*Mon cher Bobpebodi*" so that I recognized anew the kindly spirit that inspired them and felt I could fairly enroll myself as an early child of a great family, perhaps the earliest.

For at that time Mr. Ware had not begun to be a teacher. He was preparing to be one; and these letters were all about the beginning of the School of Architecture at the Institute, his museum collections, his books, his evening class, his problems, his pupil that came every week from Worcester. And when they were not about the Institute, they made clear the arguments that vexed us then, the great question of the English Gothic School or the French Classics, so alive then that one longed to have been born in either pale and so to have escaped the burden of a choice, so dead now because many of us think the same great principles underlie both schools. Then we found that in the country of Street and Scott and Burges and Shaw, the country that seemed most like home to us, practically nobody was doing any Classic work, and that, on the other hand, across the Channel the work of these great men earned scarcely a glance. It was pretty and pleasing, the Frenchman said, but not architecture.

Amid such discussion and with few pupils, but under the care of a devoted teacher, was the Institute School founded. [I did not find in my letters that Mr. Ware then had any lady pupils. Perhaps he agreed with Mr. Fitzsimmons, the pugilist. You remember that he called a friend into a private room where he was having a conference with Mrs. Fitzsimmons just before his great fight. "You see," says Mr. Fitzsimmons, "my wife wants very much to be present at the fight, but I tell her it is no place for a lady!" However, Mrs. Fitzsimmons thought otherwise, and it gave her the opportunity for that remark which has survived her and which made her husband fight to win: "Think of our dear home and the little ones to Hoboken, Fitz, and tickle him in the slats." Whether the ladies reached the School in Mr. Ware's time or not I am not sure, but they finally did get there and ever since have done themselves and the School credit.]

Since the time when that old packet of letters were written how many "*cher petits Bobs*" has our friend guided in the ways of architecture! Wave after wave of the youth of our profession has rolled up the beach before him, quiet and boisterous, grave and gay, only to roll backwards into the surges where one tossing sea, perchance, raises its crest higher than its neighbors, or ends its career in a greater glory of foam. That is the reward we architects can gain by our toilsome life; a passing glint of sunlight on our wave, perhaps a grander thunder as we are hurled on the rocks and then the turn comes for the next advancing, joyous and tumultuous line.

Mr. Ware himself is not a stranger to this great restless ocean waste. I remember the buildings that he designed before he was Mr. Van Brunt's partner, all his own and uniformly a scholar's work; well studied and well carried out, at a time when people did not have skilled assistants. You do not know them and never will. An unkindly fate, that has spared many works by a man that I know far better than I ever knew Mr. Ware,—works that I should gladly have seen levelled to the ground,—has too soon laid its destroying hand on his graceful and well studied buildings and they have either been torn down or transformed.

Later when Mr. Van Brunt and Mr. Ware worked together we know that each influenced their joint work for good and that it was the best of their time. Their reputation as architects is secure. That is all that most of us can ever hope for. We must be satisfied with the cowboy elegy, "He done his darndest; angels can do no more." But not so our friend. He does not rest his fame on himself or on his own productions. That is the glory and happiness of the teacher. He lives on in his pupils, and in all their art and their successes he can fairly claim a share. What does the wisest of our

race say should accompany advancing years? "Honor, love, obedience," but last and best, "troops of friends." None of these are lacking to our master; least of all the latter. And it is above all as one of that troop that I come here to-night. It is as "*ton cher petit Bob*" that I welcome and greet you, and in the same spirit, I call on all "*tes bons petits camarades*," the Franks and Neds and Georges and Johns to stand up and drink "*rubis sur l'ongle*," "Long life and good health to our Master."

Mr. Peabody then called upon Mr. George T. Tilden as representing the very first students at the Institute of Technology. Mr. Tilden gave the following amusing account of the conditions under which the school of Architecture at the Institute of Technology had its beginning:—

MR. TILDEN'S REMARKS.

Forty years ago this minute I found that I had been about six weeks in Mr. Ware's office. It was then in the Studio Building where that structure now stands on Tremont Street. Our office windows were on Bromfield Street, and John Stearns was in command, as Mr. Van Brunt had not yet joined Mr. Ware. This was in 1863, and the whole country was up to its arm-pits in Civil War. I had just come down from Phillips Exeter Academy and made application to Mr. Ware for a position in his office. He said, in his kindly fashion, "Well, George, what do you know?" I was, at that time, well up in the "proud lexicon of youth" and replied, with becoming modesty, "I know everything, Mr. Ware, except architecture, and if you will introduce me, please, to Palladio and Michael Angelo and Queen Anne and Charlie McKim, I'll be much obliged." And he said, "You silly boy, go to Harvard College for four years and learn just a little something, and then come and we'll give you a start"; but I said, "No, Mr. Ware, I can't do that, for here is gold up to 200 and more and flour about \$17 a barrel and every detail of my healthy appetite has been drawn out full size, and I must to work at once." Then Mr. Ware said, "But I have John Stearns, you see, and pray what more could mortal desire?" "But," said I, "you've been coaching John Stearns so long that now he is only a help to you, and what you need is a hindrance; you'll get rusty if you don't have a hindrance. Let me in as a hindrance"; and he, bringing that kindly but experienced eye of his to bear upon my countenance said, after a moment's contemplation, "Well, George, judging from your door and window-finish, you look hopefully fireproof, or at least of fairly slow-burning construction, so you may come in. As a hindrance, you may be a help."

Into this Studio Building office came Frank Chandler, with his wit and wisdom, and Johnny Mitchell, with his wonderful facility at drawing the human figure, and he kept the blackboard lively with athletic cupids performing impossible feats on fantastic architecture. By this time Mr. Henry Van Brunt had become Mr. Ware's partner and our office was moved up into Pemberton Square, the top floor of one of the old brick dwelling-houses, with its windows looking down Court Street and State Street and over the harbor, with no skyscraper to molest or make us afraid. Here our numbers were increased, and among those who came in as draughtsmen, or as students, I recall Frank Loring, and Dacre Bush, and Harry Richards, and, for a short time, Bob Peabody, who soon ran away to Paris, and there came Tom Rich and John M. Allen and Frank Howe . . . and others.

The most wealthy client, or at any rate the most conspicuous client to us young fellows, was a prominent clothing dealer whose money from the United States Government for the shoddy clothing which he was furnishing to the army of the Potomac used to come to his warehouse in Winthrop Square in huge wagon-loads guarded by four well-armed United States soldiers. He wanted a fine house on Beacon Street, and two or three blocks of dwellings on different portions of the new Back Bay, and so his presence in the office was occasionally tolerated, but the skill with which Mr. Ware would conduct the campaign to evict him, when his stay had been beyond endurance, was evidence of unusual generalship. The way in which he would execute a flank movement to shy him off from the middle of the office, and would call his attention to the skylight in the outer entry, or caution him about the third step on the second flight down seemed to us more and more sublime the oftener it was repeated.

In spite of increasing business Mr. Ware would send us down every now and then to attend the lectures of Professor Runkle, and some others who were starting the Institute of Technology with occasional talks in the rooms of the Charitable Mechanics' Association on Chauncy Street, and when he became involved in the interior treatment of Huntington Hall, with its mechanical contrivances for hoisting and lowering the screens, etc., for the lecture illustrations, I remember Mr. Ware took the whole office down one afternoon to the stage-entrance to the Boston Theatre and had the stage-carpenter show us the ropes and reels and rigging, the wings and flies and foot-lights and all the complications and fascinations behind the scenes.

When Mr. Ware had partially inspired us with an interest in Classic work, he set us to reconstruct Pliny's Villa, and for weeks we were upheaving and absorbing the whole Roman civilization, from Romulus all through the Cæsars, and while we were kept at this indefatigable research you must not suppose that he was idle. He was at work for us all the time. He did not limit himself to office hours. He was on the war-path night and day, and often, when I reached the office in the morning, I would find thumb-tacked onto my drawing-board a note something like this: "Dear Geo. It is now

2.30 A. M. and I have gone to the Parker House to get a little sleep. Have just found a fine description of Pliny's boot-jack wh. you wanted to work into his vestibule mosaic. You will find it marked on page 73. W. R. W."

Always quick to discern what was for our good, Mr. Ware was equally quick *not* to discern what would have been to our hurt, if he had seen it. One day John Allen had been corralled in the private office, when Mr. Van Brunt was in New York, and Mr. Ware was away, *presumably* for the rest of the day. John Stearns and I were holding the door shut, by clutching the knob, while Allen was trying to pull it open on his side. Finding he had no show of success single-handed he ransacked the wardrobe and brought to his aid a pair of Mr. Van Brunt's trousers, with the suspenders attached, and these he lashed to the knob and was soon shouting with glee, as he began to see victory through the crack of the door, when, suddenly, Stearns and I heard Mr. Ware's quick, elastic step in the entry, and, dropping our hold, we strolled in an absorbed leisurely way towards our proper stations, while Allen rolled in a tangled heap on the floor, with a derisive howl of success. Mr. Ware passed into his office as tranquil as a June morning, with no recognition whatever of the rampant bedlam, and Allen, after untangling himself, brought out his victorious weapons and directed the office boy where to have them cleansed and pressed, and then went to his table at the front of the room and went to work vigorously upon Mr. Freeland's front-elevation, apparently quite unconscious of his own rear elevation, which was a sight to behold! From the storm-swept thatch of his cupola (he never had it shingled) down to the grade line it was picturesquely kalsomined, done in a broad, sketchy manner, with wide expanses of deep rich browns and grays which softened off into the hazy background of his office coat, or were enlivened by the greater brilliancy of his checkered pantaloons, in a manner which should have made Haberstroh envious.

We were all of us entitled to a week in the guard-house, on bread and water, but Mr. Ware, bless his kind heart, said never a word, but, while the dust of battle was settling in his office, and "silence like a poultice" was "healing the blows of sound" in the draughting-room, he rose from his desk and gently, noiselessly, closed the office door! Surely the chivalry of King Arthur's Court can show nothing finer.

Nothing escaped Mr. Ware's notice which he could bring to the interest of his boys. An enterprising agricultural journal offered a prize for the best design for a farm-barn of unusual dimensions, for 200 horses, 300 cows and 1,200 sheep, and Mr. Ware set me at it, and suggested that I look up, at the Public Library, such books as would help me. I knew something of the proper care of horses and cows but had little knowledge of the care of sheep, so when I came upon the book entitled "Ruskin on Sheepfolds" I revelled in the cheerful hope that our inimitable John Ruskin would pull the wool off my eyes, and show me, in his entrancing phrases, the whole nature and demands of sheep. Mr. Ware smiled as he saw the book I had, and said, "Ha, ha! go ahead and see what he says." That Saturday afternoon I took that volume of Ruskin home with me and next day found it better *Sunday* reading than I had counted upon, for, as perhaps you all know, "Ruskin on Sheepfolds" is an ecclesiastical treatise on church government, with never a word about the woolly quadrupeds which I was expected to house.

And so, as you may suppose, I did not win the prize for the barn, and my carefully worked-out effort took its place at the bottom of quite a pile of what I came to call my "rejected addresses."

But perhaps it is not complimentary to Mr. Ware to mention these failures when he was trying so faithfully to bring us out on top, still in this company which knows Mr. Ware so well, we need not hesitate to name the defeats, as well as the victories, for whoever proved himself a truer friend in times of discouragement than he? Many of us know, not only those of us now still pegging away at the old game here, but some of us who have ceased to design earthly tabernacles, know full well that when any one of us was brought to earth by the snare of the fowler, and lay wounded and bruised, it was Mr. Ware's hand that poured in the oil and the wine, it was his hand that led us to an inn and took care of us, and his purse that was left behind for our comfort and hope.

And, as Abraham Lincoln said, "Since we like that sort of thing that's just the sort of thing we like," and that's why we are here to-night.

Professor Chandler added to Mr. Tilden's reminiscences of the early days in the offices of Ware & Van Brunt and spoke of the Institute of Technology as it is to-day, adding that they had never found occasion seriously to change the scheme of study as it was first laid down by Mr. Ware, and he spoke of what the Institute of Technology owed to him for his years of service in the beginnings of the school.

Mr. Warren was then called upon as representing the school of Architecture at Harvard and alluded to the fact that the reminiscences they had been listening to and the songs they had been singing, looked back to a time when the Institute of Technology was practically the only school in the country. Since then, as all knew, schools had sprung up in all parts of the United States and pupils of Professor Ware were now teaching in six of these schools. Two of these schools, the Institute of Technology and Columbia, Mr. Ware had himself founded, and he felt inclined to add a third, that of Harvard, so much had the school at Harvard owed to Mr. Ware's encouragement and advice. It might be interesting to those present

to know that the Committee having the lists of past students in their hands, had, on counting them, found that there were some 650 names, and as the lists were far from complete, it was safe to assume that at least 700 students of architecture must have passed under Mr. Ware's hands.

Mr. Warren stated that Mr. William P. P. Longfellow, regretting greatly his inability to be present, had sent the following sketch to be read:—

MR. LONGFELLOW'S APOLOGUE.

I WALKED in the early morning along a hillside way, where many young men were hastening, all in one direction. On the right hand, where the hill rose behind the path, were set at intervals monuments of various sizes and shapes, each one with a name carved upon it as in commemoration. Here was a simple tablet cut on a random stone, there a high stele, next maybe was an imposing shrine, a florid canopy, or an obelisk, and the names that were carved upon them you would recognize if I should repeat them. The hill fell off sharply on the downward side, and as the young men passed carelessly by, paying more heed to these monuments than to the way at their feet, and sometimes jostling each other roughly, they now and again wavered from the path. By times one slipped far down the slope, having much ado to climb back, or went stumbling and staggering down into the deep valley below, and came back no more.

I joined myself to one who walked alone, carrying in his hand a wreath of laurel, and as I went on with him I asked what were all these monuments by the roadside, and whither so many young men were going this fair morning. "These monuments," he said, "are set up in honor of the builders who have built and adorned the city yonder. Some are raised by the people of the city in gratitude for the great work that these men have done there, but more by the builders themselves, who have written their names thereon to make themselves known, and to show what they can do. All these young men are journeying to the same city, to become great builders also; and as they go they stop to admire these works of those who went before."

Then, lifting my eyes, I saw through the morning mists a great city standing high upon a hilltop beyond the valley. The early light glowed upon it, and it shone bright with gleaming towers and spires and the fair fronts of palaces. "But how do you come at this city," I asked, "with this deep valley between, in which, as I see, many are already lost?" "Walk with me a little way farther, and you shall see," he answered; and so we continued on till we turned the shoulder of a hill, and came upon a stately bridge all of fine stone. Here a noble arch leaped across the gulf, cunningly poised upon tall abutments whose feet were far down in the valley. It had a comely parapet of wrought-stone, and along the parapet were hung wreaths of laurel and oak and ivy, some fresh, some faded; beyond it the path was seen, bordered by still other monuments, winding far up toward the great city. But the bridge, though it seemed to me the most notable monument of them all, bore no builder's name, and I said to my guide, "Tis a noble bridge, of great elegance and artfully contrived, yet who built it? and why does it wear no builder's name?" "Tis indeed a noble bridge," said he, "the work of the master of us all. Before he built it they who came this way must fain clamber down to the rough bottom of the valley, swinging themselves over the brook below, with labor and danger, and climb for long hours up the arduous hill, happy if at the end of the day they reached the city, though worn and spent with toil; and many turned back by the way. All we who pass over it bless the name of the builder of it, who dwells in the city toward which we fare, and we love to hang our wreaths upon it in token of our gratitude. But this builder is no seeker after fame, and doth not display his name upon it; yet his name is remembered of all men in these parts. It is the Master's bridge, and it needs no blazon."

Here I stopped, and as he walked I saw him hang his wreath upon the parapet, and continue his way upward. I sat down to rest on a pleasant bench in sight of the bridge, and of the city; and I gave thanks that men are born into this world of labor whose care it is, not to build their own monuments, but to straighten its crooked ways and to make its rough places plain, for those who strive upward in it.

Mr. Howard Walker spoke as representing those who, while not Mr. Ware's pupils in any direct sense, felt that they owed to him a great deal that was most valuable in the way of encouragement and advice. He paid a glowing and hearty tribute to Mr. Ware, stating that no one knew how many there were who owed to him not only instruction, but help, sympathy and encouragement where they had most needed it. For himself he was glad of the opportunity to express his gratitude and indebtedness.

At intervals during the evening songs were sung, many of them written by Mr. Ware for the Architectural Association in the Institute of Technology in its old days. Mr. Austin read one of these sets of verses known as "Two Receipts."

Altogether a most enjoyable evening was passed and it was only to be regretted that more could not have been present.

TICKETS TO MILAN CATHEDRAL'S ROOF.—The right of selling tickets for the ascent of the roof of the Milan Cathedral was sold the other day for \$5,000 a year. Until a few years ago the sum paid was only \$2,000.—Exchange.

CONSTRUCTION OF AN OLD VIRGINIA HOUSE.

THE Clifton House, formerly standing on the corner of North Fourteenth Street and Cypress Alley, Richmond, Va., was torn down during the summer of 1903.

It is on official record that it was conveyed in 1791, by deed signed by Col. John Mayo, who was a wealthy and prominent citizen of Richmond. "The house originally was surrounded by ornamental gardens of considerable size." It probably stood in the centre of two squares, extending from Mayo Street on the east to what is now called Governor Street on the west, with unknown limits on the north and south.

The site was on the southern slope of a high hill, well above the James River, which flowed easterly, at its base, over the granite ledges and rocks forming the first falls on the river. Near here John Smith met Powhatan, and was later saved from death by Pocahontas.

The demolition of the old house afforded an excellent opportunity to study its construction and check up some measured drawings made of portions yet in place. This construction was in many respects unique, as is shown by the drawings. [See Illustrations.]

The house was long and narrow, about 61' 5" x 30' on the ground-line, with a considerably less measurement on the line of building; it had three stories, with a high basement, above grade, two bastion-like bays on the south front, all covered with a hipped roof. The materials were red brick with white marble trimmings, with roof covered by large, rough, blue-black Welsh slate, apparently similar to those formerly on "Westover," below on the James. The basement walls, up to the moulded brick course shown at about first-floor level, were laid with a very rough hand-made brick, about 8½" x 4½" x 2½" in the English bond, while the superstructure above was laid with a much smaller sand-struck brick in the Flemish bond.

The weather stains upon the basement brick evidenced a much greater age than the brick above; as there were no indications that the building had ever been attacked by fire, there seem but two possible explanations of this fact:—

1. The basement was built and allowed to stand many years before the superstructure was built?
2. The building was built complete, afterwards demolished to the top of basement walls, and then rebuilt?

The outside lintels of all the basement openings were of brick "flat arches," so called. The bricks were about 12½ inches long, laid stretcher-wise, cut to a horizontal line at top and bottom of the arch neatly; they were not cut or ground to radiate from a centre, but simply laid in full length, making a joint narrow at the bottom and an inch or more wide at the top; three bricks in the centre of arch were cut, to form a key. In spite of this peculiar construction, all these arches were in good condition; none of them had dropped or deflected in the centre, showing the good quality of the mortar used.

As time had grayed and toned this sector of a joint, the effect to me, at least, was not unpleasant.

These arch bricks were of a mellow, dark madder red, smoothly finished, clean and sharp-edged, unlike the coarse brick of the basement walls, which were of a mottled gray and red hue, caused by bad burning.

The bays mentioned extended to the roof, and were roofed out at the same slope, thus finishing below the ridge line of main roof.

The chimneys had plenty of very large flues, and topped out strong and sturdy.

The white marble mentioned was used for outside door-sills, and for a short space on the north front at second story, as narrow pilasters with moulded caps and bases. Also for belts and flat-arch lintels to all windows (excepting three on north front) above first-floor level.

The Roman Doric cornice of wood had slight projection, with neat modillions; an architrave moulding with guttæ, three under each modillion.

The house originally stood clear on all sides; later a house had been built adjoining and connecting, on the east side, by one of the windows shown upon the first-floor plan, which was turned into a doorway, and some other alterations made which I have not shown, as I have adhered to the original lines.

This adjoining house was also quite old, was finished in the olden style, neatly, but not expensively.

North Fourteenth Street and Cypress Alley were later adjuncts. All that remained of the extensive gardens was a width of about 20 feet, and the length of the south or garden front.

The masonry throughout was in good condition, mortar strong and tough, as usual in old buildings. There had been some settlements, especially near the chimneys, caused not from any defect in the masonry, but due to the unequal distribution of the loads on the foundations, a common fault of the old-time builders.

Commencing with the basement kitchen, the builder introduced a novelty in construction, entirely unlike the standard Virginia kitchen of his time. From brick wall to wall, commencing at floor level, he threw a semi-circular, two-rowlock brick arch of 8 feet 6 inches radius over the entire space, enclosing it in a half-barrel vault; the soffit of arch was plastered, the haunches up to the crown filled-in with red clay, to near the under side of floor joist of the dining-room over the kitchen. Where this arch approached the windows on the north side, it was stopped back, leaving a space between itself and the windows, the heads of which extended up to the crown of the

arch, as will be more clearly understood by reference to the drawing. On the south side, formed by one of the bays before mentioned, were intercepting arches cut in at an angle to vault over the window-heads, in the two faces of the bay. All this contrivance was evidently to keep the heat from passing through to the first floor above, something accomplished in the old Virginia mansions by having the kitchen detached from the main house, and only connected by a long passage—in some cases but a trellised arbor—with the dining-room. Through this long passage the colored servants passed to and fro with the food, in procession.

The kitchen fireplace was "wide, high and handsome," the opening being about 5 feet square and 2 feet 6 inches deep. The chimney over opening was supported on two wrought-iron bars, 2" x 1", laid 1 inch up; they had deflected about ¾ inch in the centre.

To the left of fireplace there were indications of a former low-arched construction, which was not an oven, but, for reasons, I concluded was a hot-water heater; a place for open fire below, and with a hole to receive kettle in the covering arch, a flue built on the arch and connected with a remaining corkscrew-like flue in the main chimney, would do the business very effectively. The rooms in the basement were finished neatly, but plainly, with dressed stuff. The stories above basement were all finely finished with white pine, Virginia pine (of an old growth not now in the market) and mahogany. Well-panelled and wrought dadoes, or wainscot, skirted the walls of halls, rooms and closet-like dressing-rooms. The doors were well proportioned, the outside ones having entablatures over them with carved wood consoles on each side.

Mahogany was used for hand-rails, balusters and parts of string to stairs, dado cap and window stools.

The joinery work was all hand-worked; the style of finish a free Classic, Roman Doric, with a Theatre of Marcellus feeling, and all of a high grade of workmanship.

The recessed windows had panelled jambs, backs and soffits, but no inside shutters or blinds. The windows on the north front were hung with stout outside blinds shutting into a rebate flush with the wall; there were no blinds on the south or west fronts, although originally there may have been. The windows had solid wooden frames with a small weight-box cut out for one weight, the lower sash only sliding; the heads and sills were solid, the jambs being tenoned into and pinned to them, the whole frame setting ¼ inch back from line of building outside.

There were no stone window-sills throughout the building. The 3" x 9" Virginia pine dressed sills were in perfect condition, looking good for another one hundred years. These wooden sills and frames were not, and showed no sign they ever had been, painted. They may have been oiled, but not heavily. They were dressed very smooth, not sand-papered. In this connection, I recall an old brick house in Boston, Mass., built early in 1700, which had white pine sills, much heavier than the above-mentioned, which were in good condition in 1883. Any but sills of the hardest stone would have been much worn in a less time. Where economy is a factor in the problem, it would be judicious to use wooden sills alone. It is true the old-time builder had access to choice wood not now obtainable, yet there is no evident reason why a good, sound piece of heart wood, such as the present market affords, would not stand in good condition beyond the required life of a modern building. The under side of such a sill could be hollowed out in such a manner as to reduce the sectional area, and consequently the shrinkage. It could be moulded and ornamented cheaply, and there are other advantages which will suggest themselves to an inventive mind.

To return to the windows in hand: it will be noticed that the inside of sill was in line with the lower sash and inside of brick filling below, a thin strip of wood was nailed to the back of sill, and on this the window stool was coped. This unnecessary and defective workmanship held true for all windows on the first story at least; it was somebody's "holiday" unearthed at this late date.

The lintels over the window-heads from first floor up (excepting the three windows of north front second story already mentioned) were of white marble, in one stone, but it was lined by deep V-joints, in such a manner as to divide it into voussoirs and key with a splayed bearing on ends. The surface was tooled to agree with the radiated mock joints, the mock edges tooled one inch wide.

To refer to the comparison of stone and wood again: this tooling was much worn, almost obliterated in places although it had stood upon a vertical surface.

This marble had been painted at some time, white; age had grayed it, giving it the appearance of a gray stone.

The windows generally had eighteen lights. The three windows mentioned on north front formed ornamental features over the entrance porch. They had elliptical brick arch heads, marble skew-backs and keys, while between and in the outer sides of the windows were marble pilasters with moulded caps and bases. The effect of the old brick on this front was a gem in the way of color, it was noted, to make a water-color from, but alas! was never done.

The dado or wainscot was of specially good workmanship throughout. In the halls, up the rake of stairs and in dining-room, the lower portion of dado was panelled, the upper part being a continuous grooved or channeled surface; it was made up of pieces of white pine about 12 inches wide by ½-inch thick, glued edge to edge, making one continuous piece, backed by false panelwork behind, all surfaces exposed or otherwise being carefully dressed. It was in perfect condition, equal to new work, although a portion ran on the outer brick wall, which was plastered direct upon the brick.

Where backed up by the false-work, the backs of panels, rails, etc., were finished as smoothly as the exposed faces, which insured close fitting. The false-work and furrings about the circular stairways were mortised and tenoned together, dressed smooth and true, unlike modern construction in a similar case. This and some other hand-work throughout inclined me to believe the house had been finished by ship-joiners.

The outside doorways had entablatures with carved wood consoles each side, inside and out the same, excepting that the entrance-door under stairs and the side balcony door from parlor had entablature and consoles on the outside only. These consoles were well carved of solid wood in one piece, with the shell at bottom of white pine on a separate piece neatly joined on. The beads shown upon the face of consoles were not applied, but carved upon the solid Virginia pine. There were twelve of these consoles in all.

The sills to all outside doors were of white marble with gray streaks: they had lugs and scapes.

The stairs were semicircular in plan, with high hand-rail; the cap to dado running up stairs upon the rake was in section one-half the hand-rail, all of mahogany as were the balusters, oblong in section.

The face of gallery strings had channeled grooved-work similar to that on dado. A mahogany sole-piece, moulded, ran all about well-room opening of stairs, the balusters being let into it at bottom.

The first and second floor flights were the same in workmanship, the material, where not mahogany, being the Virginia pine of old growth. In the narrow passageway between entrance-hall and dining-room, there had been a narrow flight of stairs, with very high risers, leading to second floor, either a private staircase or a servants' flight. This staircase had been removed later, sufficiently to afford passage under it; there never had been risers to the flight, only treads, probably to allow the light and air to pass through unobstructed. The first-story flight passed, at the fourteenth riser, the head jamb of north entrance door, rising with the curves. This was why they had not put an entablature over this doorway. Also on the second floor level north front, the three windows before mentioned were cut by the line of dado on the rake of stairs, a neat panel showing to the outside behind the lower sash. Little matters of this kind did not seem to annoy the architects of that period.

The Virginia pine mantels had turned fluted columns with proper Doric caps and bases, incised or gouged work, delicately rendered, gray and white marble facings and hearths with iron grates. I am inclined to think these facings were added at a later day with the grates, the opening then being reduced in area from the former open wood fireplaces. There were arches turned in the opening behind at the proper height, which confirms this view of the matter.

All the rooms had mantels, with slight variation in proportion and design. These mantels as they stood were painted a deep black, but originally they had been of the same tint as the other finish, to wit, a light warm so-called drab. Some barbarian occupant had also painted the mahogany balusters and dado caps the same deep black, while over the mahogany window-stools they had been content to run the drab tint only; by accident, belike, they had omitted to paint the polished mahogany stair hand-rail. There were no porches or piazzas left standing upon the house, all having been removed years ago.

From indications remaining I found that the entrance porch on north front extended the width of the one half brick projection shown, with a high flight of steps down to the ground.

On the south or garden front, there was a door in the halls on first and second floor, leading outside, which would call for a two-storied piazza at these points; but as the entire south front had been, later, covered with some rough-coated mastic, all original marks were concealed, one could not be certain whether these piazzas extended partly or entirely from bay to bay, as I have shown them upon the plans; however, the latter seems the most logical conclusion, and in harmony with old Virginian mansions.

It may be proper to mention here, that second-story piazzas are called "galleries," in this section; in fact I have frequently heard the name applied to any piazza above the ground.

The floor construction throughout was peculiar. The floor joists 4" x 13" about 16" on centres, supported 2" x 4" oak "cross bridging," about 18" on centres. This bridging was notched one inch on the top of joists and nailed to them, running crosswise of the floor-joist. To these bridging-joists the floor-boards were secured. Being 1½" thick by 5" wide dressed boards, bevelled on their edges, laid the narrow face down, blind nailed about every 18" through their bevelled edges to the bridging-joist, they were further secured together by ½" square oak dowels driven into round holes, bored in the edges of the floor-boards at spaces of from 7" to 9" on centres; the closer spacing being near the ends of the boards. This gave a strong and firm yet elastic floor. All were in good condition, apparently, as when first laid.

Between all the floor-joists, resting upon ledgers nailed to the lower edges of the joists, was a one-inch false floor. The false floor was covered to the level of floor-timber tops with puddled red clay, surfaced one inch deep with fine gravel and small oak chips, leaving a clear one-inch air-space between it and the under side of floor boards. This filling was 9" deep on first floor and 7" deep on floors above.

This construction evidently acted as a good non-conductor of heat, cold and sound; as well as proving of great value as a fire-retardant. Perhaps a less thickness would have been equally efficient? It was a heavy, dead, constant load upon the floor timbers, as results proved.

As, excepting over kitchen, these floor timbers were run the long way, to give them a wall-bearing at each end, this long span caused the timbers to deflect an inch or more in their centres, and nobody could well blame them for so doing. This settlement had depressed all ceilings to that extent. It may be noticed there were no cross brick partitions in the building except in basement; beside the brick barrel-vault.

This proving an eyesore or a threatened danger, the owner later, during the period of cut-nails, but evidently long ago, had removed ceilings and floor-boards above the first floor, furred up with nailing-strips the tops of floor-joists to a level, hewed off the under depressed side, then relathed and plastered the ceilings and relaid the floors.

In spite of this rough treatment and the loss of one inch or more of depth from their weakest side, the floor-timbers seem to have braced up, called upon their reserve strength and stopped deflecting; as my recollection is, that upon my first inspection the floors were level and ceilings not noticeably sagged. If I had then known the condition later ascertained, when the timbers were stripped, I should have been more critical.

The laths were ½" x ¾", of varying lengths, generally over 4 feet, split to a size, laid ¾" on face, secured by broad-headed cut-nails which, by the way, were not familiar to any of the mechanics or material men of this locality to whom they were shown. The plastering was of good quality, better than done here to-day. In some places it was one-inch thick, clear of the laths. Outside walls were plastered direct upon the brick in all cases.

The headers and trimmers were 6" x 13", mortised, tenoned and pinned as shown, after a method shocking to see. The pins or tree-nails were oak, square, driven into round holes. All the heavy timbers were anchored to walls by such anchors as shown, which are interesting if not practical.

At the top and bottom of each wooden partition were 8" x 13" timbers to which the partition plates and sills were secured. The wooden partitions were tied into the brick walls by flat iron bars with a head piece into which the bar tenoned and was "swaged." This bar extended onto several studs. While in this case unnecessarily strong, it is a good point to bear in mind, as it is generally omitted in modern work.

It was impossible to measure the roof construction, the roof being the first thing removed. It was being shunted down the circular stairway, when I arrived, with a mass of timber, brick and mortar. However, I could see its general construction.

It was elaborately framed, with king-posts, struts, straps, wall-beams and all, after the ingeniously laborious method of our predecessors, showing loving care, with a crude idea of statics and the strength of materials.

The neat plaster cornices shown were run in all rooms and halls above the basement. They were in good condition although there were no furrings to sustain them, and close inspection, when being removed, did not show the usual expedient of driven nails to allow the mass to key on. They were run solidly and stood firm.

The niche in entrance-hall was finished in plaster, elliptically, and trimmed with wood agreeing with the standing finish. Much of the standing finish was white pine.

In some cases the architrave trim to doors and windows was gotten out of a solid piece, in others in two pieces with a back-band, although the sectional outline was the same.

As stated at the commencement of this article, the house was undoubtedly standing and conveyed by deed in 1791. How much older it is I have been unable after long inquiry to find out with certainty. The consensus of opinion placed the age at 125 years.

Many silver and copper coins were found in the debris. The silver ones were old Spanish pieces; one dated 1783 I purchased of a colored laborer, who found it. I also saw an old American copper cent, date 1818, in excellent preservation, while the silver coins were much worn, many dates being illegible.

This house was before the war a fashionable boarding-house, then a hospital, tenement, and later an abandoned house. I am informed the name Clifton belongs to the boarding-house epoch.

The Col. John Mayo mentioned was the builder of the first bridge across the James River, — a toll bridge, extending from Richmond, across Mayo Island to Manchester on the south bank. It now bears the same name, although it is not the same structure. It spans just below the falls. Mayo was a member of the Virginia House of Burgesses, all of whom were termed colonels.

Libby Prison was between the Clifton house and the river. Not far away was the famous Van Lew house, frequently known as the "spy's house." Taking the Clifton house as a whole, or as the sailors say "by and large," it would be a credit to any section of the country of its time. Up to their lights the builders gave thought and care to its construction, both rare birds here and hereabout to-day.

At the point indicated by * on the basement-plan, was found when removing the building, an old fireplace and portion of an outside chimney, so well known a sight south of the Potomac. The outside showed the white-washed clay-spattered surface.

When they built the Clifton house, they simply ran the basement-floor sleepers over this fireplace, without filling up the hole. Old wood ashes could plainly be seen. It is not impossible that Powhatan may have warmed his toes at that fireplace! It had no connection or relation to the Clifton house.

I hope I have not made this description too technical and tedious; however, details have their value, to make a whole.

GEO. R. TOLMAN.



REPORT OF THE LEGISLATIVE COMMITTEE OF THE BOSTON SOCIETY OF ARCHITECTS.

THE committee appointed at the last annual meeting of the Society to represent the Society before the Legislature of 1903 in all matters pertaining to building-law and public improvements presents the following report:—

THERE is but one change in the building-laws, and it is applicable only to the city of Boston. Chapter 301 of the Acts of 1903 amends Section 82 of Chapter 419 (1892), relative to ways of egress from buildings in the city of Boston, so that in a building of first-class construction a flight of stairs constituting one of two independent and sufficient ways of egress, extending from the lowest to the highest floor, and made of fireproof material, need not be enclosed in brick walls. The object of this legislation was to improve the lighting of corridors in schoolhouses of first-class construction, and also to reduce the cost of such buildings. Unfortunately it has likewise opened the question whether the clause "unless the building be a first-class building" removes merely the requirement that staircases shall be enclosed in brick walls, and still leaves in force the succeeding provisions for ventilating skylights, openings in external wall, or a stair-well of sufficient size to light the entire staircase from the skylight. It would be unwise to remove the requirement upon owners of hotel and apartment or tenement property to provide for daylight upon their staircases.

The work of the Tenement-house Commission appointed by the Mayor of Boston has not as yet culminated in any proposed legislation. Whether the Commission shall recommend specific acts or amendments to the existing law, or shall advocate a special commission to frame a new law, the attention of your Legislative Committee will be directed to such proposals whenever they are received by the Legislature, and your Legislative Committee's action will be carefully consistent with the attitude that may be adopted by your Committee upon Building-law. These two committees of the Society, working harmoniously for the advancement of good building legislation, can do much to establish and increase the authority of the profession in public matters that are so distinctly within its scope.

In the matter of public improvements your committee has taken unusual and significant action on behalf of the Society. In our report for the year 1902 we stated that we should ask the Society for an appropriation, to be increased by at least an equal amount from other sources, and expended upon the study of the question of public takings by right of eminent domain. We also stated that we expected, on behalf of the Society, to petition the Legislature for a constitutional amendment to enable the Legislature, by special acts subject to other provisions of the Constitution, to authorize any city, town, or State commission to take in fee, purchase, or otherwise acquire for public purposes and in connection with any given public work, all or any portion of the land within certain defined limits, and after appropriating for such work so much of the land so taken as is needed therefor, to sell or lease the remainder. This amendment to the Constitution was introduced, referred to the appropriate committee, and that committee, at our request, referred it to the next General Court. This placed the Society on record at a time when the amendment proposed could not be said to have reference to any specific public improvement, but was only a possible measure of general legislation. The distinction is important, and the policy of the committee has been to promote the study of the question upon general lines. With the valuable assistance of the Real-estate Exchange and of the Board of Fire Underwriters, your committee procured the appointment by the Governor of a committee to consider the matter of making public improvements under a more extensive exercise of the right of eminent domain. This committee consists of Messrs. Edmund M. Parker (chairman), Leslie C. Wead, and Hugo R. Meyer. They gave public hearings at which the Society was represented by our President, by our counsel, Mr. Arthur D. Hill, and several of our members; the city of Boston by the Street Commissioners and by the chairman of the Schoolhouse Commissioners. The Metropolitan Park Commission spoke through its chairman, Mr. De Las Casas; and among other notable witnesses were President Eliot, Mr. F. O. Olmsted, and Mr. George G. Crocker, chairman of the Transit Commission. The testimony was reported verbatim, and one copy thereof belongs to the Society.

There was a general agreement as to the wasteful and inequitable methods of land-taking now in use, and a considerable number of suggestions to remedy the defects of the present practice. The opponents of legislation aimed rather at the methods than at the principles involved, and their objections were duly considered.

The public hearings were but a fraction of the work of the committee. It is understood that the committee has carefully considered the different systems of public takings in the principal countries of Europe, not only by a study of published materials, but also through personal investigations abroad. It is reasonable to expect that its report will contain specific recommendations applicable to the needs of Massachusetts cities, and consistent with a somewhat individualistic American point-of-view. From such a commission there is no reason to expect recommendations for a socialistic enlargement of

the powers of municipal government or for a wanton expropriation of estates not immediately affected by proposed improvements.

President Eliot has pointed out that the greatest obstacle in the matter of public takings is the question of remnants, the difficulty of establishing under present conditions the fair value of the portion of an estate taken and of the remnant not included in the improvement.

If the committee can suggest a rational method of dealing with this particular difficulty, it will distinguish itself and reflect honor upon the Society. It is almost certain that the report of the committee will furnish a basis for further efforts of the Boston Society of Architects on behalf of good legislation, and it is not at all unlikely that such efforts in favor of a general line of public policy may extend over a series of years.

Every year there is likely to come up some such measure as Chapter 158 of 1903, an act to protect public parks and parkways from disfigurement by advertisements, which your committee gladly supported; or such a dangerous special measure as the bill to enlarge the undivided floor-space in stores, warehouses, etc., from 10,000 square feet to 60,000 square feet, which your committee earnestly opposed, and which was defeated. These are the incidentals of every legislative session, whereas the revision of the whole body of building-laws, or the proper exercise of the right of eminent domain are subjects that may well be presented to successive legislatures during a series of years before an important result is obtained.

In carrying on its work your committee has received valuable advice and other assistance from our President, Mr. Peabody, and from many other members of the Society, whose interest, practically expressed, has done much to lighten its labors. Its line of duty, at times inspiring, must also at times become irksome, unless the committee has the hearty support of the profession at large. This support has generally been given. We ask for it in still larger measure, and especially do we appeal to members of the profession who may have occasion to advocate new legislation, whether at the request of their clients, or of their own initiative. We have the authority of the Society to oppose all legislation tending to weaken the law through the adoption of lower standards of building construction, and while admitting that amendments to the law may be needed, from time to time, and should not be opposed simply because they are changes, this committee will insist that such changes are to be condemned if introduced in the form of special or private legislation, and not in the interest of the public.

In two instances last year your committee, acting for the architects as a body, was surprised and perplexed to find its efforts opposed by members of the Society in good standing, who threw their individual professional influence against that of their representatives, and spoke for the Philistines who are always ready to pull down the restrictive barriers that have been raised to protect the public right from the encroachment of private greed.

The confidence reposed by the Society in this committee justifies the expectation that individual members of the Society, having legislation to obtain, will endeavor to reach such an understanding with the Society's representatives as will reconcile, if possible, any differences in point-of-view, instead of proclaiming openly an opposition of special to public interests which ought not to exist between architects.

The appropriation of \$500 voted to your committee at the last annual meeting was trebled in value by the legislative appropriation for the expenses of the Committee on Eminent Domain. We have expended or pledged for counsel fees and for travelling expenses of a member of this committee, not provided for under the public appropriation, the entire sum voted by the Society, and have received subscriptions for the same object to the amount of \$125. As it will probably be advisable to have the Society represented by counsel before the legislative committees that will report upon extending the application of the right of eminent domain, the committee will request a similar appropriation of \$500 for the year 1904.

JOHN A. FOX.
J. R. COOLIDGE, JR.
EDWIN J. LEWIS, JR.

AMERICAN INSTITUTE OF ARCHITECTS.

PROFESSIONAL PRACTICE OF ARCHITECTS, AND SCHEDULE OF USUAL AND PROPER MINIMUM CHARGES.

[As revised at Cleveland Convention, October, 1903.]

THE architect's professional services consist in making the necessary preliminary studies, working-drawings, specifications, large scale and full-size details, and in the general direction and supervision of the work, for which the minimum charge is five (5) per cent upon the cost of the work.

For new buildings, costing less than ten thousand dollars (\$10,000), and for furniture, monuments, decorative and cabinet work, it is usual and proper to charge a special fee in excess of the above.

For alterations and additions to existing buildings, the fee is ten (10) per cent upon the cost of the work.

Consultation fees for professional advice are to be paid in proportion to the importance of the questions involved.

None of the charges above enumerated covers alterations and additions to contracts, drawings and specifications, nor professional or legal services incidental to negotiations for site, disputed party-walls, right of light, measurement of work, or failure of contractors.

When such services become necessary, they shall be charged for according to the time and trouble involved.

Where heating, ventilating, mechanical, electrical and sanitary problems in a building are of such a nature, as to require the assistance of a specialist, the owner is to pay for such assistance. Chemical and mechanical tests, when required, are to be paid for by the owner.

Necessary travelling expenses are to be paid by the owner.

Drawings and specifications, as instruments of service, are the property of the architect.

The architect's payments are due as his work progresses in the following order: Upon completion of the preliminary sketches, one-fifth ($\frac{1}{5}$) of the entire fee; upon completion of working drawings and specifications, two-fifths ($\frac{2}{5}$); the remaining two-fifths ($\frac{2}{5}$) being due from time to time in proportion to the amount of work done by the architect in his office and at the building.

Until an actual estimate is received, the charges are based upon the proposed cost of the work, and payments are received as installments of the entire fee, which is based upon the actual cost to the owner of the building or other work, when completed, including all fixtures necessary to render it fit for occupation. The architect is entitled to extra compensation for furniture or other articles purchased under his direction.

If any material or work used in the construction of the building be already upon the ground or come into the owner's possession without expense to him, its value is to be added to the sum actually expended upon the building before the architect's commission is computed.

In case of the abandonment or suspension of the work, the basis of settlement is as follows: Preliminary studies, a fee in accordance with the character and magnitude of the work; preliminary studies, working drawings and specifications, three-fifths ($\frac{3}{5}$) of the fee for complete services.

The supervision of an architect (as distinguished from the continuous personal superintendence which may be secured by the employment of a clerk-of-the-works) means such inspection by the architect, or his deputy, of work in studios and shops, or of a building or other work in process of erection, completion or alteration, as he finds necessary to ascertain whether it is being executed in conformity with his drawings and specifications or directions. He is to act in constructive emergencies, to order necessary changes and to define the true intent and meaning of the drawings and specifications, and he has authority to stop the progress of the work and order its removal when not in accordance with them.

On buildings where the constant services of a superintendent are required, a clerk-of-the-works shall be employed by the architect at the owner's expense.

GLENN BROWN, Secretary, A. I. A.,
The Octagon, Washington, D. C.

ILLUSTRATIONS

[Contributors of drawings are requested to send also plans and a full and adequate description of the buildings, including a statement of cost.]

THE CLIFTON HOUSE, RICHMOND, VA.

SEE article elsewhere in this issue.

PLANS AND DETAILS OF THE SAME.

FRONT DOOR OF THE SAME.

HALL OF THE SAME.

MANTELPieces IN THE SAME.

CARNEGIE CIRCULATING BRANCH LIBRARY, TOTTEVILLE, STATEN ISLAND, N. Y. MESSRS. CARRÈRE & HASTINGS, ARCHITECTS, NEW YORK, N. Y.

Additional Illustrations in the International Edition.

PUBLIC LIBRARY, NEEDHAM, MASS. MR. ALBERT RANDOLPH ROSS, ARCHITECT, NEW YORK, N. Y.

This building, which is to cost \$9,500, is to be built of white Roman brick with terra-cotta finish to match. Interior finish to be "weathered oak."

PLANS OF THE SAME.

PUBLIC LIBRARY, MENOMINEE, MICH.:—PUBLIC LIBRARY, MASON CITY, IA. MESSRS. PATTON & MILLER, ARCHITECTS, CHICAGO, ILL.

CARNEGIE PUBLIC LIBRARY, GOSHEN, IND. MESSRS. PATTON & MILLER, ARCHITECTS, CHICAGO, ILL.

COMMUNICATIONS

[The editors cannot pay attention to demands of correspondents who forget to give their names and addresses as guaranty of good faith; nor do they hold themselves responsible for opinions expressed by their correspondents.]

A CORRECTION.

NEW YORK, N. Y., Jan. 11, 1904.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—The reproduction in your paper of our competitive drawings for a library at East Orange is very satisfactory, but we regret exceedingly that they were not labelled "Competitive Design" in a manner similar to the originals sent you. We have felt it our duty to apologize to the successful competitor, feeling that some misapprehension may be caused. We trust that in your next issue, out of justice to the winners of the competition, you will find it possible to state that our design was competitive.

Yours truly, LUDLOW & VALENTINE.

[We sincerely regret the blunder, which was caused by the return of the original drawings prior to actual publication.—EDS. AMERICAN ARCHITECT.]

NOTES AND CLIPPINGS

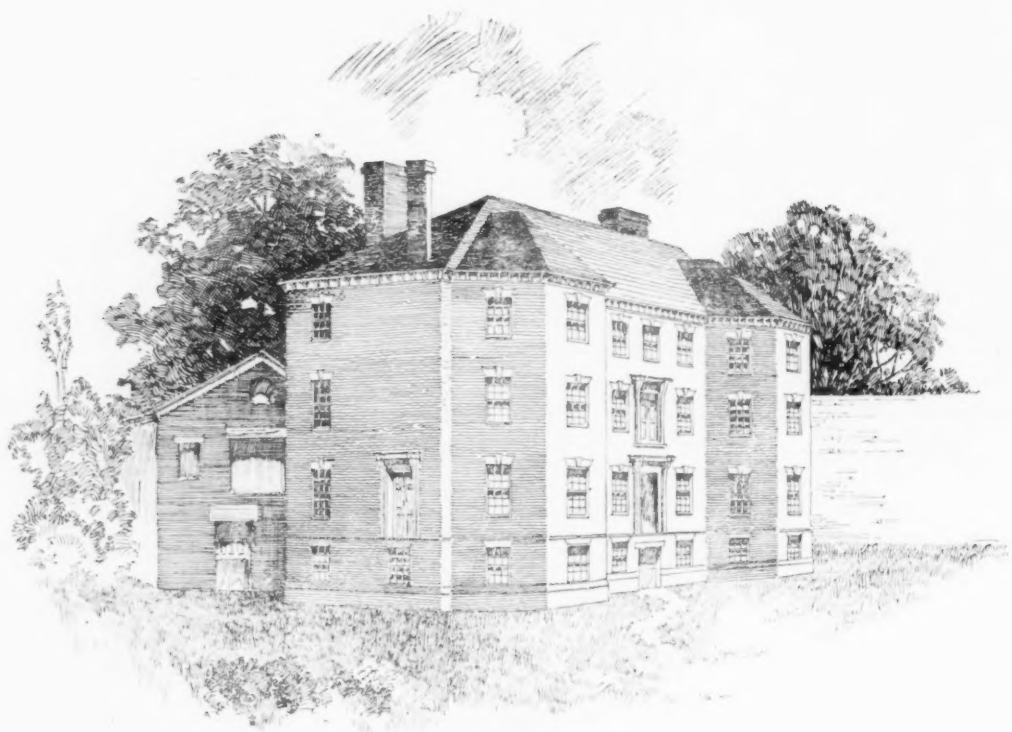
DRAINING A FLORIDA SWAMP.—An ingenious Yankee who lives on the west coast of Florida adopted a novel method to drain a bog on his plantation. He put down a 4 inch well in the middle of his bog deep enough to tap the water-bearing gravel. A nice flow of water was encountered, which rose in the well nearly to the surface. As soon as the top of the pipe was pushed down to a level with the bottom of the bog the water in the pond rushed down into the well and passed off through subterranean channels. In a few hours the bog was drained. The land has since been ploughed, and is now a valuable truck farm. Scientists declare that wet lands in many sections of the country can be drained by this simple method. Care must be taken not to permit the well to fill up with rubbish, which might impede the ingress of the water.—*Washington Star*.

WHEN CRITICISM ON ART IS NOT LIBEL.—A recent court decision in Milwaukee, Wis., should set at rest rampant misunderstanding of criticism as related to the laws of libel. A sculptor of the above city sued one of its newspapers for libel on account of some caustic criticism of a horse modelled by him for a monument. The court held that it was not libel for a critic to say that a sculptor's horse looked like a cow, because the statement had no personal application to the artist. "It was a reference to his work, and not actionable." The question of libel has always been a question, and a dangerous one, for either party to it, but the above decision may be regarded as enlightenment in an unexpected direction.—*Monumental News*.

A MAYOR AND THE UNION LABEL.—Mayor Engler, of Fremont, O., has had the grit to veto an ordinance passed by the Common Council of that city, directing that the union label shall appear on all the city printing. His reasons for doing so, set forth in a message, are that the effect of the requirement would be to limit the competition for public printing to union printers, who alone have the right to use the label. This, he considers, would be to confer a benefit on one small class of citizens, to the possible injury of all the rest, and at the cost of the taxpayers. It has vexed many citizens of many cities to find the union label on their tax bills, and to be compelled to join in advertising and supporting an association which, however useful to its own members, and however worthy in itself, may be at the moment in conflict with the individual taxpayer's personal interests, and may be even boycotting his business. Such a strain on his temper a taxpayer is surely entitled to be spared.—*Harper's Weekly*.

CAN'T PUMP FROM ITS OWN WELLS.—A decision has been handed down by Vice-Chancellor Emery in the suit of the Harper, Hollingsworth & Darby Company against the Mountain Water Company, of Scotch Plains, N. J., in which it is held that an injunction may be granted to prevent a water-company from pumping water from wells upon its own land, when the effect of such pumping diminishes the flow of a surface stream. The decision was reached in a test case brought on behalf of a combination of mill-owners along Green Brook. Litigation began in a suit for damages tried before Chief Justice Magie and a jury at Somerville. The water-company was defeated, and on appeal to the Supreme Court was again defeated. The mill-owners then made an application to the Chancellor for an injunction. The action was vigorously opposed by the water-company, but the injunction was granted.—*N. Y. Tribune*.

ROTARY DOORS IN BERLIN.—Rotary doors in hotels and other buildings are no longer to be allowed in the German capital, because of the obstacle they present in case of fire.—*Exchange*.



· South or Garden Front ·



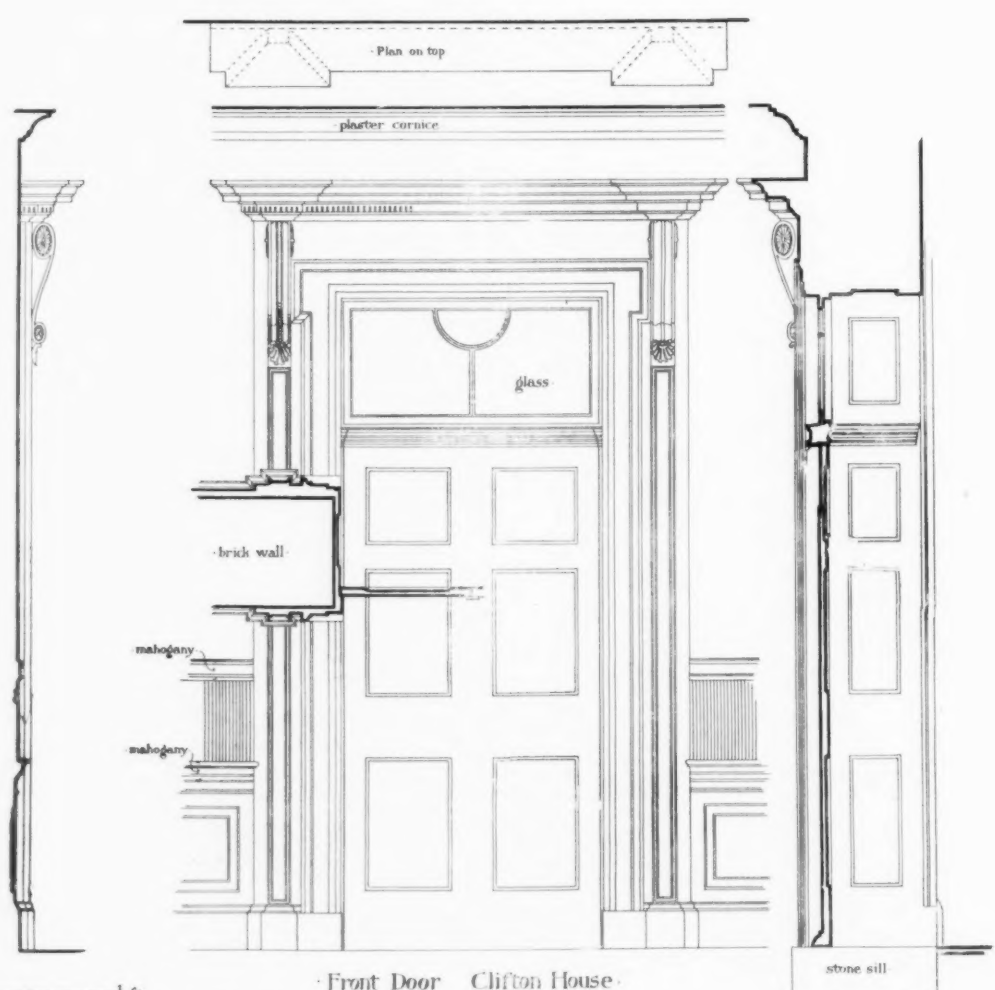
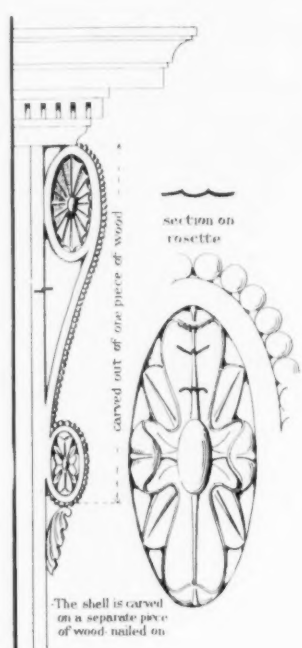
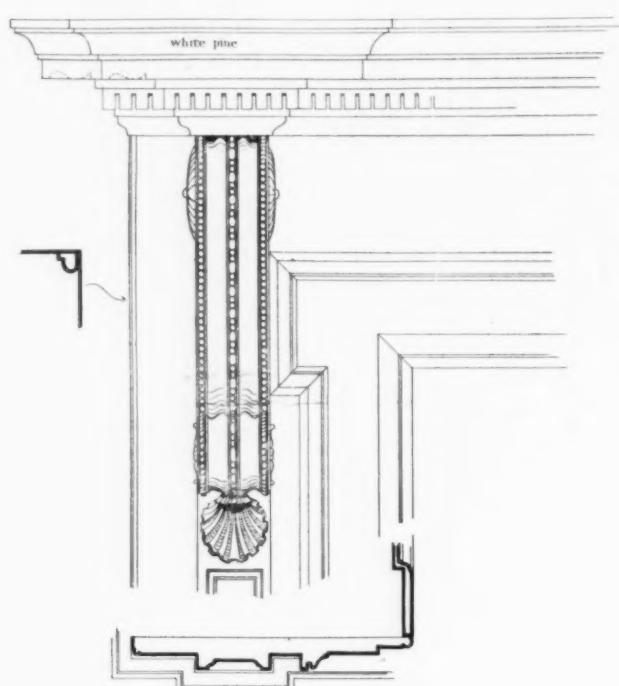
· North and Principal Entrance Front: Clifton House ·
· Richmond · Va ·

0 10 15 20 feet
Scale

· After drawings · by Geo. R. Tolman ·

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The American Architect
Jan. 16, 1904
No. 1464



0 1 ft
Scale of Details

1 2 3 4 5 ft.
Scale of Elevation

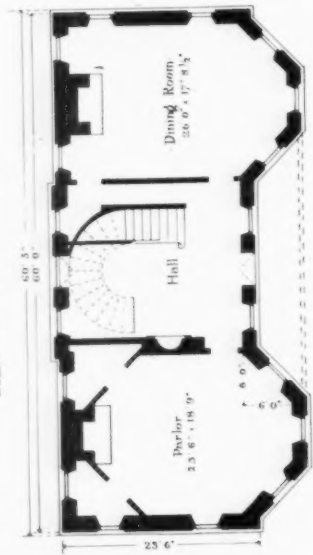
Front Door Clifton House
Richmond Va

E.P.M. after measured drawings by Geo. E. Tolman

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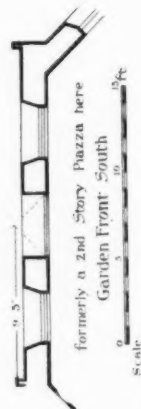
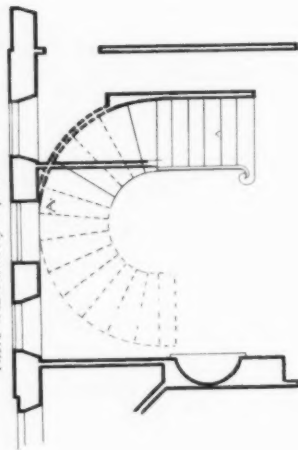
The American Architect
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No. 1464

Scale
0 10 20 30 40 50 60 70 80 90 100



The furring to receive these curved stairs and dados, was very elaborate, framed of dressed stuff, like shipwork.
It is probable that the joiner work in this house was done by ship carpenters.

This was the Front Door *abito* stairs passed over about 7' 3" up at point A. There was formerly a porch here.



Hall Clifton House
Richmond Va

Detail of Front Stairs

After balusters were inserted channel "B" was nearly fitted up by a mahogany strip

3 1/4" x 1 1/8"

Rail and balusters of mahogany

3' 0"

12"

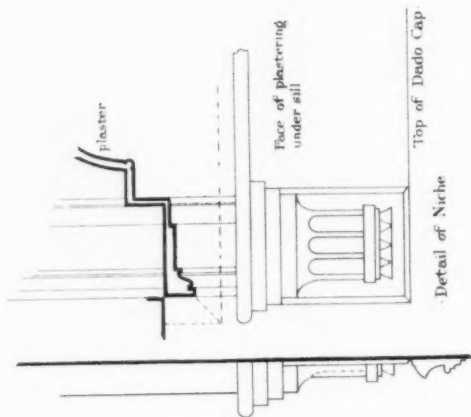
Soffit of stairs on the curved part was plastered

Scale of Details
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100



Niche plastered back

Elevation of Niche on east side of Hall



plaster

Face of plastering under sill

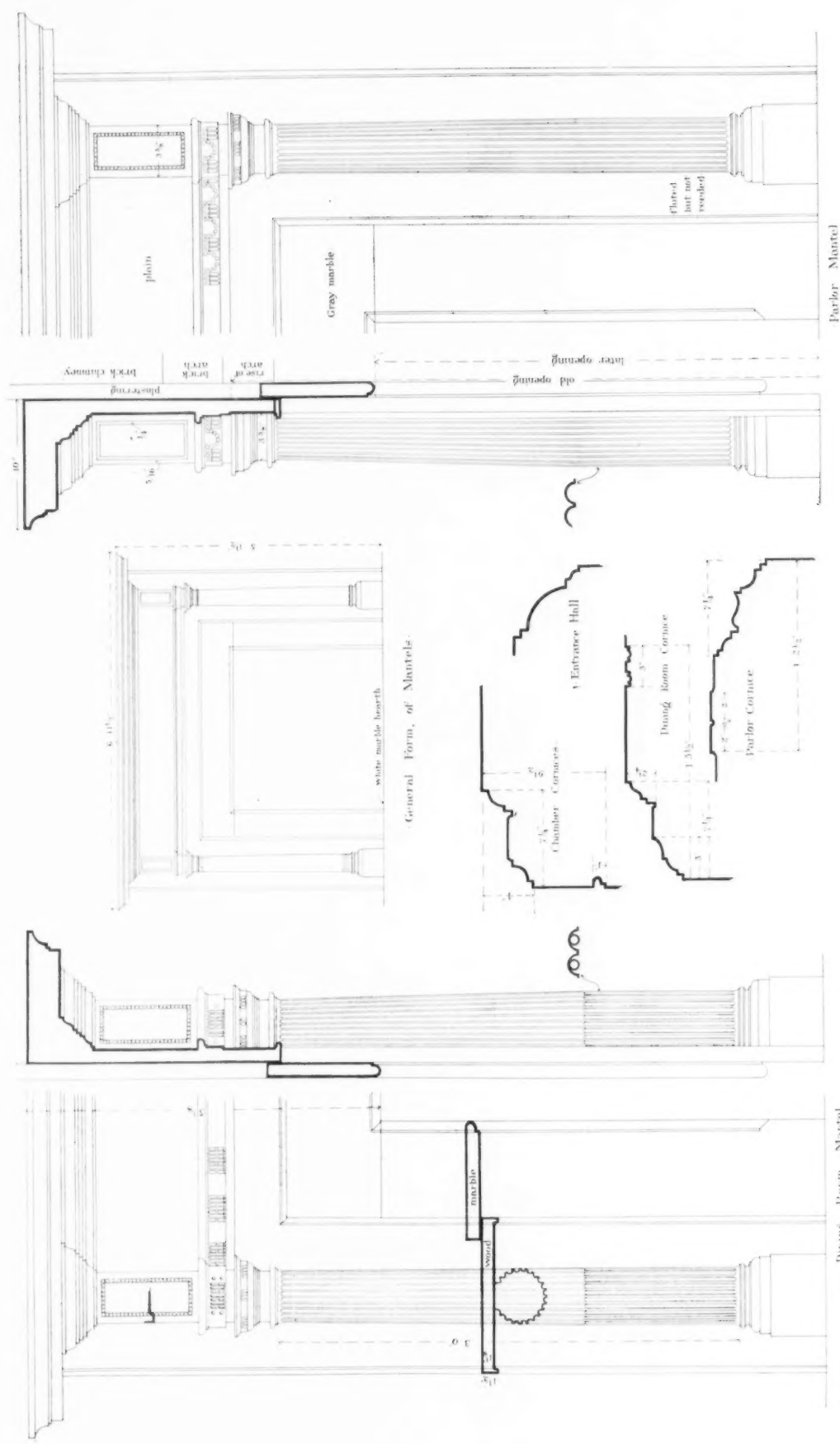
Top of Dado Cap

Detail of Niche

E.P.N. after measured drawings by George R. Tolman

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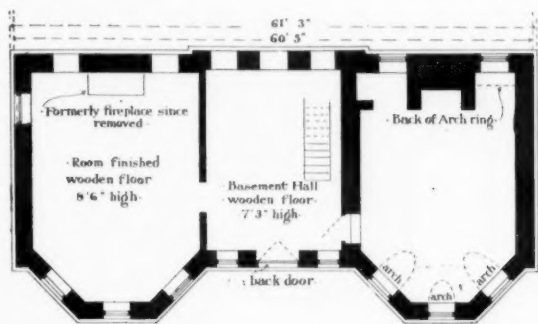


The Clifton House
Richmond, Va.

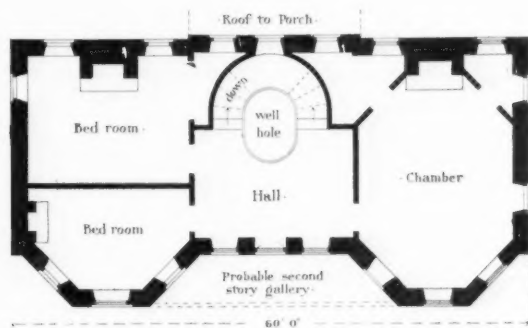
From after measured drawings by Geo R. Dinnick

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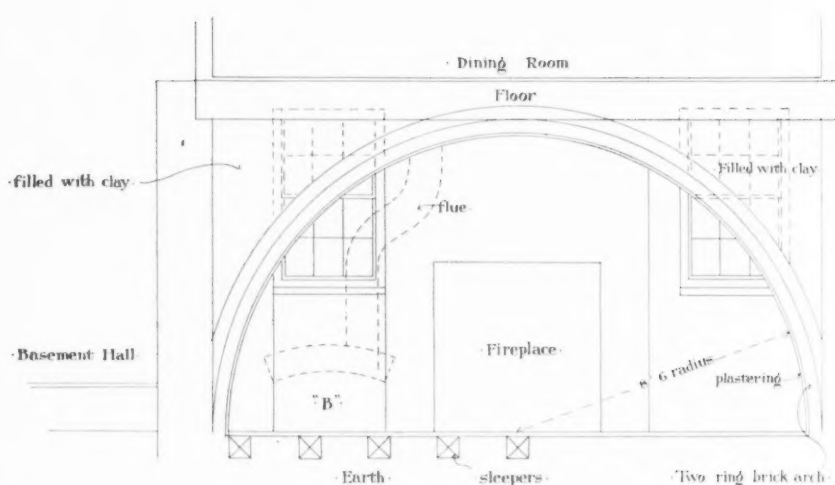
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Basement



Second Story Third Story much the same.

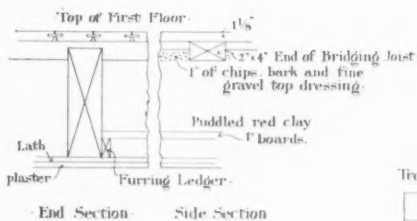


Cross Section of Kitchen

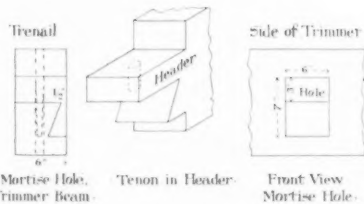
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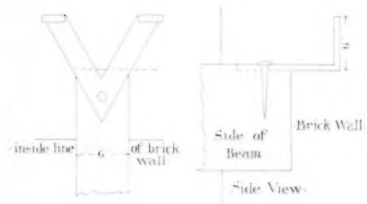
Method of Construction



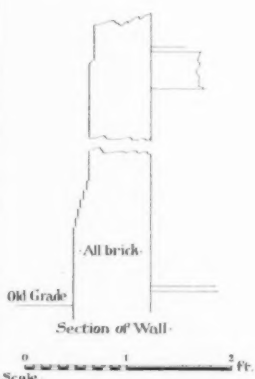
End Section Side Section



Note Trenails were square in section, angles slightly rounded, oak, driven into round holes, did not go entirely through as shown above.

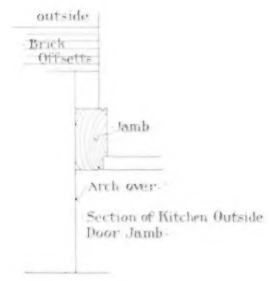


Note At B were indications of a low arched arrangement with flue connections for some kind of heating which had later been cut out.



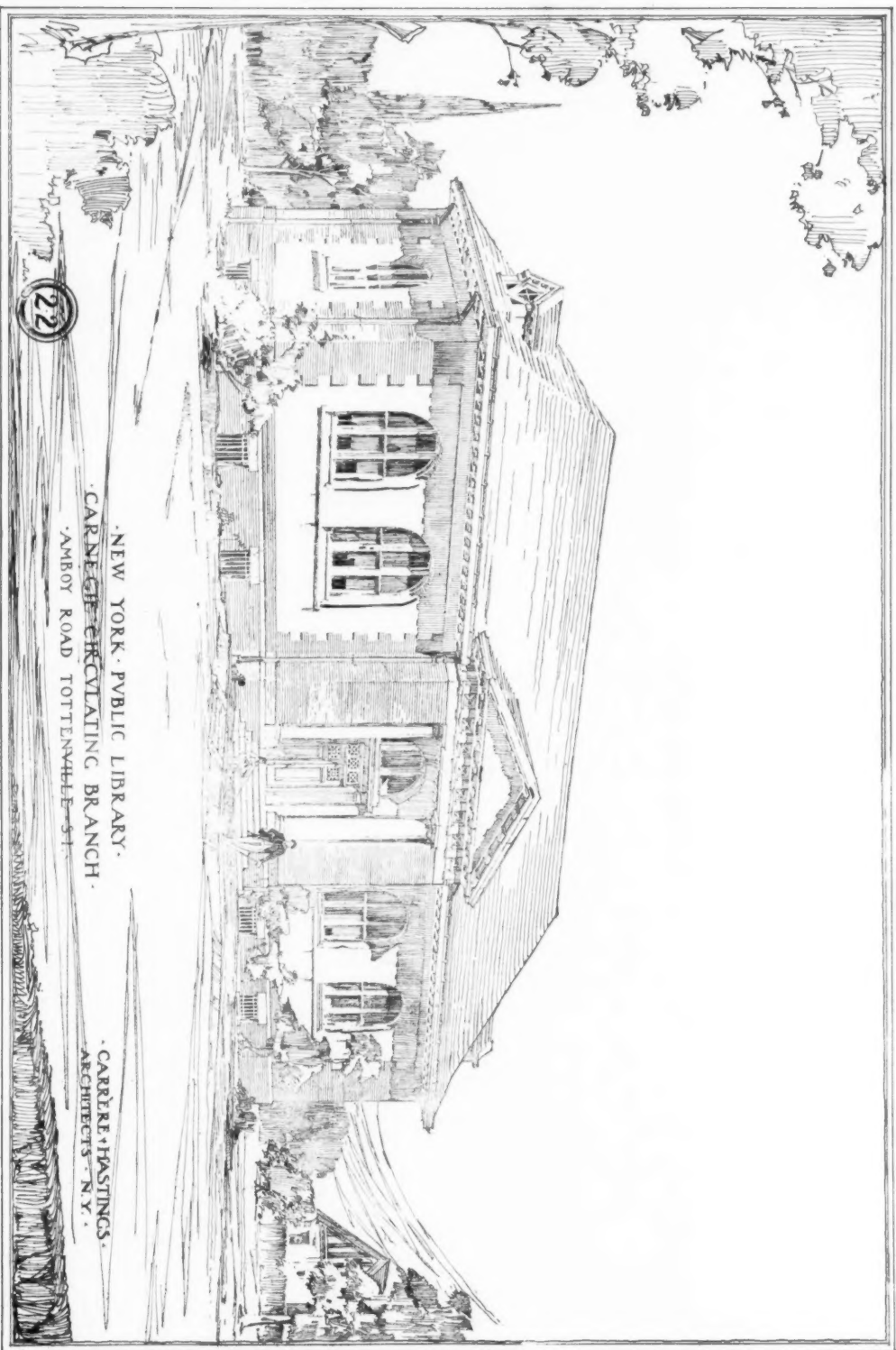
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Plans and Details Clifton House Richmond Va.



After measured drawings by G R Tolman

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THE AMERICAN ARCHITECT AND BUILDING NEWS

A WEEKLY JOURNAL OF CONSTRUCTIVE AND DECORATIVE ART

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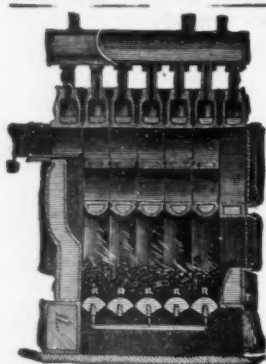
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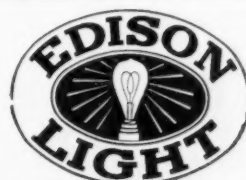
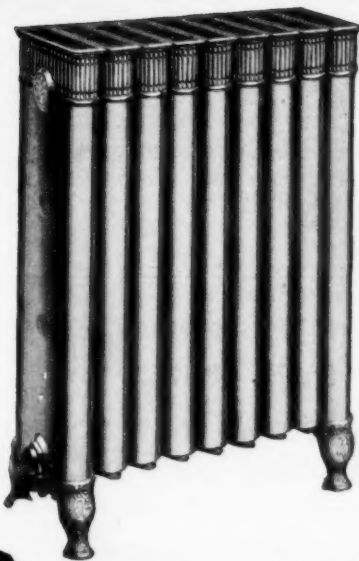
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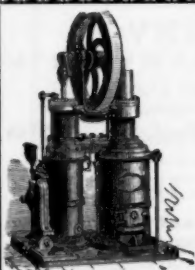
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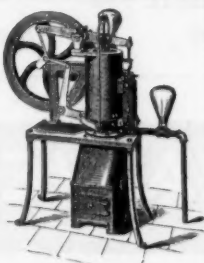
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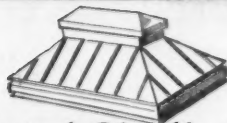
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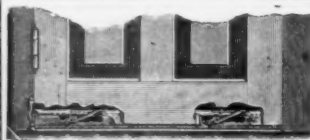
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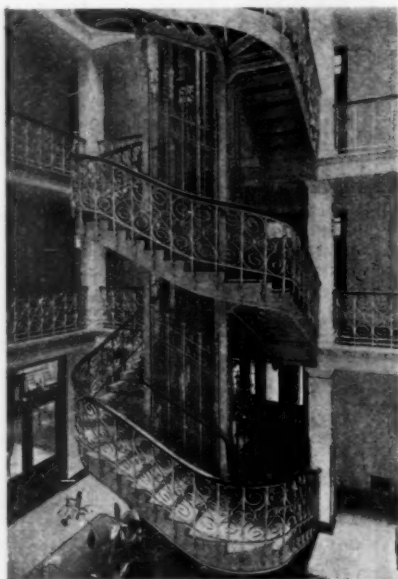
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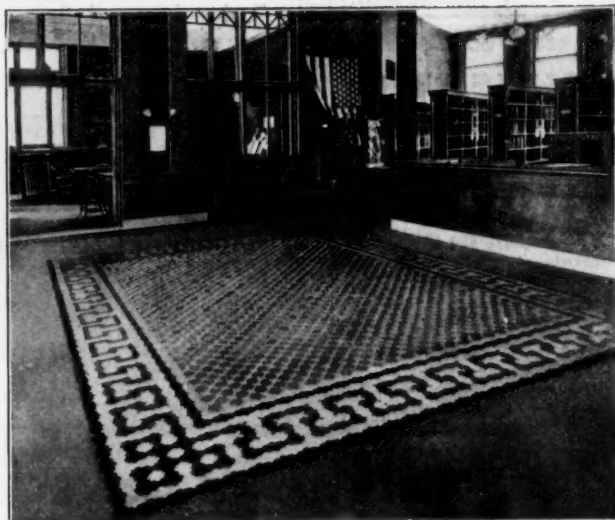
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

the Reibold Building, which will be constructed on S. Main St., just south of the present structure, was let recently to the contracting firm of H. Harig & Co., of Cincinnati. The structure will be perfectly modern in every sense of the word. The architects are Peters, Burns & Protzinger, of this city, and the engineers are Ritt & Mott, of Chicago.

Denver, Col.—The plans of Albert R. Ross, of New York, have been accepted for the \$200,000 Carnegie Library building. The ground upon which the new building is to be erected is now occupied by the present library, and is known as La Veta place. The plot is bounded by Colfax Ave., Courtland St., S. 15th and S. 14th Sts. The building will be of brick with terra-cotta or stone trimmings and everything will be strictly modern and fireproof. The work of tearing down that part of La Veta place to be occupied by the new building will not begin until June 1. It is the expectation that the new building will be well toward completion by the end of this year.

Des Moines, Ia.—Pondfoot & Bird, Crocker Building, have made plans for a three-story flat to be erected by Fred Hollands at Centre and 9th Sts., at a cost of \$30,000.

Duluth, Minn.—The new Folz Building, which is to be erected on 50 feet immediately east of the Kelly Hardware Company's store, on W. Superior St., will be a fine addition to the business structures on that thoroughfare. It will be four stories high on Superior St. and five stories on Michigan. The cost will be about \$70,000. A. Terryberry is the architect.

East Orange, N. J.—Estimates have been received by the East Orange Board of Education for the proposed new 5th Ward School. Taking the figures of the lowest bidders and including architects' fees, the cost of the 14-room structure, exclusive of grading the lot and furnishing the building, approximates \$68,000.

Grand Rapids, Mich.—J. E. Adams, of Chicago, will erect in this city a small furniture manufacturing plant.

It is said that O. W. Diebrow and Benjamin Koy will erect two-story flats in Haveland Ct., off Jefferson Ave. It is quite probable that two of the buildings will be erected at once, while the question of two additional structures may be delayed until fall.

G. W. Fairfield is engaged upon plans and specifications for a five-story tenement to be erected by Peter Smirles on Crescent Ave. The building will be constructed of brick and stone, and will cost \$12,000.

The Anheuser-Busch Brewing Association is receiving estimates for the erection of a two-story brick and stone warehouse and bottling depot on its lot at Ellsworth Ave. and Oakes St. The plans were made by its St. Louis architect.

Great Falls, Mont.—The Board of School Trustees propose to erect a new \$25,000 school house.

Greensboro, N. C.—Mr. Wm. C. Kelley, superintendent of construction of the St. Vincent Hospital Association, is ready to receive bids for the material

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

and construction of the \$100,000 hospital which the Sisters of Charity will build in this city.

Johnstown, Pa.—J. C. Fulton, of Uniontown, has been appointed to furnish the plans for a new courthouse in Somerset County, to cost from \$250,000 to \$300,000. The work of construction is to commence in the spring.

Kalamazoo, Mich.—The initial structure for the new Southwestern Michigan Normal School will be erected on Prospect Hill at a cost of \$65,000.

La Porte, Ind.—Zachary T. Davis, Chicago, has made plans for a two-story factory, 70' x 105', to be built for the Quisisana workshop here, at a cost of \$20,000.

Lincoln, Neb.—The new \$60,000 main building at the College of Agriculture for class rooms and laboratories will be erected next summer. This will be placed just west of the present experiment station building.

Logansport, Ill.—This place is to have a new Wash passenger station. It will cost \$50,000 and will be a model of beauty. Work will begin in the spring.

Louisville, Ky.—Saunders and Lawrence Jones will consult with W. J. Dodd, an architect, to decide what kind of a building will replace the historic Masonic Temple. Nothing definite had been decided upon except that the new building will be absolutely fireproof and will contain no theatre.

Madera, Cal.—Plans have been prepared for the brick building which Rosenthal & Kutner will erect on the corner of Yosemite Ave. and E St. The lower floor will be occupied by Rosenthal & Kutner.

Manitou, Col.—The Government will erect this year on the southeast corner of Pike's Peak and Nevada Aves., a tract recently purchased from the Stratton estate, a new federal building. \$135,000 has been appropriated for the building.

On Knob Hill the Cumberland Presbyterian Seminary will be built at an estimated cost of \$100,000. A main building and several smaller structures will be erected.

Milwaukee, Wis.—The permit for the erection of the university club-house on Jefferson St. has been issued. It is to cost \$40,000. The structure will be of brick.

Minneapolis, Minn.—The School Board, at a recent meeting, estimated that about \$100,000 are needed for buildings this year, and E. S. Stebbins, the official architect, was directed to prepare preliminary sketches for a 4-room addition to the Clay School; an 8-room addition to the Calhoun School; a new 8-room building, to be located west of the Grant School, and for finishing the top story rooms of the East Side High School.

New Bedford, Mass.—The bids for the erection of the new high-school building here were opened recently, and the lowest proposal was found to be that of J. B. Sullivan & Son, who offer to do the work for \$509,900.

New York, N. Y.—Samuel Weil will erect at No. 382 Greenwich St. an eight-story store and loft building, at a cost of about \$100,000. Plans for the

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

building have been drawn by Louis Korn, architect. The new school to be erected on Hester St., between Essex and Norfolk Sts., and facing Seward Park, will be the largest in the world. The school will be able to accommodate about 4,500 pupils. Altogether there will be 124 class-rooms.

It is reported that Andrew Carnegie's offer to build two \$1,000,000 club-houses for engineers has been accepted. Work on the structures will be started next spring. The buildings will each be ten stories high. The Engineers' Club will be at Nos. 32 and 34 W. 40th St. The Union Engineering Building, at Nos. 25 to 31 W. 39th St. will provide quarters for the American Society of Mechanical Engineers, American Institute of Mining Engineers, American Institute of Electrical Engineers and American Society of Civil Engineers. The union building will have a big auditorium for general use and an exhaustive library. The club-house will contain bachelor apartments for 75 members.

Plans have been filed for a five-story school-building to be erected east of Avenue B and running through the block from 9th to 10th Sts. It will have a frontage of 150 feet and be 185 feet deep. The cost is to be \$265,000.

Orange, N. J.—The Lackawanna Railroad proposes to erect two new stations here costing \$100,000. One will be built at Highland Ave. and the other at Lincoln Ave.

Pasadena, Cal.—Clifton J. Platt has had plans drawn for a three-story brick block on Colorado St. and Euclid Ave. Work will begin next March.

Peoria, Ill.—The will of the late Washington Corington leaves his entire estate, which is valued at three-quarters of a million, for the founding of an educational institution, to be known as the Corington Institute and University just outside Peoria. His estate is to be managed by trustees until it reaches a million and a half, when work is to commence.

Philadelphia, Pa.—The trustees of the Jefferson Medical Hospital and College have accepted the plans for the seven-story and basement stone and brick hospital, measuring 106' x 165', to be erected at the southwest corner of 10th and Sansom Sts., adjoining the present building. The building will cost \$600,000.

Portland, Ore.—J. A. Martin will erect a warehouse and dock to cost \$25,000 at the foot of 17th St.

Randolph, Mass.—A tract of 15 acres of land on the west side of N. Main St., known as the West Corners, has just been purchased by the trustees of the Boston School for the deaf, and a fine new school will be erected accommodating 300 students. Work will begin as soon as ground will permit of the digging for foundations. The building will be four stories high, and will contain every modern improvement. The main building will be 50' x 100'. Estimated cost, \$60,000.

Rutland, Vt.—At the last session of the legislature provision was made to meet the increasing demand for hospital care at Rutland by the appropriation of \$150,000 for the construction of 4 brick cottages, each two stories in height, and with accommodations for not more than 35 patients in each cottage.



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(Advance Rumors Continued.)

F. R. Richmond, of Springfield, has prepared plans, and work on the foundations for two of these cottages is already well under way.

Sacramento, Cal.—It is stated that improvements to cost \$300,000 will be begun at an early date at the manufacturing plant of the Southern Pacific Co. The machine shop will be enlarged. An addition will be constructed 80 feet wide to extend the entire length. A new passenger depot is to be built.

Salt Lake City, Utah.—Building permits have been issued for a residence for M. H. Walker, at 618 Brigham St., to cost \$50,000; for the Latter-day Saints' Hospital, \$90,000; the new Presbyterian Church, corner S. Temple and C Sts., \$100,000.

San Francisco, Cal.—H. Geiffuss & Son have plans out for a four-story brick factory to be erected on the corner of 21 and Silver Sts. for Chas. E. Hansen. Cost, \$24,000.

Plans have been made by Meyers & Ward for a two-story basement and attic residence for Philip B. Bekeart, which is to be erected on the north side of Clay St. Cost, \$11,000.

Edward V. Basquale will erect a two-story and basement residence after designs by T. Paterson Ross on the corner of Buena Vista Ave. and Waller St. Cost, \$15,000.

Proposals will soon be received by the Board of Public Works for furnishing 100,000 basalt blocks for repairing the streets.

San Jose, Cal.—Plans are now being arranged for one of the largest apartment-buildings which has been constructed here for many years. The proposed building will be situated on S. 2d St., between the Bristol Hotel and the lot owned by David Jacks, the Monterey capitalist. On the site of the proposed building there are at present several old frame buildings. The new structure will be of brick, three stories in height, and will cost \$120,000. As soon as the plans are accepted and the contracts can be let the work of construction will be commenced.

Seattle, Wash.—John Erikson will erect a building at 1st Ave. and University St., eleven-story, 111' x 120', for offices.

Among the structures already in sight for the year is the fourteen-story steel office-building at 2d Ave. and Cherry St., to be known as the Alaska Building, the Carnegie Library Building, a number of large wholesale blocks in the southern part of the city, and the Union passenger station. The first two of these will cost nearly \$1,000,000.

Shawnee, Pa.—Mr. C. C. Worthington, a pump manufacturer of New York, is to present this town with a public hall, theatre and library building.

Somerset, Pa.—J. C. Fulton, of Uniontown, has been selected by the Board of Commissioners of Somerset County to prepare drawings and specifications for a proposed new \$250,000 court-house here.

Spokane, Wash.—It is said that R. Daniels is inter-

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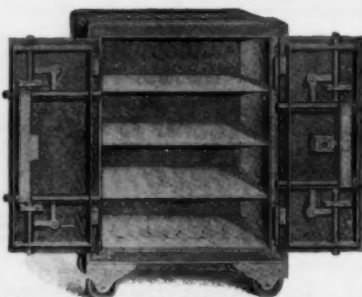
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

erected in the erection of 4 brick blocks and several additions. The total cost is to be \$140,000.

A five-story building will be started in April on the Lewis House property, recently purchased by M. Sells & Co. The building will cost about \$50,000 and will be occupied solely by the company.

The Spokane & Coeur d'Alene Co. announces that the new building the company is planning will be six stories high and will cost \$200,000. It will be located on the corner of Sprague Ave. and Washington St. The building will also be used by the Coeur d'Alene & Spokane Railway Co. as its Spokane terminus. It will be finished in marble and will have tile floors. The first two or three floors will be used by the two railway companies for offices and waiting-rooms and the upper floors will probably be used for hotel purposes. Work on the new building will start early in the spring.

Springfield, Mass.—The Central Grammar School is to be torn down and a new structure erected on that site and on the land adjoining, at a cost of \$50,000.

The plans for the proposed State St. addition to the court-house and the alterations of the present building have been received from the architect, James A. Clough, of Holyoke, and placed on exhibition in the office of the clerk of courts, by the County Commissioners. More room will be provided for the Library and Clerk of Courts. The same style of architecture will be employed as in the present building. The south end wall, or State St. end, will be taken down, and the new addition will extend this end of the building 35 feet to the sidewalk line.

St. Louis, Mo.—The members of the Young Men's Hebrew Association are enthusiastic over the proposed new club-house to be erected on the south side of Washington Ave., near Taylor Ave., at a cost of \$75,000. It will be two stories high, 80' x 100'. William Levy is the architect.

Tucson, Ariz.—The Board of Regents awarded the contract for the construction of a library and museum for the University to Roswell & Graf, for \$26,000.

PROPOSALS.

ROAD.

[At Union, N. J.]

Proposals will be received until February 9 by the County Board of Chosen Freeholders for constructing 3 1/2 miles of gravel road in Union Township. JAMES E. OTIS, Director. 1465

SEWERS, IRON PIPE, ETC.

[At New Orleans, La.]

Proposals will be received until February 2, 1904, for the construction of approximately 66 miles of sewers and appurtenances and the laying of 2.7 miles of water mains. Bids will also be received on one contract for furnishing f. o. b. cars New Orleans approximately 2,600 tons of cast-iron pipe, 113 tons of special castings and 36 gate valves, in sizes of pipe from 6 to 48 inches, and 24 hydrants. F. S. SHIELDS, Secretary. 1465

ROADWORK.

[At Ottawa, O.]

O. C. Talbot, county surveyor, will receive proposals until January 28 for 7 1/2 miles of stone road work. 1465

PROPOSALS.

HOSPITAL.

[At Fort Monroe, Va.]

Fort Monroe, Va. Sealed proposals for construction, plumbing, heating and electric wiring an addition to hospital here will be received until January 26, 1904. Information furnished on application. C. P. TOWNSLEY, Quartermaster. 1464

CEMENT.

[At Marquette, Mich.]

U. S. Engineer Office, Duluth, Minn. Sealed proposals for furnishing 4,300 barrels Portland cement for concrete superstructure to breakwater at Marquette Mich., will be received here until February 2, 1904. Information on application. CHAS. L. POTTER, Capt. Engrs. 1465

LIBRARY.

[At Cedar Rapids, Ia.]

Proposals for the erection of the Carnegie Library will be received in January. F. F. DAWLEY, Vice-president Library Board. Cost about \$75,000. 1465

COURT-HOUSE.

[At Syracuse, N. Y.]

Proposals will be received until February 2 by the Court-house Building Committee for erecting a court-house. ANSON N. PALMER, Chairman. 1465

LIBRARY.

[At Bangor, Me.]

The President of Library Trustees will receive proposals until February 1 for erecting a library. ALBERT R. ROSS, architect, New York City. 1465

Treasury Department, Office of the Supervising Architect, Washington, D. C., January 6, 1904. Sealed proposals will be received at this office until 3 o'clock P. M. on the 27th day of January, 1904, and then opened, for the installation of a hydraulic lift in the U. S. Custom-house and Post-office at Newport News, Va., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Superintendent at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1465

Treasury Department, Office of the Supervising Architect, Washington, D. C., January 7, 1904. Sealed proposals will be received at this office until 3 o'clock P. M. on the 10th day of February, 1904, and then opened, for furnishing and placing the lighting fixtures for the U. S. Mint (new) at Denver, Colorado, of which may be obtained at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1465

COURT-HOUSE.

[At Valdosta, Ga.]

The county commissioners of roads and revenues will receive proposals until February 15 for erecting a 72 x 100-foot brick county court-house. R. T. MYDDLETON, Clerk. 1466

SEWERS.

[At Washington, D. C.]

Sealed proposals will be received until February 20 for constructing sewers in the District of Columbia. HENRY B. F. MACFARLAND et al., Commissioners. 1466

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PROPOSALS.

BUILDING.

[At Portsmouth, N. H.]
Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, until February 6, 1904, and then there publicly opened, for constructing a two-story brick and steel building at the navy yard, Portsmouth, N. H. Funds available, \$38,000. Plans and specifications will be furnished by the chief of bureau upon deposit of \$10 as security for their return. MORDECAI T. ENDICOTT, Chief of Bureau. 1466

STEEL AND IRON.

[At Fort Monroe, Va.]
Engineer Office, U. S. Army, Room 2 Custom-house, Norfolk, Va. Sealed proposals for furnishing and delivering steel and iron at Fort Monroe, Va., will be received here until February 8, 1904. Information furnished on application. E. EVELETH WINSLOW, capt. engrs. 1466

Treasury Department, Office of the Supervising Architect, Washington, D. C., January 5, 1904. Sealed proposals will be received at this office until 3 o'clock P. M. on the 23d day of February, 1904, and then opened, for the construction (except heating apparatus, elevator, electric wiring and conduits) of the U. S. Post-office and Custom-house at Burlington, Vermont, in accordance with the drawings and specification, copies of which may be had at this office, or the office of the Postmaster at Burlington, Vt., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1464

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[At Camden, N. J.]
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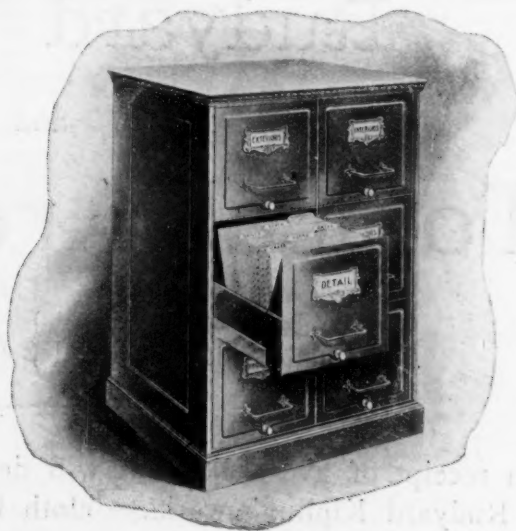
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