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THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. XXXI.

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FEBRUARY 21, 1891.



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THE Fifth Convention of the National Association of Master-Builders, which was held in New York last week, appears to have been unusually pleasant and successful. The most important business of the first day was the adoption, with slight amendment, of the report of the Committee on Arbitration, which advocated the settlement by referees of disputes between employers and their men. The report did not offer any very definite recommendations as to the rules under which the referee should act, but it is of considerable importance, both to employers and men, to know that so powerful an association will incline to support the party which shows the most willingness to submit its claims to a fair referee. On the second day, beside the reading of the Secretary's report, some important resolutions were offered. Mr. McGilvray, of Denver, proposed that the various trades represented in the Convention should "demand such proportion of apprentices to the number of men employed as would insure the perpetuation of such trades without large and unnecessary drafts upon foreign labor"; Mr. Richard Deeves, of New York, offered, as an amendment to the "uniform contract" adopted by the Association, that "The contractor shall be responsible and shall hold the owner harmless for all accidents, damages, and violations of laws through carelessness or neglect on his part"; and Mr. Richard Smith, of Omaha, offered a resolution against convict-labor. All these resolutions were referred to appropriate committees, and will, we suppose, be heard from again next year. On the third day, the report of the Committee on Uniform Contracts was read, expressing much satisfaction with its form, and urging builders to insist upon its use; and a resolution was offered, by Mr. Gorsline, of Rochester, strongly endorsing the application of the architects of New York, and other States, for legislation to compel the examination and licensing of architects, and urging all local associations of builders to support the architects of their own State in any attempts to secure, by legislation, "a more correct architectural practice"; which was referred to the Committee on Legislation. The proceedings ended with a dinner at the Lenox Lyceum.

TO our mind, the most important feature of the convention was the offer, by so experienced and clear-headed a builder as Mr. Richard Deeves, of a resolution to amend the uniform contract by a clause, providing that the contractor

"shall be responsible and shall hold the owner harmless for all accidents, damages and violations of laws through carelessness or neglect on his part." Notwithstanding the complacency with which the Committee on Uniform Contracts spoke of its work, and the positiveness with which it asserted that no "material improvement has been suggested by either architect or builder or lawyer," we think it may be reasonably maintained that a building agreement which leaves it uncertain whether the builder or the owner assumes the responsibility for carelessness or violation of law on the part of either, and which needs an amendment like that of Mr. Deeves to clear up this somewhat important point, is not yet one which an architect can conscientiously advise his client to sign. We are informed that the discussion which followed the reading of the report of the Committee on Uniform Contracts "consisted in part of an arraignment of the legal profession, and the tendency of courts and judges to reverse one another's decisions." We do not profess an overwhelming affection for lawyers, but it is due to the best of them to say that they can express their meaning, when they try, with great precision, and like to have other people do the same; and that the principal support of the profession is derived from the conflicting interpretations which honest people, with not very lucid minds, put upon agreements drawn up by other honest people, who might have had a clear idea of what they intended to say, but did not have the faculty of saying it so that other persons could make no mistake about it. If the builders have found the decisions of courts conflicting, it may be confidently asserted that this is because not even the judges could find out what the builders meant by the agreements they entered into; and, instead of berating judges and juries, we should think that the Committee on Uniform Contracts would have been reminded to look to its own form, and see that it contained no clause in regard to the meaning or force of which there could possibly be a mistake. As, after all we have said in criticism of it, we learn that "no material improvement has been suggested," we will not exhaust ourselves in fresh assaults, but will simply say that as soon as the Committee's contract contains no clause in regard to which there can be two honest, but conflicting opinions, and none which cannot honestly be interpreted to mean what its authors did not intend it to mean, those who use it need have no more fear of lawyers or courts; but until it is brought to this condition, the Committee which has it in charge should not consider its duties completed. None of us, probably, would differ with the Committee as to the wisdom of its intentions with regard to any point of the contract, unless, perhaps, that providing for referees in case of dispute; but many of us can see places in which its intention is so obscurely expressed that misunderstandings are sure to occur, and others in which its words, strictly and legally interpreted, mean a great deal more than it intended; and we cannot be blamed if we prefer to express the same ideas in language which seems to us more explicit, and less liable to misinterpretation. Mr. Deeves's proposed amendment, for example, although intended to clear up a serious obscurity in the present contract, is itself far from being clear. It says that "The contractor shall be responsible and shall hold the owner harmless for all accidents, damages and violations of laws through carelessness or neglect on his part." Who, we must inquire, does the last "his" refer to — the contractor or the owner? There is absolutely nothing in the context to show which it belongs to, and, although common-sense would suggest that the contractor only assumed responsibility for his own neglect, there might easily be some indication, the force of which would have to be weighed by a judge and jury and at least two lawyers, to show that "his" referred to the owner. Indeed, many agreements read in unmistakable language that the contractor shall see that the building laws are complied with, notwithstanding any ignorance of them, or carelessness about, or neglect of them, on the owner's part. It would often be easy, in a given case, to bring evidence that this was the understanding in a contract with Mr. Deeves's amendment; and the last "his" would then clearly refer to the owner so far as violations of law were concerned, and, by inference, would also refer to him in regard to "accidents" and "damages," and, if a serious accident should occur to a workman in the building, all these questions, which might be, and should be, silenced at the beginning by a more clear and unmistakable wording, would become of great importance. Again,

does the contractor, by Mr. Deeves's amendment, assume responsibility for all accidents, or only for all accidents through carelessness or neglect on his own, (or some one else's) part? Grammatically, there is nothing to connect "accidents" with the modifying expression "through carelessness or neglect on his part," which, as the sentence stands, refers to "violations of laws," and nothing else. Here again, although builders would probably think that the proper interpretation was that the contractor was made responsible only for accidents arising from his own carelessness or neglect, the owner would have just as much reason to suppose that the contractor intended to take from his shoulders all responsibility for accidents, from any cause whatever. He would, of course, wish to feel no anxiety about the protection of workmen or the public, and, knowing that the contractor carried an employer's liability insurance policy, and had full control of the building and ground, he would be likely to take for granted that this clause in the contract meant that his wishes were complied with, and, as the grammar would certainly confirm his view, there might be a heated contest in the courts, lasting for years, and putting thousands of dollars into the lawyer's pockets, between two perfectly honest and worthy men, simply because they had signed a paper so obscurely written that they had understood it differently. It is notorious that lawyers dislike building cases, and neither know, nor care to know, about building affairs, so that they are often less fitted to give advice about contracts than architects, who can see, in certain expressions, possible differences of interpretation, which would not occur to any except an expert in building affairs, and architects are, in consequence, all the more bound to dissuade their clients from signing anything in which they see a chance for a misunderstanding, whether it is prepared with official sanction or not.

SOME curious questions of law have been brought up by a recent case in France. A building was being erected at Lille, with the floors all covered with light vaults. The vaults had not been protected in any way, and the heavy autumn rains had washed out the mortar from the joints to a certain extent. The contractor, moreover, who had omitted the item of centring from his estimate, and wanted to economize, made a few centres do duty for the whole work, shifting them as soon as the mortar of the vaults was sufficiently hard to keep them up. Bonnet, a mason, was at work on the fifth floor, when the vault on which he stood gave way under him, and fell, carrying with it all the corresponding vaults below, and throwing the man, with the broken masonry into the cellar, where he was instantly killed. Suit for damages was brought against the contractor, whose name was Rouzé, by the father and mother of the victim, as well as by some near relations, living across the frontier, in Belgium. An expert was sent, in the usual French way, who determined the facts in the case. Rouzé defended himself on the ground that it was customary in that region to strike the centring of a vault five days after the vault was built, and that he had only followed the custom; but the Court held that custom was of no authority whatever in such a case; that a contractor was bound to use reasonable care and precaution, whether they were customary or not; and that the exposing of the vaults, without protection to the rain, was imprudent, and the striking of the centres in so short a time was objectionable in the present case, as the vaults were of a peculiarly light construction.

HENCE, the Court adjudged Rouzé to be responsible, on account of his neglect of proper precaution, for the death of Bonnet; but the claims of the representatives of the deceased were met with some novel considerations. The relations in Belgium, who claimed as heirs, were totally repulsed. The court held that, as the deceased had not been shown to have ever sent them money, and, indeed, barely earned enough to support himself, without anything to spare for other people, they were not deprived, by his death, of any income or support, and could not recover on that ground; while, as heirs, they could not succeed to any claim which the deceased did not have himself; and, as Bonnet was instantly killed by the accident, he could not, being dead, and therefore without standing in mundane courts, acquire a claim to damages for an occurrence which took place simultaneously with his death; and, in consequence, could not transmit such a claim to other people. In respect to the father and mother, the court held that, as the deceased never did anything for their support,

they suffered no material damage, and could not claim indemnity for any; but it held, further, that they were entitled to compensation for the moral damage which they endured, in the way of grief for their son's death; and Rouzé was condemned to pay them two hundred dollars, besides seeing that the amount of the life insurance policy, which he had taken out in Bonnet's name, for the benefit of the latter's parents, was properly paid over to them. For the benefit of the amateurs of legal hair-splitting, it may be well to add that the principle of cutting off the claim of the heirs for damages, in cases where the death of a relative by accident was instantaneous, has been controverted, but there is good precedent for the present decision.

WE are requested to announce that the Chicago Polytechnic Institute has established an Architectural Department, with both day and evening sessions, in which thorough courses are to be maintained. We are promised further details in regard to the courses, which will be of interest. There is a certain novelty in having architecture taught as a "department" in a school which also "furnishes instruction in cooking, millinery and dressmaking," but there is, perhaps, no reason why all these arts should not flourish side by side.

A CURIOUS observation in electricity has just been communicated to the French Academy of Sciences by M. Edouard Branly. As reported in *Le Génie Civil*, M. Branly's experiments show that if a somewhat resistant conductor is interposed in an electric circuit, the resistance is found to be very greatly affected by different electrical influences, particularly by the discharges of electricity of high tension in the vicinity of the conductor. To show this, a slip of ground-glass, or ebonite, is covered with a thin layer of copper-bronze powder, which is polished with a burnisher. If the slip is of the size commonly used for mounting objects for the microscope, about three inches long, and something less than an inch wide, the resistance may be several millions of ohms under ordinary circumstances; but if sparks are drawn in the neighborhood from a coil, or a friction electrical machine, the resistance of the circuit suddenly diminishes, in some cases to less than a thousand or even to one hundred ohms. In order to conduct the current to the bronze powder, brass springs are arranged over each end of the slip, which can be applied to the surface, or withdrawn, at pleasure. M. Branly has also employed, instead of the bronze slips, glass tubes filled with filings of metals, either alone, or mixed with non-conducting liquids. In either case, the resistance is so great that only a feeble current can pass through; but a few sparks, drawn near by, reduce the resistance to a small fraction, sometimes less than a thousandth part of its normal amount; and, more singular still, the increased conducting capacity is not lost immediately upon the cessation of the electrical disturbance shown by the sparks, but continues, often for twenty-four hours afterward. The greatest effect is produced by sparks near the resisting body, but an influence has been observed from discharges nearly seventy feet away.

WE mentioned, not long ago, that MM. Fremy and Verneuil had been experimenting upon the artificial formation of rubies and sapphires, and had been perfectly successful in making small crystals. It seems now, from a paper read by them before the Academy of Sciences, that, although their rubies are not yet very large, they are made in large quantities, each of their present operations, which are carried on with crucibles holding several quarts of material, producing seven pounds of rubies, and often more. It is hardly necessary to point out that from the time that rubies are sold by the pound they will cease to be precious stones, but the people who have money invested in such property may take a little comfort on the thought that the artificial stones are as yet too small to be of much use in jewelry, although they have been cut in rose style, and are quite large enough to be employed for jewellery watches. It is curious that in the artificial stones, as in the natural ones, the limit between the ruby and the sapphire seems to be quite indeterminate. Natural stones are sometimes found of a purplish color, or even red on one side and blue on the other, and in the Fremy-Verneuil crucible the same phenomenon is often seen, the difference in color being perhaps due to the different state of oxidation of the chromium in the mass.

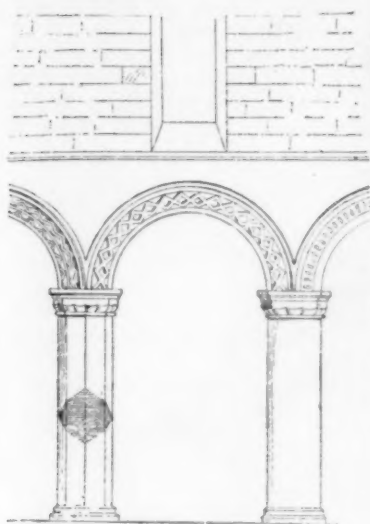
ENGLISH ARCHITECTURE.¹—I.

Fig. 1. Arcade from Ely Cathedral.

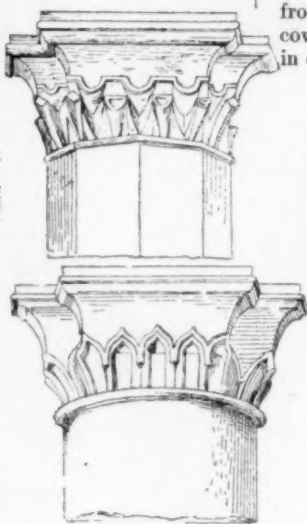


Fig. 2. Capitals from Ely Cathedral.

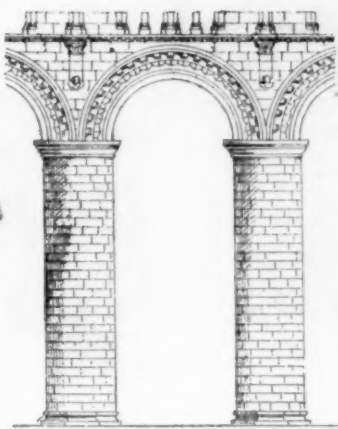


Fig. 3. Arcade from the Nave of Gloucester Cathedral.



Fig. 4. Pillar from the Transept of Westminster Abbey.

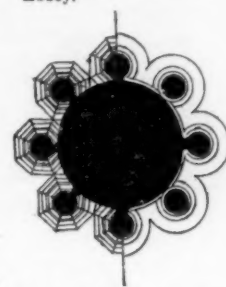


Fig. 5. Pillar from the Nave of Westminster Abbey.

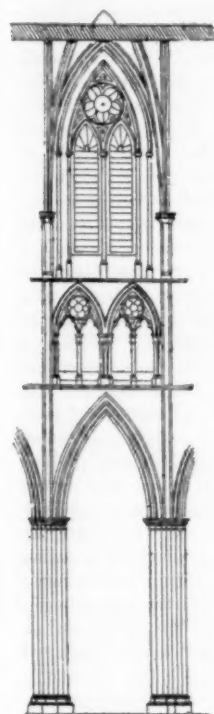


Fig. 6. Pillars from the Side-aisles of Westminster Abbey.

NOTWITHSTANDING the numerous remains of Roman constructions in England, and even of monuments still older than these, the history of English architecture may be said to begin with the conquest of the country by the Normans. The structures belonging to earlier periods—the round towers of Ireland and Scotland, the Druidical circles, and the Roman *thermæ*—have made no impression upon the architecture of Great Britain from the Middle Ages down to our time. The past of England antedating 1066 touches us as little as does the history of the Pharaohs of Egypt, but the effects of the Norman conquest are felt still in our language, our social institutions and our political system. Even to-day, England is essentially a conquered country: this accounts for the existence of our social castes, our privileged aristocracy, our agrarian laws. The history of England is throughout but the history of the stolid struggle between the conquerors and the conquered, in which the latter are little by little recovering the ground lost at the battle of Hastings. The literary language, formerly the pure French of the Norman court, was ere long altered into a half-French, half-Saxon jargon, in which the conqueror's grip betrays

itself in the form of words relating to things affecting him

and objects of luxury are of French origin, while words relating to menial employments are derived from the Saxon. The young of the cow served on the table is called veal, in conformity with the language of the

Norman proprietor, but the same animal running about in the fields is styled a calf (*kalb* in German), according to the speech of the Anglo-Saxon herdsman. The same cause still continues to exert a modifying influence on the English language; and herein is found the explanation of the fact that, with the growth of the democracy during the last fifty years, the English tongue has become much more Anglo-Saxon than it was formerly. So significant is this fact that I feel justified in considering every subject of national interest,

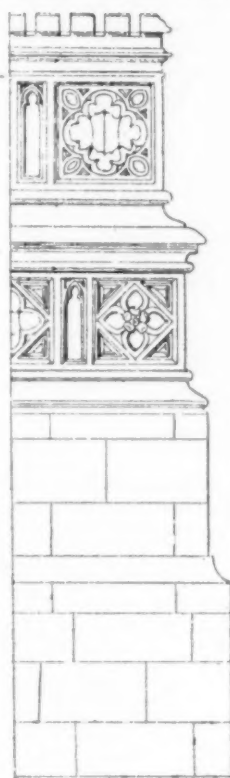


Fig. 8. Henry VII's Chapel.

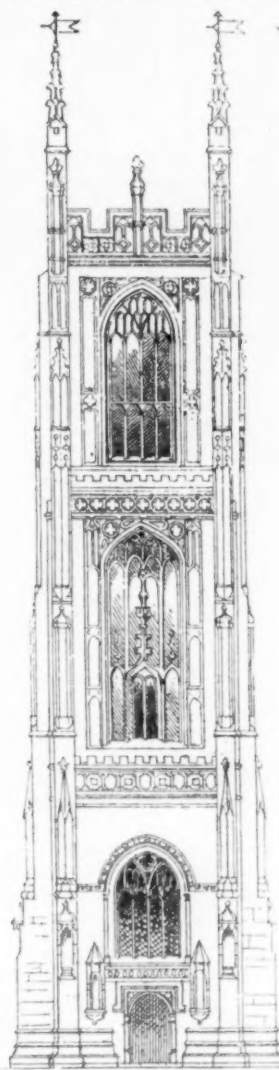


Fig. 9. All Saints' Church, Derby.



Fig. 7. Castle of Carnarvon.

individually. Legal expressions, terms applicable to cookery

¹ From the French of Lawrence Harvey, in Planat's "Encyclopédie de l'Architecture et de la Construction."

architecture among others, from the standpoint of the "Norman-Saxon Struggle."

For a long time the architecture of the conquered country, England, and the architecture of the conquerors, the Normans,

were one and the same thing. Into this domain the Saxon had no element to bring; his sole influence therein was that which his incapacity as a workman exercised over his masters. It was owing to the incompetency of the Saxon laborer that the

it seems to me, has not been sufficiently appreciated by English



Fig. 10. Edington Church.

Norman was obliged to be content to cover his churches in England with wooden ceilings, while in Normandy the most insignificant village church was embellished with stone vaults. For edifices of exceptional importance, he made use of vaults

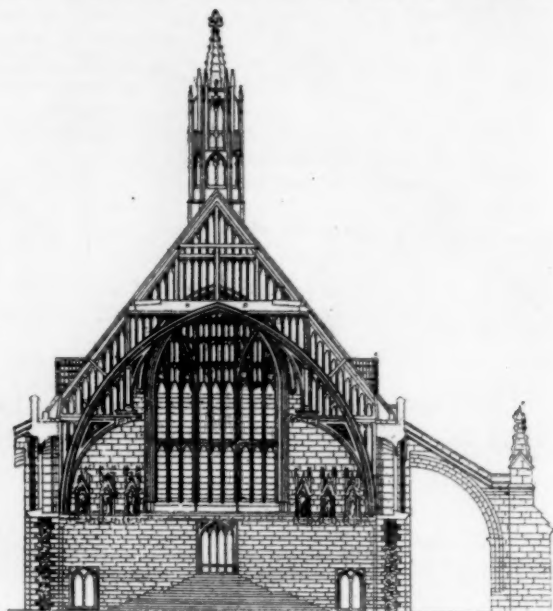


Fig. 11. Section of Westminster Hall.

COMPARATIVE TABLE OF THE GOTHIC STYLE IN FRANCE AND ENGLAND.

R6manesque.	996, Robert the Pious.	950				
	1033, Henry I.	1000				
Transition.	1060, Phillip I.	1050				
	1108, Louis VI. 1137, Louis VII.	1100				
Primary Gothic.	1180, Phillip II.	1150				
	1223, Louis VIII. 1229, Louis IX.	1200				
Secondary Gothic.	1279, Phillip III. 1286, Phillip IV.	1250				
	1316, Phillip V. 1322, Charles IV. 1328, Phillip VI.	1300				
Flamboyant Gothic.	1350, John II. 1364, Charles V. 1380, Charles VI.	1350				
	1422, Charles VII.	1400				
	1461, Louis XI. 1485, Charles VIII. 1498, Louis XII.	1450				
	1515, Francis I, 1547.	1500				
		1550				

authors. In the old Germanic Empire, from the banks of the Elbe to the borders of the Po, the arches of Romanesque structures are supported on fragments of walls, that is, on piers which are either rectangular or made up of rectangular elements. Later on, colonnettes were introduced to fill in the re-entrant angles and to strengthen the faces of the Romanesque pillar, without changing its character of a rectangular pier. In England, the arches of the Norman edifices are borne on squat columns or circular pillars (Figures 1, 2, 3). It follows that in the later developments of English architecture the pillar is evolved from the circular pillar (Figures 4, 5, 6). This is not a rule without exceptions,—far from it; but in my opinion it is characteristic of the spirit of our Gothic architecture. In the Gothic pillar, derived from the Romanesque rectangular pillar, there is a close connection between each of its elements and each element of

even in England, but this was accomplished only by bringing over squads of artisans from France.

English writers divide English architecture, so-called, according to the accompanying table, in which the periods of Medieval architecture in England and France are presented side by side.

The Norman style is simply that which in France is termed the Romanesque, and

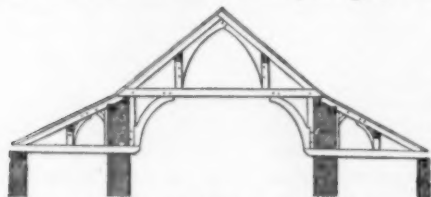


Fig. 12. North Walsham, Norfolk.

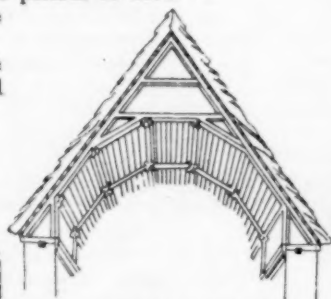
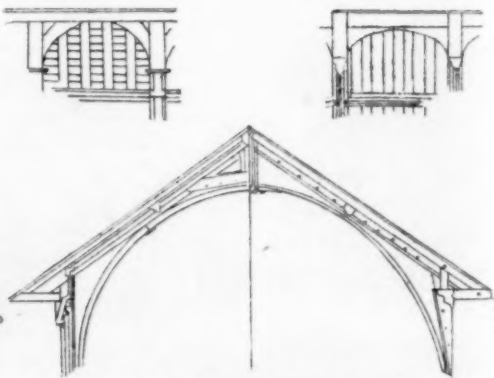


Fig. 13. Wimbotsham, Norfolk.



Figs. 14 and 15. Fulham, Norfolk; Starston, Norfolk.

in which only semicircular arches are employed; but this style offers a peculiarity in England the importance of which, the vaulting which it supports; but in the English Gothic pillar, derived from the round pillar, no such relationship exists.

For example, the colonnettes adorning the pillars in Westminster Abbey *evidently* fill no constructive rôle. Is this a defect? For my part, I think that, owing to their illogical formation, the pillars of Westminster Abbey divert the mind from all ideas of force and weight and give the impression of trees shooting up into the air and spreading their branches above our heads.



Fig. 16. Capel St. Mary, Suffolk.

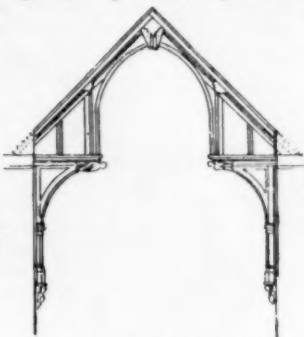


Fig. 17. Trunch, Norfolk.

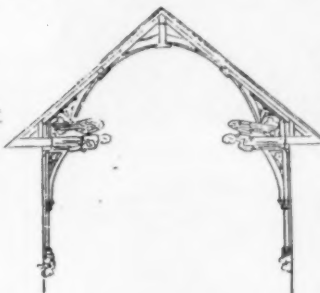


Fig. 18. Wymondham, Norfolk.

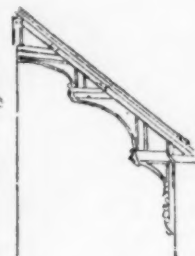


Fig. 19. Knappton, Norfolk.

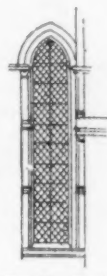


Fig. 20. Canterbury.

Another element of the Norman architecture in England, which has left its impress on all later developments of the style, is the battlement. In a conquered country it was necessary for the conqueror to protect himself by strongholds (Figure 7); the battlement, the distinctive feature of the master's dwelling,

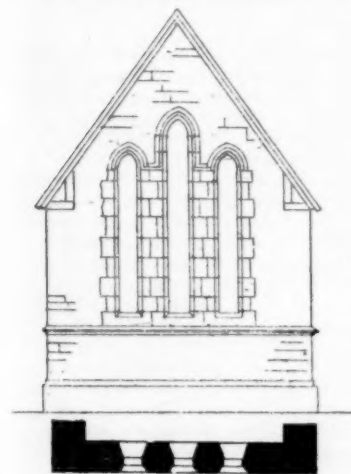


Fig. 21. Wappenburg Church.

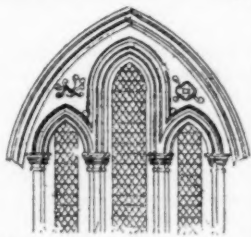


Fig. 22. Salisbury Cathedral.

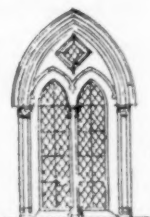


Fig. 23. Painted Chamber, Westminster.

at length came to be considered an indispensable crowning for the wall. If we ignore its military origin, the battlement is moreover one of the most useful ornaments; it is like the fringe of a hanging, a fragmentary continuation of the surface which it terminates. As the Gothic style developed in England this indented parapet became more and more a decorative element, and in the Tudor style it appears everywhere, even in the most insignificant portions of the structure. Its original purpose is so far forgotten that we find it employed to

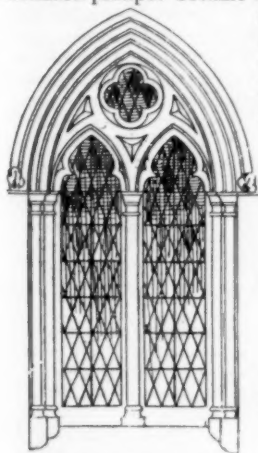


Fig. 24. Ely Cathedral.



Fig. 25. Merton College.

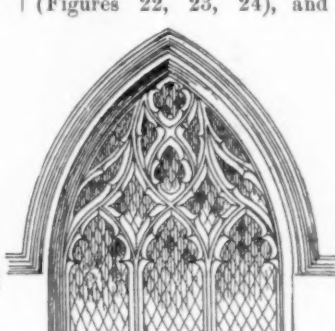


Fig. 26. Oxford Cathedral.

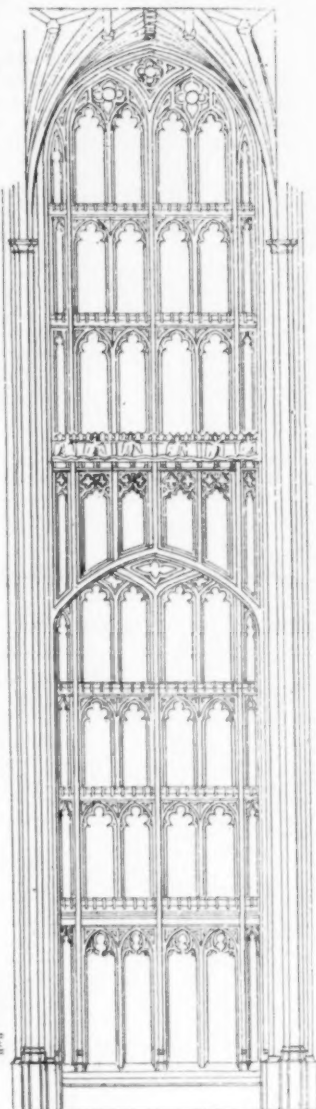


Fig. 27. St. George's Chapel, Windsor.

decorate the basement of the walls as in Henry VII's chapel at Westminster (Figure 8). Notice also its use in All Saints' Church at Derby (Figure 9), and in the church at Edington (Figure 10).

The difficulties encountered in the construction of vaults in England led to the substitution of wooden roofs, of which the famous Westminster Hall (Figure 11) furnishes the most remarkable example, and the historic development of which can be traced in Figures 12, 13, 14, 15, 16, 17, 18, 19.

The use of wooden roofing called for a radical change in the

plan of the churches. It was necessary to abandon the circular choirs of Normandy, which are so well adapted to vaulting, but which produce hideous complications when covered with exposed timber-work. It is thus that I account for the very general adoption of square choirs (Figure 10) in English churches. This explanation is not acceptable to my fellow-countrymen; they prefer to derive the square choir of English churches from a tradition of the Christian church of the first two centuries of our era—a tradition which, if their views are correct, must have made its way directly from Rome to England without leaving any traces elsewhere. My readers can judge of the part which the national *amour-propre* plays in this very natural interpretation.

Whatever may have been its origin, when once the square choir had become an established fact it had to be decorated. And so the immense windows, which form one of the characteristic features of English architecture, were introduced into the rear walls. In the Transition style, or Early English, the windows are pointed at the top, but not mullioned (Figure 20), while the wall at the back of the choir is distinguished by groups of windows (Figure 21). These groups gave rise later to colonnettes (Figures 22, 23, 24), and

finally to the mullions (Figures 25, 26) of the Decorated style. In the Tudor style, the mullioned windows assumed remarkable proportions, but, instead of the flowing tracery of the French Flamboyant style, the English adopted a lattice-work

of mullions in rigid lines (hence arose the term Perpendicular style), as in St. George's chapel at Windsor (Figure 27). Lastly, while elliptical arches were introduced into Continental architecture and led directly to the abandonment of ogival

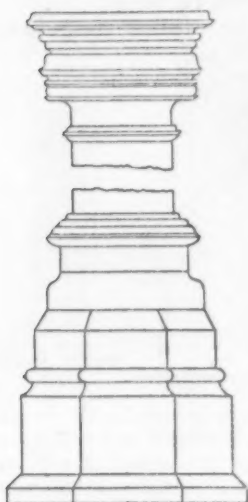


Fig. 29. Tintern Abbey.

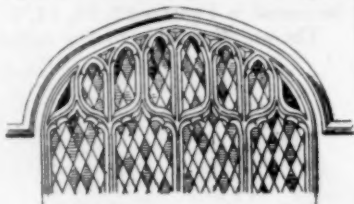


Fig. 28. Aylsham Church.



Fig. 30. Capital from Westminster.

forms, the English employed the depressed pointed arch, on a parabolic curve (Figure 28).

The details of the English Gothic offer some peculiar features. Such, for example, is the circular capital (Figure 29) in the form of a moulded swelling of the column, which, moreover, I by no means admire. This capital fails wholly in its functions as an intermediary between the circular shaft of the column and the polygonal arris which it supports. In the Tudor style, the corona of the capital is polygonal and is much more satisfactory. In France, the ancient traditions of the Corinthian capital are revealed in the foliage with which the Gothic capitals are decorated; the leaves are vertical and appear to bear the corona. In England, these leaves are merely crowns of foliage and do not support the corona (Figures 30, 31).

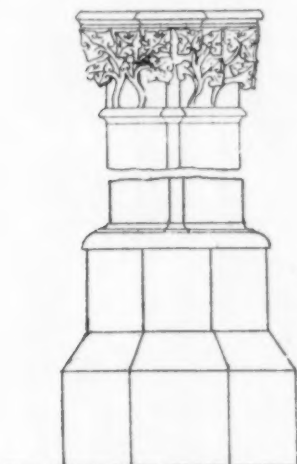


Fig. 31. Howden Church.

[To be continued.]

A RUN THROUGH SPAIN.¹—VI.

A TOLEDO BLADE.



TOLEDO.

SPAIN, like most European countries, makes sure that her means of transit shall never under any circumstances lead directly to any of her towns. The intermediate cabby must have his job, and the visiting traveller must pay the cabby. Cabby is generally a good-

¹Continued from No. 789, page 88.

natured swearing devil, who cracks his long whip over a half-dozen donkeys, shouts out a succession of rippling r-r-r-rs, which at least tears him away from the scores of beggars who are anxious to present their lack of legs, eyes, arms, and other parts of their worthless bodies to the visitor, and to assure him that they are half-clothed and thoroughly insect sodden. And thus the donkeys, lank little



A STREET IN TOLEDO

animals covered with tinkling bells, are started on a dead run, which, before many minutes, brings one to the deep-flowing "brunette bosom of the historical stream" which nearly surrounds Toledo.

Glorious old Toledo! Dream of the mediæval ages, and crown of Spain! Like Rome, built upon seven hills! Never was dream of youth better fulfilled than in the first sight of this imperial old city.

The lumbering stage winds along a barren, rocky road, just as the moon is rising above the towering hills which surrounds us. So rocky and barren of shrubbery does it look, that the night air seems chilly, yet it is warm and fair overhead. Suddenly an abrupt turn in the road appears, and our driver smiles as we all draw a quick breath, and utter exclamations of admiration. The driver evidently joins

us in heart, although he has traversed this lonely road for years. He simply says "Toledo."



Aye, Toledo surely enough, in all her glory of battlemented walls, towers and rugged hills! The Tagus, too, dark and gloomy, boiling through the vent in the mountains and surrounding the city as with a broken girdle, and Alcantara, magnificent "bridge of the bridge" with its massive and magnificent arch well known the world over.

Here are all of these in one panorama, as we roll over the bridge and start to ascend the roadway that winds around the walls, and gradually mounts higher and higher to the ancient gateways. We pass beneath its horseshoe-arch and change the freedom of the rugged open land for the tor-

tuous, narrow, crooked little streets where only a single team may navigate, and that with great difficulty.

Dear old Hermanas Figueroa, little old maids of Toledo who welcomed us, we remember you kindly and salute you even though thousands of miles separate us! No place ever seemed so welcome as when we entered your little *patio* and took up our abode with you on the narrow Santa Isabel.

A little arched doorway has given us entrance to a paved hall just large enough to admit of a horse and carriage, should one ever come up the street and desire to be housed over night. On the left is a heavy oak door driven full of old nails, and upon our knock, this door has suddenly opened of itself, and disclosed a beautiful little *patio* paved with marble, and full of tubs containing orange and lemon trees, on which the fruit is just beginning to turn towards a golden yellow. I have said that the door opened of itself, but on looking

up to the little balcony above, there stands a little old woman beaming with a smile of welcome, and she even now holds in her hand the string which had pulled the door-latch from above and let us in.

So we pass up a staircase to the balcony, are received by the two sisters Figueroa with a welcome that will ever be remembered for its kindness, and are soon ushered into our little rooms, neat as a pin, and clean to whiteness. We are in the centre of Spain, in the centre of Toledo, in the very centre of this little *fonda*, and war might be proclaimed in the streets and we should never know it, so secure are the arrangements of the house. But Toledo is perfectly quiet, there is no need of its guard, its walls or its old Alcazar, and a sense of dreamy security pervades the whole town, which soon lulls us into a peaceful slumber which is only broken by the bright sun shining down into the patio, and telling us that another day has begun.

We stroll out towards the Cathedral hard by, and although it is November the sun is so hot that we are glad to reach the old gateway leading down a few steps into the cloisters, and then into the Cathedral. A host of beggars line the walk outside, where they sit all day, hoping to reap a small stipend from the worshippers; whether they ever worship within the walls themselves it is hard to tell, at any rate they cling to the gateway outside like barnacles to the rocks, and may be found there at any time during the day, whining out their tales of woe, which in fact may be better described by the word laziness.

"Perdone usted per Dios, Hermano?"

"Oh yes, brother, we will excuse you with pleasure"; this is our thought as we hurry past, followed by this vermin-covered crowd of humanity.

How quiet and cool is the shade of the cloister! What a glorious mass of subdued lights falls through the windows, of numberless colors, their rays trembling from the lofty roof of far-distant nave and a length of 404 feet. Like a veritable kaleidoscope they change as we walk around, and fall in ever-varying combinations to the paved floor beneath our feet.

Ah, we say, how tremendous, how vast, how long, how wide, how high, how impressive!

We shall visit it again towards sunset, then will the slanting rays make emeralds and diamonds and rubies to shine forth from the darkness of the interior, and form a scene of sombre grandeur such as only fairy tales can describe.

For once we are glad of an escort. He is a youth of perhaps sixteen years, and begs to show us around, saying that he is a student at the college. Intelligent and refined, it is a pleasure to be guided by his knowledge of the grand old pile.

"But where have you learned English," we ask?

"I have picked it up, Señor," he replied.

"Picked it up," we thought, well, that is saying much certainly, for with all our endeavors to learn your beautiful language, we have simply a few words at our disposal, have asked for milk and obtained rum, besides asking for many things without getting anything.

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ures, after the French spirit, of choirs and stalls filled with monks of all kind — slim monks, fat monks, sinister Jesuitical monks, who look as if they would sell your life for a peseta. Well, that is just what we saw. One priest fatter and more disgusting than the rest, occupied a higher stall, and mumbled away at intervals, while the remainder took up the refrain, mumbling on as loud as they could. Being in Latin we could not understand the ritual at all, and Heaven help them, if the souls of their fellows depend upon the efforts of these Fathers, for a more disgusting, sensual, disreputable looking

gang of priests never sat in stalls, or offered up so-called prayers. Many of them whispered their comments on our entrance, others laughed behind their hands, and all stared through the whole of the service, without a serious thought or a devout prayer. "Enough of that," we said to our youth as we came out. He smiled, probably being also too well educated to be hoodwinked by such a lot of nonsense.

Like nearly all Spanish cathedrals, the old church has suffered from time to time from the hands of vandals. Street classes it with the grandest cathedrals of the world, second to none in France even, and a vigorous example of thirteenth-century architecture. I cannot, however, feel that this applies to the church in detail, for much of it is after the style of Holland, representing tournaments, centaurs and other figures and scenes hardly appropriate for a Christian church. If the *coro* were taken out of the church bodily, and formed into a chapel, I doubt whether there is a richer piece of work in existence outside of the temples of India, for it is a museum of sculpture in itself. The lower row of stalls represent the campaigns of Ferdinand and Isabella, while the higher row is like an artistic embroidered border, so fine is the carving. Still above these, and in alabaster, is the genealogy of Christ, the dividing pillars resting on exquisitely carved cherubs, calling strongly to mind the work of Luca della Robbia.

There are several idols of the people in this grand old cathedral, and one of them may be noted as giving one quite a surprise.

"Surely, you must see the Maestro," said our little guide!

"The Maestro, Señor?" we said. "Certainly, by all means introduce the Maestro!" He smiled, and probably understood a little of the sarcasm of the remark.

"Ah, but she is beautiful," he said.

"All the better," we replied, "because we are in quest of beautiful things"; so we entered the sacristy, a little irregular room with vaulted ceiling and containing this very wonderful object of veneration.

Lo, and behold, it was nothing but a black image of wood, as hideous as possible, and seated upon a throne of silver, which made the black face all the more marked.

"Why, she is a negress,"

I said.

The boy looked with questioning gaze, not understanding the word at all.

"Si Señor," he replied, drooping his head, but said no more.

Superstitious reverence!

Every feast-day is this doll

paraded through the streets

and her clothes completely

changed. On her head is

a crown, and on her arms

are bracelets of precious

gems and gold, and there

is a wardrobe that must rival the Queen of Sheba's, so rich is it in

gold and silver and jewels.

A pearl "is a thing of great price," yet here are 457 ounces of

them: gold is thought to be an expensive luxury, yet here it is made

into thread and 300 ounces of it used in these garments: diamonds and

emeralds are not considered as common stones, yet here are eight

ounces of them, besides 150 ounces of enamelled gold pendants, and

this is not counting the thousands of rings, necklaces, girdles and

charms that make up the jewel-box of this black beauty.

"And why all this magnificence?" we asked.

"I do not know, Señor, but so far back as 715 it was rescued from

the sacking of the church by the Infidels, and ever since it has been

a sainted object of worship, and the thing most thought of by all the



Puente del Alcántara
TOLEDO



Puerta del Sol
TOLEDO

As we stand for a moment to enjoy the grandeur of this old church a low mumbling noise is heard, and presently a priest in long robes passes swiftly down and opens a huge door at the end of the aisle, and under the tower. Instantly the mumbling becomes very plain, and turning to our youth he explains that it is the service of the Muzarabic chapel, a most interesting ceremonial since it was instituted in 1512 as a hint to Rome that Spain had not forgotten her former spiritual independence, and would ever resist the real dominion of the foreign pontiff.

We entered, but were disappointed. You have often seen pict-



Puente St. Martin

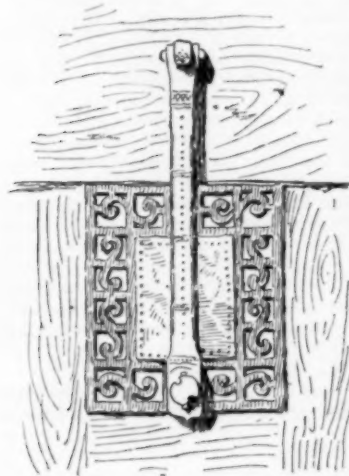
people." After all 'tis delightful to see so much comfort derived from such a harmless object.

Another no less venerable idol is that of San Francisco, by Alonzo Cano. We could not see the mystical object as it was guarded by six great doors with as many big keys, but we knew well the features of the old monk, and later carried away his image which stands in a nook hard by, and looks down, even now, upon us with his cadaverous and saintly aspect. He may have been an extremely good saint, but he was not handsome, to say the least, and evidently suffered a lifetime either from the sins of his fold, dyspepsia, or some kindred ill.

As we turned to look at the magnificent reading-desks and their great vellum volumes bound with iron clasps, a couple of women look through the huge metal gate, and without a word sink down on the steps and with uplifted gaze engage in prayer. One cannot help contrasting this scene against the Muzarabic service. Here is true piety we thought; an honest soul seeking help or consolation from a higher source than a score of dirty, lazy and disreputable fathers, whose faces are veritable Hogarths, full of cunning and deceit. We hate to open the huge gates with their clanging hinges, and so turn in the opposite direction down an aisle and out the side door. Our little friend, however, follows us out to the door and as we slip into his hand a pesata, he takes off his cap, thanks us gratefully and pushes open the door for our exit. No beggar was he, but a perfect little gentleman. Thank Heaven we have flanked the beggars, and are soon marching down the little streets which can almost be spanned with the arms.

Toledo was evidently built for defence against the sun as well as against the enemy. The streets through which we walk are narrow and dark, wind around with the most inconceivable twists and turns—a perfect labyrinth, in which one must never be surprised if he finds himself oftentimes just where he started a quarter of an hour before. You go up one street but do not notice that you have been gradually

turning all the while, then you turn a corner, go to the right or to the left, but as for guessing where you will land, one might as well be in the ramifications of the Roman Catacombs. But at the same time you see the purpose of all this. The sun cannot often get into these streets, and, further, once get an enemy within its walls, and total annihilation seems easy. You start out again, and wind and climb, and think you are going towards the Cathedral. But lo, you bring up away out on the outskirts, and look down a hill into the dark Tagus. You say to yourself, "Now I will keep the points of the compass all straight, and I will start North"; but you end up in the



West. You point again towards the old Cathedral tower of which you catch a glimpse, and before you know it you are back to it, and have never noticed the deviations. But after all it is grand sport, almost equal to a hunt through the canals of beautiful Venice.

I could not help being struck with the artistic doorways all along the way. Huge and massive yet delicately panelled they seem incrustated oftentimes with huge nails and rosettes of simple design yet great effect, and I sketched a dozen or more in almost as many steps. On many were ancient knockers, whose age was not reckoned by tens of years but by scores, and later I was so fortunate as to secure a beautiful example from a little ruined monastery outside the walls. It is now on my front door in this great city, where the hum of life is as marked as was then the solitude, and I sometimes moralize on the change, and wonder whether it is not almost sacrilege. What tales of romance, love or tragedy it could tell, to be sure, if it could only speak out.

Being an architect I could not help moralizing a little about these old palaces and wondering about the history of their building. Constantly harassed by lack of workmen, material, plan, changes, strikes and the like. I thought how I would like to sit down under their shadows and interrogate some of them, and learn their history. Better to know the architect himself and to enter his atelier! Was this old palace estimated upon by a dozen contractors who each had a half-dozen sub-contractors to depend upon? Did the owner, the noble Señor, quibble over the size of the pantry or the lack of a dumb-waiter of sufficient size to enclose the largest-size platter, which must needs be used on Thanksgiving day? And did Señor Architect admit the smallness of the pantry, but insist that the addition of the new-fangled dumb-waiter would be an "extra"? And did Señor Client kick, so to speak? And were there any strikes during the construction, when the poor architect upon his daily visit found all his carpenters and masons and plasterers sitting around utterly stopping work because Señor Plumber had employed a non-union boy to hold his tools for him? And did the palace cost within a dollar or two of

the estimated price given by the Señor Architect? And oh, question of questions, did Señor Architect charge his full five per cent for his services upon moving-in day, and did he get it without any serious kicking from Señor Client?

All this would be most practical knowledge from the poor architect's lips and would be intensely interesting. And then following this up, how I would like to have seen the señoras, the señoritas and the little señoritas as the years passed by; to have watched the fiery lover who wooed the fair ones from between the iron-bound windows, and who sang his songs of love to the tinkle of his guitar, and at last married his fair one, and came himself to live beneath these walls. Or, possibly, the stern Señor objected and vowed to transfix him on sight with his trusty Toledo. At any rate just think what a web of romance one could weave if these old walls would only speak out. But they will not speak except through the musings of one's brain, and we must proceed.

We roamed around the picturesque streets and at last got to the west of the town where we espied a little church, Maria la Blanca, almost hidden by a profusion of palm and orange trees. Going up to the door a little old woman came out, and no doubt suspecting that a pesata would be forthcoming opened the door. A veritable little Moorish church with horseshoe arches and octagonal columns broke upon the view, with fine aisles and cedar-wood ceiling. It was indeed so beautiful we were about to take a photograph of it, when the little old woman put in a word that stopped the proceedings.

"No Señor," she said, "you must not photograph the church."

"But why Señorita," we said, hoping to flatter her by the title of young lady and at the same time getting a silver piece into view.

Verily a silver key opens most doors, but here it would not work at all, for she protested most decidedly, and covered up her little parched face that the sight of money might not tempt her. So we were obliged to be content with a sketch which the old lady allowed us to take, thinking no doubt that a sketch was far less dangerous than a photograph.

Every one has heard of the famous Toledo blades, and the many stories of their whip-cord tempering; how they can be bent double, and at the same time cut off the head of a recreant Moor at a blow. We had bought a couple of these blades at the government manufactory, but seeing some very beautiful examples of etched work in a little store under the walls we entered, and after duly admiring them picked out a piece here and there, a duelling rapier, an *espadador's* sword, some large daggers, as dangerous-looking weapons as they were handsome, and a half dozen other articles. "Quanto vale, Señor," we said.

"One hundred and sixty pesatas, Señor," he replied.

"Oh bosh," we said, "*es mucho*," calling to aid our smattering of Spanish.

"Non, Señor, *es mucho poco*!" (very little).

"Oh no," we replied with a shrug, "it is very high indeed," and we took off our hats and held them high in the air.

"Non, Señor, it is very low," and with a smile he measured with his hand quite near the floor.

"Ah well," we said, "we cannot have them, then," and departed with a hearty "good morning."

Ten minutes after, and at a distance of a quarter of a mile while sketching the famous San Juan de los Reyes with its long, huge chains hung on the wall, up ran a little girl and with much gesticulation managed to instil into our minds the fact that the bargained goods were ours, and that the Spaniard had decided to take the one hundred pesatas we had offered.

"Oh, no," we said, "here we are quite a distance away, and we cannot spend time to retrace our steps, and besides he refused to accept it." But seeing such a look of disappointment on the little one's face, I said, "All right, *chico*, we will be back presently and take them."

"Can I bend my swords double?" you ask.

Well, no, nor can most of them be bent thus, for the circular-bending sword is much of a myth, although they do show you swords very thin and pliable, unfit for use as a sword, but which may be bent so that their ends touch. But the sword of the present day is thicker and stronger.

So we took the swords and started for home again, as the sun was getting terribly hot and dangerous. One must not do too much during the day in Spain. Terribly hot at noonday, the sun works with destructive effect upon tired nature, and an hour's pleasure at midday may cost a week of careful nursing. How delicious was our little patio with the shade of its lemon trees below us; one sees at once the careful thoughtfulness of the Spanish architect who knows full well that the Spaniard loves to bask under his own vine and fig tree during the middle of the day, and put in his labor at morn and eve.

Starting out one beautiful morning through the honeycomb of streets we were bent on crossing the Bridge of San Martín, and walking around over the hills to the Bridge of Alcantara, but finding the view of the city and river so charming from the former bridge we sat down under its shade and enjoyed the panorama of countless objects new to our eyes. Down below are the washerwomen famous as artist's models; there are the old Moorish mills, picturesque in the extreme, with their huge wheels and ruined sluice-ways, silent and useless; and above are the huge arches of the bridge, gray and sombre, under which silently flows the romantic Tagus so well described by our guide-books as "made for the poet and artist."

How stern, solemn and striking is the lovely unused river! No

commerce ever made it a highway; its waters have reflected castles and dungeons instead of quays and warehouses; few cities have risen on its banks; it flows away solitary and useless, its waters without boats, its shores without life.

Even now its waters reflect castles and dungeons, for high above it the turn in the river discloses the Alcazar with its great patio of granite columns and heraldic ornamentation, its noble staircase and arabesque sculpture. Over against it, also, and guarding, as it were, the old Bridge of Alcantara is the ruin of the immense Castil de San Servando, once the home of chivalry, but now a deserted pile of brick, whose only beauty is in its noble outline. Think not that this pile has no story, for it is as full of romance as the fairy stories of childhood. Verily, nearly every building can engage your attention in this respect and interest your mind even though you be three-score years of age.

The present old Alcazar foundations date away back to the time of Wamba in 687, and could turn your blood by a tale of the old king's life; how he was poisoned and placed within his tomb having upon him the habiliments of a monk; how his spirit became so restless that even before his death he arose, frightened his attendants almost to death, and forever afterwards wore the cowl which once having been assumed must never be removed.

Again you see the two old towers by the river side. You say they do not look capable of romance, but could you have seen them when the Emperor Charlemagne visited them, have seen the beautiful Princess Saliana as she welcomed him, have known of the fire of passion that sprang up in his breast and the very strange reciprocal feeling that gradually dawned upon the maiden's heart. Could you have also seen enter upon the scene the gigantic Moorish king, also afflicted with similar love; then have seen the logical outcome—what! no romance? Ah, yes, romance enough to have dug a way through the earth, away from the city of Guadalajara, an adjacent town, that he might secretly and unbeknown to his rival, bask in the sunshine of the Princess's presence. Romance enough to have seen her refuse to see him after all his pains, and romance enough to have seen the out-growing duel in which Charlemagne cuts off the head of the Moor, and presents it as did one of old to the beloved Galeana, and carries her off in triumph.

Again, El Faller del Moro has its intensely interesting romance of the Moorish chief who invited the refractory chiefs of Toledo to a feast of reason, and wit, and emphasized the dessert by cutting off their heads.

Still again, he who would have more romance may descend to the little arched *alcoba* which has an inscription which tells the fate of the fair Florinda at her bath. But you must notice, also, that directly overhead is a huge tower, once occupied by the last king of the Goths, Roderick by name, and a little window in the tower bears upon the river below. Now, though King Roderick's name was not "peeping Tom" of English fame, he was animated by much the same curiosity, and transgressing all rules of common delicacy, he daily enjoyed the charms of the fair Florinda at her bath, until, given over to the evil passions of youth, he sought out the poor girl, and wrote his name upon the pages of history as a heartless libertine and a scoundrel. But more; the father of the fair girl, Count Julian, enraged at the perfidy of his king, allowed the Arabs to pass the boundaries of the city, and eventually betrayed his country and king in revenge for the loss of his daughter, an act which we can hardly blame after such shameful treatment.

But enough of the romance of this old city. One evening as we were sitting in our little patio and endeavoring to draw out the stories of ancient Toledo, we heard the melodious tones of a mandolin guitar outside, and rushing up to a room overlooking the street, we discovered a typical Spanish scene. There they were, two tall fellows with wide sombreros and red sashes, their legs encased in leather, and over their shoulders the voluminous folds of the *capa*.

Our little *chica* runs into the room, and with a pretty smile begins to dance the graceful Spanish fandango, keeping time to the music below, and so excited did we all become that, together with the dear old *Señoritas*, we jumped up and marked time for them as they glided around the room.

"Oh, *chica*," we exclaim at last "can you sing the song of the toreadors?"

"Si, Señor," she answered and going to the window she spoke several words to the men below.

"Play the *Tango las Toreras*," she exclaims.

Then with a pretty courtesy she commenced the stirring song.

*Señores ya llega el día
que Mazzantini y Frascuelo,
El Gordito y Lagartijo
daran di ser toreros.
y todos los toreritos
el arte ran a dijar,
Por que las nuevas toreras*

el quiebro a todos las dan, etc., which recounts in about thirty verses the glories of the fight and the courage of the two foremost toreadors, Mazzantini and Frascuelo. But no words can describe the grace of movement, or the curious little twists of the song as the little *chica* grows more and more excited.

Stamp, stamp, go the little feet as she emphasizes the song, and we all join in with the ending of the chorus "long life to the toreadors."

And so the evenings pass, we tramp during the day, sketch and

enjoy the beauties of this grand old city, and sleep the sleep of health. What a delicious country it is after all, and how often have we said since that time what a charming *fonda* we were in, and what delightful little old maids are the Hermanas Figueras. Bless their kind hearts!

Did we hate to leave such a place?

One need not ask, although the recollections seem like a dream; that huge old Bridge of Alcantara looms up in memory, and the dark Tagus flows along under it. The masses of town and wall are before our mind's eye, the little old maids greet us again as they did a year ago, and the experience has given us what can never be erased, a panorama of one of the most glorious of Spanish cities.

C. A. RICH.

[To be continued.]



PROGRESS OF THE WORLD'S FAIR.—WHAT THE ARCHITECTS WILL DO.—THE PAYMENT THAT WILL BE MADE TO THEM.—ASSIGNMENT OF BUILDINGS TO ARCHITECTS.—THE LADIES AND THEIR UNDERTAKINGS.—UNION LABOR.—THE "MOUNT CARMEL" AIR-SHIP.

AFTER having written so many uncomplimentary things about the slow movements of the Directory, it is at length a pleasure to be able to say that from an architect's standpoint the World's Fair is now making rapid and very satisfactory progress. The first meeting of the Board of Architects was in session when the last letter was sent from Chicago. The result of their labors was of the highest importance, as at length placing upon record some well-defined plan for the arrangement of the buildings, and especially, from an architectural point-of-view, as establishing and defining the exact duties and responsibilities of the architects.

Although it had been known for months exactly what buildings were to be located at Jackson Park, yet no studies of a sufficiently definite character had been prepared which would be of any great service, and the Board was obliged to commence at the very beginning, laying out buildings and determining their sizes together with the possibilities of annexes.

The subjoined sketch shows in a general way the proposed grouping of the buildings and the splendid possibilities of landscape architecture with Lake Michigan as a background.

As now decided upon, the Main Building extends along the shore of Lake Michigan between the large and small steamboat piers, covering



about 22½ acres or with annexes—if needed—9 acres more. Near at hand on the north, is located the United States Government Building, while upon an island in the Lagoon the Fisheries Building covering about 3 acres, has been placed. Still farther to the north, beyond this, is a tract of nearly 100 acres, allotted for such State buildings as the different governments may choose to erect. Facing the Lagoon is the Horticultural Building of 8½ acres and at the end of this same body of water are the three buildings devoted respectively to Electricity, Mining and Transportation exhibits.

Near this point is the railroad loop and station to which all of the 30 railroads are to be eventually connected. At the south are the Machinery, Agricultural and Stock buildings, making in all a total of 74 acres of buildings or with annexes, should they be required, of 36½ acres additional which would make 110½ acres in all. These figures are only actual ground surface and do not include the additional space that may be gained by galleries or under the roofs.

As one means of communication between the different parts of the grounds, numerous small steamers are expected to make the rounds of the Lagoons and Basin, stopping at the nearest points to all buildings.

The report of the architects relative to their duties is long but very explicit, stating exactly where their responsibilities begin and end. Paragraph Three, which contains the pith of the matter, states "We shall prepare one set of full and complete general working-drawings of each building intrusted to our professional care and of full details of all work of an artistic character connected therewith, also making such written descriptions as may be necessary to elucidate

fully our views as to the construction and treatment of said buildings. We are not, however, to make calculations of strength and stability or to furnish detail-drawings of structural design, except to the extent these may be in any case intimately connected with the general artistic or economic aspects of the design. The engineer's solutions of the problem relating to design are to be submitted to us and must in each case as far as their relation to the artistic value of the buildings are concerned meet the approval of the architects of the respective buildings before execution. In view of the fact that all problems of construction are to be solved by your own engineer, we are not to be held responsible for the structural stability of your buildings. But we are to give sufficient attention to the development and execution of our designs to assure ourselves and your committee that these designs are being carried out substantially in the spirit and on the lines contemplated by us."

For this work they are to receive "all expenses of every kind incurred in making the drawings, as also all travelling expenses," and in addition each architect is to be paid the sum of \$10,000. This sum to be distributed as follows: \$3,000, when preliminary sketches are accepted, \$6,000, when all the drawings are completed, and \$1,000 when the buildings are finished.

The general consensus of opinion seems to be that the method adopted of having general drawings made by the architects, and then constructional and detail work—except the artistic portions—by the Bureau of Construction, is neither the most satisfactory to the architects, nor the most economical for the Fair. But it was argued in the Directory that by paying regular commissions there would be an appearance of partiality towards those who had the largest buildings, while by paying each architect the same sum, this would be avoided; those who had the largest buildings would have the most glory, while those who had the smaller buildings assigned them, would have their wounded pride somewhat soothed by a proportionately larger profit. Moreover, the Bureau of Construction must have something to do and this was just the opportunity for them to save money for the Fair, and no argument seems to have been powerful enough to convince the Directors to the contrary.

Several of the consulting architects think very differently about it and intimate, that while the Bureau takes all responsibility off their hands, yet they cannot see that it is in any position to assume responsibility itself.

They say frankly, that in their judgment, such a Bureau cannot work as economically as an architect's office, since it is almost sure to become a haven of refuge for all sorts of incompetent draughtsmen. For so short a time, really good draughtsmen are not going to leave good permanent positions, while any one with a sufficiently strong letter from members of the Directory or National Commission must, of course, be given a situation whether competent or not; to keep such workmen in the traces and get the desired results, at a minimum expense, will be almost an impossibility. Moreover, in such a system all responsibility will be so shifted and distributed, that no one can be held strictly accountable, and this may mean a great deal when extras or changes may be necessitated by each draughtsman's error.

The Board of Architects is to meet again the 25th of this month, when it is expected that the preliminary studies will have been completed, and they will then be submitted. But to whom? The death of Mr. Root (so fully spoken of in your issue of January 24th) will probably now be more than ever felt, and while the Chief-of-Construction is apparently filling a sort of Poo-Bah position of Architect of the Art Building, Chief of the Bureau of Construction, and Supervising Architect of the Fair in general, yet his suggestions and criticisms may not be received in the same spirit that identical counsel would, when coming from others. It will, indeed, be remarkable if without some strong controlling mind, the different buildings do not show too marked in individualities of a kind not in harmony with the general lay-out.

The Board of Architects has in hand only the buildings at Jackson Park, and although the Lake-Front problem still seems to be as much in the dark as ever, if not a little more so, yet several architects have been appointed provisionally. It now begins to appear as if there could be nothing left to put in any buildings that might be located there, except the Art exhibit, and Mr. Burnham is to be the architect of that building, which will be designed after sketches made by the late Mr. Root. The constructions, which there seems to be little probability of ever being erected, have been distributed as follows: Messrs. Treat & Foltz are to design the building for electrical displays, but as the actual electric and electrical-appliance building is at Jackson Park, it is a question what could be placed in this one except, possibly, some kind of an evening exhibit; as this could be seen as well, if not better, from the many high buildings in the vicinity, than from the inside of the grounds, it is doubtful if the scheme is ever carried out.

Bauer & Hill are to be the designers of the Music-Hall. As this building would necessarily be at the very side of the railroad tracks, Mr. Steinway and other musicians object on the plea of noise, and express a preference for the Auditorium, which is but a few blocks away, and far more satisfactory, not to mention its greater safety, than any temporary structure could be. Moreover, there would be nothing except musical instruments to display here, and they, by right should go to Jackson Park, in the building of Art and Manufacture.

Mr. C. S. Frost is to be the architect of the Decorative Art Building, but as one of the daily papers stated a month ago, "When the

Directory voted to place a Decorative Art Building on the Lake Front, the members, or at least a majority of them, thought that decorative art included diamonds and precious stones, gold and silver ornaments, silks, fine linen, tapestries, and a host of allied articles of a gilt-edged character, but alas, all of these beautiful things are grouped under the head of manufacture, and go to Jackson Park, so that decorative art is swallowed up in the department of fine arts." However, if these structures are built, the architects are to receive \$5,000 each, but otherwise they are to be paid for the time spent in making the drawings. There is some talk in the daily papers of a water-palace on the Lake Front, and a possibility of a great tower higher than the Eiffel Tower at Paris. This tower will undoubtedly be built, but where is not yet decided; it will be entirely by private enterprise, and the promoters prefer Jackson Park, while the authorities seem to favor the Lake Front.

The Board of Lady Managers appear to be in a somewhat analogous position to the architects of the Lake Front. They state that they are going to have a "Pavilion," but what is going to be done with it, the public has not yet been clearly informed. So far as known, all women who wish to exhibit, either in art or in other departments, have expressed themselves in no uncertain manner as wishing to have nothing to do with any special women's department. However, the Lady Managers had the promise from the Directory, sometime since, of \$200,000 for a building to play with, and outline sketches of plans have now been prepared in the Chief-of-Construction's office. These sketches are to be sent to all female architects, for a competition as to the elevations, and prizes of \$1,000, \$500, and \$250, are to be offered for the best three; at least such was the original intention, which probably will be carried out.

A separate association known as the Queen Isabella Association, organized by the women when the World's Fair agitation was first started, had arranged for a monument to that queen, and had also decided to erect a building at their own expense, for the comfort and convenience of women visitors to the Fair. This scheme, appearing to have considerable common-sense, without any very lofty flights about it, had received material support and things were going on nicely until the Lady Managers, finding themselves somewhat out of a job, have asked the Directory to refuse to allow the building to be erected unless it is placed under their control. This the Directory seemed inclined to grant, whereupon the application was, "for the present," withdrawn. For this little incident the ladies should be thankful, as it will at least give them something with which to occupy their minds.

The daily papers delight to state that work on the buildings has already commenced, but in reality nothing has been done except to put up a tool-house, and to commence a small structure for the use of the Bureau of Construction. This small beginning has, however, been made in such a way as to most thoroughly stir up the union-labor element, and consequently all professional agitators, since the lowest bidders chanced to be parties employing non-union men. As noted in the last letter, the labor organizations have been straining every nerve for the past six months to get themselves into such position that they would hold the master hand during the time of the World's Fair. They have not thus far been very successful, but the trades engaged up to the present, have been only the minor ones, and the fight is by no means yet even fairly on, much less given up.

The leaders well know that if they cannot rule they will, in all probability, be buried as deep as was the union at Philadelphia in 1876, and so are fully aroused. At a recent meeting of the Trades and Labor Assembly, the Directors of the Fair were charged with violation of their assurances that union labor would be given the preference, and the Assembly "Resolved, That unless satisfactory assurances are given by the Directors that their indicated action will be changed, we shall deem it our duty to ask the co-operation of every body of organized labor throughout the country to assist us in making our protest emphatic." One of the speakers stated amid applause, "We will make the Directory put a regiment of soldiers around their grounds if they employ scab-labor." Committees were appointed to appear before the Directory to ask that eight hours be made a day's work and that union-men be employed so far as possible.

The question is of such importance that it cannot be smothered very long, and the delegates will probably soon be received. The opinion seems to be, that the Directory will not commit itself to any definite course of action at present, but figuratively, will pat the committeemen upon their backs, and tell them not to get excited; eventually it is to be hoped that they will come out squarely, as they are, indeed, now strongly urged to do, with the statement that the Fair is not for any particular men or class of men, but that all will be treated alike. Such action may not, however, be politic and if not, the matter will probably drag along for some time, but if the union's demands are not eventually acceded to there will certainly be a long and hard struggle.

The unions already begin to see their fears of a large influx of outside labor realized; for there are now estimated to be fully 15,000 unemployed men in the city, many of whom have flocked here in anticipation of World's Fair work. A committee has been appointed to request the mayor to issue a proclamation to the effect that at present there is not work enough for the men already in the city, and advising workmen to refrain for the present from coming to Chicago.

Contracts for about \$400,000 have been let and the filling and dredging work at Jackson Park has begun in earnest, several

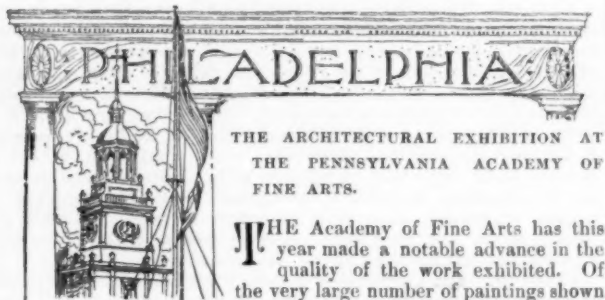
hundred men being employed, and the same question of union and non-union labor is cropping out there also. Most of the workmen live on the grounds, and the tents put up by the contractors for these employes give that portion of the grounds the appearance—from a distance—of a veritable army encampment, although a nearer inspection does not show that military order and discipline are strictly enforced.

Since the previous letter, besides the appointment of architects for the Lake-Front buildings several others of interest have been announced. Mr. M. E. Bell, ex-government supervising architect, has been appointed foreman of the draughtsmen of the construction department while Messrs. Holabird & Roche are assigned as architects of the Live-Stock Buildings. These will comprise besides others, an exchange, and a hippodrome and these it will be remembered are the buildings which, according to the report of the Board of Experts, in November last, "are to be made interesting in plan and appearance by all the arts at the architects' command." The result will be watched with interest.

At last some tangible progress appears to have been made towards the solution of the problem of aerial navigation. Mr. Pennington's air-ship "*Mount Carmel*" has been flying around in the Exposition Building for a couple of weeks, to the satisfaction of the inventor, if not always to the full approval of the numerous spectators who pay their quarters. Those, who expect to see it rushing around the entire building at more than railroad speed, making all sorts of erratic curves, up and down and wheeling on its course like a bird, and all the time carrying a passenger or two, find the reality a great disappointment; but those who do not expect so much find it curious and quite satisfactory as showing a small beginning in a direction which would seem to indicate probabilities of eventual moderate success. The model (for this is all it is) is about twenty-six feet in length over all, and is constructed of oiled silk. The principal and almost entire part of the ship consists of a buoyancy-chamber, or balloon, long and cigar-shaped with numerous fins for steadying and guiding purposes: beneath, is suspended a small car, in this case simply of painted cloth, which contains the machinery for driving a propeller-wheel, of two blades only, that comes out at the front of the buoyancy chamber giving the motion to the ship. Although the size of this chamber is about twenty feet in length and, say, five feet diameter, yet its lifting capacity is so small that no storage-battery, much less a passenger, can be taken up. As a result the ship is connected with a storage-battery on the floor of the building by a fine wire, which, however, only permits of a very limited circular path of flight.

When it has mounted about twenty feet in the air it commences to move in this circle, the radius of which is determined by the angle at which one of the rudders or fins has been set, before leaving the floor. As it propels itself through the air with the slowly revolving wheel projecting from the snout one involuntarily compares it with some of the odd conceptions of the Japanese artists when depicting the funny tribe. The speed does not appear to exceed five miles an hour (the propeller-wheel not moving at all rapidly), and of course this seems a little slow when compared with the 500 miles per hour that was originally announced as the regular speed of air-ships.

Until a full-sized vessel has been constructed and tried one is scarcely able to draw any serious conclusions as to the feasibility and usefulness of the invention. Unless a very much better speed can be developed even when moving against the wind than the model now shows in a perfectly quiet atmosphere, it can never be of any material advantage from a commercial point of view, even if useful for scientific purposes. To carry a cargo of any size together with motor, etc., judging from this experiment, would require a buoyancy-chamber so huge as to be impracticable; but with an aluminium chamber and some lighter gas the result may not prove so unsatisfactory. In one respect it seems very much as if the invention were on the right lines, for the machinery is very simple: if such be the case, the brains of other inventors will undoubtedly speedily help work out the problem to a satisfactory solution, so that the wildest dreams of trips to the north pole may yet become an accomplished fact, even if not trips from Chicago to New York in a few hours.



THE Academy of Fine Arts has this year made a notable advance in the quality of the work exhibited. Of the very large number of paintings shown—a number so large that the exhibition has passed beyond its usual bounds, and encroached upon the rooms of the permanent exhibition—of this number many are paintings of very great excellence and interest. But we have to speak here, not of the exhibition as a whole, but of the modest room devoted to the work of architects.

The general effect of the room, a matter always worthy of consideration at an architectural exhibition, is excellent. It is a difficult task to dispose satisfactorily of a number of frames, most of which are filled with drawings, the general effect of which is meagre and uninteresting. The committee has succeeded quite well in this instance by a judicious blending of the black-and-whites with the water-colors, and by means of draping the room with stuffs of light tone. The centre of the room is occupied by a plaster-cast of a group of a mounted Indian and buffalo, by H. K. Bush-Brown. Though a rather overstrained effort at violent action, the picturesque composition serves well enough as a centre-piece, for, in examining the pictures, the spectator naturally has his back to it almost all the time, and few who look at the drawings notice the group.

The place of honor on the north wall is given to a set of drawings which, though uninteresting and unworthy of that position, are, nevertheless, unquestionably the most important set exhibited. They are the designs for the Grant Monument by Mr. John Ord, one of the four sets from which the final design was chosen. Though known to architects from the reproductions which have appeared in the architectural journals, a word of criticism may not be out of place. In the first instance, the drawings appear to bear on their face evidence of the fact that their author is not a master of Classical design. Such drawings submitted in any of the competitions of the École would scarcely receive consideration from the judges. Apart from the hard and unsympathetic rendering, which is, of course, a minor defect, the composition itself is unfortunate. While the principal masses of the building are heavy almost to unwieldiness, the columns surrounding the base are far too slender to be placed in connection with such monumental work. The dome, which has been with difficulty made to accept its position on the square base, is terminated above in a kind of gallery, the effect of which in perspective would be, unquestionably, very objectionable. The eye does not long rest on this pretentious Classicism, but is attracted to a quite delightful water-color of the main entrance of the Rensselaer School, by Sturgis & Cabot, of Boston. The treatment of the building, in a late English style, seems exceedingly appropriate for the purposes of a school; while the drawing itself, with the bright sun shining on the face of the building, and the broad flower-beds in front, is unquestionably one of the most attractive in the exhibition. A pen-and-ink drawing on the west wall gives us an idea of the school as a whole. It is pleasing in composition, and drawn with much refinement. We cannot help wishing, however, that the great expanse of grassy slope in the foreground had been treated with terraces and other surroundings in harmony with the architecture.

Immediately beneath the drawing of the Rensselaer School we see four of Mr. Wilson Eyre's always delightful sketches. While we are always looking for something fresh and original from him, we, nevertheless, are surprised when we see him deviate very far from his well-accented style, as is the case with the perspective of a house at Thirty-sixth and Baring Streets, Philadelphia. In this instance, the style adopted is that of a rather formal Italian Renaissance, handled rather freely. Mr. Eyre was once heard to remark, apropos of a certain formal Classical design by McKim, Mead & White, that doubtless one might come to that sort of thing after awhile, but, as for himself, he proposed to have a little fun in his design while he was young. Can it be that this Italian design of Mr. Eyre's is the evidence of the creeping-on of time? But no, that can hardly be, for immediately to the right he has a delightful study of grouping—a dreamy, poetic sketch that seems as if it might be intended for the illustration of some old-time story. Of the other drawings which Mr. Eyre exhibits, the most interesting is one of a house and stable at Allegheny City, hung on the north wall. This drawing is thoroughly characteristic of Mr. Eyre's work both in design and rendering. There is a pleasant sense of restraint, of being within bounds, of an overcoming of the difficulties without resorting to anything curious or diverting, that is most satisfactory. The plan, too, is much better than that of most of Mr. Eyre's houses, for his plans, as a rule, appear to be drawn more with a view to helping the exterior effect than to rendering the interior comfortable and home-like.

Of the remaining drawings on the north wall, the most noticeable is the design for the Erie County Savings Bank, Buffalo, N. Y., by R. W. Gibson, of New York. Though the drawing, according to the catalogue, is from the hands of three draughtsmen, it is eminently successful. It is a firm, clear, careful and true representation of the design, while the design itself is as clear and strong as one could desire, unquestionably the best of the designs submitted in the competition. Balancing Mr. Gibson's is a drawing of almost equal size, the design for the Betz Building, Philadelphia, by Brown & Day. As a design, it is simple and inoffensive, although marred by some commonplace bay-windows; but, as a drawing, it suffers very much from its unnecessary angularity, the point-of-view having been taken too near the building. It is very much to be regretted that this design was not the one selected for the building, for if the published accounts are true, the design selected will be far from adding to the architectural credit of the city.

Messrs. Cope & Stewardson are represented by sundry drawings, the most interesting being a pen-and-ink perspective, in Mr. Cope's happiest vein, of Denbeigh Hall, Bryn Mawr College. The style selected gives quite a feeling of old college work at Oxford and Cambridge. The stone dormers, small gables, mullioned windows, lend an effect at once quiet, scholastic and inviting. In the drawing

of a "House at Merion," while the same style is used, and just as effectively, the rendering is less satisfactory, although the design commends itself strongly.

Immediately below, and in an obscure corner is a design for a "House near Philadelphia," by Frank Miles Day; the only contribution which Mr. Day sends this year to the Exhibition. It is a rather sunny pencil-sketch of a house on a hill, with terraces and a large round tower with checker-work, like those old things in Normandy. Near to this, and the most conspicuous drawing on the east wall, is a drawing by Eustache, for the Prix de Reconnaissance des Architectes Americains. Though large and conspicuous, it is by no means a very excellent example of a School drawing, the masses of foliage behind the colonnade being impossibly dense, and the design in general suffering from a lack of grace. Another School drawing by Gavault, described as "Une Salle de Fêtes," is infinitely better as a study of rendering. Its crisp cast-shadows, with their deep rich tones, make it a fine object of study for those who are interested in academic rendering. Near by are some sketches by Mr. Frank Hays, in his usual pictorial manner. Mr. Hays's sketches always suggest magazine illustrations, rather than architectural drawings, but, owing to the character of the subjects which he generally chooses, the method of rendering is appropriate, although it would be most objectionable for a drawing of a large or important new building.

The most brilliant drawing in the Exhibition is, unquestionably, the large water-color of the porch of the house of S. A. Orr, at Troy, New York, by Mr. H. B. Warren. It is a specimen of clear bright color, used with vigor, and without the slightest fear, and may be taken as an excellent example of architectural water-color.

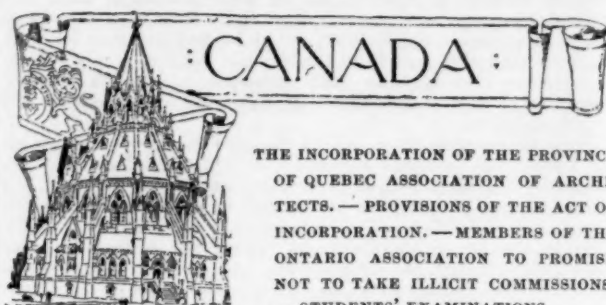
The central portion of the south side of the room is occupied by an alcove, lighted from the top through thin drapery and devoted to a display of decorative designs and picturesque water-colors. The most conspicuous thing in it is Mr. S. W. Mead's brilliantly colored drawing of a detail from the Alhambra, almost harlequin-like in its effect. It conveys, nevertheless, a fair impression of the startlingly rich color-effects so dear to the Moors. Near by is another interesting Moorish subject, a tracing of tiles from the Alhambra, by Mr. George Cary, a colored drawing on tracing linen, soft and harmonious in effect.

Fortunately the Committee has secured a number of water-colors by Mr. Charles E. Dana, the exhibition of whose works at the Art Club of Philadelphia aroused such general interest. He shows a most interesting gray treatment of stonework by the side door of a church, and in another sketch, some intricately interpenetrated mouldings from a door at Treves. But perhaps the most attractive thing Mr. Dana exhibits at the Academy is a very small and apparently hasty sketch of the mass of the Château de Pierrefonds, dashed off in his broadest manner.

The monotony of the architectural drawings is broken by a full-size detail of andirons, a spirited design by Cope & Stewardson. Below it, forming three sides of the alcove are carved-wood panels brought from Britain by Mr. George Cary. They are the fronts of three chests. To the right of the alcove there is a sketch for a country house by L. V. Boyd. The best thing about it is, undoubtedly, the plan, although the treatment of the exterior would be very acceptable, if it were not so markedly an imitation of Mr. Eyre's style. On the east of the alcove, the principal drawing is a bird's-eye view of Walter Hastings Hall, Harvard College, by Cabot, Everett & Mead, of Boston; a pleasant rendering of a commonplace design. Below is a rejected design for the front of the Young Men's Christian Association Building, Germantown, by Mr. George T. Pearson. The style adopted is very similar to that of Cope & Stewardson's Denbeigh Hall, but the handling of it is such as to lead one to think that there was either an ignorance of the style, or lack of study on the part of the architect, for certainly the effect of this modernized Gothic is far from pleasant. It is an excellent example of how the spirit and life may be taken out of a style, while its forms are yet retained. Next to Mr. Pearson's drawing is a sketch in water-color for a country house, by Harrison Albright, a pleasant little drawing, quite the best ever exhibited by this architect.

Taken altogether, the Exhibition of Architectural Drawings, is quite as good as any the Academy has ever held.

THE PRIVATE ITALIAN PICTURE-GALLERIES.—"The art-world in Rome is disturbed," says the London *Graphic*, "by a fierce controversy now raging between the Government and the owners of the various private picture-galleries. For many years past these famous collections—such as those of the Borghese palace, the villa Albani, etc.—descended to the eldest son of each family, with the bulk of the parent's fortune. Since, however, the Italian Government abolished this succession law, and enacted that the parents' fortune should be divided equally among the children, the expense of maintaining the galleries for the public benefit falls heavily upon the head of the family. Several owners having sold some of their finest works to defray these expenses, the Government are alarmed at the prospects of the national masterpieces leaving the country. They are making an official inquiry into the state of the various collections, beside considering whether the owners cannot be forced to keep their galleries opened to the public. Prince Torlonia and his fellow-proprietors threatened to close their galleries, as private property, but, in consideration that such action would materially diminish the attractions of Rome for foreign visitors, they have decided to await the result of the legal inquiry."



THE INCORPORATION OF THE PROVINCE OF QUEBEC ASSOCIATION OF ARCHITECTS.—PROVISIONS OF THE ACT OF INCORPORATION.—MEMBERS OF THE ONTARIO ASSOCIATION TO PROMISE NOT TO TAKE ILLICIT COMMISSIONS.—STUDENTS' EXAMINATIONS.

"THE Province of Quebec Association of Architects" has been incorporated by an Act passed in January by the Provincial Legislature. Like the sister association of Ontario, the Quebec association has received scant satisfaction, and the Act of incorporation defeats its own professed object, namely,—*pro bono publico* absolutely.

The preamble of the Act is as follows:—"Whereas it is deemed expedient for the better protection of the public interests in the erection of public and private buildings in the Province of Quebec, and in order to enable persons requiring personal aid in architecture, to distinguish between qualified and unqualified architects, and to ensure a standard of efficiency in the persons practising the profession of architecture in the Province, and for the furtherance and advancement of the art of architecture;

"And whereas the persons hereinafter named have, by petition, set forth that it is desirable that they, together with such other persons as may be hereafter associated with them, be incorporated by the name of 'The Province of Quebec Association of Architects,' having for its objects the acquirement and interchange of professional knowledge among its members, and more particularly the acquisition of that species of knowledge which shall promote the artistic, scientific and practical efficiency of the profession of Architecture; therefore Her Majesty," etc., etc., enacts as follows:—

Then follow twenty clauses which comprise the Act, of which the following is an epitome.

Clause 1. Citation.
Clause 2. The names of forty architects, who, together with others who may in future be associated with them, are hereby constituted the Association.

Clause 3. The usual clause, as to the holding of property, power to sue and be sued, and to make and alter By-laws, in connection with the objects of the Association.

Clause 4. Directs that the head office shall be in Montreal.

Clause 5. Formation of the Council, which is to consist of a president, two vice-presidents, a secretary, treasurer, and six others to be annually elected.

Clause 6. The Council to meet within a month after incorporation, to organize.

Clause 7. Notice of completion of the organization to be given in the *Official Gazette*—"Whereupon any person practising the profession of architect within this Province may become a member, by causing his name to be registered," etc., and paying the fees. [This is the clause that defeats the objects of the Act—"any person" may register.]

Any person failing, through accident, to register within six months may be enrolled at the discretion of the Council.

The Council may admit members of associations in sister provinces, members of the R. I. B. A., and foreign associations. Architects not members of these associations, who have been in practise for five years, may be admitted after passing the final examination.

Clause 8. Any other person desiring to register must be twenty-one years of age, or more, must have studied under an architect entitled to register for not less than four years and have passed such examinations as shall be provided.

Clause 9. Those desiring to enter the profession, shall be admitted as Student Associates, giving a month's notice and paying the required fees. "Graduates in arts and sciences of any university in Her Majesty's dominion or of the Polytechnic School of Montreal," need not pass preliminary examinations; the rest of this sentence is somewhat difficult to comprehend as it is printed, but it may be supposed to mean that any student, who, before the passing of the Act, was entered as a student for more than three years, under a principal entitled to register, shall, on serving the full time of his indenture, and passing the examinations, be entitled to register; notice and evidence of existing studentship must be given within six months. After the passing of the Act, a student shall serve such term and under such regulations as are required by the Act, and so on.

Clause 10. The Council shall appoint examiners and arrange the examinations, which shall take place in January and July. [Annually, it is presumed.]

Clause 11. The Council shall draw up a tariff of charges to be approved by the Lieutenant-Governor of the Province and published in the *Gazette* which shall be accepted in the courts "except there is an agreement in writing."

Clause 12. Council to arrange about meetings, etc.

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Clause 13. "From and after the first day of July, 1891, no person shall be entitled to take or use the name or title of "Registered Architect" [Great Caesar!] etc., unless he is registered, and if he does he shall be liable, on conviction, to a fine of \$25 for a first offence, or not exceeding \$100 for each subsequent offence.

Clause 14. The Secretary shall keep the register which shall be evidence in courts that the persons named therein are registered.

Clause 15. Members and Student-Associates shall pay fees as required. Regulations as to defaulters.

Clause 16. Members' (etc.) names may be removed under stipulated conditions. Regulations as to the removal or re-entering of names.

Clause 17. As to the sending out of notices.

Clause 18. Regulations concerning funds in hand, etc.

Clause 19. The secretary to keep the register in conformity with the Act. Deeds to be signed by the president and secretary and sealed with the common seal.

Clause 20. The Act to come in force on the day of sanction.

The passage of the Act will have the effect of augmenting the membership of the Association; waverers will come in and those who have purposely stood aloof will find it to their advantage to register, and thus by degrees, though it will take many years to accomplish, a better era for the public and the profession will commence.

Preparations are being made in Toronto for the annual meeting of the Ontario Association of Architects which is to take place on February 17 and 18, — probably will have taken place by the time this is published. This will be the third gathering of the members, but the first since the Association has been organized. But I may as well leave further remarks on this subject till after the meeting, under the circumstances.

In the By-laws "as passed by the Council," appears the following form of "solemn declaration" to be made by members of the Association before being granted a certificate of membership:

"I will faithfully and honestly, and to the best of my ability, perform all work entrusted to, or undertaken by me as architect, that I will not on any pretense whatever, either directly or indirectly, take or receive from any person or persons, other than my clients, any fee, emolument or other consideration whatsoever — for, or on account of any work executed by me, or under my direction or guidance as such architect, etc."

These By-laws also contain the new rules about examinations.

A candidate must have passed the examination of the second form of a High School or Collegiate Institute, or, as an alternative, the entrance examination to a High School or Collegiate Institute and an examination in mathematics and either French or German equivalent to that of the second form of a High School or Collegiate Institute. In addition, the student must pass two intermediate and one final examination.

One month prior to the date fixed for the first intermediate examination, the student must send to the Registrar the following drawings:

1. Two sheets of the Orders of Architecture.
2. Two sheets of Early English. Decorated and Perpendicular periods. Two examples in each period, such as a door, window or an eave, to be shown by plan, elevation and section.
3. One sheet of mouldings and ornament examples of the above periods.

The subjects of the first intermediate examination will be:

Elements of construction, history of architecture, mathematics, technical terms, applied mechanics.

The second examination. Drawings to be sent in for this must be:

One sheet of ornament, freehand, from the round; three sheets measured drawings; one sheet detail construction of a roof-truss, joints and ironwork drawn to a large scale; one sheet of floors, wood, wood and iron, iron and terra-cotta; two sheets joiner's details; two sheets stone, brick, iron details.

The subjects for examination: History and characteristics of styles, strength of materials, graphic statistics, electricity, structural ironwork, mathematics.

The final examination (to take place always in Toronto):

Set of plans, specifications and details for a specified building; nature and properties of materials, foundations, architectural jurisprudence; practical knowledge of building trades, heating and ventilation and sanitary science.

The Honor Course to include in addition, modelling, taking out quantities, levelling, acoustics.

At present no *viva voce* examination seems to be contemplated, but for a final examination which is qualifying, I think this is a very important matter. It works both ways. A few pertinent questions will show whether a candidate has answered his written questions by "rule of thumb" or "like a parrot," or whether he really is cognizant of the subject, and again it may be the means of saving a candidate from the effect of a blunder made through nervousness or accident. The *viva voce* will enable a candidate to take a higher place if he is really qualified and will take down a peg the man who has only crammed.

SCULPTOR IN ORDINARY TO THE QUEEN. — Prince Victor Hohenlohe is a sculptor to whom the filling of the shoes of Sir Joseph Edgar Boehm, lately sculptor in ordinary to the Queen of England, is confidently ascribed. Such a choice would create great dissatisfaction among the sculptors of English birth. Thornycroft, Gilbert, Onslow Ford, Brock and Birch are mentioned for the position. — *New York Times*.

THE BYZANTINE MOSAICS OF SICILY.¹ — II.

CHURCH OF ST. MARY OF THE ADMIRAL.



Clustered Column from the Cloister, Monreale.

AMONG the great dignitaries of King Roger's Court, one of the most renowned was the Admiral Georges d'Antioche. A Greek by birth, still, like many others of his countrymen, he had enlisted with the Norman princes, and by a freak of fortune it was he who had the command of that famous expedition in 1147, which placed for some time the whole of Greece, with Thebes and Corinth, under the authority of the kings of Sicily. His epitaph, in Greek characters, praises, with truly Oriental emphasis, the valor and wealth of this person; and he is bombastically called, amidst other admirable qualifications, "Sparkling star of the morning, Marvel of the world, benevolent light to the Christians, devouring flame to the unfaithful." Moreover, two monuments of Palermo have preserved his memory yet more efficiently: these are the Admiral's Bridge, which the booty brought from the campaign of Greece enabled him to throw over the river Oreto, and the Church of St. Mary of the Admiral, built in 1143, richly endowed in 1146, and which is one of the most curious edifices of Palermo.

Ebn-Djobair, who visited it at the end of the eleventh century, describes it thus: "One of the most remarkable works of the Christians that we saw at Palermo is the church they call the Antiochean's."

Among the different parts of this building we noticed a very remarkable frontal, which we cannot describe, and on this account we prefer to keep silent, as it is the most beautiful work of the world. The inside walls of the temple are gilded, or rather, they seem to be, but are only one piece of gold. We notice tablets of colored marble, the like of which have never been seen, ornamented with cubes of mosaic-gold, and crowned with leaves of trees in green mosaic. Suns, in golden glass, in rows at the top glisten with a light to dazzle the eyes and trouble the mind so much that we pray God against the temptation. The church has a belfry supported on marble columns and surmounted by a dome, which is also upon other columns. It is one of the marvellous constructions which are to be seen. May God in his grace and liberality soon honor this edifice with the prayers of the Faithful!"²

The church founded by Georges d'Antioche has fallen very much from its former splendor. Annexed in 1433 to the convent of nuns founded by Aloisia Martorana (hence the name la Martorana, by which it is commonly called), it was in the sixteenth and seventeenth centuries hideously remodelled in the fashion of the day. The beautiful front so praised by Ebn-Djobair was torn down in order to enlarge the edifice; the semicircular apse was replaced with a quadrangular choir of large dimensions; marble incrustations, with additions in the most pretentious style, fill the places of the destroyed mosaics; the cupola of the belfry, shaken by the earthquake in 1728, was demolished. I cannot share the careless scoffing of a renowned writer "at these little toys of polychrome, copper and marble, enjoyed by the poor nuns, these gilded fences, which allowed them to satiate their curiosity without breaking their vows, and behind which one half expects to see more than one veiled young face; this tribune, or rather, this parlor in Pompadour style, where they sang on feast days, and these small gratings, where the ancient mosaics are mixed up with the childishness of the most extreme rococo."³ Doubtless the wrong is done, and the disappearance of these "childish toys" of the Martorana does not bring back to us a single atom of what is lost. The Italian Government, however, has not thought it useless to restore so far as possible the former aspect of the church.

The pavement of mosaic which covers the ground indicates very exactly the extent and former arrangement of the eleventh and twelfth centuries; the churches of Theotokos and Pantocrator at Constantinople, the chapels of the Catholica at Stilo and San Marco at Rossano in Calabria, offer some finished models of about the same epoch. A Greek cross inserted in a quadrangular plan and surmounted at the crossing of its arms by a cupola built over an octagonal drum supported by four columns; three projecting apses raised on the eastern side of the edifice, point out the nationality of the builders; besides, the church was consecrated according to the Greek rites, and in 1221 was officiated over by an orthodox clergy. The mosaics which cover the walls and vaults, and part of which were fortunately preserved are also Byzantine works, not to mention the Greek inscriptions which accompany them. The scenes as represented strictly conform to the inflexible rules of the "Guide to Painting."

¹ Continued from No. 790, page 110.

² "Journal Asiatique," 1846, p. 81.

³ Renan. "Miscellaneous History and Travels," p. 83.

At the arch which covers the western branch of the cross is the Nativity of Christ, one of the most ancient examples of this beautiful scene which decorates the majority of the Byzantine churches; at the top of the cupola, seated upon his throne, and blessing the faithful ones of the Orthodox Church, is the Pantocrator Christ who said to His servants, "I am the light of the world. He that followeth me shall not walk in darkness, but shall have the light of life"; and around him the bowed down archangels; lower down, at the drum of the cupola, evangelists and prophets; at the curve of the arches medallions of holy warriors and bishops; at the arms of the cross the severe faces of the apostles who symbolize the whole Church grouped in hierarchic order at the side of the founder. At the apses nothing remains of the former decoration except at the entrance of the choir, two large images of the archangels Michael and Gabriel. But among these mosaics the most curious are two pictures, which perhaps decorated the former frontal of the church and which have been preserved in the interior of the edifice.

The first represents Christ standing and crowning Roger II, who is robed in a costume half Byzantine and half ecclesiastic, recalling it may be, the dignity of an apostolic envoy conferred by Pope Urban II on the Norman kings; the second picture represents the Admiral Georges D'Antioche kneeling down in the humble attitude ordained by the Byzantine ceremonial before the Blessed Virgin, while Christ appearing surrounded by a halo, spreads out His hands to bless His faithful servant. On the plate held by the Madonna we read this inscription, in Greek, "My Son, keep away all misfortune from Georges; he is the first among the great ones who has erected and dedicated this temple to Me from foundation to top; grant him the forgiveness of his sins, for Thou alone, O God, hath the power to do so!"

[To be continued.]

AMERICAN-DUTCH PICTURES IN LONDON.



ALL lovers of originality in art have been charmed with some pictures now exhibiting in Bond Street—two series of which are as different in style and as opposed in methods, as the poles and the equator.

The thirty-six drawings illustrating Ferdinand Fabre's "Xavière," by Boutet de Monvel, are wonderful examples of careful study of expression; the good *curé*, and the old people are especially characteristic. We find finish in the painting and individuality in the treatment; there is a certain idealism and a great deal of realism. What then is wanting? Mostly solidity. The heads are all as true to nature as they can be, but the rest of the bodies are flat, somewhat Japanese, very like the painting of a small child when it washes a coat of flat color over a print. M. de Monvel's art always reminds us of some juvenile books with illustrations colored by hand, which appeared in the early part of the century, the books from which Kate Greenaway probably took her inspiration. "Midday rest," a foreshortened figure of a boy lying upon his back upon the grass, is a masterly piece of drawing and more powerful in painting and color, than the other drawings which are in pure water-colors, whereas this one is in *gouache*.

Far different is the art of Mr. Hitchcock. Though of American birth, he is quite Franco-Dutch in education, in feeling, and in modernness. He belongs to the group of realistic-mystics of which the Frenchmen Lerolle and Cazin, and the Saxon Uhde are prominent members. These men see religious subjects through modern spectacles; for them an "Adoration of the Shepherds," is a visit of some French herdsmen to a lowly barn in which are a mother and her infant; but a light streams in and forms an aureole round the Holy Child.

Mr. Hitchcock paints us a "Manger," but it is no more of an Eastern scene than are the "Nativities" of the early Flemish or Florentine painters. And Raphael himself; did he do more than represent his "Holy Families" as Italian peasant women with their babes? In this picture of Mr. Hitchcock's, we have the Holy Mother sitting on a wooden seat upon the flower-bedecked grass. Behind her is a shed, a tulip field, a calf feeding, and some apple trees in blossom. Against the blue gown of the Virgin is a wondrous pink tulip. The whole picture is as true as it can be as a study, and yet how ideal! The "Tulip Culture," every one knows—it was in last year's Academy as well as at a previous Salon; but how masterly it

is with those rows of different colored flowers and the background of trees and houses. "Maternité" was at the Paris Exhibition last year. A peasant woman with her infant is crossing a sandy waste with long grass and a few wild flowers. By her side is a boy carrying a stick. Upon her back, behind her head a large sieve which catches the light. Are we astray in thinking the painter meant more by his subject than the name would imply? Certainly, that was the impression it made upon me when I saw it in Paris, and now it still seems to be a mystic Holy Family or rather a Madonna and child, and St. John. Ruskin is said to have seen more in Turner's pictures, than the painter ever meant; and perhaps, I, too, am idealizing. But there is no imagination in feeling the beauty of the work. The studies alone for these pictures are worth serious attention by all artists as well as amateurs. Low in tone, gray, but full of light, they express detail by thoughtful generalization. Nor should the studies of poppies, tulips, and apple blossoms be passed by. The "Rising Moon" is an echo of George Mason, a case of *les beaux esprits* . . . but the "Shadowed Ocean" is all the painter's own. A great wave rolls along against an evening sky, and three gulls flutter over its crest.

SOPHIA BEALE.



[Contributors are requested to send with their drawings full and adequate descriptions of the buildings, including a statement of cost.]

"THE YOSEMITE," PARK AVE., NEW YORK, N. Y. MESSRS. MCKIM, MEAD & WHITE, ARCHITECTS, NEW YORK, N. Y.

[Gelatin Print issued with the International and Imperial Editions only.]

THREE DETAIL DRAWINGS FOR THE LYMAN GYMNASIUM FOR BROWN UNIVERSITY. MESSRS. STONE, CARPENTER, & WILLSON, ARCHITECTS, PROVIDENCE, R. I.

[Issued with the International and Imperial Editions only.]

THE drawings from which these are reproduced were made for the use of the mechanics in the erection of the building, on a scale of three-quarters of an inch to a foot, one feature of which we do not think is in general use and may be worth while to call attention to, and that is, the use of comparative levels (98.00, 112.67, 125.17, 136.67, etc.), to indicate the height of the several parts above mean high-water mark—the datum used by the city for its surveys. By the use of these levels it will be seen how easy it is to compute the height of one part of the building from another part not adjacent thereto, and not shown on the same sheet. By the use of this common datum, the city water-pressure and the relation of the several floors with the city sewer can be readily ascertained; and in many other ways, after an experience of many years in its use, it has proved the advantage of a common base to which to refer all heights.

DESIGN FOR HOTEL, CARDIFF, TENN. MR. GEORGE F. BOSWORTH, ARCHITECT, CARDIFF, TENN.

DORMITORY FOR ST. PAUL'S SCHOOL, CONCORD, MASS. MESSRS. VAUGHAN & CLARK, ARCHITECTS, BOSTON, MASS.

COMPETITIVE DESIGN FOR CITY-HALL, PORTLAND, OREGON. MR. H. STEINMANN, ARCHITECT, SEATTLE, WASH.

COMPETITIVE DESIGN FOR ST. MICHAEL'S CHURCH, NEW YORK, N. Y. MR. F. C. WITHERS, ARCHITECT, NEW YORK, N. Y.

[Additional Illustrations in the International Edition.]

HOUSE AND FOUNTAIN, BUDA-PESTH, HUNGARY. HERR NIC VON YBL, ARCHITECT.

[Gelatin Print.]

THE CHOIR OF THE CATHEDRAL, MONREALE, SICILY.

[Gelatin Print.]

It should be noted, though it is of no material importance, that the negatives of this series are reversed in printing. The columns in the nave are of Egyptian granite and are probably the shafts originally used, but the capitals, of stucco, do not date beyond the restorations of the present century. The building is kept in a remarkable state of cleanliness and repair. The names of the architect and the designers of the mosaics are unknown. As to the character of the mosaic work, it evidently belongs to a time later than the mosaics in the Palatine Chapel and in La Martorana, probably late in the thirteenth century, so that it has less of the Byzantine character than the earlier examples, in fact the character of the work is Arabian rather than Byzantine in its elements.

FACADE OF THE CHATEAU DE VAUX, FRANCE.

(Copper-plate Engraving.)

THIS ancient château, which, for Frenchmen has an historic interest, is being carefully restored by its present wealthy owner, M. Sommier. The architectural effect here is as it is in the palace at Versailles, the wings overpower the central feature. The attempt to bring the great Ionic order of the pavilions into harmony with the one-story Doric order of the portico by the introduction of a band of triglyphs is a complete failure. Moreover, the lines of the Ionic entablature are not successfully united with the cornice of the main building and the single pilaster on the axis of the pediment is so unusual as to attract attention at once. This general lack of harmony and the different treatment of the roofs, which is no more successful than the other parts, declare these pavilions to be of later date than the middle portion of the building.

ALLEGORIC CEILING IN THE MAIRIE OF THE XIX ARRONDISSEMENT, PARIS. BY M. HENRI GERVEX.

"CANAL BASIN AT LA VILLETTE." A WALL-PAINTING BY M. HENRI GERVEX.

IN an article in one of the French publications for this month the writer stated that, among all the paintings which the municipality of paintings of Paris had commissioned for the Mairies, the best was the "Basin of La Villette," by M. Henri Gervex. The reason for this judgement probably was that M. Gervex had the courage to represent an everyday scene on the canal which passes through the nineteenth district, in the Mairie of which his painting was placed. Any one who leans over the bridge crossing the basin can verify the truth of the scene. In the ceiling-painting M. Gervex has suggested some other occupations of the district, and he has made good use of a representative of an abattoir. As a young artist he has sympathy with youth, and did not forget the student and the conscript.

CLASS-ROOM, CROUCH HILL, ENG. MR. W. DUNN, ARCHITECT.

MISSION-ROOM, HARROW, ENG. MR. E. S. PRIOR, M. A., ARCHITECT.

BILLIARD-ROOM, HARROW, ENG. MR. E. S. PRIOR, M. A., ARCHITECT.



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

THE AMERICAN ARCHITECT TRAVELLING-SCHOLARSHIP.

NEW YORK, N. Y., February 1, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—As regards the travelling-scholarship, I unfortunately did not understand that you had to enter before hand. I presumed that it would be advertised like the "League Medal" and have been anxiously waiting for its appearance. Will you kindly let me know what is necessary to become a competitor and oblige,

Yours respectfully, ALFRED H. HOPKINS.

[ADVERTISEMENT was duly made. The next examinations will be held in November or December next.—EDS. AMERICAN ARCHITECT.]

BOOKS.

OGDEN, UTAH, February 6, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Can you give me any information, where I can get Nicholson's Dictionary of the "Science and Practice of Architecture, Building and Carpentry," Volumes I and II, and if possible the price thereof. Very respectfully yours, K. C. SCHAUB.

[You will be most likely to find it at a second-hand-book dealers.—EDS. AMERICAN ARCHITECT.]

CONCORD, MASS., February 7, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—I find in Ware's "Modern Perspective," page 183, figure 69, mention of a book on cylindrical perspective or curvilinear perspective, which book I fortunately found in a junk-store, and have enjoyed so thoroughly, that I have the assurance to suggest to the editors of the *American Architect*, that they give their readers some few of the distortions of rectilinear perspective, together with larger reproductions of examples in curvilinear perspective than that

which Mr. Ware has given in his invaluable treatise. Undoubtedly you have in your possession, a copy of the book to which I refer, "*Curvilinear Perspective*," by G. Herdman, Liverpool and London, 1853.

Respectfully, JOSEPH F. DANIELS.

[We do not have the book referred to.—EDS. AMERICAN ARCHITECT.]

NEWPORT, R. I.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Is there any good work on State-house Buildings? If so kindly let me know what is the best, and where to obtain the same; and oblige, Yours respectfully, J. D. JOHNSTON.

[We do not believe there is any publication devoted to this special class of buildings.—EDS. AMERICAN ARCHITECT.]

MONTREAL, CANADA.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Will you kindly inform me through your valuable paper what is the best treatise on Plumbing and Heating according to the American system, also where I can obtain the same, and oblige, Yours truly, SUBSCRIBER.

["The Principles of Ventilation and Heating," by John S. Billings, Surgeon, U. S. Army, published by *Engineering and Building Record*, New York. "Drainage and Sewerage of Dwellings," by Paul Gerhard, published by W. T. Comstock, New York, is satisfactory.—EDS. AMERICAN ARCHITECT.]

PHILADELPHIA, PA.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Can you tell me of a book which treats of Classic Renaissance for small churches, about the period of Michael Angelo, in Italy. Yours truly, ADRIAN W. SMITH.

[Possibly "*Le Chiese d'Italia della loro origine sino di giorni nostri*," by Capelletti, 1847, may cover the ground. Scattered illustrations can be found in Letarouilly's "*Edifices de Rome Moderne*"; in "*Les Bâtimens et Dessains*," of A. Palladio, and in Durand's "*Paralleles*."—EDS. AMERICAN ARCHITECT.]

COLUMBUS, OHIO.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—I write you to inquire if you can tell me where I may find something which will give me the plan of the building erected by the Mexican Government at the Paris or Philadelphia Exposition. If you can direct me in this matter I will be under great obligations. Respectfully yours, J. W. YOST.

[We do not recall having seen plans of this building published in any domestic or foreign journal.—EDS. AMERICAN ARCHITECT.]

ROANOKE, VA., February 9, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Can you recommend me any good work on modern church architecture? Yours truly, CHARLES C. WILSON.

["Church Architecture," by F. C. Withers is perhaps out of date. So much material is to be found in the architectural journals that there is less call than formerly for books on special subjects.—EDS. AMERICAN ARCHITECT.]

PORT HURON, MICH., February 11, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—I wish to procure a work on drawing, wanting to perfect myself as a draughtsman in furniture draughting, machinery and inside ornamental work for houses, to gain as thorough a knowledge of perspective drawing as possible, and, in short, to be a thorough draughtsman; not an architect of whole buildings, but of ornamental work in perspective drawing for the above. What would you advise as the best work to study? I have had recommended to me Walker's "*Hand-book on Drawing*," Appleton's "*Encyclopædia of Drawing*," Collins's "*Art-Foliage*" and a book on pen-drawing, and also one on perspective. I have forgotten the names of the last two. Please give the price of such as you recommend in your reply, and kindly advise as early as possible.

Yours truly, CHAS. S. BARKER.

[For geometrical drawing, the basis of all designing, you will find an excellent and inexpensive guide in "*Geometrical Drawing for Art Students*," by J. H. Morris, published by Longmans, Green & Co., New York, N. Y. For architectural drawing from its practical side, we can recommend "*Architectural Drawing*," by R. Phené Spiers, published by Cassell & Co., New York. For perspective drawing, there is no better guide than Ware's "*Modern Perspective*," published by Ticknor & Co., Boston. An excellent work on pen-and-ink rendering is "*Picture-making in Pen and Ink*," by Benjamin Linfoot, of Philadelphia.—EDS. AMERICAN ARCHITECT.]

CHICAGO, ILL., February 16, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Would you kindly inform me whether or not the subjects:

Building Superintendence published in your 1881, '82, '83 issues of *American Architect and Building News*, *Safe Building* commenced in your 1886 issue, and *United States Government Building Practice*, commenced in your 1887 issue, are printed in book-form or not, and where they can be purchased.

Yours respectfully, J. H. HUBER.

["BUILDING SUPERINTENDENCE" has been published in book-form, price

\$3.00, and the tenth edition is now in press. The first volume of "Safe Building" price \$5.00, has run through two editions; the second volume is now in press. These can be obtained from Ticknor & Co. The other papers were never put into book-form. — Eds. AMERICAN ARCHITECT.]

SALT AS A TIMBER PRESERVATIVE.

BUFFALO, N. Y., January 28, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Good authority for putting salt in core of oak columns in factory construction has been called in question.

I have considered it good usage, but am unable to refer to authorities for it. Can you advise me fully on same, and oblige,

Yours truly, E. A. KENT.

[The use of salt in mine timberings has been in some cases abandoned.—Eds. AMERICAN ARCHITECT.]

THE COCK AS A WEATHER-VANE.

NEW YORK, N. Y., February 7, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Can you inform me through your columns when vanes were first used on church steeples or towers, and if there is any legend why a rooster or St. Peter's Cock is employed in preference to any other form.

Yours respectfully, HOWARD FLEMING.

[The cock is one of the symbols of the Passion and is found with others of the group, the cross, crown of thorns, nails, etc., in the rude mural decorations of the Catacombs. Logically its symbolism is one of wakefulness, warning and admonition, characteristics which should belong to the weather-prophet, and its adoption as a wind-vane need seek no further explanation than this. Historically, however, there are other reasons for its use. The cock was one of the war tokens of the Goths—its adoption by one of the offshoots of that race in the form of the well-known "Gallic cock," is only natural—and was by them introduced in the ornamentation of Gothic buildings. Its use upon church steeples was brought about by a papal bull, in the middle of the ninth century, which ordered that the figure of a cock should be placed upon every church steeple. During the Dark Ages the priests styled themselves the "Cocks of the Almighty." — Eds. AMERICAN ARCHITECT.]

NOTES AND CLIPPINGS

POSSIBLE "FINDS."—It is rumored to be a tradition of the Seraglio that the Sultan's library is neither to be dispersed nor searched by infidels, and that it is still jealously guarded by custodians who know nothing of its contents; but there are few places which German and French savants could not reach if earnestly so minded, and in Constantinople, of all places the golden key is efficacious. It is true, as a correspondent tells us this week, that the Turks are jealous of their property-rights in relics, insisting for instance, that anything found in Palestine shall be forwarded to Constantinople; but, in this instance Europe is asking nothing from them except permission to know, and thereby to enhance, not deteriorate, the value of their possessions. There are learned Armenians and learned Greeks, if there are no learned Turks—there are plenty, but their studies turn Eastward—and with money and perseverance something might surely be accomplished, if it were only to ascertain beyond doubt that further hope was in vain. There are, too, ancient castles in the Lebanon, and half-buried cities all along the coast opposite Cyprus, which no one whom a museum would employ has ever yet explored. Then we want a thorough search in Samarcand, where the plunder of a world was once accumulated; and in the religious houses of Abyssinia, where at least we may find old codices; and, as aforesaid, in Egypt, and above all in Morocco, whither the Jews, who were the learned class of Southern Spain, transported in the great expulsion, all that they could save. Their literary treasure may all have perished, but it also may not; and a search in the palaces and bazaars of Fez and Tetuan might bring to light something, were it only an old medical treatise, which scholars would not willingly lose. The Spanish Jews were once the most cultivated class in Europe—the Moorish civilization was in great part due to them—and though they fled as it were in a night and with murder at their heels, they would be eager to carry with them the knowledge which had earned for them protection and repute. Our first effort made many years ago, to obtain an official inquiry for old books in Morocco failed, the answer being that none existed, but Lord Salisbury is a scholar, and if it were but known that he was interested in obtaining a true reply it might be a very different one. Let him get the cultivated Sherief of Wazar to help him, and so evade the superstitious difficulty which always impedes research in Mohammedan lands. Everything is irrecoverable, like Aristotle's treatise on the Athenian Constitution, until it is recovered. Nobody really knows what is in the European store-houses—in the Royal Library of Spain for example, or the palaces of St. Petersburg, where everything goes and nothing comes back—much less what is buried in the ruinous cities of Turkey, or the ruined bazaars of Morocco. We want these places searched, if necessary for half a century, and it is not creditable either to the learning or to the millionaires of England and America that the work has not long since been commenced and carried on with the resolute persistence and disregard of sixpences which would characterize a search for gold.—*The Spectator*.

SUBTERRANEAN FIRES.—Some idea of the terror of volcanoes may be gathered from an account of an eruption in one of the Hawaiian

Islands, as graphically described in the *London Budget*, when the crater was filled from five hundred to six hundred feet deep with molten lava, the immense weight of which broke through a subterranean passage of twenty-seven miles and reached the sea, forty miles distant, in two days, flowing for three weeks and heating the water twenty miles distant. Rocks melted like wax in its path; forests crackled and blazed before its fervent heat; the works of man were to it but as a scroll in the flames. Imagine Niagara's stream, above the brink of the Falls, with its dashing, whirling, madly-raging waters, hurrying on to their plunge, instantaneously converted into fire—a gory-hued river of fused minerals; volumes of hissing steam arising; smoke curling upward from ten thousand vents, which give utterance to many deep-toned mutterings and sullen, confined clamorings; gases detonating and shrieking as they burst from their hot prison-house; the heavens lurid with flames; the atmosphere dark and oppressive; the horizon murky with vapors and gleaming with the reflected contest. Such was the scene as the fiery cataract, leaping a precipice of fifty feet, poured its flood upon the ocean. The old line of coast, a mass of compact, indurated lava, whitened, cracked and fell. The waters recoiled and sent forth a tempest of spray; they foamed and lashed around and over the melted rock, they boiled with white heat, and the roar of the conflicting agencies grew fiercer and louder. The reports of the exploding gases were distinctly heard twenty-five miles distant, and were likened to a whole broadside of heavy artillery. Streaks of the intensest light glanced like lightning in all directions; the outskirts of the burning lava as it fell, cooled by the shock, were shattered into millions of fragments and scattered by the strong wind in sparkling showers far into the country. Six weeks later at the base of the hills the water continued scalding hot and sent forth clouds of steam at every wash of the waves.

GENEVA AGAIN IN LUCK.—Geneva is certainly the luckiest city in the whole world. The Duke of Brunswick left it his enormous fortune; three weeks ago it received a legacy of several millions; and now Mr. Barton, the British Consul, announces his intention of building an enormous concert-hall for the use of its inhabitants, at a cost of £40,000.—*London World*.

TRADE SURVEYS

In financial and business circles there is a renewal of apprehension that all will not be smooth sailing this year. Advices from South America by way of London show that troubles there are not over. Investors are holding aloof from securities there, and many who have securities are endeavoring to dispose of them without alarming the public. The same authorities say there is more or less stringency in European and Asiatic countries. English investors are dealing very gently in American securities, evidently awaiting more satisfactory reports from railway managements on this side. Whatever may be said or thought to the contrary, the railway situation is gradually getting into better shape; the tendency to centralization is manifest; the interests of railway stockholders and the public are not as antagonistic as a year ago; the way is opening up for a better understanding. Western State legislatures have cudgels in their hands, and are still prepared to launch hostile legislation wherever they think it necessary, but, for all that, there is a decided improvement in feeling and in conditions. The radical difficulty, of course, is that there is not sufficient traffic to go around, and then, again, Canadian railways are in a position to cause a great deal of annoyance. The best authorities upon railway financial affairs entertain the belief that things will improve, that dealings will become more general, that investments in American securities will be made with more confidence by British investors, and that within the next twelve months the basis will be laid for a more general harmony between all interests. The monetary situation is, notwithstanding statements to the contrary, not altogether satisfactory. Certain simple facts are overlooked in the discussion of monetary questions: the foremost of these is that there is room for and need of much more ready money, instead of credit, than is available. Of course, this assertion is controverted by some of the highest authorities, but millions of practical Americans who entertain the contrary opinion cannot be altogether wrong. The doctrinaires and those who theorize from an educational basis argue most clearly that a great abundance of silver will drive gold out and jeopardize values by the futile attempt to make silver the standard. Whatever the results of such a policy might be, this fact is not sufficiently considered: namely, that under the very heavy demand that would be created for money by the very increase in the supply of it, gold itself would not fly into vaults as predicted, nor would the cheapening process in money assert itself. The commercial agencies have shown that over one-half of last year's failures were due to a scarcity of capital. It would be guess-work, of course, to say what effect a more abundant supply of capital would have on these concerns. The great fact still remains that there are millions of people throughout the country who, if they had the deciding of the question, would decide differently from those who have the control in the shaping of financial legislation. In all manufacturing directions there are renewed signs of increasing strength. The railway managers who predicted a sudden and serious falling-off in railway traffic now admit that they were mistaken. The increase in railway traffic during January throughout the country is remarkable; it affected nearly all railroads. The gross earnings on 155 roads for January were \$36,773,531, against \$34,613,203. The receipts of cereals at receiving points throughout the West were also heavy. East-bound tonnage from Chicago fell off during that month somewhat. The receipts of cotton in Southern States were, during January, 801,000 bales, against 613,000 bales for same month last year. Manufacturers are nearly all crowded with work, a very significant fact. This fact is more important when it is kept in mind that the demand for manufactured products at this time is for immediate requirements, and not for remote requirements. There is a heavy demand in progress for all kinds of raw material. Iron-makers took fright and reduced production forty thousand tons per week, but this sudden restriction is already producing good results. The danger lies in the fact that buyers may within a month create a sudden demand for supplies.

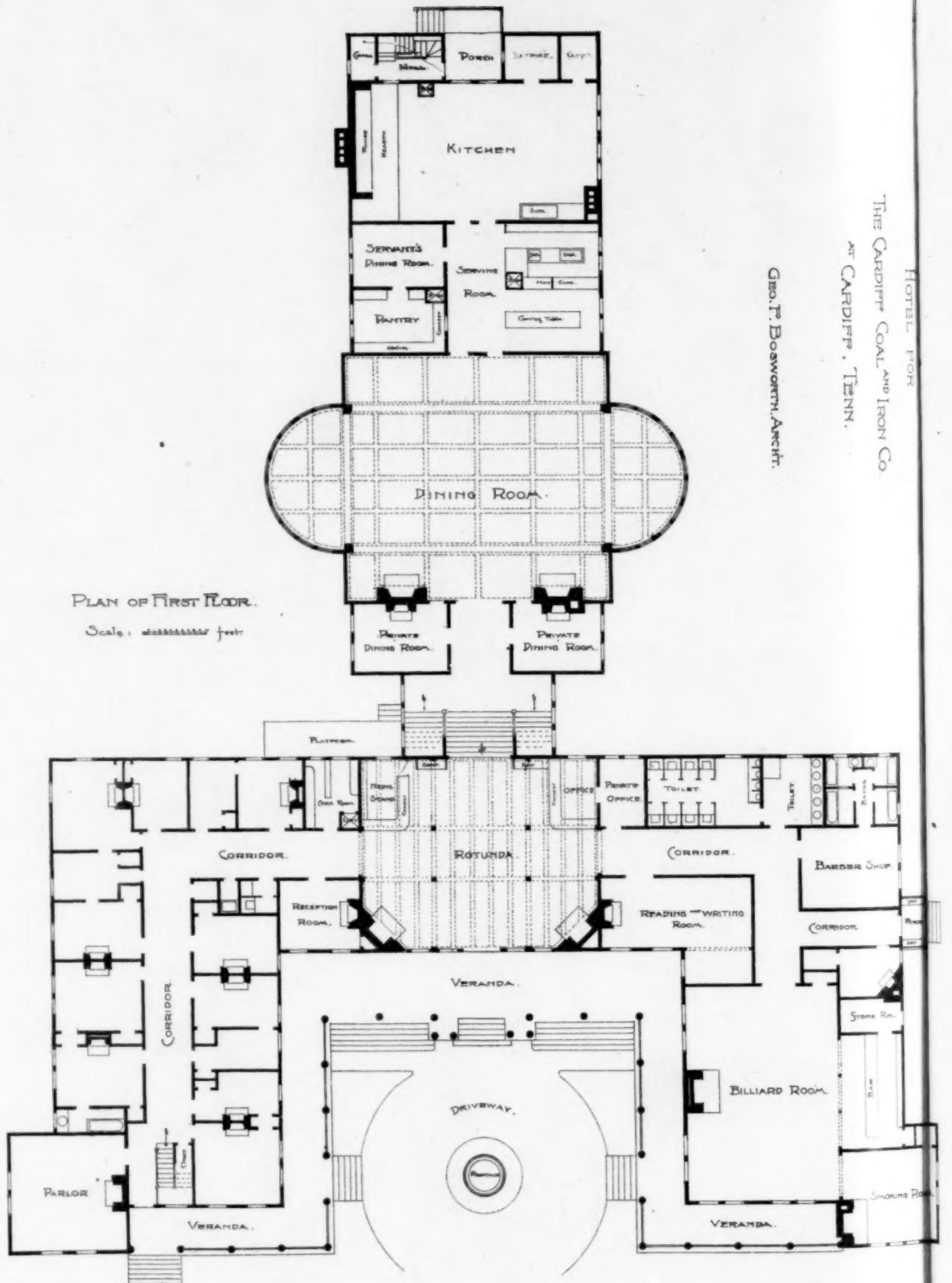
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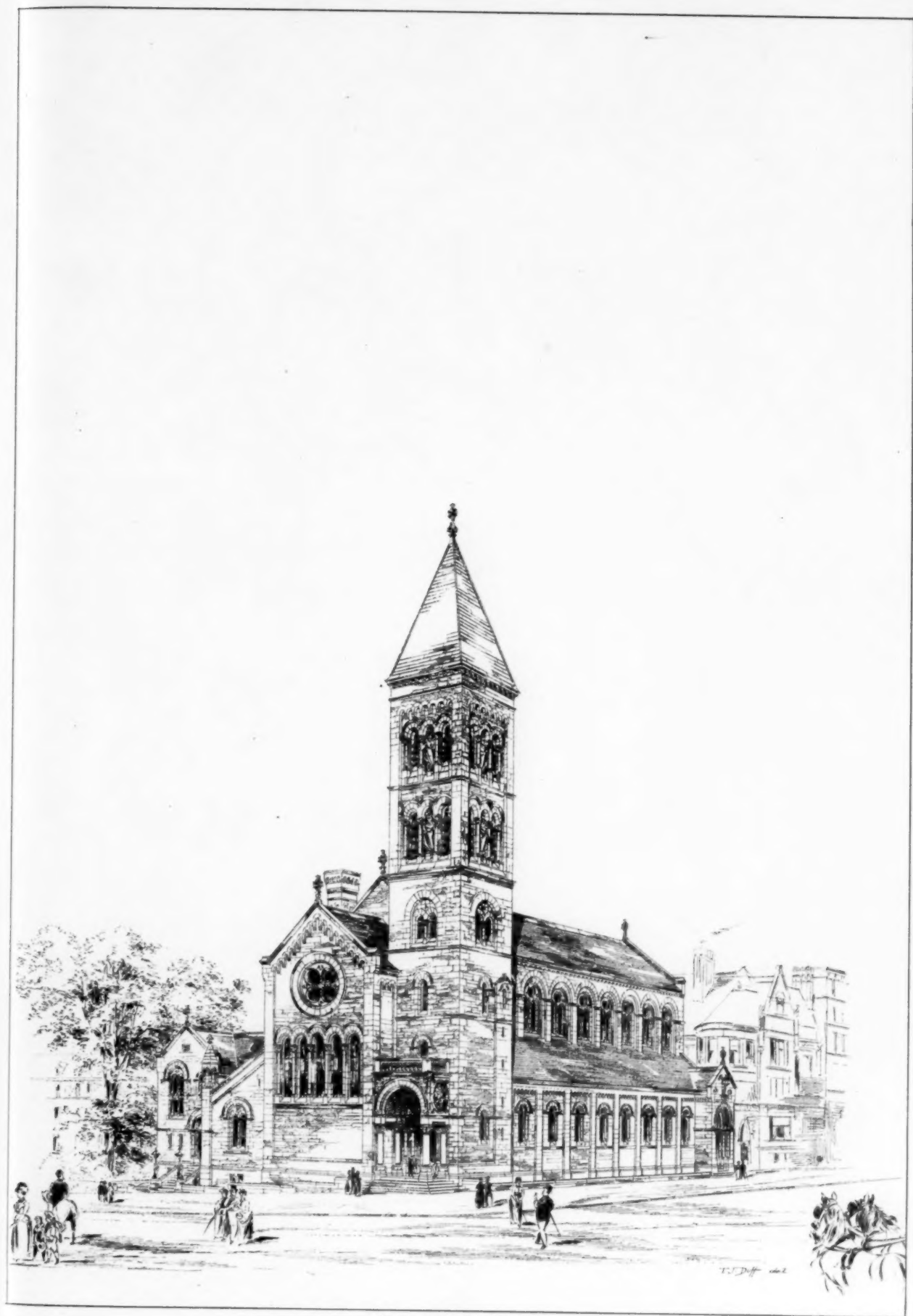
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