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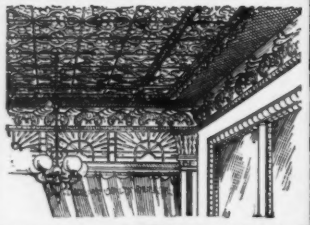
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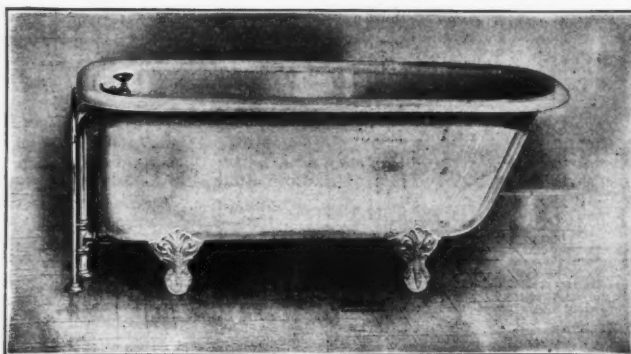


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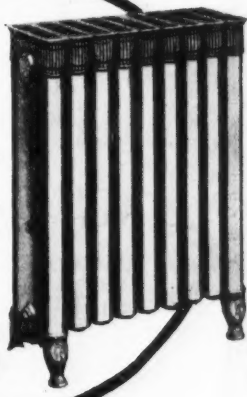
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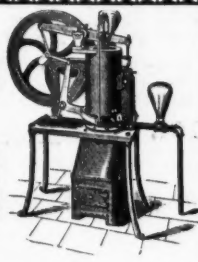
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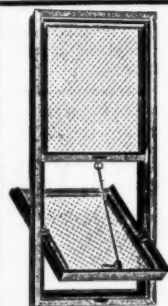
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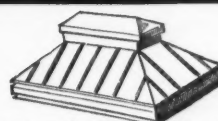
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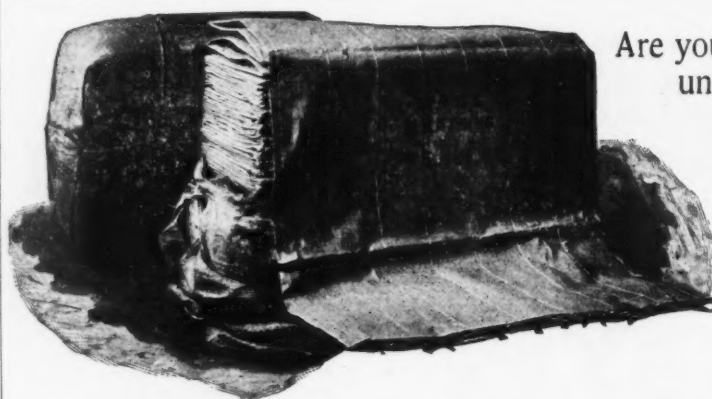
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IT is, perhaps, unfortunate that, when Mr. Edward Clark died, a few years ago, and the appointment of his successor was under consideration, the opposition to Mr. Elliot F. Woods, for a long time Mr. Clark's right-hand man, was made to have the air in the eyes of the public of a very puerile objection to his being allowed to assume the title of architect, he not being an architect by training and education. This false position on an important matter was largely due to the mistaken zeal of the Washington group of architects. Mr. Woods, however, was shrewd enough not to care for a shadow so long as he could secure the real substance and was quite willing to draw his salary as "superintendent" and not as "architect" to the Capitol. Any one but our self-opinionated Senators and Congressmen could perceive that there were dangerous possibilities in placing the care of the physical home of the country's government in unskilled hands; but the gaudy and garish work an untrained hand and head would be likely to develop unfortunately is the kind of work that appeals to and wholly satisfies the majority in our political bodies. If any one could have foreseen the possibility that the Congress could seriously think of entrusting the enlargement of the Capitol to the skill of an untrained head-clerk, the efforts on the part of the profession to secure the appointment of a thoroughly competent architect as successor to Thornton, Bulfinch, Latrobe, Walter, Clark and their several intervening fellows would have been so strenuous that they must have succeeded. It is our recollection that it was distinctly understood, at the time of his appointment, that although Mr. Woods's services and knowledge of the building fairly entitled him to his appointment as superintendent, he must give way to a competent architect where any serious architectural work was required, and with this impression in mind, we have been surprised to learn of the amount and serious nature of the alterations that have already been carried out by him according to his own notions. But when the suggestion is made that the long-talked of completion of the eastern-front extensions shall be put into his hands, we think it high time that a halt should be compelled by the protest of educated men everywhere. It is within the limits of possibility that the scheme for which Mr. Woods has prepared a model is the very best scheme that could be prepared. If it is, the leading architects in the country are fair-minded enough to be willing to express themselves to that effect. They must, however, have the opportunity to examine the model which Mr. Woods has prepared and compare it with other possible solutions. This opportunity has in a measure been secured to a committee of the American Institute of Architects, but it is by no means impossible that Mr. Cannon and others who are strong backers of Mr. Woods may not be able to make Congress believe that the outcry is merely one more expression of petty professional jealousy. To expect laymen to appreciate technical criticism of a design or model when there are not at hand other designs or models to confirm the truth of the criticism, is to hope for the miraculous, and as the Institute's committee has not had time enough to arm itself with illustrating data, we fear that

its argument will be held mere word-juggling, another evidence, merely, of high-toned trade-unionism.

THE ingratitude of republics is as proverbial as that of Charles II, and the whole history of moral shabbiness cannot produce more disgraceful instances of official neglect and wrong-doing than can be drawn from the records of our own Court of Claims—from the early days of the "French Spoliation" claims down to our own time. It is matter for regret that two members of our profession are still the object of official and political indifference, and that for nearly eighteen years they have been unsuccessful suitors for justice. In our issue for May 19, 1900, we reprinted in full the bill, then recently favorably reported in the Senate, providing relief as it is called—justice as it should be held—for Messrs. Smithmeyer & Pelz, the designers of the Congressional Library. This claim has been favorably reported to the Senate in the Fifty-fifth, Fifty-sixth and Fifty-seventh Congresses, and once it was favorably reported to the House. Once, too, it has been passed, but, unfortunately, only by the Senate. A few days ago the same bill was again favorably reported to the Senate, sitting in the Fifty-eighth Congress, from the Committee on Claims, and, on general principles, there should not be much doubt that it will once more be passed by the Senate. At the same time the recent discussion of architects' fees in the Senate may prejudice the fate of the bill, for that discussion clearly developed the fact that there are certain Senators who will never agree to pay architects on a percentage basis; and, further, it brought to light the fact that there are certain Senators who firmly believe that the designer of the Congressional Library was General Casey, a belief which has been sedulously cultivated by "army influence" until it has become the chief obstacle to the satisfying of the real architects' lawful claim. Upon this point the Committee on Claims, which adds to the Bill certain memoranda by way of appendix, touches and gives the sworn evidence of half a dozen architects of high standing to the effect that the Library was erected in consonance with the design prepared by Smithmeyer & Pelz. It is only fair to General Casey to say that the claim that he was the designer of the Library has been made for him, not by him. The Committee also incorporate in their appendix a summary of the controversy over the rejection of the cement, the act of superintendence which caused Mr. Smithmeyer's abrupt dismissal, an act, by the way, which should secure Senator Hale's warm support, in place of the cordial opposition he is only too likely to give the Bill.

THE ship of hope, in which are embarked the fortunes of the country's building industries, will always find uncertain anchorage in the shifting sands of trade-union policy, and it is probably not safe to argue that, because the first skirmish of the season has not been a very prolonged one and has reached a partial settlement, a firm holding-ground has really been found and that the first of May, the day when Janus Artifex decides whether to keep his temple door open or shut, will not find the good ship drifted far within the breakers. Nothing could be more unfortunate for the mechanic class in New York than to have a second building season so vexed and wrecked as was that of last year. Good faith and mutual trust should be the very foundation of the relation between employer and employed, and we believe it would easily be possible for both parties to stand firmly on this foundation, if it were not for the manœuvring of professional mischief-makers, the common human love of a "scrap" and the craving to secure notoriety for oneself in the newspaper, which is the particular weakness of a certain kind of mind. During the recent bricklayers' strike it was unpleasantly apparent that both parties to the controversy were giving more attention to preparing for a "fight" than to seeking ways and means for a peaceful settlement. The terminating of the bricklayers' strike is claimed as a triumph for the principle of arbitration, but the fact that the General Arbitration Board of the Bricklayers' Union and the Mason Builders' Association had twice vainly ordered the men back to work, pending arbitration, shows that agreements of this kind are of no worth whatever, if the crew choose to mutiny and disavow the articles they have signed.

WHERE are a good many things in which labor organizations concern themselves which we like to applaud, notably every movement that has a bearing on educational advancement, moral growth and improved hygienic conditions of life, whether in the home or in the workshop. One of the most praiseworthy efforts of organized labor recently has been that of the Central Federated Union in New York, in opposition to the attempt to change, by emasculation, the present tenement-house law, several bills to effect undesirable changes having been brought before the present legislature. While the opposition of the laboring man to these undesirable changes might naturally be expected, since he himself is always a dweller in tenements and an endurer of their curable and incurable defects, nevertheless, his organized opposition to the bills is rather unexpected, since the promoters of these bills are, to a large degree, speculative builders and real-estate men who are large employers of labor and hope, through the carrying of their measures to enactment, to be able to do much more building than ever before, and consequently to give more employment to laboring men, tenement-dwellers though they may be.

THE New York Times publishes a tabulation of the wage-rate now prevailing in the New York building trades, which is very curious and, in certain particulars, discloses a situation which few architects even really understand. It appears that the most highly-paid mechanic is the plasterer, who receives sixty-eight and three-quarters cents per hour, or at the rate of five and one-half dollars for an eight-hour day's work. Any one who has endured the agony of a bit of live lime in the eye, or has considered understandingly the muscular strain that is involved in trowelling a ceiling all day long, will readily admit that there is reason and justice in this high rate. But why electricians, whose work actually involves mortal peril to themselves in invisible and unavoidable form, as well as putting more or less permanently at risk every building in which their work is installed, should be paid only half a dollar per hour, the lowest rate but two in the list, is rather inexplicable: indeed, painters receive the same wage, and every one knows that the work of the average painter can be done by any one, though the real master of his craft is a man to be respected for his competent knowledge of all branches of his work. House-shorers, followers of a very dangerous trade, since we apprehend that it also includes building demolishers, are paid only thirty-four and three-eighths cents per hour, or two and three-quarters dollars per day, while laborers get from twenty-five to forty cents per hour. The rate of wages evidences the strength and combativeness of the several labor unions, and we fancy that if the structural ironworkers had won their strike last year, their wage-rate now would be more than fifty-six cents per hour, which is six and one-half cents less per hour than is paid to marble-setters, one of whose favorite antics it is to cause finished marble already in place to be torn out, that it may be repolished by good union labor. Of course, as the basic principle of trade-unionism is that every man is as good as the next, it is the object of the day-laborer to create a union strong enough to force his wages up to an equality with the plasterers'. Fortunately, or unfortunately, the laborers' union is never likely to be able to accomplish this result, so long as the Atlantic ferry keeps in motion.

MONSIEUR PAUL ADAM, a French sculptor, has been commissioned by the French Ministry of Public Instruction to visit this country to study and report on the manifestation of French influences in our art. It is interesting to find ourselves being investigated nowadays by one foreign country after another. We have had many investigating committees from Great Britain and several from Germany, but these have always had as their object the discovering of why and how our products were better, cheaper or more economical in some way, or how our processes were more expeditious; that is, these investigations have always had the air of having commercial and not educational ends in view. But this investigation of M. Adam's seems to be something conceived on entirely different lines, on a much higher plane: it seems to promise an inquiry for educational purposes only, one which, if M. Adam is just the right sort of investigator, should yield very instructive and interesting results. It is not possible to assume that a French artist is coming here to learn how we turn out paintings, statues and buildings more expeditiously, more economically or better than such things are produced in France, but we can well understand that an artistic people could take pride and pleasure in learning that its teaching and

example had produced a very real elevating and educational effect on a people whose strongest qualities had long been known to lie along the lines of practical utilitarianism. If it were possible to conceive that M. Adam's visit could have a commercial or sinister interest, it would be needful to entertain at the same time the fear that the French Government was experiencing misgivings as to the wisdom of further maintaining, in face of our tariff restrictions, its magnificent and enlightened policy of allowing foreigners to enjoy the privilege of entry to the École des Beaux-Arts and all that that implies. Should M. Adam report that, because of the liberality of his Government, this country was now self-supporting in the matter of art and yet declined to reciprocate by a lowering of the tariff barrier, it is conceivable that such a report might induce the withdrawal of, or even the curtailing of, the present privileges, which, while it would not of course annihilate American art, would certainly be a very grave misfortune.

THERE has been a rather remarkable series of fires in the modern high buildings of late, and in most cases they have stood the test satisfactorily, the fires usually being confined by the firemen, without much trouble, to the rooms or floors where they originated. But in two of these buildings, one amongst the oldest the other amongst the youngest of their class, there were attending circumstances which should attract the attention of owners, if not of the public authorities. In the case of the Masonic Temple in Chicago, the fire on the fourteenth or fifteenth floor originated, we believe, in the premises of a dealer in some form of fireworks; while the fire in the twentieth story of the "Flatiron" building in New York, a few days ago, started in the rooms of a dealer in and, evidently, manufacturer of celluloid nicknacks of one kind or another. It should be patent to the owners of such buildings that they have no right to imperil the lives and property of the great majority of their tenants by allowing the intrusion of such unquestionably hazardous stores or manufactures into an office-building, and it seems as if it should be one of the first duties of a landlord to make searching inquiry into the details of any manufacturing business that is to be carried on in his premises, particularly if those premises happen to have the form of a large office-building. For, even if the building be fireproof, it is not explosion-proof, and celluloid and fireworks can generate very explosive gases; even the ubiquitous soda-water fountain has been known to bring down its building. Ordinarily speaking, the parlor-match, the cigarette, the waste-paper basket and the electric wire can be counted on to provide all the fire-hazard the quiet lessee of an office cares to assume with his lease.

IT seems to us that we have seen a good many granite tombs and mausoleums that have, year after year, allowed the kindly sun to "thaw out the frost" in their walls, without incurring any structural damage whatever. The Grant Monument, however, though built of granite, seems a more delicate affair than its smaller and more humble prototypes to be found in grave-yards in many different latitudes and as many different climates, for the Grant Monument Association has just applied to the New York State Legislature for an appropriation of ten thousand dollars to install a steam-heating system in the monument under its charge. To heat the structure for the health's sake of the caretaker, and for the greater comfort of the occasional sight-seer or impassioned devotee, is not at all unreasonable; but to ask the money in order that the monument may not be compelled to "thaw out," like less dignified structures, seems to suggest that there is some sort of "graft" in view that needs a specious disguise.

IT is unfortunate that a certain captain of a Baltimore fire-boat cannot change his calling and transfer his activities to New York where, as a builder with an eye single to the observance of the letter of the law, his services would be sought to the exclusion of his fellows. The story goes that this nautical Dogberry found, during the progress of the recent Baltimore conflagration, that it was necessary to dump the ashes that had collected in his fire-room; but, recalling that there was an ordinance forbidding the dumping of ashes in the inner harbor, he would not heed the entreaties of bystanders or the orders of the fire chiefs on shore and, for once, make a breach in his reputation as a law-abiding citizen by discharging the ashes where he lay. Rather than break the law, he stopped work upon the fire and put off down the bay to his regular dumping-ground, returning some two hours later to his interrupted work, only to find that the fire was now out of reach from any station he could attain.

SAND-LIME BRICK FROM A BRICKMAKER'S POINT-OF-VIEW.¹

YOU have undoubtedly heard that old saying, that "Fools rush in where angels fear to tread," and that was about how I felt when your honorable Secretary asked me to read a paper on this subject.

About one year ago, when we met in Boston, as a brickmakers' association, if any one had told me that I would read a paper on Sand-lime Brick I would have told them that I guessed that they did not know what they were talking about.

Well, a short time after getting home from Boston, a gentleman dropped in at my office one day and pulled out of his grip three bricks, and said to me, after I had looked them over carefully, "What would you say if you could make such brick as that from sand and lime, for a certain price?" (which he named); "would you be interested?" I said "Yes, if you can prove what you have said to me, I would, most certainly."

A short time after this I visited a plant where they were turning out this kind of brick, and after looking over the outfit made up my mind that in many ways, perhaps, there could be some improvements made on the brick that were being made there.

I then went home and formed a stock company that is now turning out the kind of brick that can be seen by all in the Exhibitors' Hall.

I made up my mind (and have had no reason to change it), that if such a brick could be made from sand and lime, that they were going to take a place in the market and hold it, for the reason that they will take a place between pressed and common clay brick. The pressed-brick men cannot afford to sell their brick as cheap as the sand-lime brick men can theirs, and the sand-lime brick cannot be sold as cheap as the common clay brick, for they have to be handled very differently in every way. My own impression is, that the wear on all the machinery is going to be much greater, owing to the fine sand and lime dust which fills all parts of the factory.

Then, in shipping they should all be packed the same as pressed brick to preserve edges, etc. Of course, this is for a first-class brick.

Now, as to the absorption test, etc., you can all read as well as myself as to what that is and has been. I have seen some of these brick that were almost impervious to water; in other words, I have seen water turned onto these brick and let stand for hours without their taking in any perceptible amount. The brick we make, however, absorb about eight per cent. As to their resisting the frost and cold weather, there is no question about that. At our own factory we have turned pails of water on the brick and put them out of doors and then taken out pails of hot water and dipped them in until the frost was all out of them, and then left them to freeze again; and this we have repeated until we are perfectly satisfied as to what they would stand in this particular. And again, we have taken them when full of water and ice and put them under a steam jet and turned steam onto them until the top of the brick was so hot you could not hold your hand on it, and the bottom of the brick was still covered with snow or ice.

As we have nothing with which to get a crushing test, we sent the brick away and got the following result: the average was 3,425 pounds to the square inch. And when you consider that the average crushing-strength of good clay brick that go into the New York market is, I am told, about 2,000 pounds per square inch, you can see the result is perfectly satisfactory to us.

I live perhaps in as severe a climate as most of you, where quite often the thermometer goes to thirty degrees below zero; and if they will stand this sort of climate I think they will most any; in which, perhaps, you will agree with me.

They can be made at a small additional cost in almost any color wanted, by using coloring matter, of course, and of absolutely perfect shape and almost any shape wanted.

If there could be a law in this country causing all brick made of sand and lime to pass a test or a rigid examination, made by some one in authority — one who was competent to pass on them — and if the brick was not fit to be used they were to be condemned, what a grand thing it would be for the industry! For the reason that all manufacturers of this particular product would know that they had to make a brick that would pass this examination, and there would not be so many to rush in to manufacture these brick unless they were confident they could produce something marketable.

Now, these brick, of course I understand, will be condemned by many brick manufacturers for the reason that they will not take the time or go to the expense of investigating this matter; but if the members here will look into this question as thoroughly as I have done, I think most of you would come to the same conclusion. There is no brickmaker here who can afford to ignore this matter. That we will have poor sand-lime brick as we have poor clay brick, there is no question. Why? For the reason that they will be made in the same slipshod manner in every detail, and by many who know nothing about brick, but who rush in, thinking they can be made so cheaply, and that there is millions in it; not looking into the question of why this or that is so, but it is so; and for the lack of investigation and thoroughness.

We all know of brickmakers who are constantly having breakdowns and delays. Why? For the lack, is it not, of a little foresight on their part in anticipating that this or that thing will be needed shortly? And, having this thing on hand when the time comes when it is needed, the same thoroughness in detail that will make good clay brick will also make good sand-lime brick, and the want of it will cause failures in either case.

Now, I can hear you (in my mind) asking about the cost. What do they cost? I am not going to answer that question, for the reason that while figures will not lie if properly placed, I have found from my clay-brick experience that men figure very differently as to the cost of their clay brick. As an illustration of what I mean, let me say that at one time I was on a brickyard where they burned brick with natural gas, which was fine, and in talking about it with the foreman I asked him what it cost them for fuel, and he said, "Not anything." At the same time they were putting down two wells, and these, with the piping to the plant, were to cost about \$5,000, with no certainty as to how long it would last, if they struck gas at all.

Now, this illustrates what I mean exactly. Some men that you talk with have made brick for so much per thousand, figuring up to the point only where they close down for the season. You cannot stop the interest on the plant investment any more than you can the weather from rotting the roof-boards off your sheds, if you should happen to make brick for six or eight months out of a year. No more can an absolutely fixed price be made on the manufacture of sand-lime brick. While my lime might be costing me \$5 per ton, the next man in a different part of the country might only be paying \$2.50 for his, and, as we all know, coal, labor, etc., all enter into the cost and make a great difference in the same. Now, after we had been running our factory for a year, if you were to ask me what they had cost, I presume that I could tell you what they had cost us, but that would be no absolute guide for you, for the reasons given.

Now, gentlemen, there is plenty of room for this new product in the market, for it is well known to all of us that the day of wood buildings to a certain extent is a thing of the past; the buildings of the future must be of brick, stone or steel, and do we not all of us know what our choice would be? Have we not all of us seen, at the time of large fires, the stone crumble and the steel twist and warp out of shape, and the buildings go down? Also, if a fire-wall is wanted, what is it built of? One thing only, brick. Our timber forests are pretty nearly a thing of the past.

We are here to stay as long as we can, and so should build as though we intended to stay, with brick and brick only; whether they be clay brick, sand-lime brick, or any other properly made brick; this is the best building material known, in the long run.

Now, of course, in the erection of a factory we have had many things to contend with, and expect to have many more; but when we run up against these annoyances I am reminded of what a gentleman said to me once when I went into his office to sell him brick: "Well, DeLong, does the brick business have as many annoyances as the paper business?" I said, "I know nothing about the paper business, but certainly the brick business has its share." "Well," he said, "a business that does not have its troubles is not worth looking after." How often that remark has come back to me!

You all know that this sand-lime brick business is a new one in this country. After a time there will be many improvements, and that the improvements will all tend to make a better product is what I sincerely hope. I could give you quite a paper on complimentary things said about these brick, where samples have been sent by us to different architects throughout the country, from the Government as well as the State authorities; but this is not necessary. Sufficient for us to know that they will be used and used extensively. Why not? Aren't they equal to any clay brick at any such cost? If not, wherein do they fail? If they will stand the climate and the crushing-strength and will become harder the longer they stand, in this latter particular do they not lay over the clay brick even?

If you were to take a piece of Indiana limestone and a piece of our brick and put them under a magnifying glass, I would defy you, except for the difference in color, to tell which was which. Now, there is no hesitancy on the part of the builder to put up as many stories as he wants to of the one; and why should there be of the other? If what I have stated to you is true, and you have only to try it for yourselves to prove it, tell me why the brick have not come to stay.

One year ago to-day there were only two sand-lime brick factories in this country; to-day there are in operation and in course of construction not very far from thirty. If there is such an increase in one year, what will it be in the next? It is hardly possible that all these people can be mistaken. We come together from year to year to be mutually benefited by such contact and to learn from one another.

Now, I am not here to exploit this or that system of sand-lime brick; each system undoubtedly has its friends; but I am here to learn all I can about any kind of brick that is good and that will be a credit to the manufacturer who made them; and it is left to each one of us personally to investigate for himself.

I am not going to defend the sand-lime brick business before this Convention, even if it were necessary; for it needs no defense; the product shows for itself; but when this or that man says that they will not do so and so, I would say, go a little slow, else you may be mistaken. For the deeper this is looked into, the more and more

¹ A paper by Daniel P. DeLong of Glens Falls, N. Y., read at the Eighteenth Annual Convention of the National Brick Manufacturers' Association, at Cincinnati, O., Feb. 5, 1904.

thoroughly you will be convinced that it is one of the processes of brick manufacture that is all right.

I say to you frankly, gentlemen, I went into this business for the reason that I thought there was some money to be made out of it, for I am not in the brick business for my health, any more than Croker was the boss of Tammany for his.

Although a gentleman from Chicago that was at my place last fall said if he could stay there he could live to be a million years old — of course I do not wonder at that, coming as he did from Chicago and knowing what we all do of the place; but if I really thought as he did, I would have all my buildings built of sand-lime brick and test them for longevity. (Applause.)

GENERAL DISCUSSION.

MR. A. D. KEYSER, PHILADELPHIA, PA.: I would like to ask Mr. DeLong if he has ever given sand-lime brick one of the most important of tests — that of fire? We know that all important walls are built of brick. In Philadelphia, the building ordinance provides that all elevators shall be inclosed with brick walls in order to provide protection against fire. I would like to know if the fire test has ever been applied to these sand-lime brick.

MR. DeLONG: I would say to the gentleman that there is no question in my mind as to their standing fire. If he were to put up a building of these sand-lime brick and clay brick, making four walls and heating them as hot as he could heat them and then turn water on them, he would find that he would check his clay brick, and that the sand-lime brick would be all right. I have seen these brick taken when they were full of snow and put under the boiler in a red-hot fire and taken out uninjured. Another thing, if he will put these same walls up, or the walls to any building, the expansion, from the fire, of the clay brick will tip the walls over, while with the sand-lime brick there is no expansion whatever.

D. V. PURINGTON: I don't want this to count on my time, but I want to ask, if that statement is true, why not have these brick take the place of fire-brick?

MR. S. E. FRANK, NEW YORK, N. Y.: There has recently been issued in the United States a patent for fire-brick made by the sand-lime process.

MR. SCHAFFER, PITTSBURGH, PA.: We are making sand-lime brick to be used in coke ovens in Pittsburgh. They have been used and a test made. They have been used for the crowns of coke ovens.

SECRETARY RANDALL: A question has been submitted by one of the members here that will open this discussion. It reads as follows: —

"To produce sand-lime brick, the three important factors are sand, lime and fuel. Can lime be made successfully from marl containing 98 per cent carbonate of lime? Can fuel be produced profitably with peat? Volatile combustion, 69 per cent, fixed carbon, 22.5; ash, 865." Submitted by Jacob Keler, North Judson, Ind. If Professor Wheeler will answer this question, the Convention will no doubt allow him more than the allotted three minutes.

PROFESSOR WHEELER: Speaking of the ability of sand-lime brick to stand heat: the most refractory brick known in America to-day that will stand the highest heat are what we call silica brick, provided it is exposed only to dry heat. It is the most efficient brick we have, and these brick are usually of part sand with a small amount of binder. Sometimes this binder is fire-clay, sometimes it is lime. If they put too much lime in, the brick will melt. It is merely according to the quantity of lime you use as to whether it will be refractory and stand the heat. This is well known to the trade. I am not familiar with the percentage sand-lime people are using, but this instance of using them for coke ovens indicates they will stand a great heat. They turn a hose onto the coke to cool it off. It is the most violent action any refractory material has to stand; it is known that the silica brick can stand that cold water at a white heat, while oft-times fire-clay brick will shatter. Formerly we used a fire-clay brick entirely and they did good work, but we found the sand-mud brick did better, so the new plants have replaced the fire-mud brick with the sand-mud brick.

As regards these questions which have been submitted by Mr. Keller: "Can lime be successfully made from marl containing 98 per cent of lime?" Theoretically, it can. That is a very poor marl and would make a very poor lime, but as marl is never more than lime sand, it would, I think, be a financial failure. A very simple practical lime-kiln could not be used for this purpose, it could only be burned in a very expensive type of rotary-kiln, and I doubt if that could compete with a simple lime-kiln. While it is possible, I doubt whether commercially it would be practical.

"Can fuel be produced profitably with peat — volatile combustible 69.5 per cent, fixed carbon 22.5 per cent, ash, 8.65 per cent." This analysis is incorrect. There is no peat known that contains 69 per cent of volatile combustible. That is, this 69 per cent probably covers about 50 per cent water and the rest is volatile combustible matter, so this analysis gives no information whatever. But so far as peat is concerned, in this country it has never been a

commercial success. The water must be expelled by a powerful press, or by heating and when that 60 per cent is eliminated, it becomes a very low grade of fuel. But when you can buy coal at the mines for 75 cents to \$1.50 a ton, it doesn't pay to go into the making of peat at considerable expense and hope to have it compete with coal. In Europe, where coal is very expensive, where they are a considerable distance from the coal mines, peat is used with considerable success, but in this country, our coal is too close to the centre of industry and too cheap to allow peat to be used commercially.

A. M. SMITH, PORTLAND, ORE.: I would like to ask if these brick made for coke ovens would stand freezing weather, and how they get the right proportions of lime to stand the fire.

MR. SCHAFFER: The brick would not be strong enough for building purposes, but would stand frost.

S. E. FRANK, NEW YORK CITY: I think it has been sufficiently established, both by theory and actual practice, that sand-lime brick will stand heat to an enormous degree and that they show an enormous frost-resisting quality. In every instance where fires have occurred the clay brick show up much more poorly than the sand-lime brick. Professor Wheeler has explained that the sand-lime brick is practically a silicate brick and silicate has an enormous heat-resisting quality.

MR. SCHAFFER: We find that ten per cent loam will not hurt with us.

R. G. EISENHART: I take it for granted that Mr. Frank is pretty well posted in the matter. I would like to ask him a question. We know but very little about the sand-lime brick in this country, it has been but a short time since it was introduced here. I am interested in this matter from the standpoint of a common brick manufacturer and I would ask Mr. Frank if he has ever known an instance in Germany, where the sand-lime system is said to flourish, where a common-brick man had to go out of business on account of competition.

MR. FRANK: I do not know of any such instance. The sand-lime brick as a rule are not brought into competition with clay brick. In a district where you have clay, you haven't got sand. There are cases, of course, where you have competition. I know of one particular instance of recent date, being a very forcible illustration. In building some German barracks, the Minister of War was called upon to defend himself, for he had selected sand-lime brick in preference to clay brick. It was discussed at some length in the *Thonindustrie Zeitung* and they erected sand-lime brick buildings. In that case the clay brick were worsted. It is my candid opinion that wherever the two come in competition that the sand-lime brick will be the victor. I do not believe, as some sand-lime brick men do, that you are going to be thrown into competition continually, but where the two come in competition I would decide in favor of the sand-lime brick. I would like to have the information I asked for, so it might not be lost sight of. I am very much interested in avoiding all that can be avoided in these matters. I am not alone in this, there are others interested. I believe the sand-lime brick men may benefit by helping one another, and knowing what to avoid is of most importance.

The clay-brick men speak of the brick made in Egypt. It is strange to say that the cement aqueducts made centuries ago were the original causes for the sand-lime business. The Germans excavating in Rome struck this material of fearful hardness; it was taken to the German laboratories and very closely examined and it was discovered that it was sand and lime and so began the sand-lime brick industry, so you see you are none the better off with your "brick made in Egypt."

GEO. H. CAMPBELL, TORONTO, CAN.: I am, perhaps, one of the youngest members of this Association, and perhaps the youngest brickmaker, in fact I may say I am not a brickmaker, but I have started, during the past several months, this branch of the business — the sand-lime brick industry. I have spent three or four months constantly investigating this industry, at a great deal of expense, and if my opinion is worth anything, and I presume it is, since I have gone to all this trouble and expense, I must say that I have absolutely no doubt as to the future of the sand-lime brick industry. The cost of making these brick will vary according to the local conditions: the proximity of your factory to the sand-bank, for instance. If you get your factory right up against the sand-bank, you can of course make your brick cheaper. I know of a place where the brick were made for \$2.50 a thousand. There is a factory in Montreal where they are making brick for \$3.60 and they were selling them for \$12 and they cannot fill all the orders they are receiving. As I said when I started, I have had no experience, not even in the clay business, but I am here to study the business, especially from a mechanical point-of-view. My opinion is that it is not a question of secret process, it is a question of building the best machinery possible and the proper handling of the material, to make it in its proper form. In conversation with a great many of the men here I find there are many doubting Thomases on this question among the clay men, but there have always been doubting Thomases everywhere. We all know Delisle was made to drink

hemlock because he said the world was round; he is gone but the world is still revolving. This question is one of evolution and I have come to the conclusion that it is one with which we will have to reckon. I have gained a great deal of information, but I have found that instead of one there are five different machinery houses making special machinery. There are three or four new presses in course of construction to make these brick. I think you will find now it is a question of making the machinery to make these brick. When that question is settled, we will have as many sand-lime brick as we have clay brick. In talking with the clay-brick men around the country, I have found this to be true. At the time dry-press brick were brought into vogue they had just as much difficulty in introducing the new clay brick as the sand-lime brick men have to introduce their process, and I presume there is hardly a clay man that will now question the success of the dry-press brick.

ROMAN AND ROMANESQUE FRANCE.¹—X.

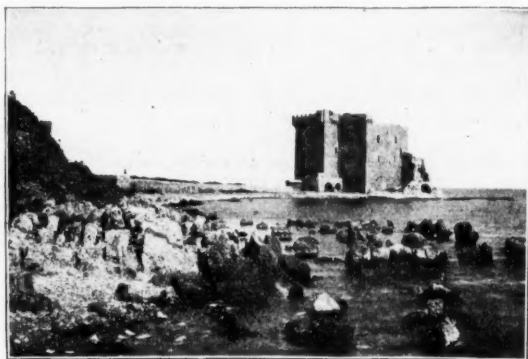
THE ISLANDS OF LERINS CANNES.

THE long tree-covered islands, twin islands one might say, which stretch across the bay of Cannes only a few feet above the level of the sea, have seen many vicissitudes. Phœnicians and Greeks, Saracens and Romans in succession occupied them; and in later days, *Lero* as a fortress housed Cinq Mars and the Man in the Iron Mask; while the lesser twin, little *Lerina*, became the home of a body of Cistercian monks.

And who was *Lero*, who stood sponsor to the island? Was he some sort of Ligurian Hercules, or merely a mythical individual who represented the primitive folk occupying the islands? It is difficult to say; but the names of *Leros* or *Lerios* are given to some of the islands of the Sporades in the *Ægean* Sea, and therefore one may draw the inference that the name implies a common origin.

Strabo speaks of the temple of a god to whom the Ligurian pirates offered sacrifice, being situated upon the larger island, St. Marguerite; and early in the Middle Ages this gave place to a chapel. In the sixteenth century an inscription in Greek and Latin was dug up near the fortress; this has unfortunately been lost, but the imperfect copy of it suggests that a Greek and Roman population inhabited the island at the same period.

The present fortress was built by Richelieu of old material in a great measure; consequently nothing remains of the earlier buildings.



Donjon at St. Honorat.

Vauban enlarged and improved the fortifications at St. Marguerite as at other places along the coast. The prison held that hero of romance and drama, the Man in the Iron Mask, and after the Franco-German war Marshal Bazaine was incarcerated therein for a time, and then allowed, most persons think, to escape from confinement in a building which probably tortured many an innocent prisoner.

There were other less noted prisoners, as is known by the correspondence of Cinq Mars, the governor of the fortress, who gives particulars of refractory sons of noble families who were imprisoned to keep them out of mischief, and of Protestant ministers, victims of the Edict of Nantes. Later on, Arab chiefs took the place of Protestant ministers.

Lerina, the sister island, has had a happier history. About 375 St. Honorat left his rocky home in the Estérel mountains and founded a monastery in the island. He collected a few followers with whom he vowed himself to a life of prayer and contemplation. The convent prospered, and became an independent colony of studious men, who exercised feudal lordship over thousands of people. The community became rich and powerful as well as learned, and for ten centuries it was called a nursery of doctors, scholars, saints and martyrs. Pirates frequently descended upon the shore and put the monks to death—in 725, some five hundred persons were massacred in the atrium with St. Porcaire.

After the tenth century the riches of the monks brought them into trouble; the Saracens robbed and pillaged, the monastery became a fortress, and lay folk upon the *in commendam* system became

possessed of the revenues. Discipline was relaxed and it became necessary in 1440 to enforce rules by which each monk should confess and receive the Holy Eucharist at least every month and upon festivals. Their numbers had decreased from eight thousand to one hundred, and in 1787 the abbey was united to the Bishopric of Grasse. When the royal commissioners arrived to take an inventory of the monastery, they found the library pillaged, the vestments in rags, the church abandoned, the land uncultivated, and four monks, who were pensioned and allowed to live on the mainland.

The donjon is the true type of semi-religious, semi-military fortresses which were built along the coasts of Provence between the tenth and the fourteenth centuries. The materials are stone and Roman bricks; the columns of the little cloister are of pink and white marble, blue porphyry from the Estérel mountains, and granite. On one of the columns is the name of Constantine, upon another, the dedication of a guild of sailors who ferried persons between Cannes and the islands. It is interesting to wander round the empty chambers, and to stand upon the great platform from which one gets a view across the blue Mediterranean.

Fragments with Greek and Phœcean inscriptions, and the little monuments of unknown origin converted later into oratories are all mere ruins. An altar dedicated to Neptune was found upon the beach some years ago.

At one time the purchaser of the island was an Anglican priest; at another, an actress of the Comédie Française; but about the middle of the last century some Cistercians took up their occupation of the monastery which had been founded by their spiritual fathers the Benedictines. Until recently the community took charge of an orphanage, but now all the monks are dispersed. When I visited the monastery, the monks did not know their fate. The abbot had gone up to Paris to make his statement, and his return was awaited anxiously by the brethren. I asked the lay brother who took me over the ruins how he would like to leave the island. He shrugged his shoulders, smiled, and seemed indifferent. Was he inclined to relish the idea? Who can say? for the monastic rule makes men impenetrable.

The island is exquisitely wooded, the pines growing down to the sea. It is 1,500 metres long and 100 metres broad. It can be attained either from St. Marguerite or direct from Cannes, and upon a fine day the voyage is delightful—the sea so clear that one can see the fish swimming about round the little steamer; but those persons who are not over fond of a tossing, had better be careful in their choice of a day for the excursion. The islands are some distance from the mainland, and practically in midocean, where the huge waves have little respect for small craft and people's feelings.

The good monks kept a lifeboat adjoining the donjon; probably a useful appendage to that rock-bound coast. S. BRALE.

MANSART AND THE CHÂTEAU DE MAISONS.

THE demolition of the building which Mansart erected for the President of the Paris Parliament, René de Longueil, in 1642–51, is, alas! very likely. Wishing to see this fine building just condemned, I prepared myself by rereading the monograph contained in the work of Claude Sauvageot: "*Palais, Châteaux, Hôtels et Maisons de France*." There I came across a curious note which accentuates the philosophical reflections which the impending disappearance of the real palace arouses, "which to-morrow may be nothing more than a heap of stones and gravel." It seems to me that this note deserves to be brought under the eyes of my fellow architects.

Claude Sauvageot records that Mansart must have demanded *carte blanche* for his genius from M. de Longueil. "Now, what the great architect must have understood by that must have been quite ruinous; it was no unusual thing to see him, discontented with his work, cause its demolition, so that it might be built all over again. But this liberty always to do better, if he could, was his condition *sine qua non*. More powerful people than the President had been unwilling to subscribe to this condition; but he accepted it, and it was greatly to his honor, to his good fortune, also, to have left the artist master of the arrangement of this vast edifice and of the expenditure which it entailed. It is reported—and the fact is certain—that after having erected one wing of the château, he demolished it in order to rebuild it after another plan."

And Sauvageot adds in a note:—

"We do not know whether, in our days (1867) an architect who went on as did François Mansart would be able to attract a numerous *clientèle*. Although bowing to the grand conscientiousness of the artist, to his incredible independence, it is, nevertheless, necessary to look twice before daring to recommend his line of procedure as a model. This humor of Mansart's, this torment of his genius, was well able to be costly for his clients; but it was also costly for himself, and in more than one case greatly to his prejudice. If the reader will permit, I will add a few words on this artist of so strange a character, who became, in spite of all, justly celebrated and one of the glories of French architecture.

"In 1645, Anne of Austria applied to him to build the Val-de-Grace, at Paris. Mansart, at this time, had just thrown down the wing of the Château de Maisons, with which he was discontented, and the rumor of this came to the ears of the queen, with this added

¹ Continued from No. 1431, page 69.

detail, that the demolition had been effected without consulting the client—a statement which was inexact. In those times the Court was in financial difficulties, and it was feared that it might be carried farther than was desirable by the ruinous instability of the architect. The queen was frightened and dismissed Mansart, with thanks. Le Muet was chosen to succeed him, but under the injunction, nevertheless, that he must conform himself in all points to the design of his predecessor: unfortunately, they say, he introduced some of his own ideas, and the critics of the time, who did not spare him, accused him with having overloaded the monument with heavy sculpture not intended by the original architect. As to the latter, when the direction of the works at the Val-de-Grace was withdrawn from him, he caused to be erected, as a noble vengeance, the chapel of the Château de Fresnes after the design, reduced, which he had conceived for the Val-de-Grace itself. Nevertheless, this terrible lesson did not reform the eminent architect in the matter of what we will call his exaggerated conscience; on another occasion, we find him again sacrificing himself for the same principles, not only his interests, but still further his reputation and his glory. And this is the story:—

"When it became a matter of finishing the Louvre, Colbert, who held Mansart in high esteem, demanded of him, first of all, his scheme. The artist accepted the minister's offer and showed him several very remarkable designs which attracted him greatly; only, no single one of them was entirely perfected; each of them embodied traces of several different lines of thought. Embarrassed in making the choice, Colbert wished to leave to Mansart himself the burden of making the decision. Let Mansart decide which of the schemes he preferred, let him determine the scheme irrevocably, and then the project should be carried into execution. Nothing more reasonable could have been suggested, as it seems to us, and it is greatly to be desired that the administrators of our own time might never proceed in any other way. Mansart appreciated perfectly the honor which was done him, and perfectly understood the reasonableness of the demands of the minister; but, in spite of that, he couldn't bring himself to fix on a scheme irrevocably; so he withdrew, declaring to the minister that he could 'never bring himself to tie his own hands, and that, to deserve more worthily the honor which His Majesty deigned to bestow upon him, he desired to preserve for himself the liberty of always doing better, if he could.'

"In this exceptional circumstance, one, in truth, devised to tempt the most timorous, Mansart, as we see, gave evidence of an exaggerated conscientiousness; this, at least, is our opinion. Throughout his whole career, and in whatever work he undertook, Mansart showed himself in the same light. So, when he came to completing the Hôtel de Carnavalet, in place of substituting his personality for that of his predecessors, he took care to efface himself entirely in the work, and respected theirs as much as was possible. That he did this is truly worthy of praise, and it makes one believe that the architects of the seventeenth century did not always act in just this way, for, in the lifetime of Mansart, it excited general astonishment. 'On seeing this work,' said Felibien, 'one does not know which to esteem most highly, the art which he made use of in order to preserve, as he did, whatever there was fine about the portal, or the knowledge with which he rebuilt the façade of this hôtel.'

"Mansart, nevertheless, in spite of his fine character and grand artistic conscience, was not wholly sheltered from criticism and even calumny. He did work for Cardinal Mazarin, and this was reason enough for his being attacked by the Frondeurs of that time. But these outrages—for things went so far as that—are merely such as always are experienced by every man who succeeds in excelling his fellows. He died in 1668, at the age of sixty-eight, possessor, in spite of all, of a fine fortune. He had no children; his two nephews were his heirs, on the condition that they should annex his name to theirs. No one is now ignorant that, under the name of Mansart, Jules Hardouin also became a celebrated architect.

"Among the buildings erected by François Mansart must be mentioned the châteaux of Berny; of Balleroy, near Bayeux; of Gevres, of Fresnes; a portion of that at Choisy, demolished a little while ago; the church of the Filles Sainte-Marie, Rue Saint-Antoine, at Paris; the Hôtel de Toulouse; the portal of the Church of the Feuillantines, and the restoration of the Château de Blois. But, of all the buildings due to the genius of Mansart, none do him more honor than the Château de Maisons."

Must I add anything?

The existence of the Château de Maisons is not threatened for the first time. After having declined to cede it back to Louis XVI, the Comte d'Artois, conscious of the heavy running expenses which it demanded, and also, doubtless, appreciating its discomforts, in his turn offered it to his brother, pointing out to him that it was easy enough to pull down the buildings "so that the forest might run down to the river-bank."

Up to the time of the banker Jacques Laffitte, fate was not too unkind to Mansart's work. But, it must be recognized that, with the death of its first owner vanished the only personality capable of living there. Even in the time of René de Longueuil, the arrangement of the château answered very imperfectly to the non-sumptuary exigencies of grand dwelling-places.

Let us frankly confess, the Château de Maisons is not habitable. Conceived for display and the magnificence of a grand seigneur—howsoever little a parvenu—excessively rich, it has always been a

very inconvenient dwelling, and to-day it would be impossible for the most pliant tenant, supported by boundless means, to render it habitable without such transformations as would deprive it of its real value as a "monument." Mansart, through responding so perfectly to his client's love of display, has in some sort limited the future of his work, not only because of the costliness of up-keeping which its preservation requires, but, especially, by the impossibilities which confront any attempt to make use of it, except, perhaps, as a museum. There is a fatal condition which weighs down the works of men; grandeur and beauty are not enough to assure them a material duration; it is necessary that they should satisfy interests which justify the sacrifices demanded by their conservation.

The moral and material condition of society for a long time back no longer permits the existence of such men as René de Longueuil. The architect's art will never have a chance to embody itself as was done at Maisons. Our conception of art is, moreover, much modified. Would there now be tolerated, for instance, that which Gabriel was able to do so happily for the Place de la Concorde: a decoration exclusively composed for the place itself, while completely sacrificing the interior of the building?

Nowadays, we have numerous and costly needs; we are hurried and not very rich; we have a little more of material order in the details; but we are only sensitive to the positive and utilitarian character of things, and this character is utilitarian and positive only so far as concerns to-day; to-morrow, other things will be imposed on us.

The Château de Maisons is an admirable witness of the architectural art of an epoch from which we are far separated by facts of more weight than the space of time which separates us; it answers to a peculiarly remarkable condition of the society which saw its erection; from this double point-of-view, it is greatly to be deplored that we can do nothing for the preservation of a *chef-d'œuvre* which, in fine, is really a portion of the artistic patrimony of our country.—*A Vaillant in l'Architecture.*



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

CLOISTER IN THE DONJON ON THE ISLE OF ST. HONORAT, NEAR CANNES, FRANCE.

For this and the following plate see article elsewhere in this issue, "Roman and Romanesque France."

THE ISLE OF STE. MARGUERITE AND THE PRISON OF THE MAN WITH THE IRON MASK.

GENERAL VIEW OF LIVINGSTON, MONT.

NORTH PACIFIC RAILROAD STATION, LIVINGSTON, MONT. MESSRS. REED & STEM, ARCHITECTS, NEW YORK, N. Y.

BUILT of red and buff brick with buff terra-cotta trimmings. Roof of green slate, lamp and sign posts of brick and terra-cotta. Platforms of cement, floors and wainscoting (8 feet high) with trim around windows and doors, all terrazzo and mosaic.

GRACE EPISCOPAL CATHEDRAL, TOPEKA, KAN. MESSRS. ROOT & SIEMENS, ARCHITECTS, KANSAS CITY, MO.

Additional Illustrations in the International Edition.

THE VARIED INDUSTRIES BUILDING: LOUISIANA PURCHASE EXPOSITION, ST. LOUIS, MO. MESSRS. VAN BRUNT & HOWE, ARCHITECTS, KANSAS CITY, MO.

"THE NEW KENTUCKY HOME": LOUISIANA PURCHASE EXPOSITION, ST. LOUIS, MO.

THE RATHAUS, ELLINGEN, BAVARIA.

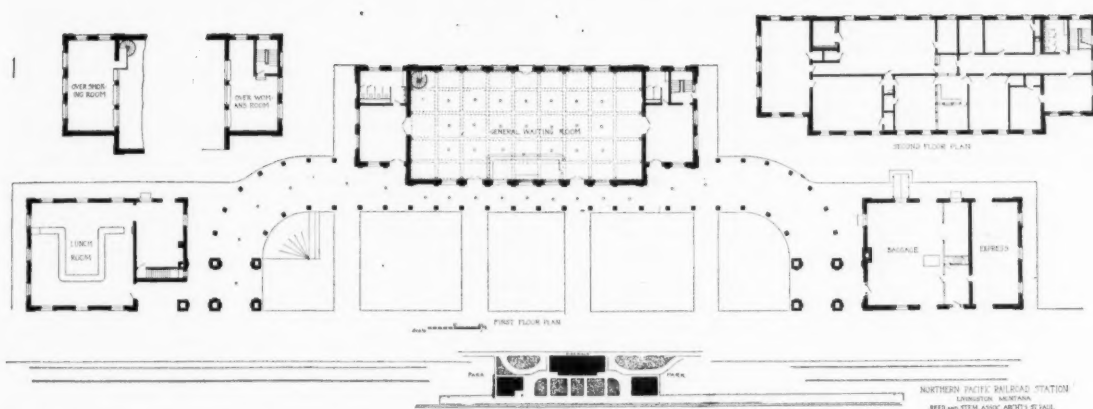
This plate is copied from *Blätter für Architektur*.

OLD BARN IN LEVER PARK, RIVINGTON, ENG.

The *British Architect*, from which we copy this plate, gives the following interesting account of the building:—

This old barn, one of the finest in Lancashire, is situate at the foot of Rivington Pike, in Lever Park, Rivington, near Bolton.

The park, which is nearly 400 acres in extent, has recently been presented to his native town of Bolton, by Mr. W. H. Lever, of Port Sunlight. Mr. Lever has had the building carefully repaired, preserving as far as possible all the old timbers and replacing with English oak the portions fallen to decay. The building is intended



for use as a refreshment-room and shelter for visitors to the park. The interior length is 105 feet 8 inches, and the width 57 feet 6 inches. It is divided by six "forks," or "crucks," into seven bays. The width of the centre avenue is 25 feet 7 inches and the "forks" are placed from 15 feet to 16 feet apart. The timber is English oak, and the construction very massive. The "forks" rest on large boulder stones about 2 feet 6 inches above the floor line, and the height from floor to ridge piece is 23 feet 10 inches. Speaking of a similar building in his book, entitled "*The Evolution of the English House*," Mr. Sidney O. Addy says: "No living man can now remember the time when 'forks' like these were set up, and there are reasons for believing that they have not been used by builders during the last two centuries. But building with 'forks' can be traced up the stream of time for at least 2,000 years. Such 'forks' supported the roofs of Roman cottages in the days of Ovid, and they were regarded by Vitruvius as evidence of the oldest kind of building."

This interesting work has been carried out by Mr. Bentley, builder, Horwich, under the direction of Mr. Jonathan Simpson, architect, Bolton.

NOTES AND CLIPPINGS

DIAMOND SHOAL LIGHTHOUSE AGAIN.—The House Committee on Interstate and Foreign Commerce has reported a bill authorizing the construction, by Albert F. Eells of Boston, of a lighthouse and fog signal at Diamond Shoal, off Cape Hatteras, for which he is to receive \$590,000 five years after it is built, on condition that he shall maintain and operate the lighthouse at his own expense for one year and that the structure at the end of five years after its completion shall be found substantial and secure. If the lighthouse is not deemed safe and satisfactory at the end of that time by the United States Government, Mr. Eells will receive no compensation for his work. The structure, which is to be located on one of the most dangerous points on the Atlantic coast, will have a circular steel tower 200 feet high on which the light will be placed. Consideration of the bill by the House will probably not be reached before the next session of Congress. — *Boston Herald*.

THE KIN OF MR. MACCAIG AS STATUARY.—A most eccentric will is about to be disputed in the Scottish Supreme Court. When Mr. John Stuart MacCaig of Muckairn, Oban, who was a noted Highland land reformer in his day, and also figured on one occasion as a parliamentary candidate, died about eighteen months ago, he left a will which caused some sensation at the time. His heritable property he decreed was not to be sold, but was to be let to tenants, and the clear revenue was to be devoted to the erection of statues in large figures of himself, his father and mother, brothers and sisters, altogether numbering twelve, on the top of the wall of a tower he had built on a hill overlooking Oban. The statues were to be the work of Scottish sculptors, and each was to cost not less than \$5,000. To carry out this remarkable will, Mr. MacCaig appointed the Court of Session executors, or failing the supreme judges of the country, who form the senators of justice in the Scottish Court of Session, the University of Glasgow was to undertake the work, and to the latter the work has fallen. The will is to be contested by Mr. MacCaig's sister and sole surviving member of the family. It may be added that in Oban the townspeople do not consider the statuary proposed will add to the beauty of the popular West Highland watering-place. — *Exchange*.

EXCAVATIONS IN THE ORIENT.—Since his visit to Palestine, some four years ago, the German Emperor has evinced a keen interest in Oriental research. The Sultan, on his side, has recognized the archaeological interest of his imperial brother by concessions and gifts of a most unusual character. Of these perhaps the most noteworthy was the concession at Baalbek, where the Germans have excavated and renovated the ancient temples, the expedition at the same time conducting further studies, not only in the neighboring region, but also at Palmyra, in the Hauran, and at Gerash, Amman and Mesheyyta. This last remarkable ruin, which has been visited by but few, on account of its inaccessible position in old Moab, east of the Jordan,

beyond the present pilgrim route to Mecca, in the desert, was presented outright to the German Emperor. Under the direction of Dr. Schumacher the remarkable carved stone façade of the great enclosure of the khan or palace, whichever it may be, has been taken down, boxed and sent to Berlin, where it is to form one of the adornments of the new Friedrich Museum, which will be opened this spring. The carved stones of this façade filled 462 boxes. The imperial participation has done much to stimulate German interest in Oriental research. A school has been established in Jerusalem for practical Biblical study, and the German Orient-Gesellschaft, of which the Emperor is a member, and to whose work he is one of the largest contributors, in conjunction with the German Palaestina Verein, commenced last spring excavations at Mutezellim, supposed to be the site of ancient Megiddo, on the southern edge of the plain of Esdraelon and at the neighboring Lejjun, the site of the important town Legio, of the Roman period. These excavations were resumed last autumn, after an intermission during the heat of the summer months, but up to the present time have yielded no important returns. An account of these excavations, so far as the results of the work last spring are concerned, is contained in the *Mitteilungen der Deutschen Orient-Gesellschaft* for December, 1903 (No. 20 of the series). The Orient-Gesellschaft is to be commended for the promptness with which it publishes preliminary reports of the work done, as this naturally tends to retain and stimulate the interest of subscribers. The extent of that interest is manifest from the fact that, according to the fifth annual report, just published, the income of the society for the last fiscal year was some \$80,000. Besides the excavations in Palestine, successful excavations have been conducted by this society at various points in Egypt and Babylonia. It is in the latter region that the principal work of excavation has been and is being accomplished. This work consists, first of all, in a systematic excavation of the ruins of Babylon, which has now been in progress for five years, with minor excavations and explorations at other sites, Borsippa, the sister city of Babylon, Fara and Abu Hatab, two very ancient sites about three days south of Babylon, between the Tigris and Euphrates. The current number of the *Mitteilungen* contains an account of the commencement of excavations at Kal' at Shirgat, the ancient Ashur, the original capital of Assyria. Up to the time of the discovery of the Code of Hammurabi, by the French at Susa, in 1901-02, it was supposed that the city of Ashur, and hence the country of Assyria, was founded not earlier than about 1800 B.C.; but the mention of Ashur in that document proved that it was already a famous and important city in the twenty-third century B.C. The discoveries of the Germans up to the present time have shown that the city retained its importance also to a much later date than had been heretofore supposed. Hitherto historians have assumed that, with the construction of Calah and the removal thither of the seat of Assyrian empire, about 1300 B.C., Ashur lost its importance. A succession of palaces has now been found, showing that Ashur continued to be occupied as a residence city by the Assyrian kings into the seventh century B.C., and probably until the time of the downfall of the Assyrian empire; that, in fact, during the whole period of the existence of that empire it remained a city of great importance, at least from the official and religious standpoint. Further excavations at this point seem likely to contribute valuable material for the history of Assyria. — *N. Y. Evening Post*.

WATER-RESISTING MORTAR.—It very frequently happens that work has to be carried out in the presence of running water, or where water runs through under pressure, as in the case of mines or caves that are situated below the level of a certain sheet of water. In these cases the mortar of cement—even that which sets rapidly—does not fulfil the desired object, for it is necessary to close, almost instantaneously and securely, the openings through which the water runs under high pressure. In these particular cases, Staab proposes the employment of a mixture of cement, sand and wood charcoal, which is moistened with a solution of sea-salt and potash; two parts of cement and one part of sand are taken, or, in the case where very high pressure of water is to be resisted, three parts of cement and one part of sand. This is mixed together while dry, some wood charcoal powder being then added to facilitate the adherence of the oil varnish that is to be applied outwardly. Another method which is advocated is to dissolve seventeen grammes of sea-salt (chloride of sodium) in a litre of water, afterwards adding fifty grammes of potash lye. The water thus charged with salt is heated to 30 or 40 degrees C., the mixture of cement and sand being then moistened. The paste-like mass which will be obtained should be immediately employed, as it hardens very quickly. If it be desired to coat a wall, a layer of the mass is applied about seven or ten millimetres thick; in the case of closing up large apertures through which water runs under pressure, the opening is first made smaller by

applying the mass round the sides of the hole, gradually completely filling up the same. In this case, it is as well to apply, for a short time, a small piece of wood against the repaired portion by way of a support. Scarcely, however, a minute after application, the hardening is almost complete, and so great is the solidity and resistance of the mass that in one case the water forced its way through the gaps in the masonry work and came through the bricks themselves. We are assured that this preparation can also be used for a number of other requirements where a hard and quick setting mortar is required. — *Stone Trades Journal*.

WONDERFUL HOME-MADE CLOCK. — With a scroll-saw, plane, a hammer and a common pocket knife a one-armed cripple has made the most remarkable clock in the world, says a Cleveland dispatch in the *Philadelphia North American*. The maker is Marvin Shearer of Akron, O. He is a scenic artist, but his hobby is mechanics. His pet project for the last fifteen years has been to make a surpassingly wonderful time-piece, but it was not until disabled for daily work at his profession that he found the time. The clock is 12 feet 4 inches high, more than 4 feet wide, and almost 3 feet deep. It contains 4,161 pieces of wood of 37 different kinds. There are 192 pictures in or on the clock, all of which Mr. Shearer painted. The motive power consists of a water pump having a capacity of 200 gallons per hour, a one-half horse-power electric motor and several other electric appliances. The clock weighs 850 pounds, and is constructed in three sections. On the face of the top section are nine dials, seven of which give the time in three foreign cities and four American cities; one, the local standard time, the other, the calendar dial, indicating all the changes of the moon, the month, the day and date. The weather signals are translated by signal flags on a revolving staff directly in front of the calendar dial. Thermometers, barometers and hydrometers, each tells its tale, and around the dials pieces of wood from each State, territory and foreign possession in the Union are arranged, decorated with the coat-of-arms of each. On either side of the clock dial can be seen every man-of-war in the United States navy, arranged according to their class and speed, followed by the different squadrons in their official order. Underneath the navy is shown a Passion history of Christ. All these pictures have their stated times of appearing, passing from view behind a screen. The middle section is by far the most beautiful. In the extreme top is located a miniature Niagara Falls, over which 180 gallons of water fall every hour. Both the American and Horseshoe Falls are shown with Goat Island in the foreground, and the sparkling water is illuminated by colored and changing electric lights, making a most effective water display. At each hour, as the clock strikes, the figures of Uncle Sam and the Goddess of Liberty appear from an elevator at the right, walk in front of the American Falls, pass through a gate that opens automatically, descend a flight of steps, continue their walk around the front of the falls, where they turn and bow to the audience. Behind glass plates pass in review pictures of all the Presidents of the United States, and on each end a silhouette of Washington shows.

CHINESE WOOD OIL. — Wood oil is rapidly becoming an important article of export in China, according to L. S. Wilcox, United States consul-general at Hankau, during last season there having been more than \$1,890,000 worth of it shipped from that port. Previous to 1899, when the attention of the United States importers was called to its valuable properties, only three small shipments had been made from here to the United States. After the report which called attention thereto was published inquiries began to be received and orders commenced to come in from the United States. Now two United States firms have located branches here for the purpose of exporting wood oil. One of the firms deals exclusively in this article, and it has shipped nearly 200,000 gallons since last fall. Previous to 1900 the oil was shipped to Europe in considerable quantities. "The value of the oil is due to its astringent and drying qualities, and it is used in varnish for the finer kinds of furniture. There are two kinds of this oil — one yellow, the other a dark color. Only the former has been exported, being considered of a higher quality than the latter. It is also reported that in Europe it is used in making soaps. The price of the yellow variety during the past season has varied from \$4.92 to \$6.05 per picul (133½ pounds). The oil is brought to Hankau in bamboo baskets lined with oiled paper, each basket containing about one picul of oil. The great difficulty of obtaining barrels to export the oil in is a serious drawback, as no barrels are manufactured in any of the provinces where the oil tree grows. For this reason an American firm at Hankau has imported from New York shooks for 5,000 barrels and machinery for setting them up. Last year a request was received from California for 1,000 seeds of the oil tree. They are planted and are growing finely. The same parties last fall requested 4,000 more seeds, and arrangements have been made to secure and ship them. As the oil finds a ready market the introduction of these trees into various parts of the United States will be a source of revenue to their owners." — *Exchange*.

ONYX. — The onyx marbles, owing to their nature, are represented by slabs of varying size, some larger, some smaller than the standard. The cylindrical and fruit-like forms of the Mexican onyx give the effect of the characteristic bands on carved surfaces. Besides the better known onyx of Mexico, lower California and Arizona, less known localities, such as the stalagmite marble quarries of Utah, are represented. Among other foreign localities Egypt and Syria are represented by travertines of great beauty, the same known as alabaster in Biblical times. A serious endeavor is to be made to place onyx marble on the market in quantities. In the past our supplies have been mainly drawn from Mexico and California. The Mexican quarries produce the finest material, but the quantity shipped is very limited, and the price is almost prohibitive, owing to the fact that the quarries are situated

some distance from the seaboard, and transport is exceedingly costly. From the California quarries there is a more steady supply, but the cost of transport has always been a serious bar to the development of the business. A shipment has recently arrived in London from Galveston, of an onyx quarried in Arizona, and this is pronounced by experts to be of a quality unsurpassed by the finest produce of Mexico. Until recently the owners of the Arizona quarries were under the same difficulties as the producers in Mexico and California with regard to transport, for something like seventy miles had to be slowly and painfully traversed by road before the nearest railway could be struck. A new railway, has, however, now been built, which passes within 200 yards of the quarries, and this, it is stated, will enable onyx to be placed on the market in London at prices which have been hitherto unattainable. If this should turn out to be the case the ornamental marbles in ordinary use will have a new and formidable competitor, and future developments will be interesting. The beauty of onyx consists in the marvellous gradations of color which are found in the stone, and the semi-transparency of the material, which makes it peculiarly adapted for decorative purposes. If all that is claimed for the onyx from the Arizona quarries can be realized, there is, without doubt, a great future before it. The origin of onyx is purely chemical. It is, without doubt, an aqueous deposit of carbonate of lime, and similar in this respect to marble; the main difference between onyx and marble being that the latter has been formed under conditions which involve deposition from waters of a high degree of saturation and of considerable pressure at the same time. The Arizona deposits are doubtless those formed by an ancient geyser; in fact, the quarries are on the site of a volcanic eruption of this nature, which must have been one of the most extensive in the world, as they extend over an area of 320 acres. The reports of experts are to the effect that the amount of the deposits run into millions of tons, so that the supply for all practical purposes is inexhaustible. — *Stone Trades Journal*.

A RUINED MEXICAN CHURCH. — The suburban town of San Angel, at the base of the foothills, three-quarters of an hour from the capital by electric car, is every year becoming more fashionable as a summer resort, and every year, as modern conveniences and better houses are provided in the outlying districts, more people take up their permanent abode there. To the casual visitor to San Angel the most interesting feature is the handsome old church of *Neustra Señora del Carmen*. Its triple domes, with their tiles shining brightly in the sunlight, are the first objects that arrest the attention of strangers approaching the town. Its Carmelite bell-tower, or *campanario*, is distinctive, and the edifice is one of the handsomest ecclesiastical monuments in all Mexico. It was dedicated to the worship of God in 1617, or three years before the Pilgrim Fathers of New England landed on Plymouth Rock. The interior is handsomely decorated and contains some notable paintings by the famous Mexican artist Cabrera. Pious women have adorned the Chapel of our Lady, which is one of the features of this ancient church, and the magnificent Churrigueresque ornamentation of the northern transept is a splendid specimen of this most distinctive Spanish mode of decoration. Beneath this transept rest in their eternal sleep forty-five American soldiers, who were killed or died of disease during the war of the North American invasion, when the adjoining monastery of the Carmelite fathers was converted into a military hospital and barracks, the good fathers nursing the wounded Americans with such Christian devotion and good will that when the troops evacuated San Angel monks and soldiers fell on one another's necks and wept. Janvier speaks of San Angel's church as follows: "In the year 1613 Don Felipe De Guzman, a pious 'cacique' of Chimalistac, in fulfillment of his father's testament, gave up to the Carmelite order a *huerta* of considerable size. Here the Carmelites built a little hospice. Don Felipe De Guzman presently died, and a little later died also his widow, childless. By her will the entire estate of which she died possessed passed to the Carmelite fathers, and by these it was devoted to the building of the existing monastery and church. The plans for these buildings were prepared by the celebrated architect Fray Andres De San Miguel, a lay brother of the Carmelite order, and at that time held to be the first architect of New Spain. That this reputation was well merited is shown by the beauty of his still existing work. The building was begun June 20, 1615, and was pushed with so much vigor that the church and convent were finished within two years. The church was dedicated to San Angelo Martir, whence came the name of the little town that presently grew up around it." — *Modern Mexico*.

WATER-POWER FOR ELECTRICITY IN CALIFORNIA. — The Eureka Lighting Company of San Francisco has concluded to begin at once the development of their power water-rights on the Trinity River for the purpose of generating electricity for power and light. The rights are sufficient for the production of 6,000 horse-power, which is at present fully double the amount that can be utilized. The plans contemplate an expenditure of nearly half a million dollars, and the result will be a power line passing through Korbel, Blue Lake, Arcata and Eureka, a distance of fifty or sixty miles, and thence on into the Eel River Valley. It will do away with the steam generating plants for current in use in Eureka at present, and will furnish an almost unlimited quantity of electricity for all purposes within Eureka. An electric road through Trinity County to the Sacramento Valley is one of the possibilities of the plan, as the power plant will be but twenty miles from the present Hay Fork Road in this county. The enterprise means a great deal for Eureka and Humboldt County, for it is the intention to develop thoroughly the proposition and furnish light and power to every place to which the line can be extended. The cheap power which the company expects to be able to furnish will undoubtedly foster manufacturing in Eureka and open up considerable of the outlying country. — *N. Y. Evening Post*.



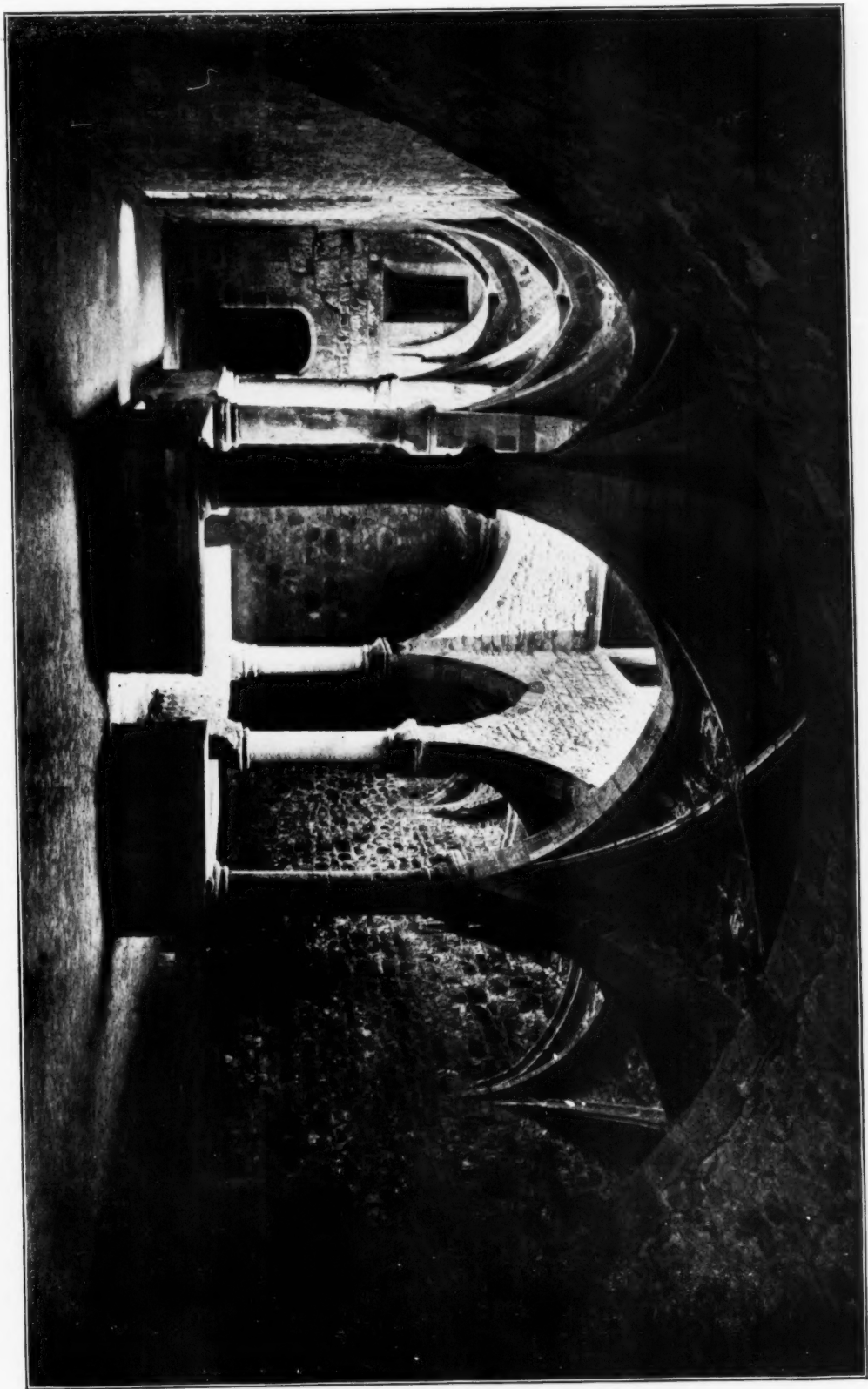
Isle of Ste. Marguerite, near Cannes, France.



*Prison of the "Man with the Iron Mask."
Isle of Ste. Marguerite, near Cannes.*

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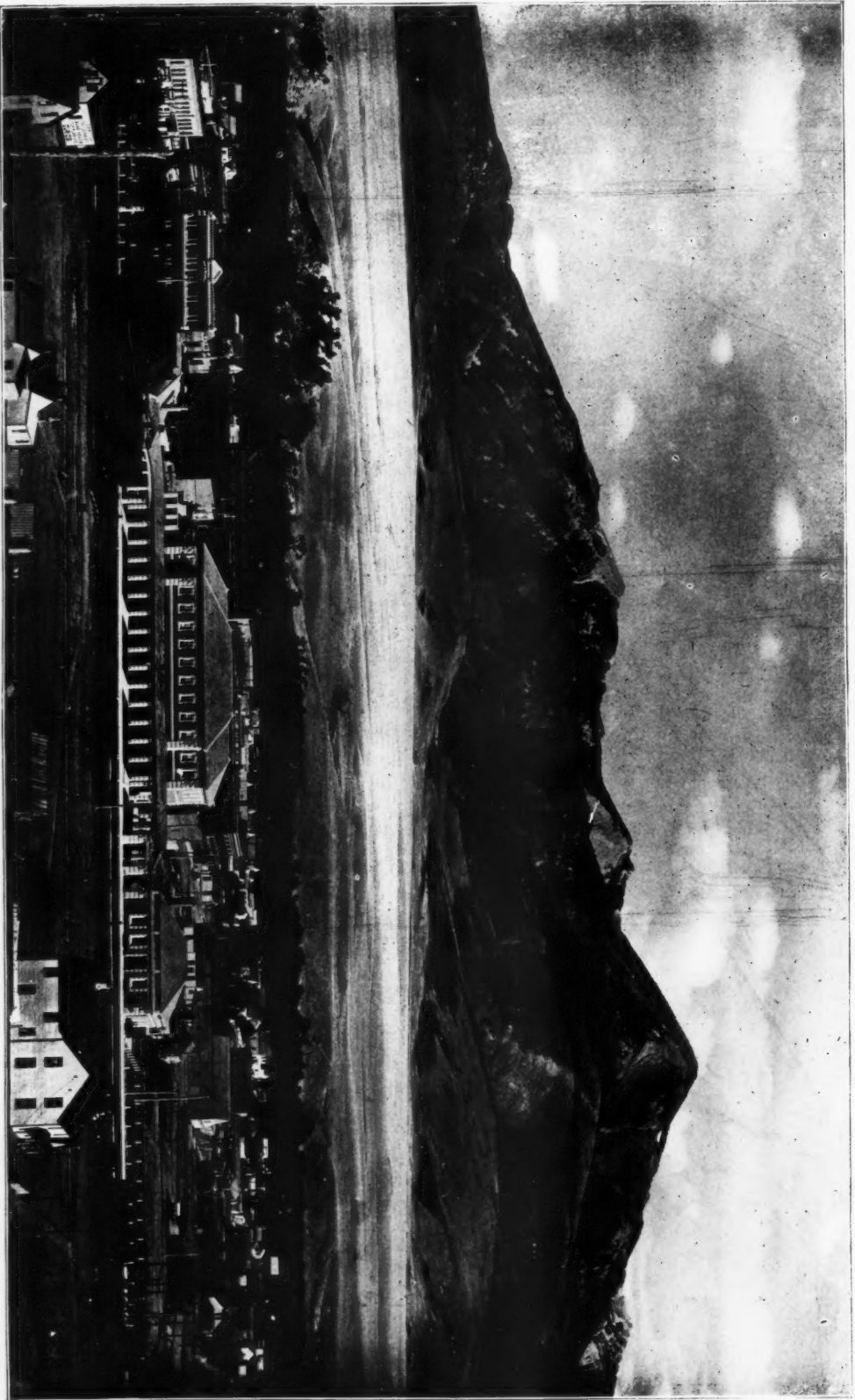
The American Architect
April 16, 1904
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Cloister in the Donjon, Isle of St. Honorat, near Cannes, France.

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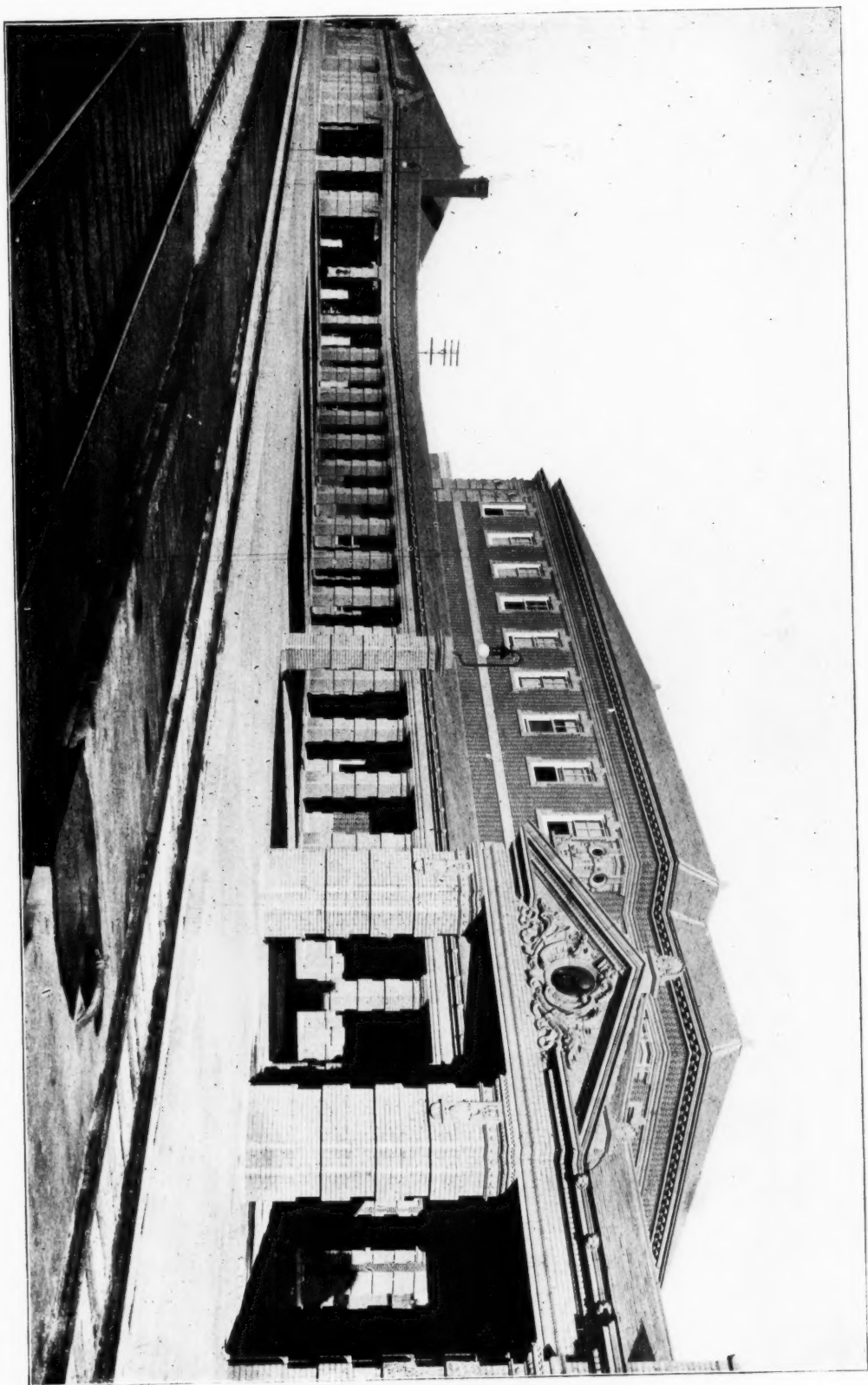
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General View of Livingston, Mont.

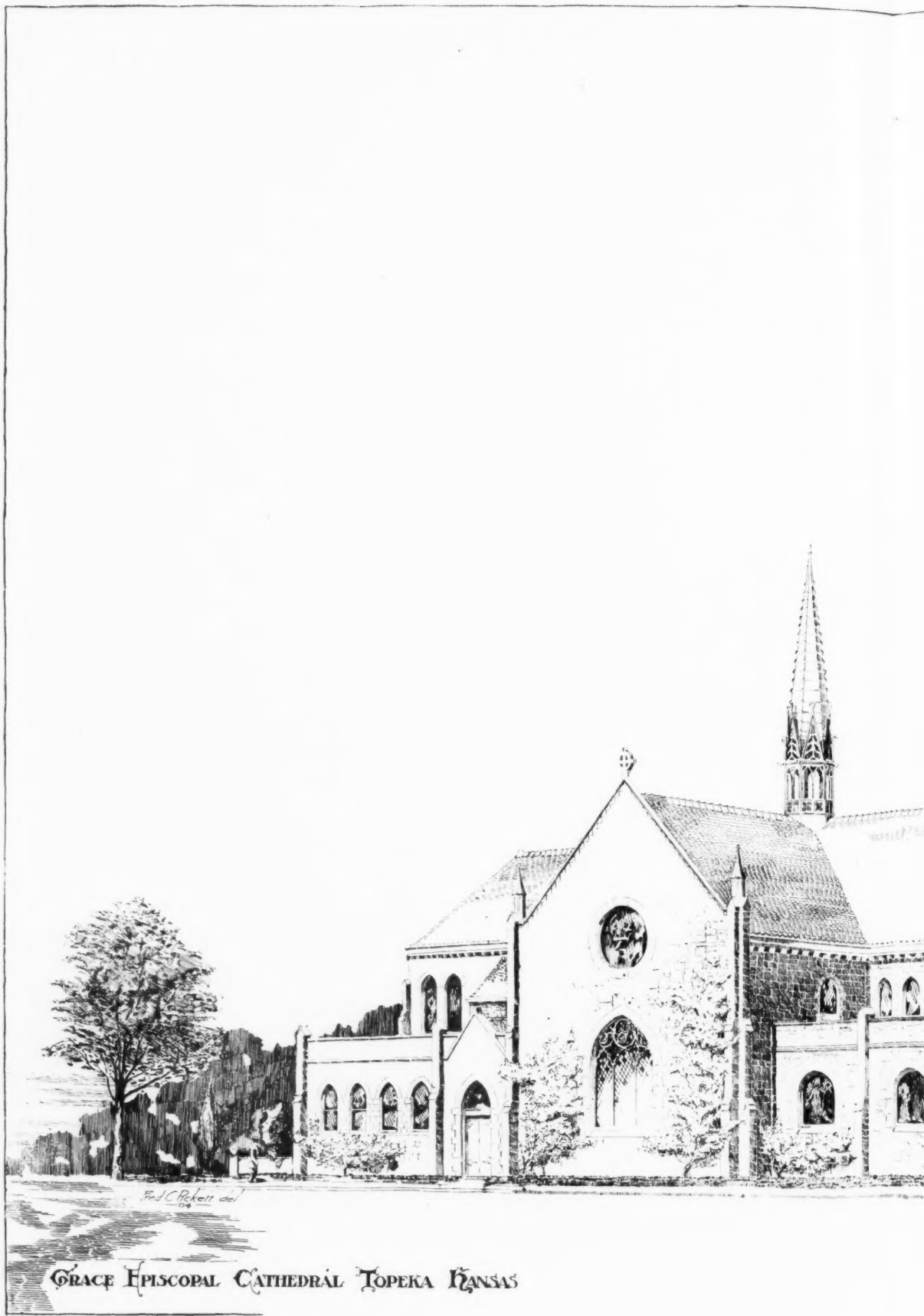
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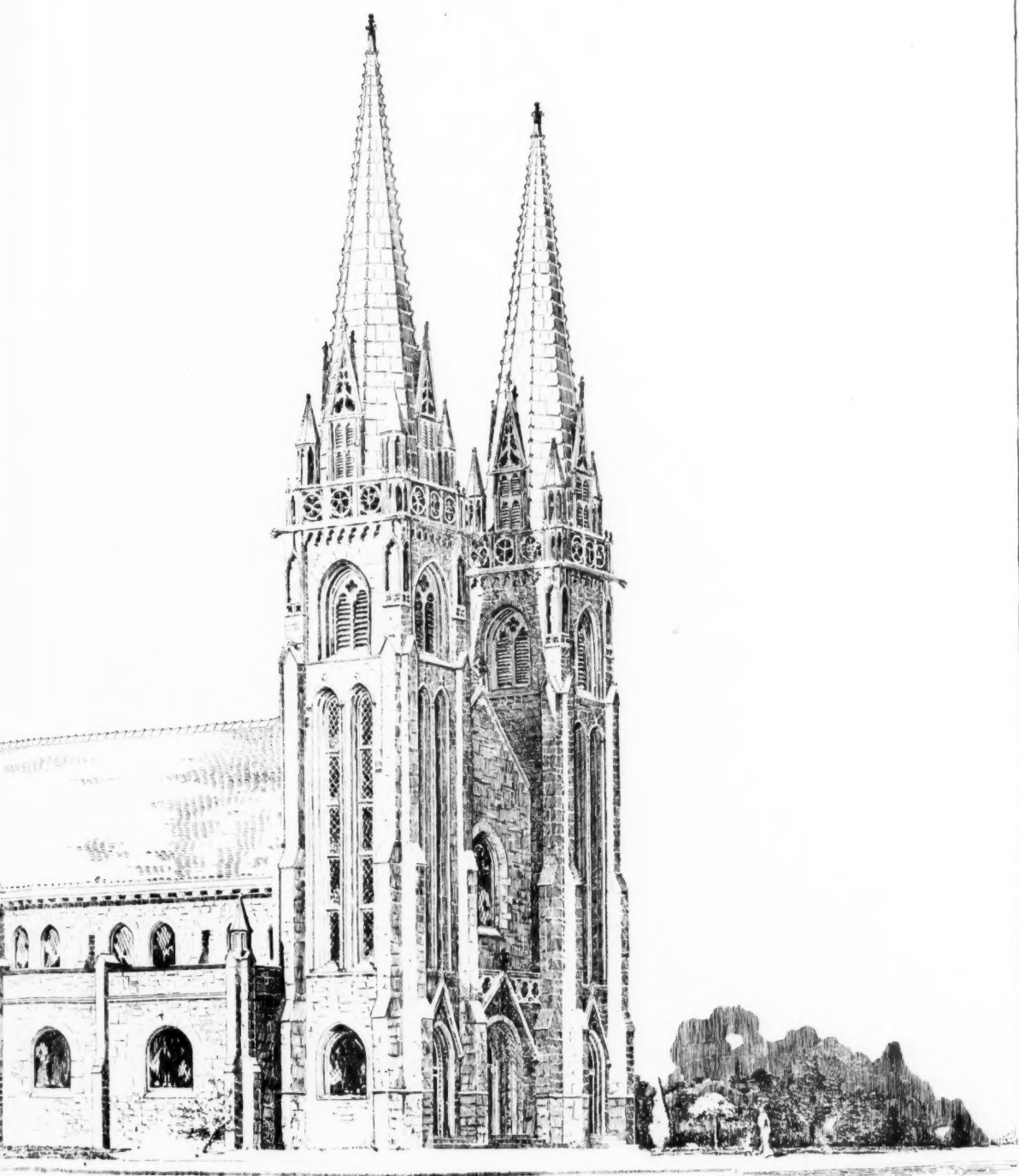
No. Pacific R. R. Station, Livingston, Mont.
Reed & Stem, Architects.

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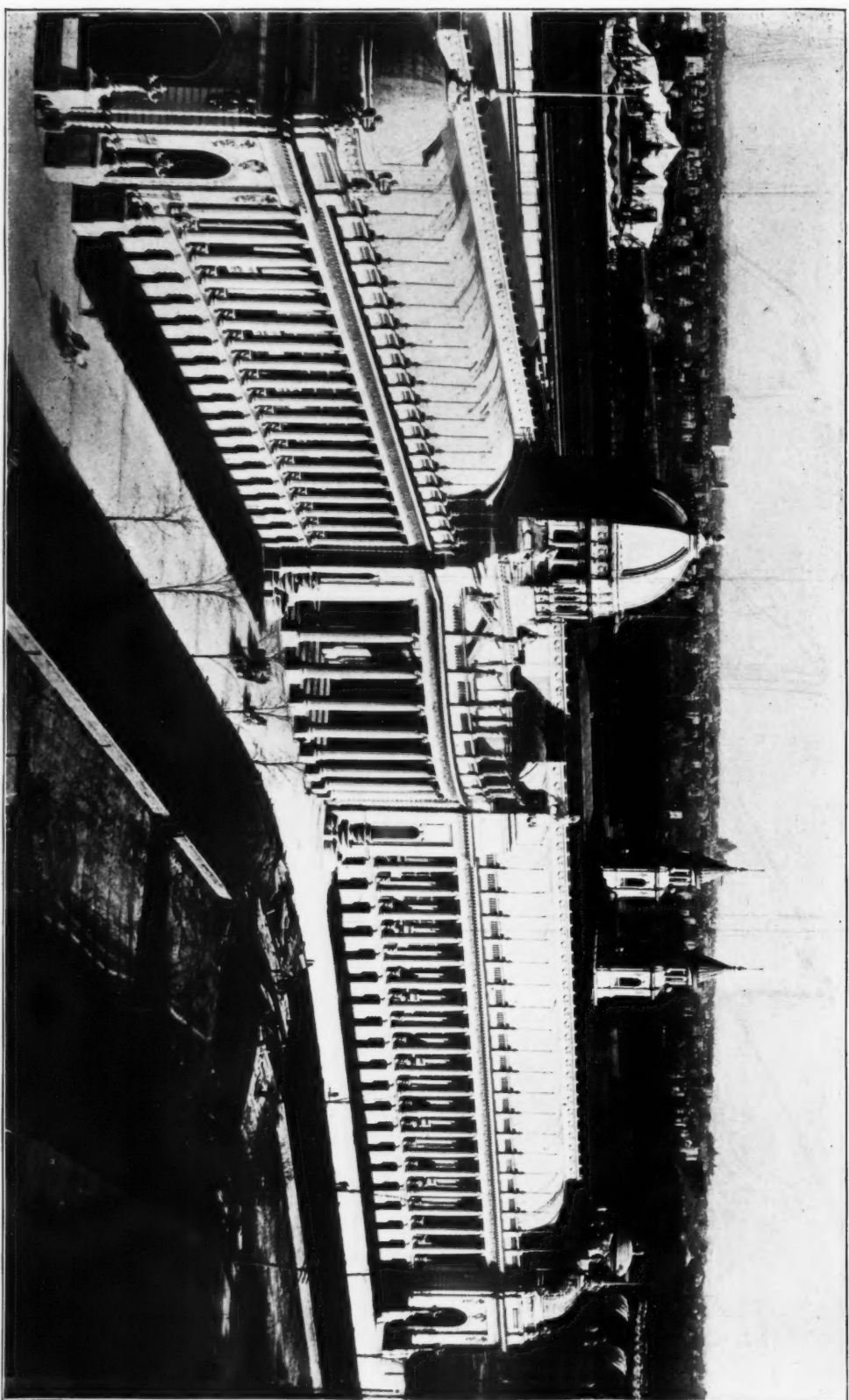
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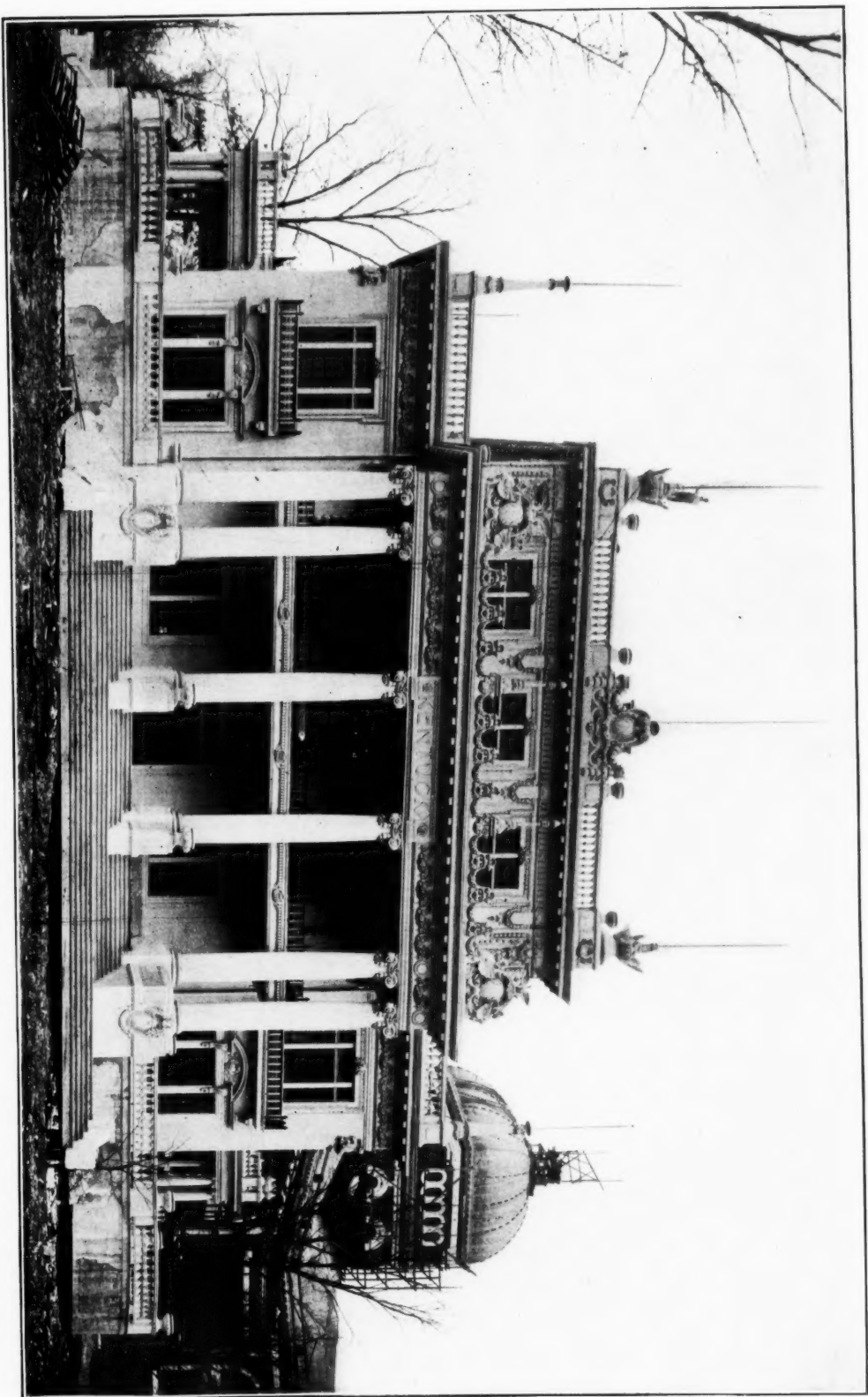
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*The Varied Industries Building: Louisiana Purchase Exposition, St. Louis, Mo.
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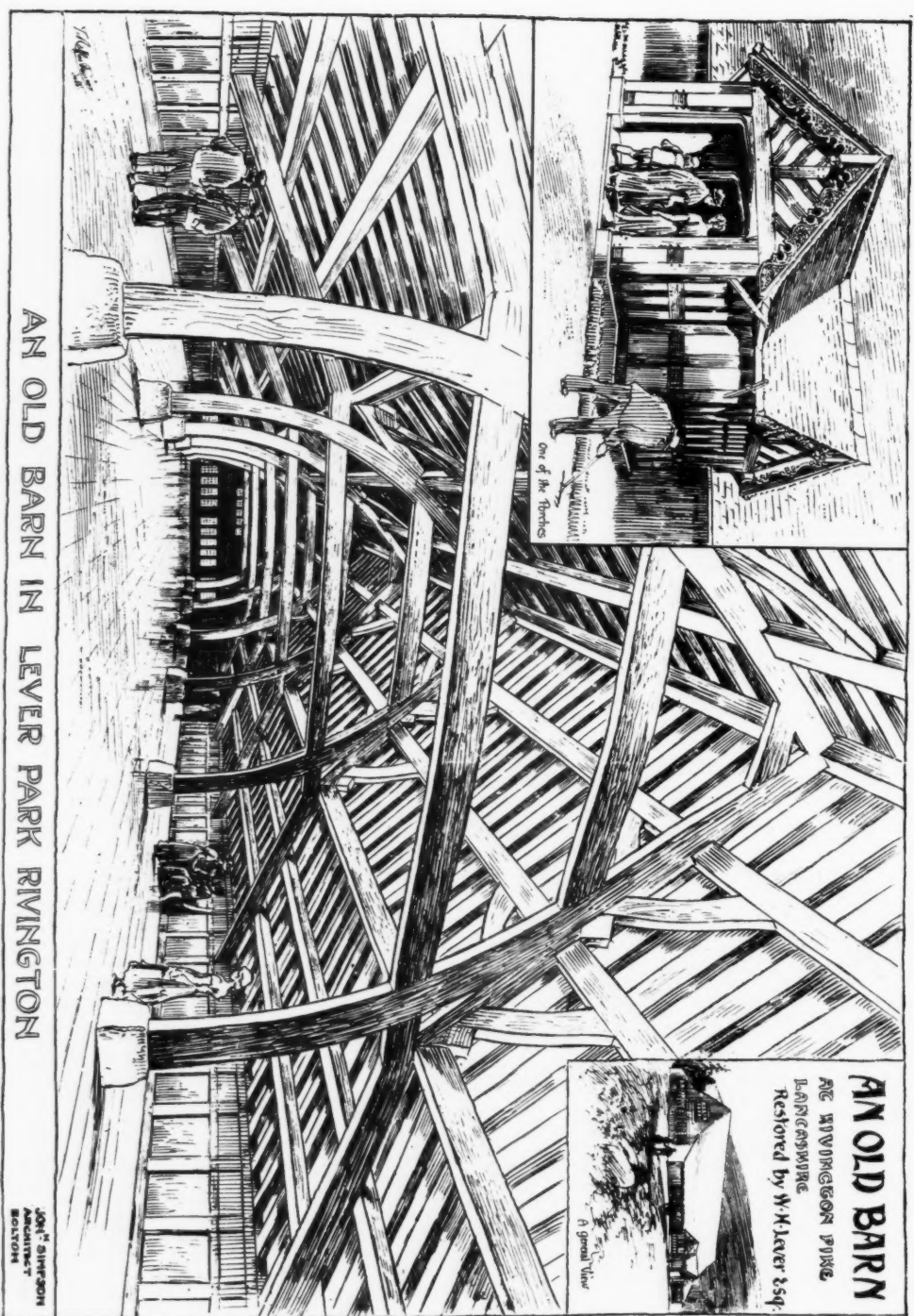
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"The New Kentucky Home": Louisiana Purchase Exposition, St. Louis, Mo.

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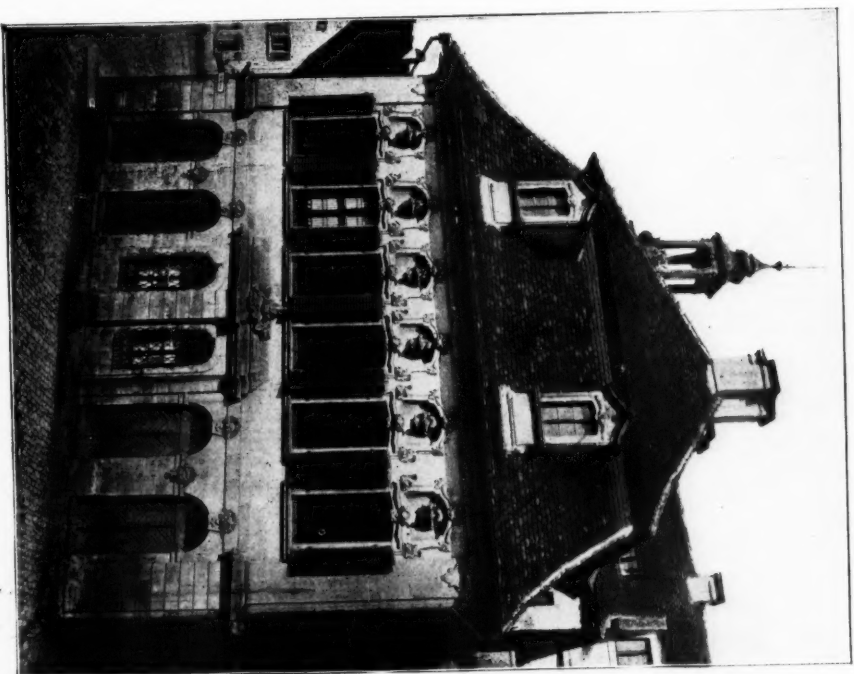
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AN OLD BARN IN LEVER PARK RIVINGTON

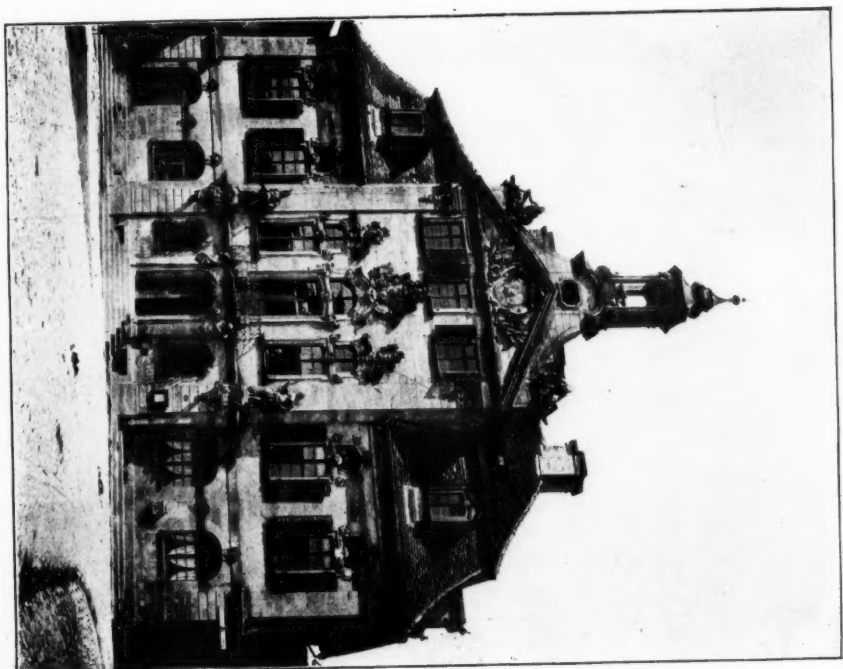
From *The British Architect*.

The American Architect
April 16, 1904
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Side View.

The Rathaus, Ellingen, Bavaria.



Front View.

From *Blätter für Architektur*

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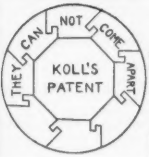
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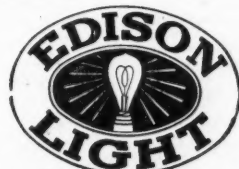


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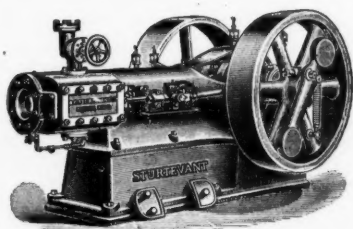
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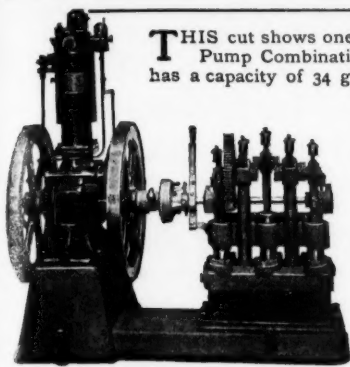
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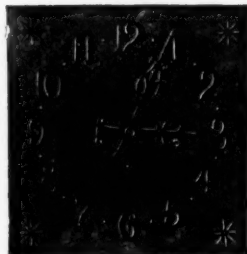
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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

on the building will soon be begun. The structure will be four stories high. The material used will be pressed brick and stone.

Cohasset, Mass.—Plans for the new Black Rock House for T. H. Raymond, of Cambridge, have been completed by Newhall & Blewins, and excavations for the foundations have begun. The new house will be located an eighth of a mile back of the old hotel, occupying higher ground and having a more commanding site. The structure will be 175 feet deep and of an average width of 40 feet, and an average height of three and one-half stories. The style is an adaptation of the French chateau, with large towers and chimneys. The materials of construction will be shingle, plaster and timber work. The building will contain 40 guest rooms, all facing the water.

Dankirk, N. Y.—The Common Council has approved the Carnegie Library bill which was recently brought before and approved by the State Legislature, authorizing the levying of an annual tax of \$3,000 for the support of a \$25,000 public library, the offer of which was secured from Andrew Carnegie some time ago at the instigation of the Young Men's Association of this city. The library is now an assured thing. A \$4,000 or \$5,000 lot will be donated for a building site by the Young Men's Association.

Elizabeth, N. J.—Ground was broken recently for the new edifice of St. Peter and St. Paul on Ripley Pl. The church will be completed, it is thought, in the course of a few months. The cost will be about \$50,000.

Lowell, Mass.—J. L. Chalifoux has purchased the Dartmouth College property in Merrimack Sq., which includes the two buildings situated between Barristers' Hall, owned by Mr. Chalifoux, and the Sun Building, and occupied by Harry Richardson, Fairburn's market and A. E. O'Heir & Co. The purchaser intends to tear down the old buildings and construct a big modern steel skyscraper on the site.

Nashville, Tenn.—N. F. Griffiths, of New York, with a company of capitalists of this city, are preparing to erect a seven-story storage house at a cost of nearly \$200,000. The building is to be seven stories high. It is to be used for the storage of butter, eggs, poultry and fruit.

New Haven, Conn.—Ground will be broken at once in the rear of the Quinpiac Club-house, in Chapel St., for the new \$25,000 addition which the club has decided to erect. The building will be four stories high and will cover the land now vacant at the rear of the present home of the club.

New York, N. Y.—A theatre is to be built at the southeast corner of Bergen and Westchester Aves. by the William F. Kehogh Amusement Co. It will be three stories high, and will cost \$175,000. Neville & Barge, architects, have filed plans for the building.

Messrs. Barney & Chapman, 44 W. 34th St., have finished designs for the large buildings to be erected in De Witt Clinton Park, which occupies the two city blocks between W. 52d and W. 54th Sts. and 11th and 12th Aves. There is to be a great pergola, 33' 8 1/2" x 206', reached by broad staircases, and a public comfort pavilion. The pergola will be of brick, with blue and limestone trimmings, and will

BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

cost \$30,000. The comfort pavilion, containing baths and gymnasium, will cost \$50,000.

Plans have been filed for a six-story fireproof building to be erected for Wells, Fargo & Co. at the corner of Warren and Greenwich Sts., on the site of the Tarrant drug warehouse, which was destroyed by the big explosion of October, 1900. The new building is to be erected by the Surety Realty Co. and Jackson & Stern and will cost \$100,000.

Plans have been filed for a twelve-story fireproof office and loft building to be built at Nos. 47 and 49 Maiden Lane, for S. F. Myers. It will have a frontage of 45.3 feet and a depth of 76.3 and 89.7 feet, with a 41-foot seven-story extension. The cost is estimated at \$225,000. Architect, Robert T. Lyons.

Plans have been filed by Schickel & Ditmars, architects, for the completion of the church building of St. Monica's Roman Catholic Church, in E. 79th St. The basement only of the building is at present finished. The added superstructure will be 70 feet high, 80 feet wide and 152 feet deep. It will have a facade of limestone of decorative Gothic design. Estimated cost of the structure, \$70,000.

Oneida, N. Y.—A party of capitalists are preparing to erect a dancing pavilion and summer garden on the site of the Algonquin Hotel, which burned down at Syrian Beach this winter. Plans are being prepared which include an up-to-date band pagoda as well as an expensive and artistic array of refreshment booths. \$50,000 will be expended.

Philadelphia, Pa.—Included among the items in the proposed loan of \$16,000,000, voted upon by the people at the election held last month, and which will be authorized by Council after the reorganization of those bodies on the first Monday in April, is one of \$2,000,000 for the purchase of sites and the construction of new school buildings.

Mayor Weaver has been elected a member of the commission which will have charge of the erection of the Dr. Evans Institute and Museum. It is said that the fund for the institution will eventually amount to \$3,700,000, but the money will not be available until certain property in Paris, valued at over \$1,000,000, is sold.

W. J. Grabler will erect a \$20,000 school house at the southwest corner of Seminoe St. and Willow Ave. for Mrs. Henry. The building will be three stories high.

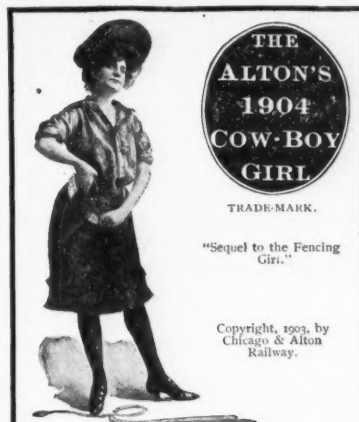
Portland, Me.—The contract for the erection of the Merrill Memorial Library has been awarded to N. E. Reddon, of Portland. The building will cost about \$25,000 and work will commence as soon as the frost is out of the ground.

The Polish Catholic Society has purchased the A. T. Goodwin estate, the building lot on Summer St., near Cottage, having a frontage of 120 feet and containing about 14,000 square feet. Funds are now being solicited for the erection of a new church and the society expects to begin operations by July 1.

A new school-building, costing \$20,000, is to be erected at Morrill's Corner. F. H. Thompson has drawn plans for a two-story brick building.

Rochester, N. Y.—Plans for the eight-story building to be erected by Mrs. John Fahy on the site of the burned Kierley Block are being made by Gordon & Madden, architects. The front will be of pressed brick with stone trimmings. It will be fireproof.

No plans have yet been made for building on the



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BUILDING INTELLIGENCE.

(Advance Rumors Continued.)

site of the Cornwall Block, or on the lots formerly occupied by the Marble Block and the Ellwanger & Barry Block. It is rumored that negotiations are under way for the purchase of all three lots by one man who will build a single large building thereon.

The contract for the construction of the new addition to the German Insurance Building has been awarded to A. Friederichs & Son Co. The building, which will be ten stories in height, will adjoin the present German Insurance Building on the east, occupying part of the property on which the Smith Arcade building formerly stood.

Rockland, Me.—Charles Dana Gibson is to build a \$12,000 villa on the southern end of Seven Hundred Acre Island, on which he has bought seven or eight acres of land. He and Mrs. Gibson look forward to becoming "permanent residents of Maine in summer."

A. E. Colcord has drawn plans for a three-story building, 100' x 165', which is to be built at 63d St. and Monroe Ave. for L. C. Wagner at a cost of \$65,000.

Roxbury, Mass.—A lot of vacant land on Harold St., Elm Hill District, owned by John J. Johnston, has been sold to Margaret H. Crane who will improve the same with a frame apartment-house for investment and occupancy.

Peter A. Hoban has sold to Frederick J. Casey a lot of vacant land on Wait St. and Parker Hill Ave., on which the new owner will erect a house.

Savannah, Ga.—The city council has let a contract for the construction of the new quarter of a million dollar marble city-hall to the Savannah Contracting Co. The building is to be completed in twelve months.

South Hadley, Mass.—Within the past few weeks conditional pledges have been made which warrant the statement that if \$40,000 additional can be raised by June 1, 1904, a fine brownstone building with stack for 100,000 volumes, reference, reading and seminar rooms, will be assured for Mt. Holyoke College, and the building will be commenced at an early date.

St. Louis, Mo.—Plans have been prepared for a proposed new three-story hotel at the northeast corner of Delmar Boulevard and Clara Ave. A permit for the building has been granted through J. M. Danham, the architect, at 727 Old Fellows' Building. The structure will be two stories high, 96' x 150'. It will be Colonial in type, with a large portico entrance on Clara Ave.; built of brick, with metal cornices, terra-cotta arches and stone trimmings. There will be 76 large rooms. The cost of the hotel, which will be named the Fielding, after the owner, will be \$55,000.

Syracuse, N. Y.—A dormitory for jurors will be a feature of the building to be erected by the county in Cedar St. for a power-house, detention jail and heating plant for the new courthouse. The Building Committee has prepared the general plans, but they have not been finally approved.

Benjamin Tousey, a wealthy man of Syracuse, has purchased land and offered a large sum to help erect a magnificent building for the Y. M. C. A. Land was purchased at a cost of more than \$30,000 and plans have been made in the rough for a \$175,000 building opposite the new Public Library. W. W. Taber will be the architect. The plan, it is understood now, is to erect an eight-story stone building for the purpose of providing for the older members of the association, the present building continuing to be used for the boys under 16. It will be modern in style and equipment, with all the appurtenances needed by the association, and equal to the best Y. M. C. A. building in the land.

Toledo, O.—It is rumored that Schackne, the conductor of a dancing school, has purchased land, and will erect a handsome dancing pavilion some time this summer.

An addition is to be built at St. Vincent's Hospital. The enlargement has been in contemplation for some time but it is thought the work will be done this summer. Bacon & Huber are preparing plans and the cost will be in the neighborhood of \$40,000. A three-story addition will be erected on the northwest wing and one in the rear, conforming



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(Advance Rumors Continued.)

to the style of architecture of the present main building.

Arland Johnson has prepared plans for a commercial building to be erected on Adams St., between 11th and 12th Sts. for J. R. Peck, to cost \$18,000. The contract for construction has been awarded to Frank Stahl. The building will be 60' x 100' in dimensions, three stories and will have 3 storerooms and 12 apartments. Mr. Johnson also has plans prepared for a house for H. E. Simon, which will be erected at Irving and Horton Sts.

John A. Downey has prepared plans for a factory building to be constructed for the Bott Malto Hop Co. which will be located on Dorr St. He also has plans for a modern brick residence to be built for H. Sheehan, on Collingwood Ave., and for a large residence to be built for Dr. J. Liken at Cherry St. and Rosalind Ave.

Traverse City, Mich.—It is at last settled that the Carnegie Library shall be erected on the site presented by Perry Hanna on 6th St. Contract has been awarded.

Utica, N. Y.—A new theatre is projected for Utica. Business men are back of the scheme, and plans are now being drawn which if satisfactory will be accepted and work on the playhouse commenced at an early date.

Waltham, Mass.—J. F. and F. I. Robinson have recently sold another lot from the Ellison estate on Main St. The lot was bought by Arthur P. Teale, who will at once build a high-priced dwelling for occupancy.

Washington, D. C.—"At the meeting of the Connecticut Chapter of the American Institute of Architects, held at the Hartford Club, the intention of the United States Department of Agriculture to construct its new building on the mall in this city, in such a place as to obstruct the future development of the plan of the city, laid out by Washington and L'Enfant, was discussed. The proposition was condemned by the Connecticut Chapter, and a protest against the erection of the building in the place proposed was drawn up and adopted. It was also voted to forward copies of the protest to the Connecticut senators and representatives in Congress, and this has been done by Secretary F. Irvin Davis."

Waynesburg, Pa.—The building outlook here for this spring is in no way discouraging. Architect Fuller has not been so busy for several years. Many contemplate building, but have not just reached the decisive point. Others have passed that point, and contractors are figuring on the jobs. Attorney J. E. Debolt will erect a splendid modern frame residence on his lot on West St.

West Newton, Mass.—The Bras-Burn Country Club is soon to break ground for a magnificent club-house. The structure will be in the Colonial

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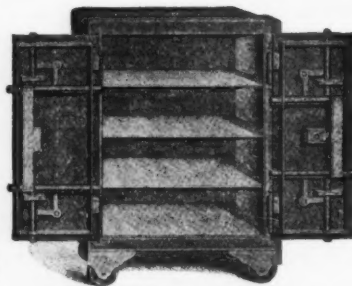
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(Advance Rumors Continued.)

style, handsome and commodious, three stories in height, 50' x 100'. The club controls the rights of about 180 acres of land most splendidly adapted for the varied purposes of a country club.

Whitewright, Tex.—A stock company composed of the faculty of the college and citizens of this place has been formed for the purpose of rebuilding Grayson College recently destroyed by fire. Capital, \$42,000.

Worcester, Mass.—Maginnis, Walsh & Sullivan, of Boston, have prepared plans for a \$100,000 Alumni Hall for Holy Cross College.

Edward T. Chapin, architect, has finished plans and specifications for a new 11-tenement block, to be erected at 18 Crown St. for Fannie E. Talane. It will be 52' x 81', six stories high, of Greenfield brick, finished with terra-cotta and granite. Cost, \$30,000.

PROPOSALS.

Treasury Department, Office of the Supervising Architect, Washington, D. C., April 9, 1904. Notice is hereby given that the time for opening the bids for the construction (except heating apparatus) of the U. S. Post-office at Hastings, Nebraska, has been extended from May 3, 1904, to 3 o'clock P. M. May 18, 1904. JAMES KNOX TAYLOR, Supervising Architect. 1477

Treasury Department, Office of the Supervising Architect, Washington, D. C., March 31, 1904. Sealed proposals will be received at this office until 3 o'clock P. M. on the 11th day of May, 1904, and then opened, for the construction (including plumbing, heating apparatus, electric wiring and conduits) of the U. S. Post-office at Durham, N. C., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Postmaster at Durham, N. C., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect. 1477

NORMAL SCHOOL.

[At Kearney, Neb.]

Bids will be received April 26 by the State Bd. Educ. at Lincoln for erecting the Kearney Normal School; bids will be received on Bedford stone, artificial, pressed and common brick; probable cost, \$50,000. Geo. A. Berlinghof, archt., Beatrice. 1477

LOCK AND GUIDE WALLS.

[At Wellsville, O.]

U. S. Engineer Office, Wheeling, W. Va. Sealed proposals for building lock walls and guide walls for Dam No. 8, Ohio River, about two miles above Wellsville, O., in accordance with the river and harbor act of June 13, 1902, which provides \$190,000 for said work, will be received here until April 27, 1904. Information furnished on application. GEO. A. ZINN, Major, Engrs. 1477

LOCK GATE AND ANCHORAGE.

[At Pittsburgh, Pa.]

U. S. Engineer Office, Pittsburgh, Pa. Sealed proposals for building and delivering in the harbor of Pittsburgh, Pa., a steel lock gate and anchorage will be received here until April 28, 1904. Information furnished on application. W. L. SIBERT, Capt., Engrs. 1477

PROPOSALS.

SEWER.

[At Grand Rapids, Mich.]

Office Board of Public Works, Grand Rapids, Mich. Sealed proposals will be received at the office of the Board until April 29, 1904, for constructing a public sewer along the line of the West Side Ditch (so called) including pump pit, sluice gates, gates, pump suction and discharge pipes, etc., according to the plans and specifications on file at the office of the City Engineer. All proposals must be made upon blanks that will be furnished upon application at the office of the Board. By order of the Board. JAMES E. KEEGAN, President. L. W. ANDERSON, City Engineer. Attest: JNO. C. BROWN, Clerk. 1477

JAIL AND SHERIFF'S RESIDENCE.

[At Jamestown, N. D.]

Proposals will be received until May 16 by the Board of County Commissioners for erecting a jail and sheriff's residence, cell work in jail, boiler-house complete, except boilers, boiler and steam plant. ANDREW BLEWETT, County Auditor. 1477

ALTERATIONS TO COLLEGE.

[At New York, N. Y.]

Proposals will be received until May 2 by Alrick H. Man, Chairman Executive Committee of the college at the department of education, for repairs and alterations to Normal College buildings. 1477

OFFICERS' QUARTERS.

[At Plattsburg Barracks, N. Y.]

Office Constructing Q. M., Burlington, Vt. Sealed proposals will be received until April 25, 1904, for constructing, heating, plumbing, gaspiping and electric wiring of two double sets officers' quarters, constructing, gaspiping and electric wiring of one quartermaster's storehouse and construction of one quartermaster's storehouse and one quartermaster's workshop at Plattsburg Barracks, N. Y. Information furnished on application. CAPTAIN T. B. LAMOREUX, Q. M., Burlington, Vt. 1477

ADDITION TO HOSPITAL.

[At Fort Washington, Md.]

Office of Constructing Q. M., U. S. Army, Fort Washington, Md. Sealed proposals will be received at this office until April 25, 1904, for the construction of an addition and alterations to the hospital at Fort Washington, Md. Information regarding plans and specifications may be obtained at this office, at the office of the depot quartermaster, Baltimore, Md., and at the office of the depot quartermaster, Philadelphia, Pa. F. L. DENGLER, constructing Q. M., U. S. A. 1477

BOAT SHOP.

[At Bremerton, Wash.]

Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, until April 23, 1904, for constructing a three-story brick building about 308 by 64 feet at the Puget Sound Navy Yard, Bremerton, Wash. MORDECAI T. ENDCOTT, Chief of Bureau. 1477

BUILDING.

[At Charleston, S. C.]

Sealed proposals will be received at the Bureau of Yards and Docks, Navy Department, Washington, until April 23, 1904, for constructing a two-story brick and steel fireproof building with one-story wing and brick chimney at the navy yard, Charleston, S. C. Plans and specifications will be furnished by the commandant of the navy yard named upon deposit of \$15 as security for their return. MORDECAI T. ENDCOTT, Chief of Bureau. 1477

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SECTION 1. No Member should enter into
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SECTION 2. A Member having any ownership
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SECTION 3. No Member should be a party to
a building contract except as "owner."

SECTION 4. No Member should guarantee an
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SECTION 5. It is unprofessional to offer draw-
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without adequate pecuniary compensation.

SECTION 6. It is unprofessional to advertise in
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SECTION 7. It is unprofessional to make altera-
tions of a building designed by another archi-
tect, within ten years of its completion,
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SECTION 8. It is unprofessional to attempt
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a professional journal.

SECTION 10. It is unprofessional to furnish de-
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public work, unless for proper compensation,
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is employed to draw up the "conditions" and
assist in the award.

SECTION 11. No Member should submit draw-
ings except as an original contributor in any
duly instituted competition, or attempt to
secure any work for which such a competition
remains undecided.

SECTION 12. The American Institute of Archi-
tects' "schedule of charges" represents mini-
mum rates for full, faithful and competent
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charge higher rates whenever the demand for
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SECTION 13. No Member shall compete in
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less than another, in order to secure the work.

SECTION 14. It is unprofessional to enter into
competition with or to consult with an archi-
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SECTION 15. The assumption of the title of
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bearer has the professional knowledge and
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SECTION 16. A Member should so conduct his
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