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TO OUR SUBSCRIBERS.

DURING the coming year we shall pay especial attention to the architectural features of the World's Fair at Chicago. The gelatine plates of the INTERNATIONAL EDITION in particular will be largely selected from World's-Fair subjects, and subscribers to that edition, will receive also *twelve extra helio-chromes* mainly from the same sources, to be issued at intervals during the year.

All *new* subscribers for the year 1893, who remit to us their subscriptions *direct, in full*, before January 1, will receive the December numbers of this year gratis.

A SUGGESTION, which is not altogether new, has been made by Mr. Henry K. Hannah, for facilitating traffic through the streets of Boston, where something of the kind is greatly needed. There are several singular things about the street traffic of Boston. Although it is comparatively small in volume, it has a singular faculty for choking itself, and, as the Mayor recently wrote, it is, in practice, "crowded almost to a standstill" in streets which ought to accommodate it with ease. Washington Street, for example, which is one of the "congested" thoroughfares, presents, in the region of the great dry-goods stores, the singular spectacle of a narrow sidewalk on each side, packed with a jostling, elbowing crowd, while the roadway between would be almost totally deserted, were it not for the strings of enormous electric cars, which follow each other slowly up and down the double track in the middle of the street. Often, in the busiest hours of the day, hardly a vehicle in motion, except the electric cars, is to be seen on the pavement, which presents a curious contrast with the crowded sidewalk. To a teamster familiar with Broadway, or the Strand, with their moving masses of vehicles, the idea of calling Washington Street, between Winter and West Streets, "congested" would seem ludicrous, yet the foot-passenger on Washington Street is more uncomfortable than he ever was on Broadway, even in the days of the Fulton-Street bridge. The cause of the disuse of the Washington-Street roadway, which is a phenomenon of quite recent date, is, evidently, the introduction of electric cars. It did not take drivers long to find out that almost continuous trains of sixty-horsepower locomotives, passing in two directions through the middle of a narrow street, were incompatible with teaming through the same street; and, as the electric cars would not abandon their part of the roadway, the teamsters have had to give up theirs, and take their traffic, and its accompanying "congestion," to other thoroughfares. The solution of the problem of relieving the great Boston streets of their present discomfort evidently, therefore, lies mainly in the proper proportioning of footway and carriageway, and in making the carriageway more available than it now is. There are few, if any, streets in the city in which the carriageway would not be more than ample, if the cars were taken out of them, to accommodate all the other vehicles, and leave room, besides, for widening the sidewalks, which urgently require such widening.

MR. HANNAH'S suggestion for solving the problem is, not to arcade the buildings lining the principal streets, and thus, at enormous expense, ruin the rental value of the stores, without giving much additional space for passengers, but to set up posts at the curb-stone, and support on them a second sidewalk, on each side of the street, at or near the level of the second floor of the abutting buildings, leaving the space between these new sidewalks clear, except for occasional bridges, and stairways to the lower level. The second story of the abutting buildings would thus become as valuable for renting as the first, and the first would not be much injured by the change, as the old sidewalks would remain, and the light, although somewhat diminished, would be less affected than it is by the ordinary summer awnings, and far less than by arcading. Moreover, no space would be lost, as would necessarily be the case with an arcade, and the first-story stores would have the advantage of fronting on a sidewalk always sheltered and dry. The cars and other vehicles would use the streets just as they do now, but with the advantage that something might probably be spared from the width of the street-level sidewalk if another one were built above it, and that, as foot-passengers would cross the street mostly on the upper level, there would be none of the stoppage and blockading at important intersections now necessary to enable foot-passengers to get across. As to the posts for carrying the upper sidewalk, although they would be numerous and inconvenient, they would be no more so than the present telegraph poles, lamp posts and electric-car poles, and they would take the place of them all. The most serious troubles would probably be found in removing snow and in arranging staircases to get from the lower to the upper level. Few Boston streets have sidewalks wide enough to accommodate, without inconvenience, stairways like those at the New York elevated railway stations, but it might be found practicable to arrange stairways in the abutting buildings, as is proposed in Paris, and for a store, it would be very advantageous to have such a stairway, on account of the custom it would bring. Although it would be detrimental to the appearance of a building like Trinity Church, or the Public Library, to have a second-story sidewalk across it, there is hardly a building on Washington or Tremont Streets, or the business part of Boylston Street, which would be injured, and we are much inclined to hope that the plan may be carried out. With cheap iron, and flooring of Guastavino arching, the construction would be by no means costly, and it becomes every day more evident that something of the sort must be done soon.

A SERIES of experiments has been going on during the past weeks, at the United States Arsenal, at Watertown, Mass., for testing the comparative holding power of cut and wire nails. The magnificent Emery testing-machine is used in the work, and the results are likely to be conclusive as to the points submitted. Whether these points, however, comprise everything that architects and the public would like to know is uncertain; and, indeed, from the meagre reports that we have received, seems more than doubtful. The tests were made at the instance of the nail-makers themselves, to determine points disputed between the manufacturers of the rival kinds, and it does not seem that any architect or builder was invited to be present, or to offer suggestions. This was certainly unfortunate, as, so far as we know, no investigation was made of certain questions of great importance, which would have occurred at once to any architect or builder of experience. In the comparative tests, the cut and wire nails were driven to exactly the same depth, side by side, in a piece of timber, and then drawn out by the testing machine. As might have been expected, the cut nails showed about one-third more resistance to being started from their hold than the

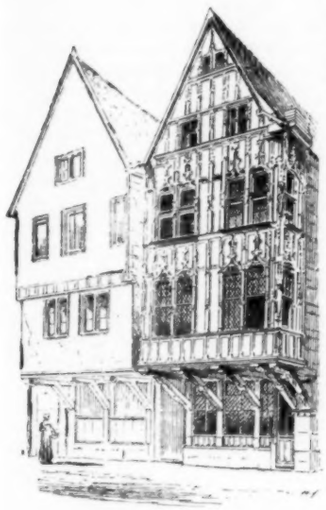
new and smooth wire nails. All carpenters find, by experience, about the same difference between the two, but they also find, what the testing-machine does not seem to have shown, that, after the first start, the cut nail, owing to its tapering shape, draws out much more easily than the wire nail, which continues to hold with considerable force until almost entirely withdrawn. During the testing, it was found that a particular make of wire nail showed, within eight per cent, the same resistance to starting as the cut nail against which it was tried, but investigation disclosed that the wire samples of this manufacture were slightly rusty, and the friction due to the rust caused this great increase in resistance. Here would be, obviously, a hint to wire-nail manufacturers to rust, or in some other way roughen the surface of their nails, but the suggestion, which would occur to any one who has tried to pull out a rusty wire nail, has already been adopted by at least one manufacturer, who dips his wire nails in what appears to be asphalt varnish, with the result of increasing the holding power considerably. Another investigation, which it would have been interesting to make, would be one relating to the comparative resistance of cut and wire nails to movement caused by alternations of heat and cold. Most people who have slept in an old house during a very cold night, have heard at intervals the sharp reports which country people attribute to "the nails going off." This phenomenon appears to be due, not to explosions of the nails, but to their unusual contraction, which, as the head cannot be drawn inward, pulls the point outward. The elastic fibre of the wood resists the pull with great force, but is compelled at last to yield to the irresistible power of contraction, and gives way suddenly, causing a report, and often a perceptible jar. When warm weather returns, and the nail lengthens again, the fibre of the wood has readjusted itself about the nail, and as expansion takes place, it is much easier to push the head of the tapering nail outward, than to force the point again inward. The head of the nail thus begins to advance toward the outside, and, after many successive seasons, it may come to protrude considerably from the clapboards, or shingles, or flooring, or other work secured by it. Any one can see the results of this curious movement by close inspection of a few wooden houses. After fifteen or twenty years, the putty in the nail-holes, over the heads of the clapboard nails, will be found bulging out, and perhaps nearly ready to drop, and expose the nail-heads. Twenty years later, the nail-head itself has begun to protrude, and in fifty years or so it will often be found to have crept out nearly a quarter of an inch. Obviously, this movement, even in its incipient stages, exposes the nail to rust, and probably shortens the life of wooden buildings considerably, so that if wire nails should be found to stay in place under the effect of alternate contraction and expansion, they will be much more desirable for outside work than the cut nails.

THE competition for the Philadelphia Bourse continues to afford material for vexation to those most interested. It seems that, at a meeting of the Engineers' Club of Philadelphia, not long ago, a member "called attention to the act of leading architectural societies of this city, in passing a resolution to expel any member who submitted plans for the Bourse, because it was specified that the architect should be associated with an engineer," and suggested the matter as a suitable subject of discussion by the Club. The report of the meeting says that "no action was taken," which was certainly the most judicious way of treating the suggestion. As we recollect, the architectural societies never objected to having their members "associated" with engineers, in the matter of the Bourse, or any other building; what they objected to, and with reason, was the stipulation in the Bourse competition, by which an engineer was thrust upon the architect, as co-designer and general meddler, in a way which gave assurance of discomfort, disagreement and loss of credit for both; and the engineers should be as ready as the architects to discountinance such an arrangement. As a rule, architects are much more ready to consult engineers than engineers are to call in architects, for the reason, probably, that the work which an architect asks an engineer to do for him is that which he is quite sure of not being able or willing to do for himself, while what an engineer expects of an architect is commonly some work of taste or skill in design, and it is difficult to persuade any American that his own æsthetic faculty is not sufficient for all his requirements. At the same time, it would be a good thing for engineers if they could have more assistance from architects than they now seem to enjoy, and it would not be amiss for architects to refer even more of their complicated problems in construction to engineers than they now do; and it would not take long for both to find that their professional provinces, though contiguous, are sufficiently distinct to afford opportunity for a friendly alliance, of great benefit to both.

THE Paris Exposition of 1900 already begins to occupy a considerable space in our exchanges, and M. Antony Wable, in *La Semaine des Constructeurs*, makes a particularly ingenious suggestion in regard to it. There is no doubt that the exhibition will occupy a much larger space than the last one. The total area required for the exhibition of 1889 was about one hundred and seventy-three acres, but the buildings were rather inconveniently crowded. The Chicago exhibition will have a park of more than a thousand acres for a site, and, with every recurrence of these affairs the number and extent of buildings required increase. It is to be expected, therefore, that the Champ de Mars and the Esplanade of the Invalides, which, together, sufficed for 1889, will be too small for 1900, and there is no other large space within the city limits. According to one of the Paris newspapers, the plan contemplated by the Government is to take the Tuileries garden, and the adjoining quais, extending along the latter as far as the Hippodrome, and taking in the Esplanade of the Invalides, on the south side of the river; and to take in also the Avenue des Champs Elysées and its continuation, as far as the Bois de Boulogne, including so much of the Bois de Boulogne itself as may be necessary. This would give a line of galleries more than three miles long, extending from the Bois de Boulogne to the very centre of Paris, with groups of more important buildings at each end, and in the middle.

THERE is something rather attractive in this scheme, by which the tourist, strolling through the galleries, could divide his attention between the objects exhibited in them, and the brilliant life of the Avenue des Champs Elysées outside; but the persons most experienced in such affairs seem to think it preferable to group the buildings more compactly. M. Berger, the distinguished Commissioner of the Exposition of 1889, is said to have mentioned the grounds of Bagatelle, the private estate once owned by Sir Richard Wallace, and now included in the Bois de Boulogne. This would be a most beautiful location, and *La Semaine* thinks that, as it is certainly desirable, as a matter of architectural effect, to keep all the buildings together, rather than to spread out the exhibits over miles of insignificant galleries, and as no space sufficiently large for the necessary group can be found in the city, it would be better to accept the necessity at once, and choose a site suitable in all respects outside the city limits. The natural objection to this is that the communication between the different portions of the city, and the extremity of the Bois de Boulogne, is inconvenient, but *La Semaine* points out that ample means of communication would be provided, if the Exhibition should be held there, by private enterprise. We can recollect how sharply the railroads contended with each other for the privilege of establishing stations near the exhibition buildings of 1876, in what was then the remote and almost inaccessible Fairmount Park; and, before the Exhibition opened, the fair grounds formed the terminus of a whole system of railroads and tramways; and there is little doubt that the same would be the case in Paris. In view of this, M. Wable suggests that, as the project for a Metropolitan railway seems to have been abandoned for the present, apparently on account of the opposition of the great omnibus and tramway companies, and the unwillingness of the General Government to come to the assistance of the city, it would be an excellent idea for the city to enter on the construction of the road by itself, arranging to have communication with the Exposition grounds, wherever they may be, made a part of the plan, and to have the principal lines open for business by the year 1900. If this could be done, the city, having a monopoly of the business of conveying passengers to the Exposition grounds, would be sure of a very large profit, which would enable it to dispense with Government assistance to a certain extent, and perhaps altogether. Meanwhile, the Metropolitan road would have been built, and a great public improvement made under very advantageous circumstances.

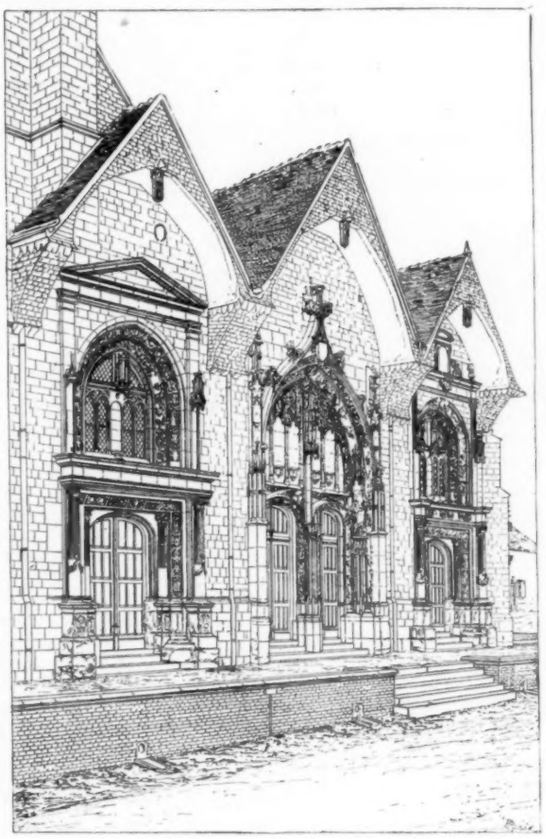
THE CHAMPAGNE SCHOOL OF ARCHITECTURE.[1] — III.



Wooden House, Rheims.

FEW remarkable specimens of private architecture are left in Champagne; the most interesting of all such remains is unquestionably the celebrated House of the Musicians at Rheims, for we believe we are justified in assigning it to the thirteenth century, and private constructions of that period are very rare now. It stands in the Rue du Tambour and is said to have belonged to the corporation of minstrels. According to Viollet-le-Duc, the date may be set back to the year 1250. The Abbé Cerf says that it was apparently built between 1240 and 1250 and that the adjoining house must be referred to the fourteenth century. Of the latter we shall have something to say farther on.

The windows, divided by a stone mullion and a single cross-bar, light a vast hall with a ceiling of exposed timbers. The disposition of the roof does not indicate that the room was ever vaulted. The outer lintels are thin; they are lined on the inside with a broad wooden cross-beam with very sharp angles,

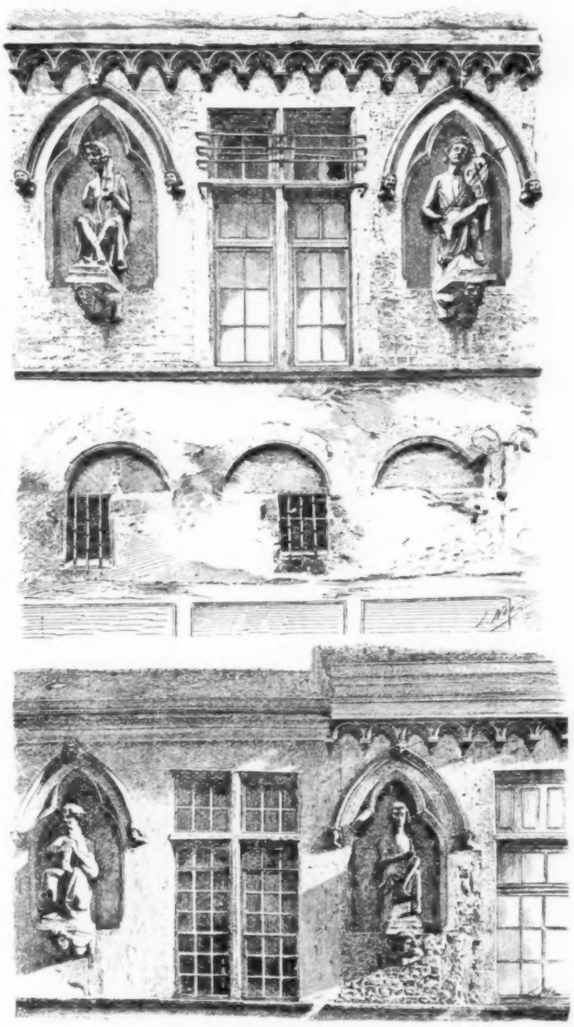


Church of St. Marie du Pont.

and designed to support a depressed discharging-arch. The window recesses are occupied on either side by stone benches.

The *ensemble* of the façade is crowned by a three-lobed arcade with sculptured springers; it may have originally borne an openwork balustrade. Above rose the roof, with stone garret and dormer windows, a few traces of which are still to be seen. Nothing remains of the old façade except five seated figures — a player on the clarinet and drum, a bag-piper, a harper, a violinist, a person in the centre holding a falcon on his wrist — and a carved cornice running around a part of it. Below the harper and the violinist, that is, beneath the two figures on the right, are three small semicircular apertures, surrounded by a moulded cordon and supposed to have once formed the upper part of three bays on the ground-floor. They seem to have originally rested on a support or lintel; but no trace of the primitive disposition now exists on the ground-floor; a wooden breast-summer has been introduced to enlarge the shops and any piers that may have once been there have wholly disappeared.

The ground-floor has also been transformed on the left, where openings with depressed arches have been formed.



The House of the Musicians, Rheims.

Any restoration whatever would therefore be entirely hypothetical. Absolutely nothing is known about the ground-story, for it is not even settled that the three arches on the right — nothing of the kind appears on the left — are as old as the seated statues; this is certainly open to doubt, since they do not correspond either to the axes of the niches or the intervening space. As for the square bay in the story above, it would seem to us venturesome to attempt to fix its date; in fact, neither the jambs nor the mullion have any characteristic moulding; the masonry work is of a rustic unhewn stone, which must have been revetted to begin with, as it is to-day, with a coating of some kind, and this must have been frequently renewed. There is nothing that would indicate with certainty that the form or the proportions or the decoration should be assigned to the thirteenth or even to the fourteenth century.

[1] From the French of P. Planat, in Planat's *Encyclopédie de l'Architecture et de la Construction*. Continued from No. 885, page 161.

Though these curious remains give us but little information as to what the façade of a Rheims house was at that period, they are nevertheless of great interest in regard to the sculptural decorations; it is easy to discern through the awkward stiffness

Staircase, House in the Rue de l'Arbalète, Rheims.

of the attitudes qualities of true and artless expression that are not without significance; the figures on the right especially are genuine portraits, real and living.

An act of 1521 furnishes a brief description of the house as it was at that time: it bore the number 1332, Rue du Tambour, and comprised "a *porte cochère* on the street, a hall, court, kitchen, one lower room, several upper rooms and closets, garrets above, cellars, wine-cellars, gardens and other appurtenances and dependencies." The adjoining house which is sometimes spoken of as though forming a part of the House of the Musicians, and bears the name of Palais Royal, dates, as we have already said, from the fourteenth century. The same act describes it as follows: "a large *porte cochère*, a court, kitchen, etc. . . . with the garden opening on the side of the Marc." From early times the two dwellings have been similarly disposed. The Palais Royal formerly had large ogival windows, divided by a mullion and crowned with trefoils; one of these is still to be seen. A few traces of arches and smaller openings can yet be distinguished. The inner court, with its ribbed windows, is of the fifteenth century.

MM. Verdier and Cattois, in writing of this curious relic and its carved decorations, have carried their admiration so far as to remark: "One does not depart much from the truth in saying that antiquity produced nothing nobler, simpler, more beautiful, or more harmonious than this house taken as a whole," etc. It is certainly an interesting work, but it would be better to refrain from such exaggerated praise.

We call attention also to another curious house at Rheims, in the Place des Marchès; it is in an excellent state of preservation and dates from the fifteenth century; it is called the House of Jacques Calloux, or of the *golden child*. The façade which is of wood and decorated with very beautiful sculptures, corbels out over the ground-floor and is supported by five struts. Standing at the corner of the square and a street, the corbelled portions get light from the side street. The end props bear two figures, one of Samson opening the jaws of a lion, the other of St. Michael on the dragon, with his hand resting on the hilt of his sword. On the intervening supports are groups of two small figures; on one are two nude children, seated on the calyx of a large flower, and similar subjects adorn the others.

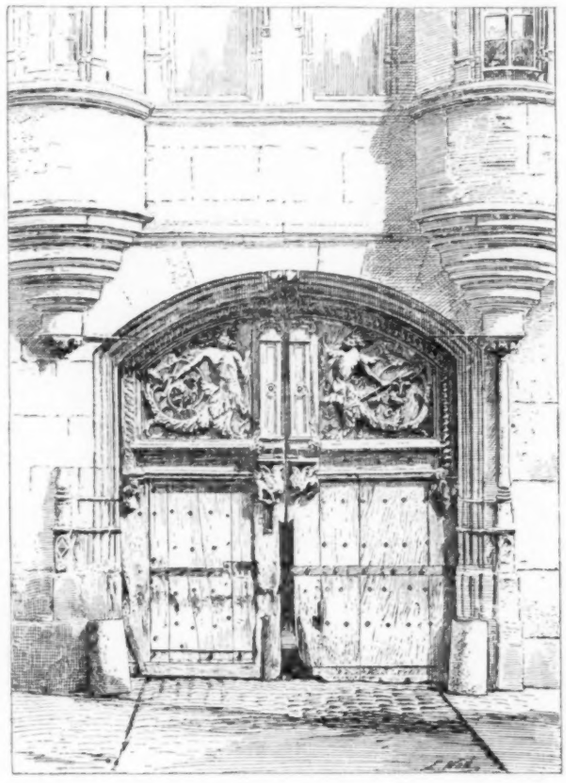
The upright timbers of the first story present at each end a series of representations depicting a workman seated, pushing a needle through a bit of cloth; a woman with dishevelled hair, holding a sort of lamp or perhaps a flower in her hand; an old, long-bearded man, his head covered with an auricled hood; a person in antique style, counting on his fingers; and lastly a fool with cap and bells. Under the last beam there is an escutcheon on which are the letters J. C. These may have been, it is said, the initials of Jacques Calloux, draper.

In addition to the refinement and wealth of its ornamentation, this façade is interesting because it furnishes a curious example of a simple corbelling supporting the entire two stories and gable; this disposition is much rarer than that exhibited in the adjoining house, which must belong to the same period.

The entrance to the court of the chapter-house reproduced here was built in 1531. In former times the keeper opened and closed it at the moment when, at the sound of a bell, the city gates were opened and shut.

Specimens of private architecture from the sixteenth century onward are quite common in Champagne; at Rheims, we may cite especially the celebrated house in the Rue du Marc, at the corner of Rue Pluche, which possesses fine sculptural remains, unfortunately deteriorated by time. We give also a less well-known fragment from a house in the Rue de l'Arbalète; it offers a beautiful example of the openwork spiral staircases of which French Renaissance artists were so fond. Beneath the modern additions with which certain portions of it have been masked, and which could be easily removed, we detect the noble characteristics of the style of Champagne.

On one of the steps of the turret staircase may be read, "15 S. B. 83 (1583), in the time of the processions." Reference is doubtless made here, says M. Tarbé, to the processions of the League in Rheims, the white processions spoken of by



Gate of the Cour du Chapitre, Rheims.

M. Cocquault, and which occurred the year that Louis de Guise made his entrance into Rheims as archbishop.

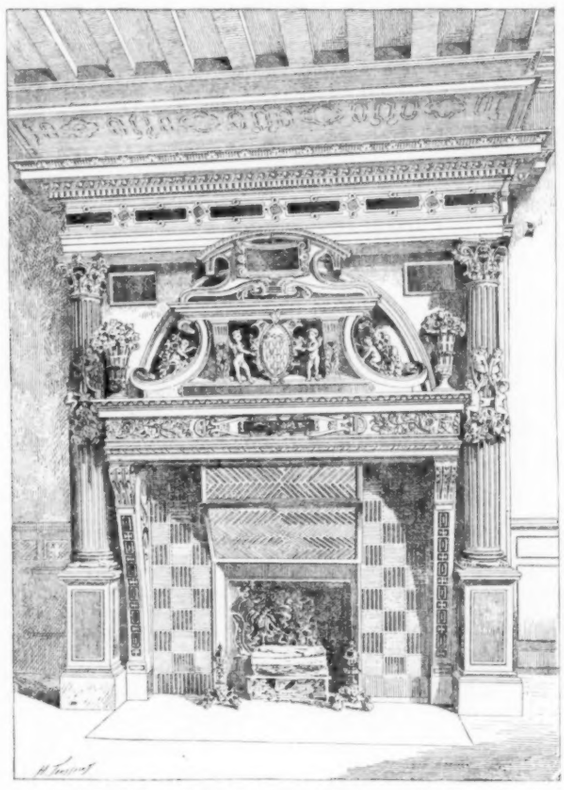
But it is especially to Troyes that we should turn for well preserved remains of this period; the characteristics of the Champagne style are very sharply defined there. The Hôtel de Mauroy and above all the famous Hôtel de Vauluisant must be ranked among the first in interest.

Châlons possesses to-day few private residences particularly worthy of note, but the town preserved for a long time its primitive aspect and enabled one to form a general idea of the appearance of the cities of the fourteenth and fifteenth centuries. M. Barrat has left a description of it which seems sufficiently interesting to be summarized here.

After 1347, the date of the English occupation, the city decreased in population. In 1421, the number of families was reduced from 2,500 to 1,200. "At about this time, the façades of the houses were pierced with square windows, divided by wooden or stone crosspieces. The roofs were flat and projected three, four or five feet; the effort to secure protection from the rain was carried to extremes then. Not only did each story jut over the one below for three or four feet, but every window and dormer had its own individual roof. Finally, the pent-houses of the shops were more or less prominent and their main roofs nearly touched one another. . . . The stories advancing beyond the base of the house enabled pedestrians to walk under shelter. There was a bench at the door of every dwelling, where the owner came to sit."

At the beginning of the present century, Châlons still contained a number of houses of different epochs. A contemporary writer describes them thus: "The houses were, in general, closed by heavy doors, covered over on the inside with ironwork of all sorts. The windows were barred with iron. In the stores a long piece of timber ran across the entire apartment, supported by a central pillar, and was carried outside to receive the merchant's sign-board. The façades were surmounted by huge pent-houses, from which merchandise of all sorts was suspended. Artisans' shops were closed with a single shutter, fixed at the top and swung up by means of a pulley, either fully or half-way. In the latter case, it served as a screen from the light. The windows opened in the same way all through the shop; when it rained they were raised half-way, so as to form a small glass roof, which prevented the water from reaching the interior and carried it into the street.

"In the first story there were often three, four or five narrow and long windows, set close together, with wooden panes in the lower part; the windows of the second story, when there was one, were square. The garrets were lighted by simple dormers." Such was the appearance of the city and such it must have remained for centuries.

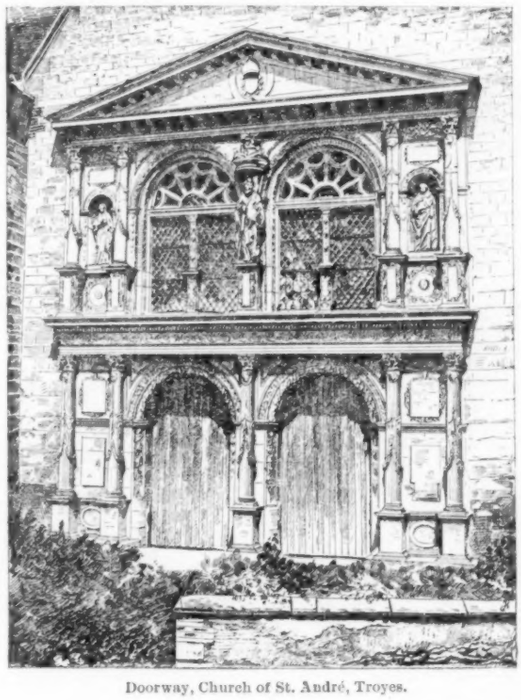


Fireplace, Hôtel Vauluisant, Troyes.

If, in the Middle Ages, the School of Champagne found expression in an exceptional quest after ornate grace, delicacy and lightness, it should also be remarked that these characteristics were maintained during the following period; they can

Hôtel Vauluisant, Troyes.

be detected in its productions, as in those of earlier times, though under a new and very different aspect. Were all these artists in whose works this delicate *manner* is discernible, natives of the province? Were they born on its very soil? There is no question about most of them; in any event, these



Doorway, Church of St. André, Troyes.

productions all exhibit the same characteristics and testify to the same aim. We are, therefore, compelled, at the very least, to admit that a distinctive taste still prevailed in the Province of Champagne in the sixteenth century and that it forced itself upon artists, even though they may have come from abroad:

Renaissance edifices here are readily distinguishable from those of the same period in other provinces.

After the seventeenth and eighteenth centuries Champagne may offer some very beautiful specimens of architecture, but at that time French unity had already been attained and the characteristics peculiar to each province were gradually disappearing and merging into a general style which later became universal throughout France, at least in its main lines; little then remains to be said of different provincial types except as to a few differences of details.

P. Planat.

BUCRANIA.[1]—IV.

Fig. 29.

Fig. 30.

We have previously stated what were the three principal forms of the bucrania that were employed in ancient times in ornamentation. When the artists of the Renaissance met with that

Fig. 32.

ornament on monuments, they used it again, but only from time to time, and especially during the sixteenth century, with slight modifications and new appropriations. When the bucrania were used in architecture, either alone, repeated, in succession or alternated, according to the ideas of former times, the artists contented themselves with changing its motive of decoration and even sometimes its proper shape. In some decorative pieces, not many it is true, the bucranium is, as formerly, again used as a supporter of garlands, or else the garlands are replaced by cartouches or frames suitable for inscriptions, as in the sarcophagus of Sassetti, a sketch of which has already been given. But as soon as the victim's head became a motive of pure caprice only, an ornamentation used like many others,

Fig. 31.

then the artists introduced it in the prominent fashion of that epoch, in scrolled wavy friezes, in fanciful arabesques; they also transformed it at the very first opportunity into supporters, into linking or crowning features, all these ornamentations being entirely without prototype and original. These heads were joined to anything and everything, as was daily done for vases, dolphins, culs-de-lampe, etc. The ornamentists gave full play to their imaginations; they vied with each other in making of that carcass any odd or pleasing thing, a contrasting centre, a springing for a *floraison*, and they used it according to the caprice or the need of the moment, either at the superior, middle or inferior part; in vertical, horizontal, square or circular compositions; it mattered little, provided that it was becoming and answered the purpose for which it was placed there. The artist used the head on a door-post, between two cornucopias, and supported it by a sort of pedestal shaped like a globe surrounded by foliage (Fig. 29, Fifteenth-century door-frame); also on a *candeliere*,

Fig. 33.

Fig. 34.

which ornaments an English imitation of Grolier's bindings (Fig. 30) where the bucranium can be seen resting on the voluted wings of a genius, while it in turn supports in equilibrium cornucopias, culs-de-lampe and vases; here in the centre of a frieze, a bucranium unites the two symmetrical parts of foliated scrollings, which are hooked into the ocular cavities (Fig. 31, National Museum, Munich); there at Laxenburg, at the entrance of the hall called "the Coronation Hall" (Fig. 32), the branches issue from the nasal openings; sometimes it is used as the crowning of a shaft where it blossoms on the crest with a common and insignificant air (Fig. 33, Composition by Vogtherr); or with a realistic manner augmented by the presence of

Fig. 35.

Fig. 36.

serpents coming out from the eye-sockets, as we can see in San Giobbe of Venice; sometimes an artist like Beham does not hesitate to fix the victim's head on a pike in the middle of a panel, like the Indian who fastens his enemy's head to his spear-head (Fig. 34). In some bands decorated with a succession of genii, the limbs being formed by foliage attached to the trunk of the genius, a bucranium is erected in equilibrium upon the joining parts of the voluted extremities (Fig. 35, by Nicoleto of Modena). On plates or dishes of Caffagiolo, we can see at the upper part of the arabesque the victim's head hanging from the rolled tails of two dolphins which menace it (Fig. 36), or resting vertically at the upper part of a cup (Fig. 37). Finally in the rood-screen at Limoges, a bucranium, modified by appendices, of which we shall speak later, becomes a pedestal which supports and upon which is erected the whole edifice of a luxuriant ornamental combination.

Although the decorator seems, from what has been said, to have used the bucranium with the greatest freedom and to have allowed himself all sorts of license in its use, we must not conclude, however, that that elementary type had undergone serious modifications in its style, as has happened with some other ornaments.

The different examples we have already seen indicate sufficiently that at all epochs the victim's head has been almost always represented in the same way and that it has been affected only by very few modifications; of course we do not speak of the more or less correct shape given. Indeed the bucranium has been presented

Fig. 37.

Fig. 38.

entirely simple or embellished with emblematical adjunctions as far as it was used to express an idea or to recall a fact; next we notice that from the Renaissance it was still used with ancient or revived ideas attuned to the fashion of the times either by means of fanciful additions or with the aid of twisted forms which were everywhere allowed, so that the object no longer expressed anything by itself. Therefore these different modes of existence can be summed up into four principal groups, namely, "1, *Plain;* 2, *Decorated;* 3, *Leafed;* 4, *Unnatural* or *Perverted.*"

PLAIN BUCRANIA.

Under this title we shall include the bucranium in a rudimentary state, the wholly natural bucranium, not only the skinless skull, but also the one whose skin has been retained. These two states are the only ones used in many cases, and especially at the beginning, for sober or severe ornaments, as on some metope, rustic altar, sepulchral stone and on certain sacrificial instruments, coins, such as those of Assos and of the Phocians, etc. We can see them also in the reproduction of historical, mythological or allegorical scenes

Fig. 39.

Fig. 40.

Fig. 41.

Fig. 43.

as a sort of secondary document, as upon the Vase of Darius, already pointed out, upon which the victim's head hanging upon the wall (Fig. 38) reminds us in a very simple way that before the act thus represented, a sacrifice had been offered to the hermes [gaine] of Aphrodite, which is placed at the side.

In the compositions of the artists of the sixteenth century, the plain bucranium is used, profusely ornamented with light scrollings and

[1] Continued from No. 883, page 135.

foliage, in several instances as a sort of intersecant bond, the sober and plain aspect of which is something of a relief and serves to throw out more strongly the embellishments which surround it or which are symmetrically repeated on each of its sides; such is the case shown in Figures 22 and 31. In other instances the bucranium

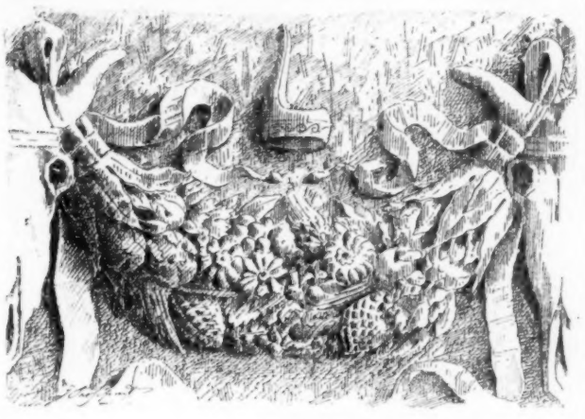


Fig. 42.

is transformed in the shape of a ring in order to take hold of two chains or of two stems which run through it from top to bottom, as is shown in Figure 39, coming from the decoration of a cannon. But this complete and icy nudity forms sometimes a too-striking contrast and seems to divide everything rather than to bind it. Therefore, in order to form a sort of hyphen between these elaborate and eagerly sought for combinations, in order to harmonize its *ensemble* and to give it more cohesiveness, the decorator ornaments the bucranium with some decorations, either plain or elaborate. This mode which was in fashion in the remotest times, is the most frequently used and constitutes the second group of bucrania in our classification.

DECORATED BUCRANIA.

The idea of ornamenting the bucranium more or less and thus putting it in harmony with that which accompanies it, is, so to speak, born with it. This idea came quite naturally to some by the interpretation of certain particularities as is indicated by the

Fig. 44.

Fig. 45.

colored points and the shaded portions by which the bucranium was ornamented by Egyptian painters (Figs. 3, 4, 5), to others by the copy accurately made of the model trimmed with the required ornaments at the time of the sacrifice, that is, of the model, whose horns were bound by a cord, a leather strap, an embroidery which served at the same time as a fetter, a distinctive ornament and as a means of suspension. However slight this ornament might formerly have been, in many cases it has proved entirely sufficient when rightly used. By force of circumstances this sort of ornamentation became gradually more important; to the stiff bands, strings, common "*licia*," the faithful soon added knots, tufts and tassels (Fig. 40, after H. Sambin and Fig. 41, after Æneus Vico); a little later these very common embellishments were replaced by ribbons or by a puffy shell-like kind of stuff, softly plaited, the extremities of which fluttered in the breeze (Figs. 20 and 28, for instance). Finally for more pomp and brilliancy, light falls of flowers, small leaves, sprouts or chaplets of pearls, flowerets, roses and interlaced pendants were added (Fig. 25). It was by regulating and characterizing these ideas in order to make them more in conformity with the

Fig. 46.

Fig. 47.

rules of his art, that the sculptor created the true type of the ancient bucranium, so well known and also so often accurately copied.

Notwithstanding the remarkable qualities of these first ornamentations which decorated that bony mass, and, falling from the horns, filled the inferior spaces thus rendering the whole better adapted to fill the space of the metope whose ornaments we have just spoken of, they appeared, nevertheless, too sober, we were going to say too paltry, to accompany the bucranium upon the altars and Ionic friezes. Therefore, in order to satisfy the desire for elegance so eagerly sought for, they thought only of uniting the heads of the victims, which were placed at the corners or regularly sculptured on

Fig. 48.

Fig. 49.

Fig. 50.

the platband, with garlands which had not only a very graceful and striking effect, but were quite in harmony with the subject and recalled the natural festoons of leaves and flowers which formerly were used daily as well as now-a-days, in order to ornament the objects of worship or the places where prayers were offered. These garlands, hanging from the horns by wavy ribbons, were made of fruits or flowers and more often by a happy mingling of these two gifts of Vertumnus and Pomona, which were usually presented to the gods during the sacrifice (Fig. 42, An antique fragment in the Museum of the Vatican).

As soon as the bucranium was put in use by Italians and after that by their imitators, the ancient embroideries, the ancient waving of consecrated ribbons and garlands, which were formerly copied or interpreted with ardor, were then modified in form, aspect and position, and were finally replaced by other objects of a more new and more refined style. Garlands became a twisted fringe, forming epaulettes, or were replaced by cartouches, scrollings, (Fig. 35), vegeterian animals (Fig. 22), etc.; the ribbons became chaplets

Fig. 51.

Fig. 52.

(Figs. 27 and 30); the falls made of pendants and flowers were transformed into a succession of bells, into hanging cartouches and separated bouquets, as at Bournazel (Fig. 26); the pieces of stuff not only ornament the superior part of the head but more often they are thrown over the horns and form a garland below the muzzle, as in the Church of Grand-Andely (Fig. 43); or else upon a cuirass of the epoch of Henri II where they hang from the horns and enter into the mouth after having formed two festoons (Fig. 44). Many times these ordinary resources are, though varied, no longer sufficient, or they are not original enough. The idea of adding serpents to the bucranium seems to have been especially in favor during the sixteenth century and that idea is considered as the representation of a phenomenon which was actually observed; several

Fig. 53.

Fig. 54.

Fig. 55.

examples have already been quoted, to which may be added this one furnished by Æneus Vico, at the base of a bronze chandelier (Fig. 45). Nicoleto of Modena replaced these realistic additions by fanciful objects the principal merit of which seems to have been to sufficiently furnish and embellish the form. Thus in common ornamentation we see a bucranium (Fig. 46) hanging from a crown with two

flaming torches emerging from the eyes, probably to replace the vanished sight of the orbit, and later on we may see an ox's head (Fig. 47) with two cornucopias attached to its own horns, the whole being surmounted by a mask to which are attached the wings of a bat, with serpents for hair.' Elsewhere on the profusely ornamented page of a medal catalogue which belonged to the Strozzi family, a skilful but unknown artist has replaced in a bucranium the serpents and falls by common volutes and the forehead-band by a scalloped one which unites the horns and binds them together so as to form only one piece (Fig 48).

LEAFY BUCRANIA.

To this last way of ornamenting the bucranium in order to render its aspect more presentable and alluring, and also to maintain its rank among other motives of ornamentation so elaborately decorated, was added, almost at the same time, another one entirely new, the credit of which must be given to the Italian masters. It consisted in adapting to it, as an embellishment and even sometimes as a facing, leaves, pendants, foliage — that sort of vegetation which was so abundantly and currently used at that epoch. In short, they did for it what was formerly done for dolphins, masks, genii, etc.; but, as we must acknowledge, with more moderation and reserve, perhaps on account of the few attractions and the trifling importance of the subject. If the examples of this somewhat elementary type thus revived and which we distinguish by the name of "leafy bucranium," are numerous and sometimes elaborate and fanciful enough, they present nevertheless very few varieties indeed, for almost always the same spaces are filled in the same manner in Italy and later on in France and elsewhere.

These fanciful additions, which are so becoming and harmonize so well with the remainder of the ornaments artistically arranged in complicated arabesques, pertained especially to the superior part of the head, to the horns, and sometimes extend even to the eyes, nose and muzzle.

So we see at the end of the fifteenth century the gifted miniaturist Girolamo da Cremona placing a bucranium on the ornamentation of the gradual of the Cathedral of Sienna, and making a sort of very alluring jewel, whose cap is only an acanthus leaf and whose nose is replaced by a pendant, a bud which is about to blossom (Fig. 49); again, on a shaft of the Church of the Holy Trinity at Florence, among the luxurious entanglement of blossoming twigs, animal and whimsical figures, the artist has placed as a bond a bucranium whose horns are enveloped in leaves and the upper part of its head is surmounted by an herbaceous tuft (Fig. 50). Although the ornamentist continued to surmount the victim's head with leaves and pendants, the *ensemble* of which formed a casque or a stem from which sprung either a vase or a support. The artists who had already very often made use of the ocular or nasal hollows as a place from which twigs emerged, thought to utilize as well the place of the horns: to that end they cut off these appendices and in the hollows thus formed they substituted other vegetable horns more flexible, more slender, more graceful, which sometimes occupied a very large space although always very elegant.

As a specimen of this manner of covering the bucranium with foliage, we cannot do better than to refer to the one presented to us in a framing of an edition of Herodotus, dating from 1470; it is very elaborate and the refined taste of the artist is well shown (Fig. 51).

UNNATURAL BUCRANIA.

Especially during the sixteenth century the bucranuim could have been seen in the conceptions of the sculptors and carvers as well as in those of the miniaturists and the draughtsmen of niello-work; every decorator, every ornamentist made use of it. It was a motive in daily use and as such was considered as an integral part of the ornamentist's portfolio. Even at that time, the elements which were formerly used as ancient models, were no longer copied with the same accuracy and care. That was all right at the debut, in order to get acquainted with them. Now, many times some one added something that originated in his own mind, but they were satisfied

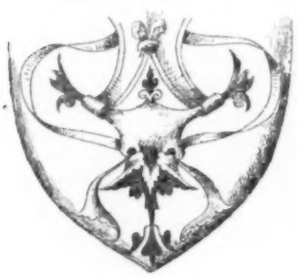


Fig. 56.

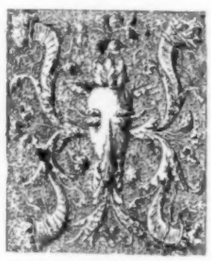


Fig. 57.

most of the time to repeat them more or less perfectly. Thus the artists knew these elements by heart and drew them from memory. These motives being in daily use, from the master's hands passed into the student's, with more or less accuracy regarding the genuine type. However, that led to no harm, inasmuch as, most of the time the ornaments were improved by it, some with a charm unknown till then, impregnated with the ideas of the moment, others with a certain relief, according to the nature and fancy of the artist. From that fact naturally came the large variety of forms and aspects, which can be seen from the starting of this reformatory movement, in the elementary types and more especially in the bucrania. There also were brought forth a large number of deformities fancifully conceived and generally obtained by subtractions, substitutions or additions of pieces and foreign fragments, a real mélange, at the end of which the bucranium became a hybrid thing, such as this victim's head with wings soldered on the cheeks, and whose head is placed at the centre of the breastplate of a cuirass, which is now at the Museum of Artillery at Paris (Fig. 52); here is another one, very odd indeed, which is used as a support to one of the most elaborate arabesques of the rood-screen at Limoges, to which the sculptor has added two enormous paws, in order to obtain a larger and more solid base capable of supporting its fanciful load, and which made the bucranium resemble a crouching animal (Fig. 53.)

Fig. 58.

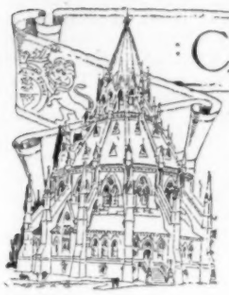
After the way had been thus shown, every artist tried to surpass his neighbor in whimsical and odd or ingenious design, and it very soon happened that they began positively to play with the bucranium. "It was taxable and workable at their lordships' discretion."

Therefore in many cases the bucranium became an ornament, the true origin of which was almost unknown; it was, as it were, not to be recognized, so many and so great were the modifications of the contracted or enlarged outlines; fanciful horns in spirals or straight (Fig. 54, Hôtel de Ville of Orleans), muzzles square or pointed, slashed in the form of a braid or hair of a poodle (Fig. 55 Coat-of-arms of Fouquet: drawing of Lebrun) or spread out like a leaf in the sun (Fig. 56, Lower part of a cartouche made by an unknown master, in the Cabinet of Engravings at Munich).

While some artists allowed themselves to be guided by their fanciful imagination towards those improvements which seem to revive the old customs of Middle Ages, and form, as it were, a natural sequel to those impossible small animals; others, more cool-headed, thought best to create something new by giving to the bucranium the appearance of a carcass belonging to another quadruped. In so doing they were guided by the teaching of the past. In fact antiquity had left, profusely spread out on numberless monuments, besides oxen's skeletons (bucrania properly so-called) other heads of animals whose skin has been taken off, as those, for instance, of rams, sheep, goats and he-goats (ægicrania). These victims thus represented, were really an emblem for the Greeks or for the Romans, but it mattered little to the people of the Renaissance; they were satisfied to acknowledge the presence of those specimens among the ornaments which were brought to light again, which they considered as models for themselves and more emphatically as sources of inspiration, in order to authorize themselves in enlarging their field of action by applying the principle to other animals. That way of doing was the most satisfactory and soon was put in practice. At the end of the fifteenth century and during all the sixteenth, very often we meet in sculpture, in engraved pieces, in the sketches of some masters and in illustrated books, skinned heads, free imitations of the bucranium, whose shape is rounded or lengthened, hornless, with the ears only, whose jaws are furnished with large and sharp teeth, etc., and whose *ensemble* presents the striking image of dogs' heads, stags' and horses'. The latter seems to be the most numerous and sometimes present queer and agreeable examples, as the one which is presented to us in one of the panels in the gallery of the ground-floor of the house of Agnes Sorel at Orleans (Fig. 57). Beside this one, which was made under Francis I, it will be suitable to place a fragment of the stalls of the choir of Saint Peter's at Perouse (Fig. 58) the drawings of which are attributed to Raphael, while the carving was done by Stefano da Bergamo.

Thus we have before us two remarkable types of ornamentation which not only will allow us to acknowledge that these special bucrania, with varied and unforeseen aspects and manners, to which no particular name has been given, have been used and modified as oxen's heads, that is, sometimes plain, sometimes ornamented and decorated with foliage, even more unnatural, but still will show us in a striking manner the happy results which have been brought forth from these new conceptions by the skilful decorators of that beautiful period; a period devoted to all that was most refined and elegant in art.

Jules Passepont.



TORONTO BY-LAWS AFFECTING SCAFFOLDING. — DERRICKS. — DECIDING THE CHARACTER OF A BENEFACTION BY POPULAR VOTE. — THE HART MASSEY MUSIC-HALL. — THE NICKEL AND COPPER MINING INDUSTRIES. — THE PEEL EXHIBITION. — AN UNCANNY PAINTING.

THE Municipal Council of the corporation of the city of Toronto has enacted a by-law respecting the construction of building-scaffoldings, a subject which has been mentioned before in these letters. It was felt by many people interested that, if such a by-law were passed, an army of inspectors would be required to tramp the streets all day and every day to watch new scaffolds being put up and existing ones raised (as the buildings proceeded), and it was thought that a few general rules as to safety, supplied in printed form to workman, would meet the case, and that, if a scaffold were not erected in a secure manner, the workman might be able to detect it and refuse to work thereon. But these and other suggestions have not been noticed, and the by-law has been framed and passed. One or two convictions have already been secured since the by-law came into force, one of which was the case of a contractor who had but half a day's work to do to finish a lofty chimney. It was discovered that, although he was a man of experience, and had constructed it with every intention of making it as sound as possible, his scaffold was not erected according to the terms of the by-law. He was, of course, forced to take off his men and to comply with the requirements of the by-law. Without doubt, unscrupulous builders should be prevented from risking the lives of their men for the sake of saving a few dollars, but there may be many peculiar cases that the by-law would hardly cover. However, all will have to submit, whether it be reasonable or not.

The by-law is divided into four sections. The first refers to "builders' scaffolds," the second to "carpenters' scaffolds," the third empowers the City Commissioner to prosecute offenders, and the fourth provides that "a penalty not exceeding fifty dollars for each offence, exclusive of costs, and, in default of payment of the said penalty and costs forthwith, the said penalty and costs, or costs only, may be levied by distress and sale of the goods and chattels of the offender," etc. There is nothing at all remarkable about the by-law. The scaffolds contemplated by the framers are of the most ordinary character, and nothing is said about scaffolds designed for special works, such as might require to be properly framed and bolted, nor is there any word as to the construction of centres for arches, or with reference to underpinning. On the whole, it is about as poor and wretched an enactment as could well be devised, and when its enactors take the trouble to insert a clause to the effect that for "small" scaffolds a rope of a diameter of one-eighth of an inch less than for other scaffolds may be used, and that all ropes *must* be sixteen feet long, I think we can guage their intellectual ability.

Another omission of a very important character is the failure to regulate the use of derricks, which, in the last few years, have become very common, and are very dangerous. As a building rises, so does the derrick, and its supports are often of a rickety kind, while a long, heavy arm not too well braced stretches out over the street to hoist immense weights of material. The fact that a man was killed by the breaking of the derrick on the building upon which he was working only a short time ago, and that every day numbers of citizens pass to and fro beneath the awkward arm of a crane that is more likely to be faulty in its construction than well made, might, one would think, have secured for the citizens some protection by means of a by-law.

Mr. Hart A. Massey, of the Massey-Harris Manufacturing Company of Toronto, has made a very generous offer to his fellow-citizens; namely, to devote the sum of one hundred thousand dollars, as a memorial to a son who died some years ago, to some purpose by which the greatest number of citizens may best be benefited. A meeting was held by a number of prominent citizens to consider Mr. Hart Massey's offer, with the result that it was suggested "that nothing would meet the requirements of our city at the present time so fully, nor meet the ends to which it is proposed to set aside this large sum of money, as a large and well-appointed music-hall; the building to contain, say, one audience-room capable of seating from 3,000 to 3,500 persons, well equipped in every particular, another for smaller audiences of, say, 1,000 persons, the building also to contain the necessary offices, committee-rooms and other desirable features." A site for such a building has been purchased already, although there does not appear to be anything in Mr. Massey's offer which would bind the citizens to this particular site. The only question now to be settled seems to be the guaranty required by Mr. Massey — that if he builds the concert-hall, the citizens will maintain it. Another meeting is arranged for December 10th, when the matter will be further discussed, and any suggestions people may have to make will be received.

Toronto has at the present time several small concert-halls, but nothing of the size suggested, except the pavilion of the Horticultural Gardens, which was intended more for an exhibition-hall than for music; but, failing any better accommodation, all the large public concerts are held there. The want of a hall such as is now suggested has been felt for a long time, and several attempts have been made to raise funds to build one, but all schemes have fallen through, on account of the uncertainty of the revenue to be derived. Such a gift as this, however, demands recognition from the Municipal Council, and any scheme which is decided upon should receive their assistance, as, for instance, through the remission of taxes on the site, free supply of water, etc., or in any other way that the city has power to assist.

An extraordinary state of things exists with regard to mining operations in the Province of Ontario, the result of party quarrels, one might almost say, in the Provincial Government. The history of the affair is this: The present Minister of Crown Lands for Ontario paid a visit three years ago to Sudbury, the great nickel district, and at the next session of the Legislature introduced a bill for the regulation of mining interests, which passed its second reading in the House. The leader of the opposition criticised the bill vehemently, and found fault with the Government for not arranging for a royalty on the output. Up to that time no one had thought of such an imposition, the mining industry being altogether too new, and requiring really all the aid that could be given it for its development. The Government, fearing that the opposition might make political capital in some way from such a suggestion, forthwith withdrew the bill. At the next session, the Government itself brought down another bill, imposing a royalty on every ton of output, and this became law, to the present ruin of the industry. In consequence of this, the following remarkable paragraph appears in the report of the Mining Bureau concerning nickel: "The product of eight nickel mines operated by four mining companies (for 1891) was 85,790 tons (of ore), returned at the low valuation of $324,240. The total amount paid for labor was $322,201. These returns, of course, do not include labor for roasting and smelting the ore, nor its value when converted into metal. Of the latter product, the United States Government, last year (1890), purchased for armor-plate purposes 4,536 tons, containing about 900 tons of nickel." This statement naturally puzzled everybody. If the cost of labor for mining $324,240 worth of ore was $322,201, there is only left the ridiculous sum of $2,039 for other incidental expenses and for profits. Such a statement is very misleading, and is likely to do a great deal of harm, deterring capitalists from investing in what, in time, must prove a very profitable business. Compare this statement with the summary of the mineral productions of Canada for the same year, 1891, compiled by the Geological Survey Department, and it will be seen that it is absolutely incorrect. This gives the output of our nickel mines as 4,626,627 pounds of nickel, valued at $2,775,976. This is estimating the metal at 60 cents a pound, and, allowing one-half for the cost of refining the nickel, the products of the mines last year were worth nearly $1,500,000.

It is also a misfortune that the Canadian Copper Company owning and working three mines, the Copper Cliff, the Evans and the Stobie, have been obliged to suspend operations for the present, owing, it is reported, to their having been beaten in a lawsuit brought by Mr. S. J. Ritchie concerning his share of the stock. A fourth mine has also closed, but for a very good, though unfortunate reason — it is managed by a Board of Directors all of whom are in England and hold their Board meetings in London. The Grand Trunk Railway is an example of the impossibility of doing successful business under this method, so it is not surprising that smaller enterprises should fail also.

In consequence of the death (mentioned last month) of Mr. Paul Peel, a Canadian artist in Paris, an exhibition has been held of a few of his works, his best ones being in Paris. A more unfortunate thing could hardly have been devised, for in this exhibition have been placed pictures that he painted as far back as ten years ago, when he was only budding, and which had he been alive would undoubtedly never have exhibited at all. They were collected probably by some well meaning friend, ignorant of art, who thought it a good opportunity to secure purchasers on behalf of the widow; but Mr. Peel's work in Canada was that of a very young artist without much instruction and as he promised to become a fine painter, it is particularly sad that he should have been cut off in his prime. It is to be hoped that his gold-medal picture, at any rate, will find its way here, that we may be able to form a correct idea of his ability.

A remarkable picture is now on view, the author of which is a Canadian, Mr. Ernest Thompson. It was painted in Paris and received a silver medal, but the subject is terribly sad, the treatment cruelly realistic, even to horrifying. The subject, is the incident, fairly well-known, of the Norman peasant returning to his home on the outskirts of a wood, in mid-winter, and who, within sight of his cottage, was attacked and devoured by wolves. The artist is said to have visited the spot and reproduced the exact surroundings: possibly he did, but there is nothing striking in that, as the edge of any wood would have suited just as well, or even such a scene might have been invented for the purpose as it is nothing more than half-a-dozen trunks of young leafless trees. The picture is called

"Waiting in Vain," and it is supposed that the cottage in the dim distance in which is noticed a light, contains the waiting wife. The centre and feature of the picture is a group of three wolves, undoubtedly, very true to nature, as the author made a study of wolves at the Zoölogical Gardens. The middle wolf appears to have arrived late, after other wolves have satisfied their cravings on the corpse, and is seizing with horrible greed and viciousness on the skull, using all his force to penetrate it with his cruel fangs. Of the peasant nothing is left but skull, backbone, pelvis and the bones of one leg still joined together in a ghastly line absolutely denuded of flesh, one leg and the arms gone: the snow is besmeared with blood. The other wolves are finishing their meal with their backs turned; one of them appears to hear a voice from the cottage and two others, slinking off in the distance, appear to have had enough. It is to be feared that Mr. Thompson has shown his great skill in animal painting in a rather horrid manner and we fear he will find some difficulty in finding a purchaser, for certainly no one would like to have such a subject in his private dining-room.

: PARIS :

THE ARTS OF WOMANKIND. — EVERYTHING TO THE SEWER. — DEATH OF EMILE SIGNOL, PAINTER.

THIS fall, the Palais de l'Industrie was occupied by the Union Centrale des Arts Decoratifs, whose exhibition was consecrated to the arts of womankind. This idea, altogether a gracious one, was doubtless due to the President of the Union, M. Berger, Deputy, who was Director-general of the Works at the Exhibition of 1889, whose taste in all matters of elegance, and especially those which concern woman, is well-known. This exhibition of the arts of womankind was international, modern and retrospective. Here one experiences a stirring of one's art-instincts, which are not usually excited at the annual exhibitions, more or less industrial in character, which are gathered at the Palais de l'Industrie.

Everything of a vulgar character was, as a matter of course, banished, and space was made for beauty, grace and poetry of form. In the great nave of the ground floor one did somewhat experience the impression excited by an ordinary exhibition, since there the same furniture, the same bronzes and the same bric-à-brac were installed; but this impression disappeared when we mounted to the floor above. Here was found the retrospective exhibit of the arts of womankind. The history of hair-dressing was set out in a most interesting, not to say life-like, manner by means of eighty female busts coiffed by our best artists. Here we saw the *coiffures* of antiquity, of the Middle Ages, Henri II, Henri IV, Medician, Louis XIV, Louis XV, Marie Antoinette, and Louis XVI, etc., down to our own day, and it was difficult to determine which of them was the most graceful or the most eccentric. In the middle of the hall, a group after the manner of the Musée Grevin showed a graceful little woman of the time of Louis XV just stepping out of her sedan-chair. In a neighboring room, five pretty women in wax, wonderfully clad, displayed to the vulgar public the elegance of a modern five o'clock tea. Farther on, a charming decoration with figures showed the plastic reproduction of one of the most charming successes of Moreau-le-Jeune, "The Delights of Maternity." The history of woman's costume was reconstituted in a very complete and interesting manner, thanks to the private collections which were lent so generously, and also thanks to ancient engravings and plates. Nothing could be more amusing than to see our Parisians laughing at and making fun over the fashions of their ancestors while waiting their turn to be laughed at and mocked for their own eccentricities by succeeding generations. It must be acknowledged, however, that in some measure they are right to derive amusement from it, for the modes of the First Empire and those of 1830 were actually grotesque. It seems as though the women must have been extremely pretty to give pleasure in clothing so absurd. The conclusion to draw from these retrospective views of fashions is that, after all, our women have no reason for complaining that our epoch is less luxurious and elegant than those which preceded it. The stuffs of the last century seem very poor and simple beside the tissues provided by our great centres of industry at Lyons, Tarare, St. Etienne, Calais and St. Quentin. The laces and embroideries, however, were truly marvellous, and the bric-à-brac was represented by jewels of real grace and refinement.

We could admire, also, the collection of magnificent fans, at least so far as their mounting went, even if their decorations and paintings were often maladroit and spiritless. It was not so with those vases which have a peculiarly private destination, which were represented at this exhibition by specimens ornamented with painting.

Female artists are many in number, and two rooms were reserved to them. Here one saw many works already exhibited at the annual *Salons*, and which often evidenced a surprising vigor of execution. And, finally, grouped in a large hall, were the exhibits of Austria-Hungary, Bosnia, Galacia, Bohemia, Herzogovina and Buda-Pesth, which initiated us into the mysteries of the elegancies of foreign womankind. A large glass case of Slavic or Czech embroideries particularly excited the admiration of visitors. This exhibition had a great success in the secular and artistic world, whose members it brought together at the Musée des Arts Decoratifs, whose riches one always revisits with pleasure, and which profits by the occasion by encouraging in the public a greater knowledge of its contents, which are ordinarily left aside in its semi-forgotten corner of the Palais de l'Industrie. When will it be moved into a more central portion of Paris? When will they carry out the project of building a special museum for the decorative arts on the site of the Cour des Comptes, whose ruins, still standing after twenty-one years, ceaselessly recall the lugubrious memories of 1871?

Alas, why is life so made that poetry, ideality, art, must always at a certain time give place to reality and materialism. We had but just passed before the exhibits in the elegant and perfumed halls of the Exhibition of the Arts of Womankind, and here, as we leave the building, we find ourselves on the quays of the Seine, whose perturbed waters effect a complete change in the current of our reflections. Here we are at once confronted with a very important question, which at the moment occupies everybody, but which is absolutely removed from everything poetical. I speak here of the question styled "Everything to the Sewers."

The cholera epidemic which has lately reigned in Paris, quite slightly, however, has called attention to the state of the waters of the Seine, which, unfortunately, we are obliged to furnish to Parisians during the times of great drought, when the spring waters prove insufficient. There is charged to its account, and not without reason, the cholera and typhoid fever which have raged this year. And, in fact, it is remarked that when an arrondissement is provided with river water, typhoid fever immediately makes its appearance there. Even now the water of the Seine is not precisely benefited by the discharge into it of waters coming from factories more or less insalubrious which surround Paris. When there is added to this the sewer waters of the city, you will agree that for potable water much is left to be desired. But for some years past other things have been added to it, and now a great number of houses have adopted the practice of discharging everything into the sewers. When M. Durand-Claye, engineer, and M. Alphand formulated this system, it was held to be admirable. It did away with the fixed receptacles and freed the dwelling-houses of a deposit which was far from being hygienic. Because of it the dwellings were much more healthy, and Paris became a delightful place of sojourn. But in proportion as filth was discharged into the Seine, it became a pestilential cloaca which poisoned the suburbs. The inhabitants on the river banks complained, the press conducted an energetic campaign, and M. Durand-Claye, to whom a short time ago people desired to erect a statue, is to-day abused and treated as an assassin. Happily for him, he is dead and is not present at this reversion of public opinion, which would have been so painful for him.

The system of "everything to the sewers" may not be a bad one; but that of everything to the Seine may be disputed, and just now the question of building a canal to the sea is seriously being discussed. M. Camille Raspail, Deputy from the Var, is busying himself in the Chamber with these sanitary questions, and here are some of the arguments he invokes to condemn this system of "everything to the sewers" as it exists, and above all this "everything to the Seine." He finds fault with the administration for having approved a system which calls for certain conditions which do not actually exist. In the first place, the sewers are in an awful condition. M. Alphand acknowledged it himself before the Senate, and declared that twelve years would be needed for their reconstruction. The grade was not proper, and there was not water enough for the scouring of the soil-pipes. This insufficiency of water is the excuse for putting Parisians on short allowance every summer, and even then it leaves them for drinking only the Seine water. Few persons know the cause of this suppression of spring water. In certain quarters there comes a time when in houses arranged on the "everything to the sewer" system, the water of the Vanne alone rises to the upper stories for the service of the water-closets. The water of the Seine, not having sufficient pressure, the water of the Vanne, which is taken away from the inhabitants, has to be used for the flushing of the sewers.

In 1880, the Ministry of Agriculture and Commerce appointed a commission called the "Commission de l' Assainissement de Paris," which published its report in 1881. This report condemned the system of "everything to the sewer." M. Raspail pointed out still another danger, that is, the direct discharge into the sewer of factory waste water. In Paris and in its suburbs there is a large number of factories where are employed dangerous mineral poisons, arsenic, mercury and cyanide of potassium. To ward off danger from this source the administration should oblige the manufacturers who employ these poisons to discharge their waste waters into sumps built outside of the city. This method is actually in use at Roubaix, which adopted it under the threat of Belgium to close to it the Riez, a tributary of the Scheldt, which furnishes its household and manufacturing water-supply. When four years ago M. Raspail declared his theories condemning "everything to the sewer," he was confronted with the examples of London and Berlin and Brussels, but

the sewers of those cities had been built under better conditions with grades which facilitated immediate removal, and where water is very abundant. M. Raspail therefore condemns the system until it shall be established under better conditions, and his advice is that it is necessary to build a special canal to transport the foul waters to the sea itself, asserting, moreover, that an industrial use might be made of it.

Such is the state of the question which greatly interests the Parisians and the dwellers in the suburbs. It is high time to settle on a plan. It ought to be inadmissable that a city like Paris should be, even during the period of greatest heat, provided with a water-supply insufficient in quantity, and which even then introduces typhoid fever into the household, as has been done each year.

The painter Emil Signol, dean of the section of painting of the Academy of Fine Arts has died recently at the age of 85. Pupil of Baron Gros, at the Ecole des Beaux-Arts, M. Signol, in 1830, carried off the grand prize of Rome. His best-known painting, acquired by the Luxembourg, is "La Femme adultère," which dates from 1840. Galleries at Versailles contain of M. Signol's work the portraits of Louis VII, Philip Augustus and Louis IX. He had a share in the decorating of the churches of the Madeleine, St. Roch, St. Séverin, St. Eustache, St. Augustine and St. Sulpice. For the transept of the latter he painted four grand compositions. He was a talented artist, but his works, though classical and academic, often lacked sentiment and the quality of exciting the emotions.

LONDON

THE ANNUAL ADDRESS OF THE PRESIDENT OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS. — THE NEW PUBLIC WORKS' DEPARTMENT OF THE LONDON COUNTY COUNCIL.

FOLLOWING my practice during recent years, I propose to give a short account of the Annual Address of the President of the Royal Institute of British Architects. This forms a sort of résumé of the important architectural events of the year and the address of President McVicar Anderson expressed these events in a very thoughtful and lucid form which has attracted considerable attention.

President Anderson elegantly introduced his subject by an enlargement upon the truism, "we live in an age of progress." One of the most remarkable developments of our times he felt to be the perfection to which architectural draughtsmanship had attained. To set side by side the drawings of some generations since and those of to-day was to exhibit not so much comparison as contrast; for in many drawings by old masters in architecture, knowledge of perspective and firmness of touch were alike conspicuous by their absence; but whilst yielding to none in his admiration of the artistic beauty and perfection of the draughtsmanship of the younger school, he ventured to ask his hearers to consider that the mode of representation was obviously of less consequence than the thing represented, and it was because he had observed a tendency to drown architecture in mere draughtsmanship that he was induced to remind his hearers that, although every architect ought to draw, and draw with facility, it was yet possible to be a good architect without being a brilliant draughtsman; and, conversely, that it was possible to be an expert draughtsman, and yet not to have any claim to be an architect. Architecture was the material embodiment of conceptions of the mind; drawing was the medium by which these could be, at the best, but inadequately expressed. It may be excusable to smile at the draughtsmanship of old masters whose names live in history as great architects, but it might not be amiss for the brilliant draughtsmen of to-day, while justly proud of their attainments, to ponder on their prospects of acquiring equal fame; for while it was good to know how to draw with artistic excellence, it was better to know how to design with purity and truth. After discussing the pros and cons, he summed up as follows: In a word, so long as draughtsmanship was the truthful delineation of effects which it was desired to produce, it could not be too good; when, however, truth was disregarded, and when the temptation was yielded to, of producing delusive though attractive effects which the draughtsman knew could not exist, then no amount of technical or artistic cleverness could make it worthy of the art it professed to delineate, or bring it within the sphere of true progress.

Draughtsmanship naturally led on to education, and he noted in this connection the "vast strides which had been witnessed during recent years," and dealt in detail with the various steps which had been taken in this direction by English architects. He noticed the remarkable curriculums of University College, King's College and the Architectural Association, and felt that the progress attained by the latter during the first year — necessarily the most trying and critical — had been real, and such as to encourage the promoters in the continued and energetic prosecution of the scheme.

Referring to the proposed Fresham University or Teaching University for London he stated that a royal commission was now engaged in taking evidence, and considering the whole question; that such a University must embrace art as well as science and literature might be taken for granted, and it would seem reasonable that a definite place should be claimed for architecture. The scope of the University has thus been defined by Professor Huxley in a letter from him which appeared in *The Times* on the 7th of last July:

"The University occupies a position altogether independent of general or of technical education. It is neither an institution for testing the work of schoolmasters, nor a machinery for ascertaining the fitness of young men to be curates, lawyers, or doctors. It is an institution to which a man who desires to devote himself to any branch of science or art may go in full confidence that he will find there those who can teach him (or put him in the way of learning) what is already known in regard to that discipline, and still more train him in the methods by which he may himself advance that kind of knowledge. Under art are to be comprehended literature, the pictorial and plastic arts, architecture and music; under science, logic, philology, mathematics, the physical sciences, and archæology and history. The question of the connection of the university (in this sense) with the high schools and the technical schools of theology, law, medicine, and so forth, comprehended under the present 'faculties,' and the working in of the present chaotic raw material of educational institutions in London into an organized whole, are matters of detail which will settle themselves as soon as people are agreed upon first principles."

Teaching naturally led on to examination, and the President in reply to the criticisms that are from time to time levelled at the examination in architecture remarked that, so far as he knew, no advocate of examination ever thought or expected that it would or could create a great architect. It was not fair criticism to condemn an educational test because it did not effect a result which was never intended, and which was impossible. As consistently might University tests be objected to because they do not in all cases produce great divines! No one thought, however, of disputing that they acted as stimulants to the acquirement of knowledge, upon which success in life so largely depended. He felt justified in asserting that the Associates' examination had hitherto successfully withstood the somewhat fierce — and he felt bound to add, the not just nor fair — criticism to which it had been exposed, for, as the practical issue of all that had been said and written, the rising generation of architectural students had come forward in increasing numbers, and the cry was, Still they come! Did not this imply that they appreciated the active labors of the Institute in endeavoring to raise the standard of knowledge and promote the efficiency of architects, rather than mere academical and inoperative disquisitions?

The qualification of Fellows is a burning subject just now and naturally received a considerable amount of attention. The greater part of the reference was, however, intimately connected with the internal policy of the Institute and I need not trouble you with it. President Anderson's own opinion is, however, interesting to all architects. After discussing the merits of various proposals he said that it seemed to him reasonable that a single test of theoretic and scientific knowledge was sufficient, and that having once satisfied that, the further test or qualification for Fellowship should be, in addition to what now existed, an examination of the actual work of the candidate. In short an Associate should be tested as a student; a Fellow as an architect. To carry this out, it would only be necessary to enact, in accordance with the permissive powers of the Charter, that on and after a date to be specified, every person desiring to be admitted a Fellow should in addition to the present qualification, be required to have passed the Associates' examination, and to undergo the further test of submitting to the Council evidence of his executed works, always providing for special or exceptional cases by the dispensing power which the Charter conferred on the Council. Such an enactment would remove the existing anomaly that a candidate twenty-nine years could only acquire membership by examination, while a candidate thirty years of age could acquire it without any such test, and it would further meet the views of those who, to use the characteristic, if somewhat emphatic, words of Mr. Ernest George, thought that, "the Institute should relinquish the custom of admitting any respectable father of a family, however damnable his productions."

A suggestion for a modification of the form in which the Institute now conducts its publication, a reference to the election of the Duke of Devonshire as an Honorary Fellow and a hearty farewell to Mr. Aston Webb and an equally hearty welcome to Mr. William Emerson, as Secretary, followed, and then the President passed on to consider the relations of capital and labor. Labor, he felt, could be congratulated on the manifest desire now exhibited by society to accord to it fair and even liberal remuneration, and this he thought was to some extent due to strikes.

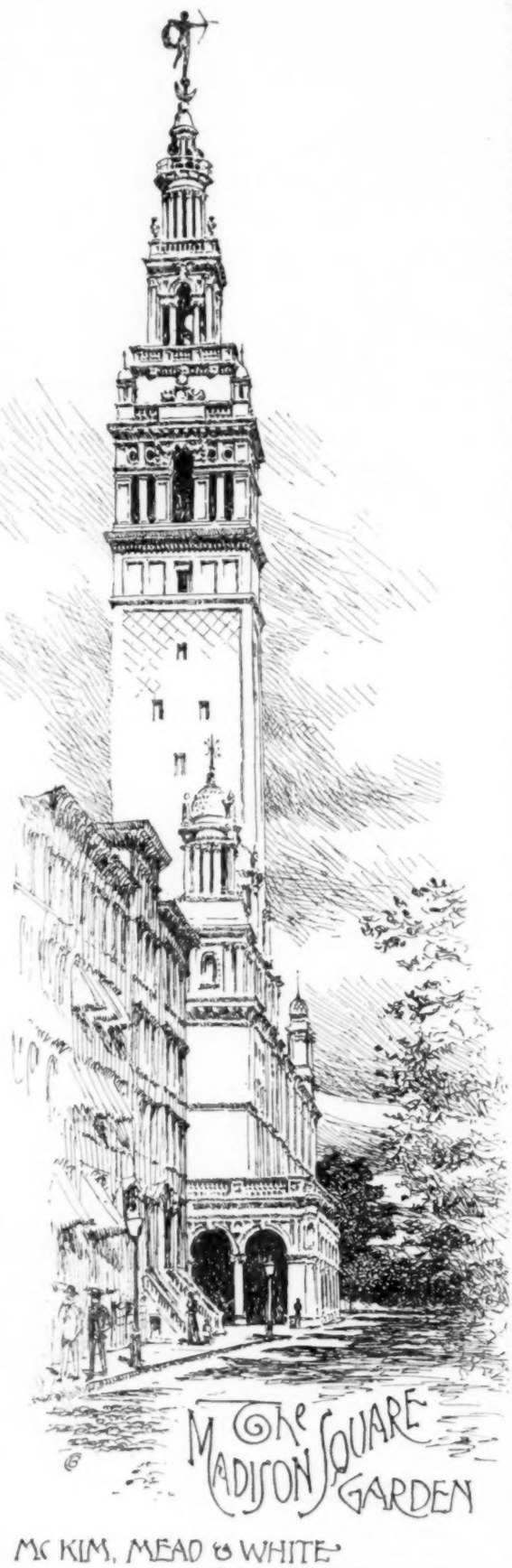
To combination for such legitimate objects, no reasonable person could or did object; but when trade organizations were used for the purpose of imposing arbitrary restrictions on labor, of depriving the workman of his right as a free citizen to work how and as he pleased, or of arbitrarily reducing the hours of work without a corresponding diminution in wages, such as may be dictated by the law of supply and demand, then it seemed to him that the real friend of the working-man was not his leader who preached such pernicious doctrines, opposed alike to political economy and common-sense, but rather he who bravely warned him of blind leaders of the blind, who,

be their motive what it may, were leading him to inevitable and certain disaster.

I doubt whether the President was wise in introducing so thorny a subject of discussion in his address at all, and I fear the brief reference will hardly excite enthusiasm among either of the contending parties. The manner in which he dealt with the recent strike of London carpenters and joiners did not meet with universal approbation, owing, perhaps, to the closely-reasoned character of the decision which served almost to render the award liable to criticism, of academicism and unpracticability, being not wholly applicable to the eminently practical body of men with whom he was dealing. Such language as the following, for example, may be considered suited to the serene atmosphere of Conduit Street, but at the same time it appears to me to indicate a somewhat inadequate appreciation of the difficulties of the present position of labor disputes:

"When workmen burst the fetters with which Trade Unionism is surely binding them; when they return to the good old days of freedom of contract and earnest work; when they recognize, what was as old as the hills, that 'in all labor there is profit: but the talk of the lips' — of which we hear so much in these later days — 'tendeth only to penury'; then — but not till then — may they expect to emerge from the dismal shade of progressive socialism, and walk in the path of real progress."

A paragraph descriptive of the World's Fair was followed by a relation of the steps taken by President Anderson with regard to the saving of Emanuel Hospital, Westminister, which he felt to be doomed, a conclusion which he arrived at with great reluctance and which he felt would be keenly disappointing to all lovers of art and particularly so to architects. Another interesting building which is threatened with destruction is the Church of St. Mary-Woolnoth, the work of Nicholas Hawksmoor, the pupil and friend of Sir Christopher Wren, and a familiar landmark in the city of London. This, it appeared, was scheduled as a site for a station on the line of a proposed underground railway. The President stated that he personally interviewed the authorities, and the Council of the Royal Institute of British Architects petitioned Parliament, but as the bill did not reach the committee stage, no action was taken. The completion and removal of the Wellington monument was briefly referred to and then the President entered upon a discussion of the proposed Council Broadway to which I have referred in previous letters. With the general idea of the London County Council's proposal he concurred, but he made one able criticism upon the relation of the new street to the Church of St. Mary-le-Strand. The expediency, however, of laying out the street on the central axis of a line drawn northwards from the centre of the Church of St. Mary-le-Strand appeared to be open to doubt. The Church of St. Mary was designed, as we knew, to be viewed from the west and east, notably the former, where it formed so charming a feature in the street architecture of London; and from an artistic point of view it was questionable whether it was wise to make it the central feature of a northern thoroughfare, to which it would present a frontage not designed for such a purpose, with the tower and steeple to one side instead of being in the centre of the vista from the north. He was disposed to think that it would have been better not thus to accentuate the northern view of the church, and that a happier disposition would possibly have been to make Somerset House the central feature by taking a line from the new street a little more to the west than is proposed.



The address was concluded by an appeal to all architects to recollect their responsibility not only to their clients, but to the public generally, and by an expression of his conviction that the architecture of to-day — although falling far short of what we longed to see, although exhibiting an exaggerated enthusiasm for the element of quaint picturesqueness, which he hoped at no distant date to see leavened by the spirit of Classic purity and simplicity — was not yet altogether unworthy of the enlightment of these latter days, nor altogether out of harmony with this age of progress.

The arrangements for the creation of the new Public Works' Department of the London County Council have been reduced to a practical form and adopted by the Council. The chief features of the scheme are as follows:

1. The Department is to be under the charge of a committee, to be termed "The Works' and Stores' Committee," and is to consist of thirty members.

2. The relations of this Executive Committee with the various initiating committees are to be on the following lines: (*a*) An initiating committee shall have the option of deciding whether the work is to be performed by a contractor or by the Council itself. If the latter, it is to lay before the Council full plans, specifications and estimates of the proposed works. These are to be thereupon referred to the Works' Committee and considered by them. If they are dissatisfied with the accuracy or sufficiency of the plans, specifications and estimates, the Works' Committee is to report to the Council accordingly, and the matter is to be referred back to the originating committee to bring up amended particulars. If, on the contrary, the Works' Committee are satisfied, they are forthwith to proceed to carry the works into execution. The Works' Committee have no power to vary the plans or specifications, except upon the advice of the architect or engineer, and in communication with the originating committee, and after reporting the same to Council; but action in emergency is provided for.

3. The order of reference to the new committee is as follows: It is to carry into execution all works which the Council resolves shall be executed without the intervention

of a contractor. They are to control the staff engaged in building, to provide store-yards and workshops, and generally to supervise the whole of the matters incidental upon the construction of works.

4. There is to be a new Department of Works, to which is to be entrusted the execution of all works upon plans prepared by the engineer or architect, and the custody and regulation of the Council's stores.

5. The salary of the head of the Department is to be £700 a year, and subsidiary officers, from £400 to £700 a year, are to be employed to supervise the administrative work.

The proposals have met with considerable attention, as will be seen from the following opinions:

The *Times* concludes a leading article on the subject as follows: "In our judgment, the plan now adopted in principle is, from every point-of-view, inexpedient. A committee of a changing elective body, composed of persons who, in regard to such business as that of building or drainage works, must necessarily be amateurs, is not likely to show efficiency in the control of large, costly and complicated undertakings. If it leaves everything to its chief officer and its departmental staff, it will create a dangerously powerful bureaucracy, which may not always be incorrupt, and which is almost certain to become obstructive. If it meddles with details, it will reduce the department officials to abject insignificance, and will meet with the usual success of amateurs. There is a further and still graver objection. The question whether any particular work should be undertaken without the intervention of a contractor will not be determined by the Works' Committee, but by the majority of the Council, who are pressed by the growing demands of their clients out-of-doors, and are committed to extreme opinions about the rate of wages to be compulsorily maintained. The declared policy of a section of the Council is to obtain the control of the productive industries of the metropolis, and they will lose no opportunity of taking every step in this direction that lies in their power. The demand for works substantially for the relief of the unemployed, and the exaction of the highest rate of wages, can no longer be met by showing the practical difficulties in the way of getting contractors to undertake them subject to impracticable conditions. For our own part, we have no faith whatever in the fitness of a body of this sort, even if it were not hampered by rash pledges, to conduct successfully the immense and complicated business of a firm of builders and contractors."

As for the technical papers, the *Builder* states that, "theoretically, the Council has a perfect right to undertake any work without making use of a contractor, but, in practice, it is doubtful if the result will be satisfactory. A great deal of extra responsibility and work must be thrown on the officials of the Council, who will have to purchase materials, engage workmen, etc. 'The proof of the pudding is in the eating,' but we shall be surprised if, even locally, the ratepayers find any satisfaction in what may be regarded as a new departure."

The *Building News* declines to commit itself as to "how far the Council are right in taking this step. We are, however, fully cognizant of the vast magnitude of the question, and fear the individual members of the Council have not all grasped the details of the proposed reformation in the execution of their public works. There is great truth in what Sir John Lubbock said in warning to the Council, that 'a municipality or government might control everything, but it could not undertake to do everything.' Is the Council undertaking too much? Is its present strength sufficient for the extra pressure on the actual 'working members' of that body — that is, the officers? We are inclined to think that the result of the experiment will prove that Sir John Lubbock was right in saying that 'government and municipal work was always more expensive than private work.'"

The *Architect* indulges in the dubious luxury of strong language: "Suicidal policy; insane proposal; transparent piece of folly. It is not worth while attempting to describe all the possibilities, not to say probabilities, of shipwreck the Council will open out to themselves if, as we may be allowed to doubt, they attempt to carry into practice their decision. If ignorant as babes unborn of the dangers that will confront them, they will not long remain so. Like young bears, they have all their troubles before them."

There is no doubt that the proposal has met with the severest criticism. The Conservative press is unsparing, while the more steady-going Liberals are careful not to commit themselves. It is only the extreme Radicals or Socialists who approve the idea. Nevertheless, the Council is steadily pursuing its own way, regardless of comment, and we shall therefore have an opportunity of watching the progress of the experiment which, whatever we may think of it from an economic point-of-view, has an undoubted interest to the looker-on, particularly when he does not occupy the position of the rate-payer.

BURNING OF ST. MICHAEL'S CHURCH, VIENNA. — This city was visited November 30 by a serious fire. The Church of St. Michael, one of the finest in the city and which is visited by tourists from all parts of the world was burned. The church stood in the Michaeler Platz, and was erected in the Romanesque style in 1219–21, and had a Gothic choir of the fourteenth century, but had been greatly altered in the seventeenth century. It contained many tombstones, from the sixteenth to the eighteenth centuries, which are badly damaged by the flames.

COLOR ON THE WORLD'S FAIR BUILDINGS. — THE JAPANESE BUILDING. — BUILDINGS IN THE MIDWAY PLAISANCE. — TROUBLES ATTENDING THE BUILDING OF THE PUBLIC LIBRARY. — THE BUFFINGTON INFRINGEMENT CLAIMS. — PROPOSED CHANGES IN THE BUILDING-LAWS. — THE ART INSTITUTE. — A BUST OF J. W. ROOT.

IN an autograph-book on sale at a recent bazaar in this city, H. C. Bunner wrote above his signature, under the title of "a modest request," the following:

> "The White City that lies by the great inland sea,
> I'm proud to aver, was so christened by me;
> And if the Chicago folks take to the name,
> I want one small niche in the temple of fame."

It was indeed a most suggestive title for the group of beautiful buildings rising by the side of the "great waters." What would Mr. Bunner say now, could he see the havoc which is being done in this White City, which formerly stood with so much dignity and harmony in the place which is destined soon to be one of the busiest portions of our ever-hurrying city. It was pleasant to think that "men might come and men might go," the crowds jostle and hurry through the grounds with their noise and confusion, and still there would look down on it all those great reposeful buildings, suggesting in their white grandeur, the elegance and endurance of old Rome in her festal days. We had heard rumors that the Director of Color would some day come forth and show his strength, but a thing as fiendishly aggressive as the Transportation Building has become was beyond the wildest fears of the most pessimistical. Of course allowance — great allowance must be made for the fact that the building so far as the coloring goes is in a very unfinished state. Undoubtedly on a close examination of the structure, the completed form will be much better than the present one, but from a distance, if the present color be preserved, the result will be a most unmistakably discordant note in the heretofore beautiful harmony of the northern group of buildings. People in sympathy with the present scheme of color on the building call the tint a "rich Pompeian red," while the large majority who disapprove, speak of it as "that abominable brick-red that is simply ruining the Transportation Building." Undoubtedly much gold and rich colors will be eventually introduced into the decoration, but the effect from a distance, if the same color shall be adhered to cannot be very different from what it is now. The building is cheapened by this treatment to an extent, which it would be hard to appreciate except through actual sight, and the loss of harmony and dignity which this group of buildings suffers by the introduction of this one red barn makes one wish severe things for those who are responsible for it. Possibly the scheme of color may become quite in keeping with the partial Spanish feeling of the building, but is it wise to sacrifice so much of the harmony of the whole to the possible better carrying out of the style of one structure. Most probably several of the other buildings are to receive treatment from the same hands, but it would seem a very hazardous experiment. The present dinginess of Horticultural Hall would indicate that its fate as to complexion is undecided. If the idea is to keep it white, it seems a great pity that a more successful labor-saving machine than the Hibernian who at present runs the furnace for the greenhouses could not be obtained. Hard coal is used, as it should be, and the only reason for the thick volume of smoke which escapes from the stack is that it appears to be too much trouble for the attendant to properly fire the furnace. However, if this smoke should in time tone down the colors of the poor little White Star Steamship Company's Building in its near vicinity, the black cloud would certainly prove one with a silver lining. The White Star Building has been spoken of before in these letters, yet, though a very unimportant structure, in its new coat of paint deserves to be mentioned again. Its hemispherical roof is at present a lovely pistachio green, while the frieze beneath it is only as bright as vermilion can make it. On this vivid red band repose large white stars, heretofore quite inconspicuous on a white ground, which makes one breathe out, at the first glance at the building, the old exclamation "My stars and garters!"

The Mines and Mining Building appears to have reached its final state, and in a tone of restful cream-color, just off of white, is satisfactory, though, by its close proximity to the Transportation Building it gains nothing. Vague rumors are abroad concerning the Liberal Arts Building whose Classic beauty is as yet unmarred by royal purple or sky-blue dabs. That any day may work a change in the Fishery Building, we are prepared. This structure though excellent by itself is not even in its present state in harmony with the surrounding structures, and should the old Romanesque coloring be tried on it, it would hardly stand out more distinctly apart than it does at present, and as an example of the thorough carrying out of a certain style might, from an architectural point, be interesting.

Portions of Machinery Hall appear to have reached completion

and the coloring on those parts is very charming indeed. The general white appearance of the building has been preserved, the only coloring being on the walls of the loggias formed by the colonnade, and the liberal use of gilt on the white Corinthian capitals of the columns and in the lettering used in the names on the frieze. Those used on the wall are only the most delicate blue and fawn colors, combined with most liberal tracery of gilt.

Thus far the decoration on the Agricultural Building is quite as charming as that on its neighbor the Machinery Building, which is certainly very successful. The staff on the exterior of the building still preserves the white tone of marble which, in the general effect, it simulates so well, while the recessed entrances have charming decorations in bright Pompeian colors and designs. This work is executed in a thoroughly excellent manner by competent artists under the direction of the chief-decorator. The designs on this especial building are those in keeping with the exhibits which the structure is to house. There are the typical harvest and seed-time scenes, in strictly Classical form, and with their brilliant and beautiful coloring, combined with good drawing make an especially charming decoration.

The entrances to the Electrical Building are treated in a similar manner, and are very successful. One has a faint hope in looking at them that the entrances and recessed walls in all the buildings combined may afford sufficient space for the decorator to work off his energy upon, and that consequently so large a part of the exteriors may be spared that Mr. Bunner's title to his niche may be a clean one, unsoiled by red paint.

St. Gaudens's much abused "Diana" has at last found a resting-place and, poised on top of the central dome of the Agricultural Building, rising up against the sky, comes out a thing of real beauty. Those heathen goddesses always did need to be kept at a distance not to have discernable their really low-down nature. Chicago is big enough to give Diana this distance, and now that we have covered her with gilt, which New York considered she did not need, she looks like a thing of life and beauty springing up to the sun, as the author of all good in the province over which she holds sway. The pose of the figure, in its present position at least, is fine, being full of strong yet airy action, such as suits one's preconceived idea of goddesses.

The interior decoration of the buildings is of the simplest kind, being indeed only a solid coat of calcimining in one light and pleasing tint. A rather interesting feature at present is the method used for covering the walls and ceilings. A machine is used consisting chiefly of a force-pump and hose with numerous refined attachments, by which more calcimine can be applied by two men at the nozzle-end of the hose in one day than by twenty-five working with a brush.

One of the most interesting buildings now in process of erection is that of Japan, on the Wooded Island. This structure is to be known as the Hoodeu (Phœnix Palace), and is to consist of three pavilions connected by three corridors. The pavilions are to be representative of three distinct epochs in decoration and architectural features in the art-history of Japan. The left wing will represent that style known as Fujinara, which continued from the tenth to the thirteenth centuries, and the interior will show the manner of decoration of the palace of a court noble.

The right wing will be in the style in vogue in the fifteenth century. This epoch was distinguished for its purity and simplicity, the colored decorations being replaced by the pen-and-ink landscape. In the interior of this pavilion will be reproduced the villa of a Shogun.

The central pavilion will reproduce the sitting-room of a feudal lord of the eighteenth century. The decoration of the central wall of this portion of the building will be of phœnixes and a huge pine tree, the Japanese emblem of strength. The adjoining room is to have a decoration of fan design combined with nearly three hundred panels, in colors and gold, of phœnixes. The result promises to be attractive, but, whatever the result is, the method of construction, as carried on by the native Japanese workmen, is most interesting to watch. The only things which we are at all familiar with similar to this scene of the building of the palace are the pictures of our old friend, "The Brownies." The queer little workmen in their curious costumes, bearing large white crosses on the backs of their blouses, toil up inclined planes with beams which three of our ordinary-sized workmen would stagger under. Then they hammer and saw away with ridiculously trivial-looking tools, or else swing huge mallets, which make their small heads and smaller legs look like jokes. Very few nails appear to have been used about the construction, as everything is fitted and mortised together. The building was evidently first put together in Japan, then taken apart, the parts carefully wrapped in paper and sent over here to be fitted together once more.

The eight acres of the Midway Plaisance are beginning to take shape, and the Cairo streets and German villages are fast materializing in what a short time ago was only vacant space. The thatched houses of the latter promise to be an attractive group, but the Turkish settlement, so far, in spite of solemn dedicatory ceremonies, in which the sacrificing of a ram figured largely, has as yet little interest in an architectural way. The Libby Glass Company is erecting buildings to contain its glass exhibit in the Midway Plaisance; the Vienna Bakery Company has put up a sightly and comparatively solid structure for its use; the large housings for two panoramas — one of the Bernese Alps, the other of the crater of Kilauea — are fast taking on definite shape, while the sliding-railway on the north and a very commonplace arched entrance at Cottage Grove Avenue give a defined outline to the limits of the Midway Plaisance.

The custom and bonded warehouse directly within the Fair grounds has been in working condition for some time, and has been receiving exhibits as they arrive. One exhibit has already paid its installation charges, this being a thirty-foot section of a California giant sequoia tree destined for the United States Government Building. The section is twenty-three feet in diameter, and will be hollowed out and put under the dome of the hall there, to be used as a two-story reception-room for visitors.

Without giving the printing firms a chance to compete, the immense business of printing the catalogues for the Fair has been given by the directors to the Conkey Printing Company, which is a non-union firm. This act has given rise to much unfavorable comment on the part of the general public, and now comes the resolution passed at a recent Trade and Labor Assembly, threatening a general strike of all union men employed at the Fair grounds unless the printing be given to some union printing-house, or unless the Conkey Company employ union men. As fully two-thirds of the men at Jackson Park are union men, a strike, if declared, would be of enormous proportions, and would seriously interfere with the work at the grounds. The Assembly will take no definite action until the special committee from the Typographical Union has waited upon the Board of Control of the exhibition, and, if no agreement is reached, some serious trouble, it is much to be feared, may be the result. Though the public could never sympathize in a widespread strike that would cripple the work on the grounds, yet it is much to be deplored that the action of the directors, or special committee, was such as it was.

The foundations for the Public Library are slowly being placed, and the building is again being brought to the notice of the general public, through various trying experiences which those interested in it are passing through. Work has been stopped once on the structure by the Assistant Superintendent of Streets, who found that, in driving piles for the foundations, the roadway on Michigan Avenue was being seriously damaged. The piling is near the street line, and has caused a depression of eight inches. It is feared that further settling might break the water and gas pipes, causing floods and, perhaps, explosions. Some arrangement will have to be reached between the Library Board and the Street Department before work can be continued.

Now comes the Trades and Labor Assembly declaring that it has the right to the southern half of Dearborn Park, on which the Library building is being built. It is a curious complication, the outcome of which it will be interesting to watch. It would seem that a Public Library might give more to the people than a Labor Temple, but it is not an easy thing to judge what is the most desirable thing for "the masses." Probably this claim will not amount to very much though some are prophesying trouble ahead for the Board. The story is briefly this. About ten years ago the City Council gave to organized labor in Chicago, through the Trades and Labor Assembly, the right to erect on the southern half of the square in question a building for its especial use. Then came an injunction filed by an adjacent property-owner, the grounds being taken that the national government not the city owned the property and that consequently it did not belong to the city to give to any one. The labor people had no money, were unable to fight the injunction and therefore it was granted by default. At present, however, the labor people claim that by the decision of the Supreme Court the city's ownership of the property has been established and that therefore the grant made by the city to the labor organization was valid and is still holding. Several prominent lawyers have expressed their opinion that, reasonable as the claim may look, no serious trouble can come from it.

Speaking of possible and probable law-suits reminds one of a stock company which has recently come into existence, namely the Buffington Iron-Building Company, of Minneapolis. While the company has been formed ostensibly for the purpose of manufacturing the iron framework and other materials used in the skeleton constructions of iron, the real object of the company seems to be to prosecute the claims of Mr. Buffington for what he is pleased to consider the infringements of his patents. These claims will be in the shape of royalties on all buildings of this iron framework construction, that may be erected in the future and a fair per cent on the money already put into such edifices.

Mr. Buffington numbers the Masonic Temple, the Monadnock and the Rand & McNally buildings here in our city as a few of the many that have trespassed on his rights. He appears to feel very sure of his claims, his patents he says dating from 1889. It is equally certain different features of this special method of construction were used in building long before that date, in which there was absolutely no chance for any illegal infringement. The Home Insurance Building here in this city was of this steel construction, and that was entirely completed in 1888. It may not contain in its construction all the features of the later buildings, but the principle is the same. Even with the one million capital stock, which the Company has, together with reserved capital, which Mr. Buffington claims to have, it is difficult to see what can be accomplished on the line on which the Company expects to act.

Some time ago was mentioned in these letters the stand which the city was contemplating taking relative to these same high buildings. The City Council, as reported, appointed a committee to frame new laws relative to building operations, and a sub-committee has finally brought in its report on this proposed ordinance. The rather unusual feature of the chief committee was that it was not composed, as is so often the case, of men whose business it was to know least about such matters, but of architects, real-estate men and, in fact, of numerous classes whose interests would naturally make them wisest in such an affair. The draft that has been submitted provides for the "establishment of an executive department of the city government, to be known as the Department of Buildings, embracing the Commissioner of Buildings, Deputy Commissioner, a secretary to the commissioner, inspector of elevators, an inspector of stand-pipes and fire-escapes and of buildings, and such number of inspectors of buildings and other assistants and employés as the city may, by ordinance, prescribe and establish. The commissioner shall be an experienced architect, and shall not be engaged in any other business. He shall be appointed by the Mayor, by and with the advice and consent of the City Council, on the first Monday in May, 1893, or as soon hereafter as may be." The proposed ordinance further describes the duties of the commissioner, which appear to be much the same in character as those of the usual building-inspector, except that they are more particularly specified by this ordinance. The fire-limits are to be extended, and the laws controlling buildings in said limits are to be in several lesser points more exacting than at present. After several laws controlling sheds and out-buildings, the height of buildings is next attacked. Concerning this, the new ordinance reads: "Hereafter no building shall be erected within the fire-limits of Chicago that shall be more than one hundred and fifty feet from the highest point of the front sidewalk grade to the highest point of the main roof." Next follows special provisions for walls, etc., while foundations, bays and porticos are next taken up. In fact, the general features are much the same as those of the present ordinance, buildings only seventy-five feet in height being permitted of ordinary combustible construction, semi-fireproof construction being required for all from seventy-five to one hundred feet, while all over this shall be what is known as absolutely fireproof; that is, steel or iron properly protected. It looked at first as if the appointment of Building Commissioner would not be entirely in the hands of politicians, but, as the draft now stands, not only one office, but several, are to be created, which may be entirely controlled by "the machine," bringing but little benefit to the building interests of the city, while several large salaries will make an additional drain on the treasury.

The Art Institute's building is progressing finely, and is no longer a thing without form and void. Considering the cramped quarters in which the Institute is located it will be a pleasant change for that institution to get into its new home. At present the Palette Club is holding its exhibition on the walls of one of its galleries, and is making a most creditable showing. From a very small and modest beginning this club has grown into considerable local prominence, till it is finally becoming the headquarters of women possessing the greatest artistic ability not only in Chicago itself but all through this section of the country, in fact, it stands out as being the only well established club of its kind hereabouts. One item in its history is unusual to say the least. In its existence of over ten years, with somewhat unsteady by-laws, a constitution not at all noted for its strength and very unusual parliamentary ruling, it is reported there never has been the slightest suggestion of anything like a feud between its members, all artists and women, two classes of human beings generally conceded to be largely made up of petty jealousies and selfishness. The less gifted members admire the work of their more talented sisters, with an enthusiasm which it would be pleasant to see imitated in certain of the clubs of the male artists of the city. This year's exhibition is especially good, presenting many excellent examples of work both in oil and water color.

A recent addition to the possessions of the Institute is a bronze bust of the late John W. Root, Chicago's well-known architect. It is the work of Mr. Gellert, one of our own most able sculptors, and is a strong and artistic creation. This gift to the Institute is in a certain way an unusual one. It is not the portrait of a man who had won a place in the gallery through his munificence while living, it is not a feeble work of art, so despised by the surviving relatives and friends that it is put in the Institute as a place of "safe keeping," but a piece of really fine work, the model for which, by his artistic ability deserves to have a place in the art treasure-house of the city.

SOCIETIES

THE PHILADELPHIA T-SQUARE CLUB.

THE Philadelphia T-square Club held its third meeting of the season at its room, 29 North 13th Street, on Wednesday evening, December 14, 1892. This proved to be an unusually good meeting. The programme for the evening — A Memorial Chapel on a rocky coast — seemed to meet with the approval of the Club, judging from the number of designs submitted. Arthur Truscott received first mention; James H. Cook second, and Percy Ash third. The programme for the next competition was announced — "A full-size detail of a carved wooden panel in the Italian Renaissance style" — size and shape of panel given.

PERCY ASH, *Secretary.*

THE ILLUSTRATIONS

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

EASTERN ENTRANCE TO THE TRANSPORTATION BUILDING, WORLD'S COLUMBIAN EXHIBITION, CHICAGO, ILL. MESSRS. ADLER & SULLIVAN, ARCHITECTS, CHICAGO, ILL.

[Hello-chrome, issued with the International and Imperial Editions only.]

THE polychromatic treatment of this building is in the hands of Messrs. Healy & Millet, of Chicago.

SKETCHES BY THE *American Architect* TRAVELLING-SCHOLAR FOR 1891, MR. ALBERT KAHN, DETROIT, MICH.

[Issued with the International and Imperial Editions only.]

COMPETITIVE DESIGNS FOR THE CARNEGIE LIBRARY, PITTSBURGH, PA. SUBMITTED BY MESSRS. BAILY & TRUSCOTT, PHILADELPHIA; A. B. JENNINGS; ROGERS & TOTTEN AND W. B. HARTIGAN OF NEW YORK.

[Issued with the International and Imperial Editions only.]

EARLIER in the year were published other designs submitted in this competition, and the four published this week would have appeared about the same time, but for our entertaining the hope that it would sooner or later be possible to publish with them the successful design.

AN OLD HOUSE AT LAVAL, FRANCE.

A DOORWAY OF THE OLD CHOIR OF DRYBURGH ABBEY.

THE JENNINGS HOUSE, ANNAPOLIS, MD.

THIS drawing is made after a plate in Corner & Soderholtz's "*Examples of Domestic Colonial Architecture in Maryland and Virginia.*"

A STREET IN BLIDAH, ALGERIA.

[Additional Illustrations in the International Edition.]

FACADE OF THE PALAIS DU SENAT, BUCHAREST, ROUMANIA.

[Copper-plate Photogravure.]

LONGITUDINAL SECTION OF THE PALAIS DU SENAT, BUCHAREST, ROUMANIA.

[Copper-plate Photogravure.]

ST. PETER'S CHURCH, ABBEYDALE, SHEFFIELD, ENG. MESSRS. G. H. SHACKLE AND J. E. NEWBERRY, ARCHITECTS.

THE perspective drawing from which our illustration is taken was submitted in the competition for the above church last August. The site is a fine one; there are roads on three sides of it, and the ground rises very considerably from east to west. The small plan shows the church to consist of a nave and aisles, north transept, the tower forming a transept on the south side; the organ-chamber and vestries are on the north of the chancel and the morning chapel on the south. The three doorways are each arranged so that the doors will open outwards. The nave and chancel are the same height, and are kept as low as possible on the score of economy. The clerestory of nave is small, and is lighted with square-headed windows, thus allowing space for lofty arcades and aisles. The church will seat the required number of 750, without reckoning the floor-space of tower. This feature has been kept outside the main structure, in order that the church could be completed without building any more than the foundations and lower part of north tower wall. The style adopted is based on the study of some examples of Curvilinear Decorated. Mr. Ewan Christian was the assessor, but did not draw up the conditions. In his report he spoke very highly of this plan, but considered that the instructions as to cost had been exceeded.

LECTERN, WELLS CATHEDRAL, ENG.

OLD CHEST, WELLS, ENG.

COBLENCE.

COMMUNICATIONS

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

A CORRECTION: THE ROOD-LOFT AT TROYES.

New York, N. Y., December 15, 1892.

To the Editors of the American Architect:—

Dear Sirs, — In the instalment of the translation of M. Planat's article on "The Champagne School of Architecture," printed in your issue of December 10th, reference is made to "the remarkable rood-loft of the Cathedral of Troyes." There is no rood-loft in that Cathedral. The reference is to the rood-loft in the church of Ste. Madeleine in that city. The view on page 161 of your paper, called the rood-loft of the Cathedral of Troyes, is a representation of the loft of this church and not of the Cathedral.

Yours very truly, Barr Ferree.

NOTES AND CLIPPINGS

The Norman Discoverer of Steam-power. — There lived in Normandy, where he was born in 1576, a man named Solomon Caus. He was an engineer and architect and had held several important positions. He wrote a great many scientific works and papers of which, however, no one took much notice during his life, and, finally, was seized with an idea which made his friends and relatives fear that he was mad. After pestering the King and the Cardinal at Paris, he was ordered to be taken to Bicêtre — the madhouse — and there shut up. This was done. They had just one way with mad people in those days. They shut them in iron cages and fed them through the bars, like wild beasts. They did this to Solomon Caus. For a long time he stood behind those bars all day and called to those who would listen, and to them repeated the story he had told the Cardinal. He became the jest of the place. Some of them even gave him writing materials and then, amidst the misery of his surroundings, he wrote down his ideas and amused his gaolers so much the more. However, it could not be long before such a life, such surroundings, would shatter any brain. In time Solomon Caus was as mad as every one believed him.

It was in 1624 that an English nobleman, Lord Worcester, went to Paris and visited Bicêtre. As he was passing through the great court, accompanied by the keeper, a hideous face with matted beard and hair appeared at the grating and a voice shrieked wildly, "Stop! stop! I am not mad, I am shut up here most unjustly. I have made an invention which would enrich a country that adopted it."

"What does he speak of?" the marquis asked his guide.

"Oh, that is his madness," said the man, laughing. "That is a man called Solomon Caus, he is from Normandy, he believes that by the use of the steam of boiling water he can make ships go over the ocean and carriages travel by land, in fact, do all sorts of wonderful things. He has even written a book about it which I can show you."

Lord Worcester asked for the book, glanced over it and desired to be conducted to the cell of the writer. When he returned he had been weeping. The poor fellow is certainly mad now," he said, "but when you imprisoned him here he was the greatest genius of the age. He has certainly made a very great discovery."

After this Lord Worcester made many efforts to procure the liberation of the man who doubtless would have been restored to reason by freedom and ordinary surroundings, but, in vain; the Cardinal was against him, and his English friends began to fancy that he himself had lost his senses, for one wrote to another: "My lord is remarkable for never being satisfied with any explanations which are given him, but always wanting to know for himself although he seems to pierce to the very centre of a speaker's thoughts with his big blue eyes that never leave theirs. At a visit to Bicêtre he thought he had discovered a genius in a madman, who declares he would travel the world over with a kettle of boiling water. He desired to carry him away to London that he might listen to his extravagances from morning till night, and would, I think, if the maniac had not been actually raving and chained to his wall." Thus in Bicêtre died the man to whom, after his works were published, many people gave the credit of being the discoverer of steam-power and it is said that from the manuscript written in his prison Lord Worcester gathered the idea of a machine spoken of as a "water-commanding engine," which he afterwards invented. Historians have denied that Caus died in prison, but there exists a letter written by Marion de Lorme, who was with Lord Worcester at the time of his interview with Caus, which establishes the fact beyond doubt. — *Invention.*

Drinking-water for the World's Fair. — For drinking purposes, water is also supplied that is piped direct from the Hygeia Springs, at Waukesha, Wis., a distance of 102 miles, where the overflow capacity of the springs exceeds 650,000 gallons a day. Steam pumps will force the water into a reservoir that is being built on a high ridge, 200 feet above and eight miles distant from Waukesha, and ninety-four miles from and 416 feet above the level of the Exposition grounds, and from this reservoir it is expected that the water will flow by gravitation through a six-inch Maltby coated steel pipe, at the rate of 50,000 gallons a day, to the cooling-reservoir located between the Transportation Building and the grand passenger depot. This great cooling-tank has a capacity of 100,000 gallons, and will be covered by an ornamental structure 80 x 40 feet in size, containing a full refrigerating-plant that will furnish 100 tons of ice daily. From this reservoir the water will be forced by a small pumping-plant through the refrigerating-coils to the twenty-five miles of three-inch distributing-mains and the small connecting laterals extending into each exhibit, from the faucets of which it will probably be drawn, at a temperature of about 38° F., a water-meter registering the amount drawn. In addition to the private faucets, there will be 250 fountains erected, within ornamental booths built to harmonize with the different forms of architecture of the buildings to which they are attached, where a half-pint glass of Hygeia may be secured from one of the many female attendants at the cost of a penny a glass. The water supplied to these fountains will be kept in circulation, so that an evenly cold temperature will practically be maintained. While the capacity of the main supply is 50,000 gallons daily, it can be largely increased by pressure, though it is believed that the demand on the Exposition grounds will not exceed 30,000 gallons, or 500,000 drinks of half-a-pint each, daily. At one cent each this alone will give the Hygeia Company an income of $5,000 daily, to say nothing of the advertising effect of this great enterprise. This plant is a concession controlled by the Hygeia Company, who pay a portion of the gross receipts to the Exposition. — *Scientific American.*

Wooden Staircases the Safer. — Can wooden staircases really be the best and safest? This question arises when one reads the remarks reported to have been made by Superintendent Savage, chief of the Manchester Fire Brigade, viz.: "A wooden staircase is the safest in the case of fire. A staircase of stone looks incombustible, but once it is attacked, and one keystone 'flies,' as we say, with the heat, the whole thing will go by the board. Wood is the safest building material in the world, so far as fire is concerned. Build your theatres, for instance, of wood coated with asbestos paint, and make everybody come upstairs to get out. Then you will never have a serious disaster. People cannot fall over each other when they are climbing, and a wooden staircase will hold together as long as a scrap of it is left." This opinion, which is in accord with those of Captain Shaw and other experienced firemen, will be read with surprise by many theatrical managers and others. — *Invention.*

TRADE SURVEYS

The reports and reviews of the past week from all industrial, railroad, banking and general avenues of trade show a rather surprising fact; viz., an increased distribution of merchandise not only throughout the East, but, so far as heard from, through all sections of the country. This was not anticipated; in fact, predictions have been made in financial and commercial circles that for some weeks to come a decline in the volume of business might naturally be expected. It is rather strange that almost every prediction recently made as to the course of trade and business should have turned out to be erroneous. The present tendency among small buyers seems to be to make liberal purchases for the winter. This is the fact, especially in all of the lighter industries, as shown by the distribution of clothing, dry-goods, knit-goods, carpetings and furnishing-goods generally. In these branches, there has been remarkable activity for some time past; a great deal of manufacturing capacity has been added in cotton and woollen-goods mills, and orders have been flowing in quite freely. Manufacturers have been encouraged to add to their machinery, and it is safe to say that at no time in the history of the textile industry has there been such a satisfactory condition of things so far as manufacturing and distributing goods is concerned; but from the counting-houses of these concerns come loud complaints of extremely narrow margins. Notwithstanding the high rate of duty on hosiery, importations continue heavy; and, in spite of this, most of our manufacturers have about as much as they can do. Latest reports from the Southern cotton mills show that activity continues there, although the avenues of distribution are changing somewhat. The grade of goods manufactured is being rapidly improved; better skill is being employed, and finer machinery is being put in many mills. In the financial world there is nothing new to report, except the fact that the large exports of gold are creating grave apprehensions, and the Government policy of making large monthly purchases of silver is blamed. It is now an established fact that an amendment will be made to the Interstate Commerce Law, which will allow of the making of mutual contracts between the different railroad companies in a manner not heretofore permissible. The volume of traffic is enormous all over the country. The railway companies have not yet agreed upon World's Fair rates, and it is probable that cutting will be resorted to when travel begins. The promotion of new railroad enterprises still attracts a good deal of attention, which points to the probability of increased railroad construction next year. The demand for all kinds of machinery is a feature of the situation which demands attention. Manufacturers are very busy, and in some lines of work contracts have been entered into which will keep the largest and best-equipped establishments busy for months to come. It is impossible to say with certainty whether there will be any great expansion of manufacturing activity during the coming year, but this probability is indicated by the fact that there are now no accumulations of stocks, and that demand is everywhere steadily expanding. Nearly all kinds of raw material have weakened in price during the past few months, and this is also indicative of greater manufacturing activity, as buyers of all kinds of material now express themselves as satisfied that prices have reached the lowest probable limit. A reaction is feared, or, at least, looked for by a good many. The sudden turn in cotton may be followed by other like turns. The ore-producers are looking for better prices; makers of iron and steel are in some cases refusing very long contracts, in hopes of better prices later on. Whether there are any real probabilities of higher prices, it may be said that there are anticipations expressed in this direction, and many good reasons assigned. This month has been a prosperous one as to volume of business, and latest reports show a further decline in the number of failures. Small shop-keepers are in better position to meet their obligations. The commercial agencies report a healthier tone in general business.

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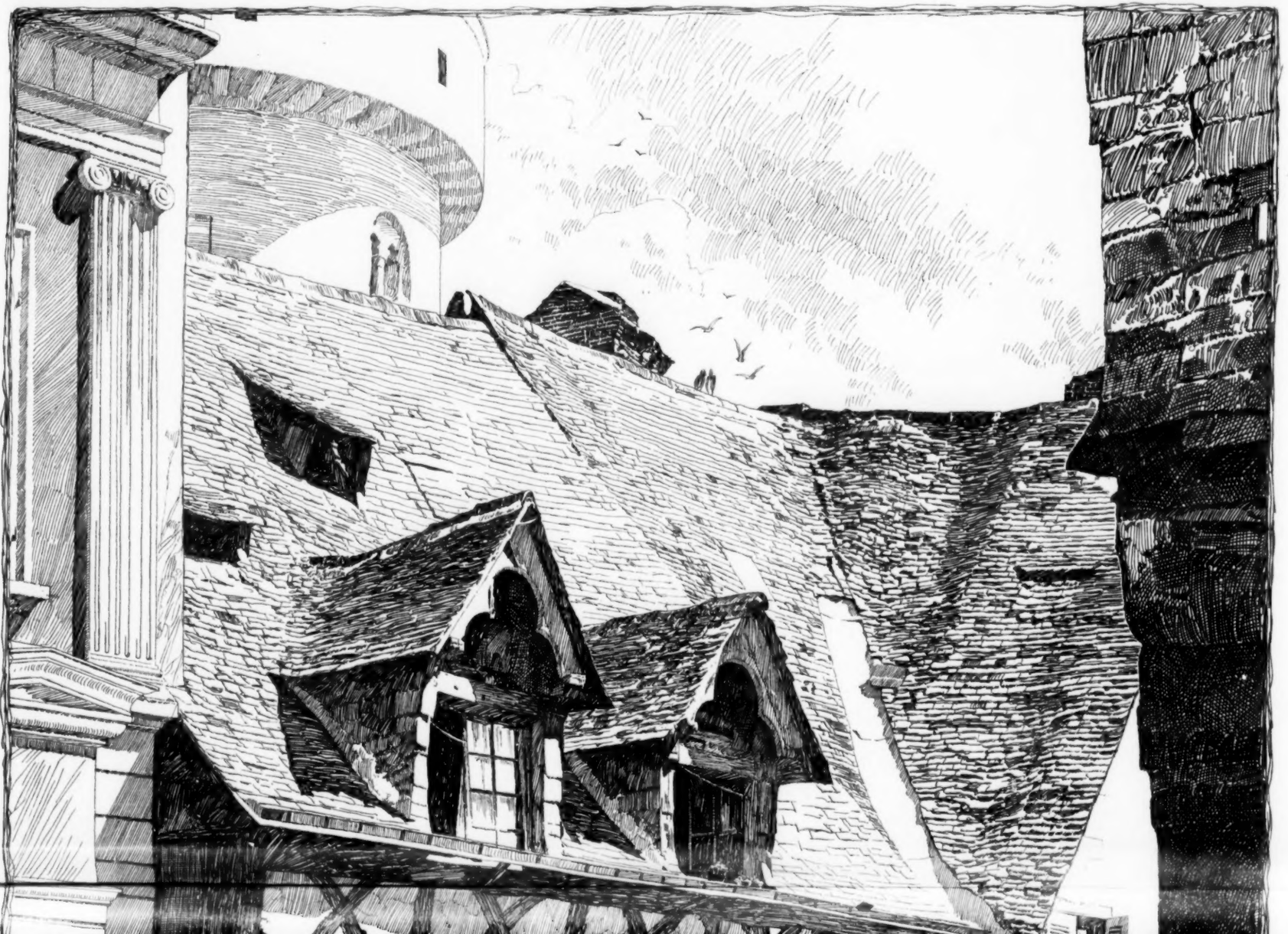

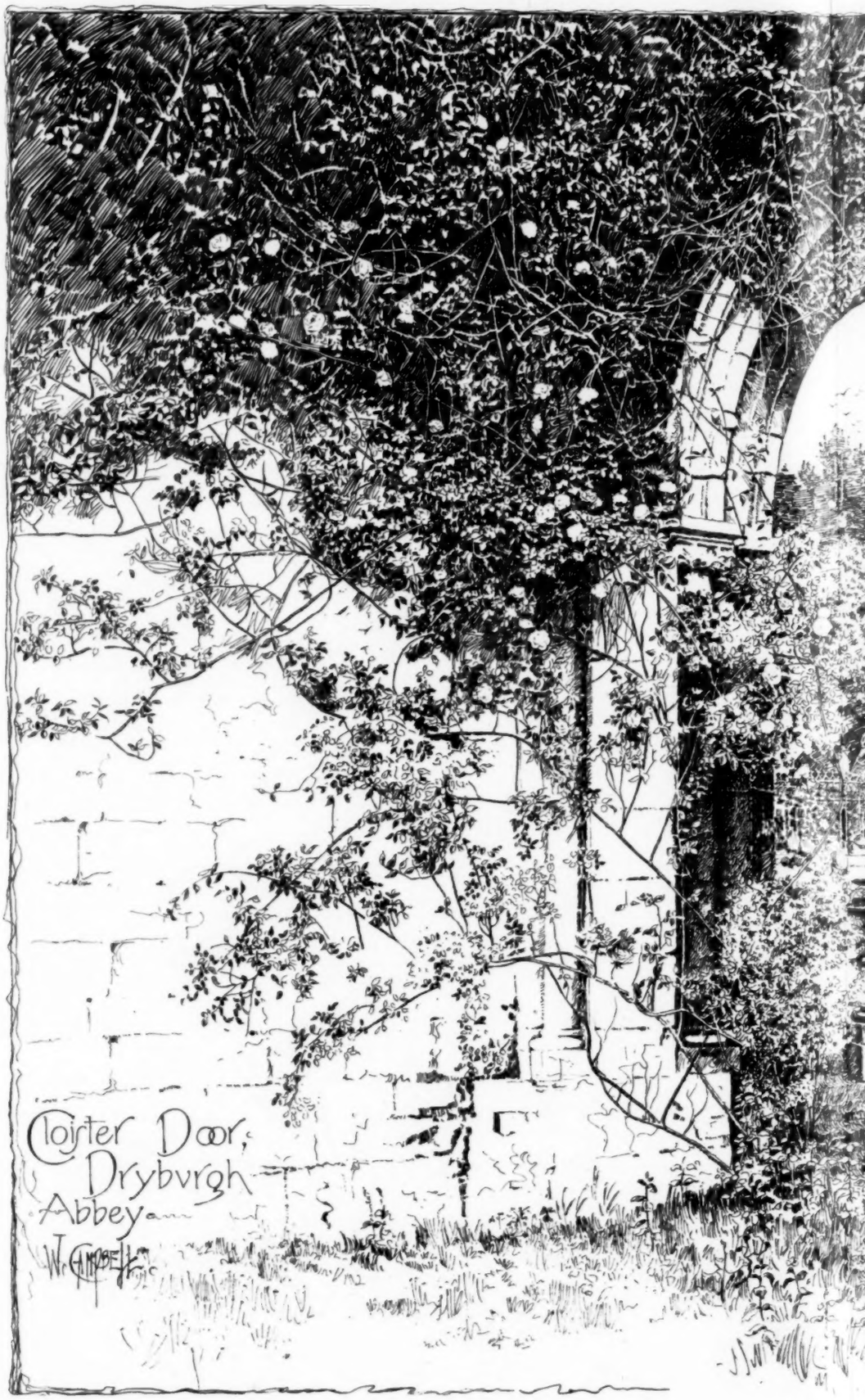

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STREET IN BLIDAH, ALGERIA