PRICE 15 CENTS.

DECEMBER 19, 1891.

THE AMERICAN ARCHITECT AND BUILDING NEWS

VOL. XXXIV. * REGULAR EDITION * NO. 834.

ARCHITECTVRE

ENGINEERING

DECORATION

CONSTRVCTION

TICKNOR & COMPANY

BOSTON MASS.

CONTENTS.

ILLUSTRATIONS.

Additional Illustrations in the International Edition.

THE AMERICAN ARCHITECT AND BUILDING NEWS.

VOL. XXXIV. Copyright, 1891, by TICKNOR & COMPANY, Boston, Mass. No. 834.

Entered at the Post-Office at Boston as second-class matter.

DECEMBER 19, 1891

CONTENTS

M. GEORGES BERGER, who is well known by reputation to our readers as the Director-General of the Paris Exposition of 1889, and the man to whose untiring energy and administrative skill the affair owed much of its success, is a man of ideas, as well as of action. Of late years, he has occupied himself much with the question of the relations of capital and labor, and has become an earnest advocate of the participation of workmen in the profits of their labor. To use his own expressions, he believes that labor agitations and revolutions can only be avoided by a reorganization of the system of wages. As machinery and processes are perfected, the workman becomes more and more either a superintendent or a mere attendant on a machine, and it becomes constantly more necessary, as the intelligent artisan loses his importance in industry, to see that the element which he furnished is supplied by making the union closer between capital and labor. M. Berger sees no better way of accomplishing this result than to extend the practice of profit-sharing. He believes that this should not be done by legislation, and that the law should interfere as little as possible with the business of adult workmen; but he thinks that an effort should be made to study the best modes of profit-sharing, and to show the facility with which, by means of an understanding between master and men, a beginning may be made in mutual coöperation, by the establishment of pension funds, and the provision of insurance against strikes, accidents and death. As M. Berger is one of the editorial council of *Le Génie Civil*, he has, very naturally, appealed to his colleagues for the assistance of that admirable journal in disseminating information on the subject which he thinks of so much importance; and, as many thousands of readers share his opinion, the articles which may be published in accordance with his wish will probably attract great and deserved attention, not only as expressing in some degree the opinions of one of the most practical and clear-headed men of the time, but as having the sanction of a journal of the highest character and influence, in which no sentimental or impracticable schemes have ever yet found countenance.

IT will be remembered that the house-painter Leclaire, a man thoroughly French in his intelligence and unselfishness, was the first to establish a modest, sensible system of profit-sharing among his employés, free from the brilliant eccentricity of M. Godin's grand scheme, and much better adapted to the conditions of the life of workingmen in great cities. Since the death of the good Leclaire, in 1872, his establishment has been carried on under the system which he founded, and its benefit fund is now under the charge of M. Charles Robert, who, being much interested in the subject, has exerted himself to form a Profit-Sharing Society, composed of the managing officers of financial or manufacturing establishments practising, or disposed to practise, this method of providing a supplement to regular wages, and regarding it as an efficacious means for preserving harmony in the work-rooms. The principal object of the Society is to render as widely known as possible the different methods used in all parts of the world for dividing, in any degree, the profits of business among those who are considered to have contributed to its success. For the present, it neither holds nor expresses decided views of its own, but contents itself with collecting all the information possible, including facts about the failure, as well as the success of profit-sharing schemes. Nothing could be more judicious than this course, particularly at the beginning of what appears to be an impending social revolution. The results of the Society's inquiries are made known through a periodical publication, the *Bulletin de la Participation;* and one or two special works have been translated and placed in the hands of French readers by the efforts of the Society.

FROM the statistics gathered by the Society, it appears that there are now in France eighty establishments in which participation is practised, and in other countries of Europe and America one hundred and forty-three more. Although this is still a microscopic fraction of the total number of manufacturing and commercial establishments in existence, the numerator of the fraction is nearly six times as large as it was in 1878, when the first number of the *Bulletin* was issued, and when only thirty-nine profit-sharing establishments were known to exist anywhere; and if the proportion should continue to change at the same rate, the beginning of the twentieth century will find participation a very visible factor in industry. In France, where the statistics are, naturally, more accurately kept, it is curious to find that banks, brokers and insurance companies are particularly disposed to the adoption of the new idea. We have never heard of a bank or broker's office, still less of an insurance office, in this country, where such a scheme would receive a moment's consideration, but in France sixteen such establishments practise participation. Thirteen printing-offices also practise it, besides eight machinists, eight plumbers, three building contractors, three house-painters, two manufacturing chemists, two textile manufacturers, two vine-yard proprietors and two manufacturers of laces and embroideries. In the last instance, the participants are probably women, as is the case in several shoe-factories managed on the same principle in this country. Among the individual houses, the proportion of the net profits divided among the workmen varies from one-half of one per cent, in the case of a great farming establishment in Mecklenburg, to one hundred per cent, in the case of the piano-forte factory of M. Bord. Why M. Bord should give all the profits of his business to the workmen is a question which only he can answer, but in 1882 he divided twenty-six thousand dollars in cash among them on this principle. As a rule, the percentage divided is much less than this, but it varies greatly, two, three, four, five, ten, fifteen, twenty-five, thirty-three, fifty, fifty-five and seventy-five per cent being regularly paid in certain establishments, while in others the allotment is entirely arbitrary, and is rather a special annual gift than a regular distribution of a fixed share of profits. There is also a great diversity in the way in which the allotment is paid. Some establishments give it in cash, and make no inquiries as to what the recipient does with it; but the larger part appear to prefer to credit the men with their share in a pension fund, or even as payment toward the cost of stock in the company. This is particularly the case in the great Angoulême paper-mill, where, although the workmen may take their share in cash, they generally prefer to avail themselves of the privilege accorded them, of using it to purchase an interest in the business. Although the workmen who own stock have a certain right to a voice in the management of the business, there is, at Angoulême, no attempt at interference with the principal proprietors, and many establishments prefer to invite those of their employés who have earned by faithful service the right to participation in the profits, to participation also in the management of the business. Contrary to the common idea, this does not seem to lead to any contests for control, and it must certainly assist greatly in giving the workmen an intelligent idea of the conditions of success in the particular manufacture in which they are engaged.

ARCHITECTS generally know that in many of the extremely high Chicago buildings the outer walls are nothing but thin shells, the structure really consisting of a skeleton of metal floor and roof beams, resting everywhere, even at the outside ends, on iron columns and girders. A structure of this sort would be perfectly stable without any outside walls, and it has therefore become common to reduce the outside walls to a thin veneering, often of four or eight inches of pressed brick, backed with eight inches of hollow terra-cotta blocks, and kept from falling over by being tied to the iron framework in every story. It is said that there is a building in Chicago two hundred and forty feet high, and containing seventeen stories, which is veneered on an iron framework in this manner; and a curious story is told of the so-called Unity Building, which has seventeen stories, and is two hundred and ten feet high. This structure was designed with granite outside walls for the lower three stories, and brick above. There was a delay in the delivery of the granite for the lower walls, but, as the entire outside masonry was nothing but thin veneer, this circumstance did not at all hinder the work on the brick superstructure, which was hung to the iron framing above the fourth tier of beams, and was actually carried up through six or eight stories before the arrival of the granite which was to be set beneath it. Although this sort of construction would not be allowable under the building laws of New York or Boston, there are arguments in its favor in Chicago. As the ground in that city consists of a stratum of hard clay, overlying a deep mass of very soft mud, it is important to reduce the weight of all buildings as much as possible, to prevent them from sinking bodily into the ground, and the restriction of the thickness of walls to one-fourth or one-fifth that which would be required in the East gives a material diminution of the load on the foundations. Moreover, experience has shown that, in very high buildings, it is not well to have the floor-beams rest at the inner end on the columns and girders which almost always form a part of such buildings, and at the outer end on walls of masonry, which must almost inevitably settle more than the rigid framework of iron in the interior. Hence, the lining of the exterior walls with a system of iron columns and girders, corresponding with the interior ones, is logical and reasonable, and as this takes the whole weight of the floors off the masonry, and puts it on the iron, the walling may, so far as structural exigencies are concerned, be reduced to any point consistent with its own stability. Moreover, as a construction of this sort has the advantage over one with thick bearing walls of being cheap, and of saving many square feet of precious floor-space in all the stories, it is not wonderful that it should have become popular among owners, and it is said that in one day, recently, just before the issue of permits for buildings more than twelve stories high was suspended, permits were granted for the erection of five new veneered buildings, each to be sixteen stories high. Since, however, the discussion arose in regard to the limitation of the height of buildings, the safety of high veneered structures in case of fire has been seriously called in question. Mr. Swenie, the Chief of the Chicago Fire Department, and a man of great intelligence and experience, having been called before the committee of the City Council, unhesitatingly expressed the opinion that in case of fire the veneering would fall off, and observed that it had already partly fallen off from one of the high buildings, without the provocation of a fire. The probability seems to be, as experts believe, that the expansion of the metal-work due to a serious fire, or even the shaking of one of these towering structures by a severe wind, would loosen the veneering, and tumble portions of it into the street. This would be unpleasant for the passers-by, although it might not affect the independent metallic framework behind the veneering; and skilful as the Chicago architects are, it may be considered that they have still some problems to solve before they arrive at a perfect construction.

IT is reported that the total of property destroyed by fire during 1891 in the United States will reach more than one hundred and twenty-five million dollars, or nearly fifty per cent more than last year. Although there have been no grand conflagrations during the year, there have been a great many fires of considerable importance, so that, on an average, about three hundred thousand dollars' worth of painfully accumulated property has been swept out of existence every day. Although premium rates have been high, as compared with those ruling a few years ago, the insurance companies have not, as a whole, earned more than a very meagre interest on their capital, and the larger companies are said to be consoling themselves with the reflection that the year's losses will have the effect of driving many of the smaller ones out of the business. Their idea is that the small companies, having been reduced to desperate straits for money in the course of the year, have taken risks recklessly, at special rates, and have thus brought down, by competition, the income of the larger ones; and they think that it will be a good thing to have the disturbing element removed. Whether the stockholders of the smaller companies will view with as much complacency the prospect of their elimination from the business is by no means certain; and it seems to us that the public has some interest in the possible concentration of fire-insurance in the hands of a few great companies, combined to fix their own rates of premium. It is commonly estimated that the amount of the premiums paid for insurance, which, of course, must cover agent's and broker's commissions, salaries and expenses of offices and inspection, together with the cost of fire-departments, is about double the actual fire-loss; so that, on this basis, the people of the United States have spent this year on their national ash-heap about two hundred and fifty million dollars. We have before mentioned that this sum would more than pay all the pensions, and the whole cost of maintaining the naval and military forces of the United States; and it may be interesting to reflect further that, if it could be devoted to producing iron-clad ships, instead of piles of cinders, it would furnish us every year with a fleet superior to that of Great Britain; while, if we preferred to spend it in a more ornamental way, it would supply one hundred and thirty queens with a civil list equal to that of Queen Victoria; or we might have three queens and a Prince of Wales in each State, each with an establishment equal to that of their prototypes in England. There will be, doubtless, many people here who would rather spend the money on ash-heaps than on queens and princes, and we are not sure that we do not sympathize with them; so we will turn our thoughts from monarchical pomp to the little kings and queens of our own republic. Applying to them a modest arithmetical calculation, we find that if we could give up our fondness for cinders, or even if we could make fires as infrequent, and as little destructive, as they are in Austria, or Italy, or Spain, we should save enough to keep all the children in the United States well supplied with boots, shoes and stockings, all the year round, with a large surplus to spare for overcoats and mittens for winter. Every head of a family will acknowledge that such a saving as this would be worth making. The money that we spend on cinders benefits nobody whatever. Even the underwriters, if conflagrations were abolished, would find plenty of employment, if they wished for it, in the numerous forms of insurance against death, dishonesty, theft, accident, water-damage, and so on, which the saving, to be put into profitable business, of such an enormous capital would bring into demand; while the poor people, who are always the principal sufferers, whether by the destruction of their modest homes, or the cutting-off of their livelihood, after any fire, would be saved untold distress, which cannot be measured in money; yet, although the means of making destructive fires impossible are known to every architect and every fire-engineer, and to many underwriters, no one takes any steps to promote their adoption. The insurance companies, as a rule, care little about the matter; the "freezing-out" of the small companies, and a combination of the large ones to put up premiums, naturally seems to them a more immediately desirable object than the improvement of risks. Last year, a feeble, though, at the time, promising attempt was made to unite representatives of the National Association of Fire Engineers, the National Board of Underwriters and the American Institute of Architects, in the effort to secure uniform legislation throughout the country, looking to the prohibition of the more dangerous kinds of construction, and the gradual removal of the terrible burden of fire-risk which weighs upon American life and property. The representatives of these bodies met, drew up a simple and practical preliminary code, and adjourned, leaving, so to speak, their infant code squealing on the public doorstep. The public heard its cries, examined the babe, praised its appearance, and put it back on the doorstep, to wait until its parents should return and take care of it. So far, it has waited in vain; its voice, once so lusty, has become so feeble as to suggest approaching dissolution; and if its parents wish to resuscitate it, the attempt ought not to be long delayed.

ITALIAN ARCHITECTURE.[1]—VI.

THE RENAISSANCE (FIFTEENTH AND SIXTEENTH CENTURIES.) — (*Continued.*)

Fig. 9. Palazzo del Consiglio, Verona.

ANTONIO SCARPAGNI, called the Scarpagnino, (1558–?) was also a great artist. His name is connected with one of the richest edifices in Venice, the Scuola of San Marco, and, with some show of reason, with the church of San Sebastiano, ascribed without any foundations to Serlio.

"Fra Giocondo" (1433–1515) and his work in Venice and Venetia should have received our attention before this; the famous *fondaca dei Tedeschi* is generally considered as his; it was begun in 1505 and has been attributed to Geronimo Tedesco and even to Pietro Lombardo. Fra Giocondo's part in it was probably confined to the direction of the construction. His name is also well known in connection with the Palazzo del Consiglio at Verona (Figure 9). Fra Giocondo reminds us of his contemporary, the sculptor and architect Giovanni Maria Falconetto (1460 † 1534) who was long engaged as an architect at Padua and who perhaps erected the modern portion of the castle of Trieste; this has been ascribed to Palladio, to Sansovino and to Sammichele. Falconetto helped to spread the taste for Classic architecture through Venetia. Mention should also be madé of Bartolomeo Buono († 1529) who must no be confounded with Bartolomeo Bon, architect and sculptor of the celebrated Porta della Carta at Venice — and of Antonio Rizzo or Riccio, called Bregno (born in 1410) who has been confused with Andrea Riccio of Padua, called Briosco (1470 † 1532) sculptor of the famous candelabrum in the church of San Antonio at Padua. It is to Antonio Rizzo or Riccio that Venice owes the superb part of the court of the Ducal Palace about the Giant's staircase (Figure 10). Although it does not properly come within the scope of this sketch, I cannot refrain from noticing the work of Lorenzo Bregno, perhaps a relative of Rizzio's and a sculptor rather than an architect; he was the author of the magnificent monument to Benedetto Pesaro in the Church of the Frari.

If attention has been mainly directed to the Renaissance edifices of the city in which the artistic movement was most pronounced, it should not therefore be inferred that remarkable examples of the style are wanting in towns of secondary importance. The Palazzo del Consiglio at Verona has already been spoken of. To this may be added a magnificent loggia (Figure 11) in the episcopal palace erected at Vicenza by one Bernardino da Milan (1495) and attributed to Tomaso Formenton, a Vicenzan engineer († 1492?); also the admirable town-hall of Brescia, begun in 1492, on which, including Formenton who executed a wooden model of it apparently after the plans of an as yet unknown architect, several different architects were engaged down to Vanvitelli, in 1774.

Brescia brings us to Lombardy and its architectural history during the Renaissance period. We turn first to Milan, and Milan means the style of Bramante. Even here, however, we encounter Tuscany and Tuscan architects. The series of Tuscan artists begins with the Florentine sculptor and architect Antonio d'Averulino or Averlino, surnamed the *Filarete* (about 1400 † 1465?); then follows Michelozzi, not to speak of Filippo di Ser Brunellesco, who was, it seems, called to Milan by Duke Filippo Maria Visconti, of "Benedetto da Fiorenza" (according to some Benedetto da Maiano, according to others, Benedetto Ferrini), of Giuliano di Sangallo, sent thither by Lorenzo the Magnificent, of Francesco di Giorgio Martino, of Luca Fancelli, who was there in 1487, and many

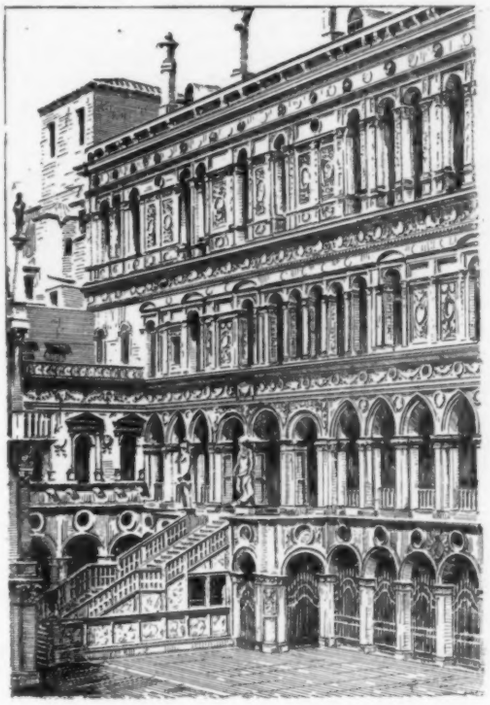


Fig. 10. Court of the Ducal Palace, Venice.

others. Filarete came to Milan from Rome, whence he was driven by a most unfortunate affair (*cf.* Müntz, "*Les arts à la cour des papes*," t. I, pp. 89, 90). He was protected by the Duke Francesco Sforza and his name is connected with one of the greatest of Milanese monuments, the Ospedale Maggiore (Figure 12).

After Filarete, Michelozzi was the architect of the chapel of St. Peter the Martyr, or of the Portinari family, at San Eustorgio, which was constructed between 1462 and 1468 and

Fig. 11. Loggia of the Vescovado, Vicenza.

may have been the prototype of the Colleoni Chapel at Bergamo (1410–1477), as well as of the "Incoronata" of Lodi (1488). There is an evident relationship between the Portinari Chapel and two of Brunellesco's magnificent productions, the Pazzi Chapel and the sacristy of San Lorenzo at Florence. These constructions thus suggest Florentine influence in the

[1] From the French of Alfredo Melani, in Planat's *Encyclopédie de l'Architecture et de la Construction*. Continued from No. 833, page 162.

Renaissance architecture of Lombardy, much to the honor of Tuscan art which made its way everywhere. They antedate Bramante's sojourn in Milan, like the superb "Prigione" of Brescia, now the Mont de Piété, and other structures here and there. I will pass over the Certosa of Pavia, which was begun in 1396 after the designs of Bernardo of Venice, but the façade of which was commenced in 1491 and therefore belongs to the very period which we are about to take up.

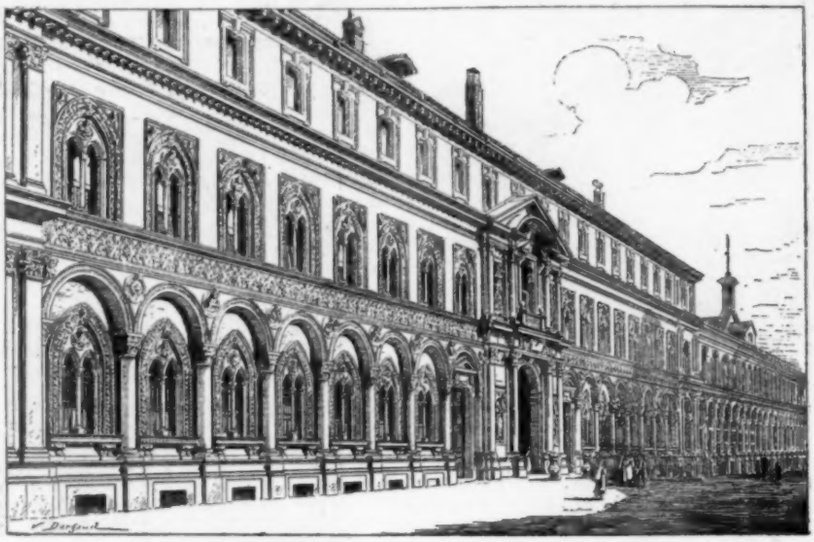


Fig. 12. Ospedale Maggiore, Milan.

Bramante, who did not bear the family name of Lazzari but was called Donato Bramante (1444 † 1514), came to Lombardy when he was quite young (about 1470); he received a fitting welcome from Lodovico le Moro at Milan, and, like Leonardo, was often honored by this prince. The Lombard works attributed to Bramante are so numerous that it is impossible for him to have been the author of all of them.

However, he was undoubtedly the architect, if not of the entire Church of San Satiro at Milan, certainly of the beautiful baptistery (Figure 13), in which he was ably seconded by Cristofano (not Ambrogio) Caradosso, who was born about 1452 and died in 1526 or 1527; to him also is due the porch of San Ambrogio, the construction of which was entrusted to him by Duke Lodovico Sforza, and to which Herr von Geymüller, the eminent historian of Bramante, justly accords the warmest praise (*cf.* "*Des projets primitifs pour Saint-Pierre de Rome*," 1875–76, page 45); he also had some part in San Celso, the Fontana Palace, now the Silvestri (in which there are frescos by Bramante), and, very likely, in a few other edifices. Even the works on the castle of Porta Giovia, pointed out by M. de Pagave, have been warmly contested in the light of the latest researches, particularly those of Signor Beltrami; the works on the aisles and the apsidal portion of the Cathedral of Como have likewise been disputed as well as those on the Cathedral of Pavia. This last church, which was begun in 1488 and for which a too sumptuous design was furnished by Bramante, was built after the plan of Cristoforo Rocchi, who at his death was succeeded by Giovanni Antonio Omodeo or Amadeo. The same can be said of other constructions.

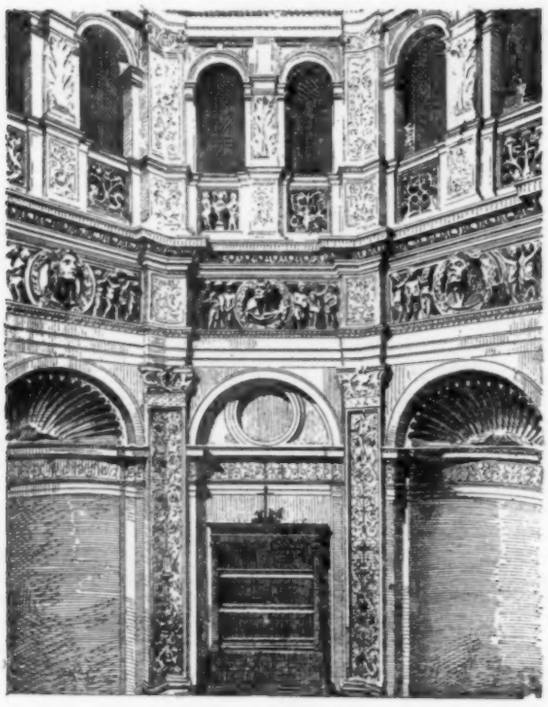


Fig. 13. Sacristy of San Satiro, Milan.

Bramante's claims have likewise been excluded from the charming sanctuary of Saronno, founded in 1498, and from the immense "Lazzeretto" of Milan, begun in 1488; also from one of the most celebrated Milanese monuments in this style, the church of Santa Maria delle Grazie, the posterior part of which exhibits an example of decorative delicacy in the use of brick (Figure 14). Constructed in the second half of the fifteenth century, according to della Valle ("*Lettere Sanesi*," page 87), this is the production of a Tuscan architect, one of the most remarkable geniuses of the Renaissance, Francesco di Giorgio Martino, of whom we have already spoken, and who was in fact at Milan in 1490, according to Herr Springer (*cf.* "*Bilderaus der neueren Kunst Geschichte*," page 152). I am, however, far from being convinced that Martino was the architect of this church and am more inclined to ascribe it to Dolcebuono.

Though Bramante was largely instrumental in giving life to

Fig. 14. Apse of Santa Maria delle Grazie, Milan.

Lombard art, it had, naturally, a flowering of its own, which was entirely independent of outside influences.

The Cathedral of Como was mentioned above; next to the Certosa of Pavia, it is the most interesting example of the

Lombard Renaissance. It was founded in 1396 by Lorenzo degli Spazzi, of the valley of Intelvi. After him, numerous Como masters were engaged on it, notably the two Rodari, Tomaso and Giacomo, of Maroggia (1485–1519), who were among the greatest decorative sculptors of the Renaissance. As for the Certosa, it is too well known to warrant a long description of it here, erected by order of Gian Galeazzo Visconti, who also contributed much to the construction of the Cathedral of Milan. This Certosa is of special interest on account of its magnificent façade; this has been incorrectly accredited to Ambrogio di Fossano, called the *Bergognone*, but it is really the work of Omodeo, both as a whole and in its characteristic details. It was completed by Dolcebuono and Cristofaro Solari.

The two cloisters of the Certosa deserve notice, but too much space has already been devoted to Lombard art. The reader is, therefore, referred to special treatises on these and and such other works as the façade of the Miracoli at Brescia, by Omodeo, architect of the Colleoni chapel at Bergamo; the interior of the Incoronata at Lodi, by Giovanni Battaggi, who flourished in 1488, and in 1493 furnished the plans for the Church of Santa Maria, outside the Serio gate at Crema, and was succeeded at the Incoronata by Giovanni Giacomo Dolcebuono (1474 † after 1503); Santa Maria at Busto Arsizio; the

Fig. 15. Doorway in the Façade of San Lorenzo, at Lugano.

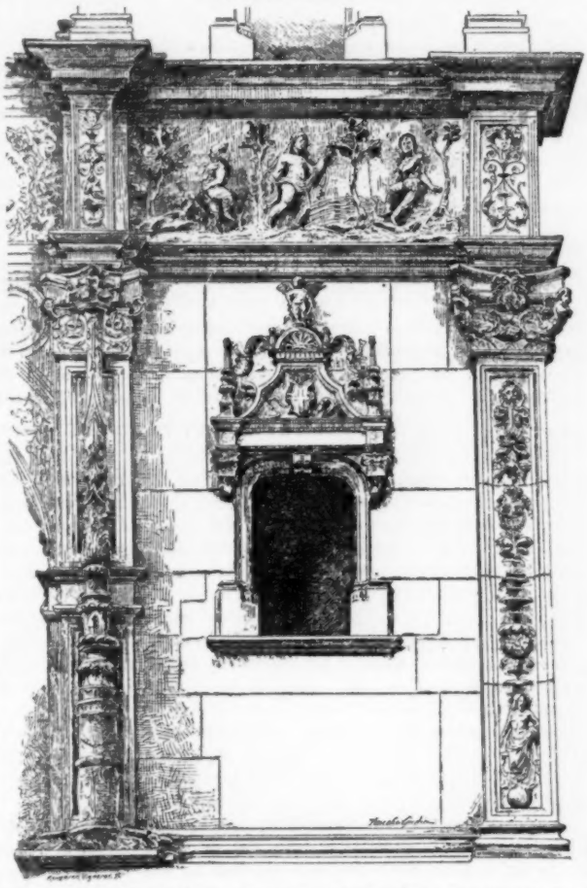
Stanga door of Cremona, now at the Louvre; and the façade of San Lorenzo at Lugano, the exquisite enrichment of which recalls again the names of the Rodari of Maroggia, although, according to Herr Rahn, the Rodari have changed in these very interesting decorations (Figure 15).

[To be continued.]

THE SCAFFOLDING UP FOR TWENTY YEARS. — A man who is frequently called the meanest man in Connecticut lives in the southeastern part of that State. A Connecticut statute fixes the rate of taxes on an unfinished house at a lower figure than that on buildings which are finished. This particular man began to build his house about twenty years ago. He put the roof on and made it ready for occupancy in every other way, but did not take the scaffolding down. When the tax-collector came around the owner of the place calmly handed over the money which was due under the assumption that the house was still in the course of construction. The collector saw the scaffolding and, after a little argument, decided to be content with the sum. When he made his visit the next year the scaffolding, now a little weather-beaten, was still about the house. The owner again handed over the sum he had paid the previous year. There was objection to this, but the tax-collector finally went away with the amount. That established a precedent, and for two decades the scaffolding has been up, and for two decades the owner has been paying taxes on an unfinished house. The framework, which was to be only temporary, has grown black with age, and is pointed out to every stranger by the neighbors. "The meanest man in Connecticut" doesn't mind his bad reputation, but thriftly counts up how much the scaffolding has saved him. — *N. Y. Tribune.*

ARCHITECT, OWNER & BUILDER BEFORE THE LAW.[1] — XIII.

CERTIFICATES AND ORDERS MUST BE IN FORM SPECIFIED BY THE CONTRACT.



Bastard Window from the House of Francis I. — Coursi-a-Reine. From Havard's "*Dictionnaire de l'Ameublement.*

EVEN in regard to the manner of issuing certificates, of giving orders for extras and estimating the payments due, the terms of the contract must be strictly followed. In Illinois,[2] where a contract provided that the architect should "settle deductions or additions, and determine amount of damages which may accrue from any cause," and the architect, in regulating the mason's account, charged him with $350 damage to the carpenters for delaying them, the Supreme Court held that the architect had no right to fix the damage that the carpenters had sustained, and, until they claimed such damage of the owners, and the amount had been ascertained, the architect had no right to consider it in any estimate he might make.

ARCHITECTS MUST NOT CONSIDER OTHER ACCOUNTS BETWEEN OWNER AND CONTRACTOR.

It was also held that the architect has no right to ascertain and allow other payments from the owner to the contractor,[3] and that, so far as his statement of accounts between the parties includes such charges, it is unwarranted, and not binding on the parties.

ARCHITECT CANNOT GIVE CERTIFICATES TO SUB-CONTRACTORS.

In an Illinois case,[4] where work was to be done for a county, under the direction of a firm of architects, who, under the contract, were to supervise the work, and give certificates for payments, the principal contractor fell into difficulties, and one sub-contractor, named Bouton, refused to go on. The architects arranged with Bouton and the principal contractor, that the certificates should be given directly to Bouton for his part of the work. The other sub-contractors contented themselves with getting orders from the principal contractor for the money due them, and these orders were accepted and paid, but the

[1] Continued from No. 833, page 164.
[2] Mills *vs.* Weeks, 21 Ill. 561.
[3] Mills *vs.* Weeks, 25 Ill. 561.
[4] Bouton *vs.* Supervisors, 84 Ill. 384.

certificates given to Bouton were not honored. After a time, the principal contractor failed, and the county had to get his contract completed by other parties, and expended all the rest of the contract price in doing so. Bouton then sued for payment of the certificates which the architects had given him, but the Supreme Court held that, although the principal contractor had agreed to the arrangement by which the certificates were transferred from him to Bouton, the county was not bound by it, and the architects were not the agents of the county for such a purpose. The Court said that, although it seemed hard that the other sub-contractors should be paid in full, and Bouton, the one who relied on the architects, should not, still, the others had showed superior vigilance in going to the supervisors, the proper parties; and as their claims, with the cost of completion, exhausted the contract price, the county could not be held to pay more.

UNLESS AUTHORIZED BY THE CONTRACT, ARCHITECT CANNOT EMPLOY OTHERS TO DO CONTRACTOR'S WORK.

An architect has, moreover, no authority, unless it is expressly given him by the contract, to employ other persons to do work in a building which the contractor has undertaken, by his contract, to do. It is, in practice, very important that this

VERY IMPORTANT THAT SUCH AUTHORITY SHOULD BE GIVEN.

authority should be given, for architects often find that the owners have made contracts for work with persons who are utterly incapable of doing it, but who, relying on their contract, keep the rest of the work waiting for their futile pottering, until the owner, in despair of getting his building finished, and knowing that no damages for delay can be collected from them, pays them their money to get rid of them, and employs some more competent person to carry out their contract. The architect's natural impulse in such cases is to eliminate the incompetent mechanic as soon as his incapacity begins to be manifest, which is usually at an early stage of his proceedings; but this can only be done in such manner as the contract provides, and not at all, unless there is some stipulation to that effect. An architect in Illinois,[1] employed to supervise and direct the work done under a certain contract, found that the brick piers were giving way, owing, as it proved, to bad workmanship.

A sub-contractor was furnishing cut stone for the building, and the architect ordered him to put in stone piers, in place of the brick ones, without knowing that he was a sub-contractor, and supposing that the order was really given through him to the principal contractor. The owners saw the stone piers being built by the sub-contractor, but made no objection. When the sub-contractor sent in his bill for the stone piers, the owners refused to pay it, and he brought a suit, which was carried to the Supreme Court. This court held that the architect had no authority to engage others to do the work of the principal contractor; and, in answer to the argument that the owners, who saw the sub-contractor doing the work, without objection or inquiry, thereby accepted the benefit of his labor, it held that they had a right to suppose that it was being done for the principal contractor.

ARCHITECT CANNOT DELEGATE HIS AUTHORITY.

An architect, within his own province, like any other agent, must exercise his functions in person; he cannot delegate his authority to any one else. He must also see that his delegated powers are exercised in a just and reasonable manner.

While the utmost respect is generally shown by courts for his discretion, where he has conscientiously exercised it, his mere arbitrary caprice cannot be enforced upon any one in place of the well-considered judgment which is expected from a man of science and honor.

A contract for a building for the Edison Electric Company, in Minnesota[2] provided that, if the contractor failed to comply with its conditions, the architect should be entitled to take possession of the building. The architect did so, on the ground of failure to comply with the contract, and the contractor sued for damages for being prevented from completing his contract. The official Inspector of Buildings made an examination of the building, and a report, which was put in as part of the evidence for the defence. The judge, in the court below, allowed the jury to consider whether the contract had really been complied with, and the defendant's counsel objected, claiming that the architect's discretion was final, and not subject to review by the jury, and that, if it were not final, the evidence of the Building Inspector was conclusive, and other evidence should not have been admitted.

The Supreme Court rejected both these claims, saying that the right of the architect to take possession of the building did not depend upon his mere arbitrary discretion, and that, in an action for damages for interference with his contract, the contractor was entitled to have the issue tried, to see whether he had fulfilled it. As to the inspector, the court said that the contract made no provision that he should be arbiter between the parties, or that his decision should be final, and the city ordinances did not give any such effect to his decision. A builder might be prosecuted and fined for bad workmanship and materials, and in such case he would be entitled to be heard on the question of fact.

ARCHITECT MUST BE HONEST.

It hardly seems necessary to say that the architect must be perfectly honest in all his dealings with his employer, and must not use his position as a trusted agent for his private gain. It speaks well for the character of the profession that there seems to be no record of a suit brought against an architect for dishonorable practices in the higher American courts, nor, so far as the digests show, in those of any other country, although in two English cases[3] the owner has alleged fraudulent acceptance of gratuities from tradesmen as an excuse for not paying the architect's bill; and, in general, the tendency of judges appears to be to assume that architects are worthy of confidence, unless direct evidence is brought forward to the contrary.

In a California case,[4] an architect, with another person, entered into a contract to construct a building, and the owners made a separate engagement with the architect-contractor that he should superintend the work. When the building was done the owners refused to pay for the superintendence. The architect sued for his money, and the owners claimed that it was against public policy for a person to act as contractor and superintendent at the same time, on the principle that an agent must not deal with himself; and that, therefore, the contract for superintendence was void, that for the erection of the building having been carried out in full. The verdict in the lower court was for the plaintiff, and it was sustained by the Supreme Court, which said that, although the duties of a superintendent in some respects conflicted with the interest of the contractor, still, if the defendants, knowing his position, chose to rely on the architect's good faith and honesty, there was no reason why he should not be paid for the discharge of his duties, which were not claimed to have been neglected or unsatisfactorily performed.

THE PUBLIC IDEA OF HONORABLE PRACTICE.

Although the presumption in regard to architects, which is certainly borne out by the facts, is that they are generally honest, it is not uncommon to hear bad faith attributed to them by disappointed mechanics and other persons, who, as Cardinal Mazarin said, are disposed to impute to people in positions of responsibility the actions of which they would themselves be guilty if they held those positions. Curiously enough, however, although architects indignantly resent an accusation of dishonesty of this kind, it does not appear to be regarded by the rest of the world as a very serious matter. We have seen that the court, in the case of Gilman *vs.* Stevens (page 45), thought that the fact of the architects having taken "loans" from the builder "was not to be considered a question in the case," unless fraud or collusion were charged; and in a singular Missouri case,[5] a similar view appears to have been taken. In this controversy, an architect of St. Louis, named Legg, brought an action for libel against a certain Dunleavy and others, complaining that on several occasions the defendants published and caused to be shown an affidavit, signed by Anthony Dunleavy, saying that on a certain day he, the said Dunleavy, was a member of the firm of John E. Oxley & Co., doing business in St. Louis; that the said firm on that date (June 1, 1873), made a proposition to do the galvanized-iron, tin and copper work on a certain building of which Legg was the architect, and that Legg promised Oxley, the other member of the firm, to give the said firm the contract for the said work, provided the sum of $200 was paid to the said Legg as commission by the said John E. Oxley & Co.; that Oxley agreed

[1] Campbell *vs.* Day, 90 Ill. 363.
[2] White *vs.* Harrigan, 41 Minn. 414.
[3] Norris *vs.* Day, 10 L. J. N. S. 43.
[4] Shaw *vs.* Andrews, 9 Cal. 73.
[5] Legg *vs.* Dunleavy, 85 Mo. 558.

to pay it, and informed Dunleavy so, and Dunleavy paid the $200 to Legg, the last payment being made on June 9, 1873.

Legg claimed that he had "always demeaned himself with honesty and fidelity, and had never been guilty of any misconduct or malpractice in his said capacity and profession of architect and superintendent," and that he had been damaged to the amount of $50,000 by the circulation of this affidavit, which was dated August 6, 1879.

ACCUSATION OF TAKING ILLICIT COMMISSIONS NOT LIBELLOUS.

The Supreme Court held that the petition "does not state a cause of action." "In what manner," said the Court, "does "the affidavit of Dunleavy blacken the reputation of the plaintiff? It, in substance, alleges that the plaintiff was supervising architect of a certain building, and that the defendants "paid him a commission to give the defendants the contract "for certain work thereon. Suppose that was true, how would "it show that the plaintiff was degraded or brought into contempt or ridicule? The words, to be actionable *per se*, must "be such as, if true, would disqualify him or render him less "fit properly to fulfil the duties incident to the special character "he has assumed." "Words to be actionable on this ground "(as disparaging the plaintiff in his calling), must touch him "in his office, profession or trade." "They must impeach "either his skill or knowledge, of his official or professional "conduct." "A false charge . . . must blacken the memory of "the dead, or the reputation of one who is alive, and expose him "to public hatred, contempt or ridicule. In our opinion the "affidavit in this case does neither, and is therefore not actionable *per se*."

"Where words are charged," the court went on to say, "that are not actionable without a knowledge of some extrinsic "fact, it is necessary to set forth that fact by way of preliminary averment, . . . which is not done in this case." What the nature of the extrinsic fact might be, which, added to Mr. Dunleavy's affidavit, would make it libellous, the report of the case does not say, but the judges repeated, later, that "If this "is a libel of the plaintiff in his business, it must be so on "account of some extrinsic fact, or some special obligation he "was under to his employer. . . . If so, his petition must "allege it."

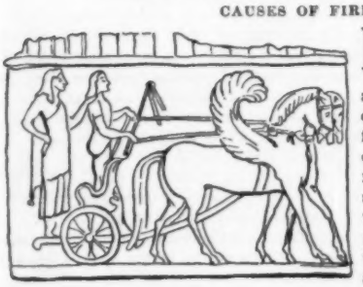
COMMISSIONS FROM CONTRACTORS CANNOT BE COLLECTED.

If an architect should be so dishonorable as to make an agreement for the payment to him of a commission by a contractor,[1] in the manner alleged by Mr. Dunleavy, he could not enforce it, and the contractor who made such payments would do so at his own risk. Two builders[2] once took a contract under a partnership arrangement, by which the profits were to be divided. The partners disagreed, and one of them had to sue the other for his share. The defendant, in reckoning the profits, claimed credit for money paid as "gratuities to the architects having charge of the work. The New York Supreme Court held that "there was no proof that the payments were "beneficial to the parties, or that they were necessary or justifiable on business principles"; and that the credits were properly rejected by the court below.

[To be continued.]

THEATRICAL ARCHITECTURE.[3] — VI.

CAUSES OF FIRE.



FROM personal observation during the past fourteen years, I have ascertained that the causes of the origin and spread of fires in theatres and places of entertainment arise from numerous and various sources. In order to avoid these errors, I have already pointed out many things which should receive the architect's careful attention. Below is a list of actual causes which have occurred, but which I do not for a moment state is an exhaustive catalogue of all the dangers to which a theatre is liable:

(1) Bad arrangements in planning; not dividing the many departments and sections into separate fire-risks by proper horizontal and vertical party structure.

(2) Bad and inappropriate materials, scamped and faulty construction.

(3) Danger from the proximity of adjacent property.

(4) The illegitimate use of the premises as living-rooms or for trade purposes.

(5) Dirt and darkness, insufficient window-space, non-removal of trade refuse.

(6) Imperfect ventilation.

(7) Foul or defective flues, open fireplaces, defective heating appliances.

(8) Unprotected or foul gas-burners; imperfect gas-fittings, both on stage and in auditorium; the use of matches, naked candles or spirit-lamps; faulty installation of electric-lights.

(9) Carelessness of the employés of the theatre; want of care in shifting scenery, etc.; smoking in places not specially set aside for the purpose, as in workshops and dressing-rooms; use of firearms, fireworks and colored lights on the stage; use of hay or straw on the stage; not making scenery and dresses incombustible by chemical treatment.

(10) Lightning; not providing proper conductors; concentrated rays of the sun by means of lenses; spontaneous combustion; incendiarism.

(11) Want of proper fire-watch and fire-appliances.

PREVENTION OF FIRE.

When a building has been planned and constructed so that it will in every way retard the spread of fire and panic, it should be considered how, should a fire break out, in spite of all these precautions, it could be most effectually coped with.

Places of public amusement of this class can never, on account of the peculiar nature of their business, be actually *fireproof*, although they can, as I have tried to show in these papers, be made entirely *fire-resisting* down to the minutest detail, and therefore, as far as the public are concerned, *safe*, provided ordinary measures and precautions are taken, so that should, by any mishap, a fire break out, it could be localized, shut off and extinguished within the section in which it originated.

Water is accepted as the best means to overcome fire; it is cheap, can be easily obtained in large quantities, and, if used at the first outbreak, can effectually prevent the loss of life and property. If a fire is attacked in its first stages, not only is the property saved from destruction by fire, but also from the damage caused by the water used to extinguish it when it has attained alarming proportions. Fire is permitted to grow with rapidity through the lack of simple means of extinction not being handy at the outbreak, one bucketful of water during the first few minutes is worth all the steam fire-engines of the city half an hour later.

Bearing this in mind, it is for the architect to see that the building is provided with proper fire-appliances, and one of the most valuable articles in the list will be found to be the fire-bucket — so long as it is kept full of water: of these there should be an unlimited supply in every part of the building, in every room, workshop, passageway, and staircase, on the stage, in the flies and all parts from gallery to cellar. To use a fire-bucket with effect requires no trained hand, the undrilled can do as much good with a bucket of water as the well-drilled fireman. The buckets should be painted a conspicuous color with the words "Fire-bucket" upon them, and to prevent the water being upset, they should be hung above the floor-level on brackets.

Should the fire not be subdued in the first stages more stringent measures will be required. The house should therefore be fitted with hand-pumps, chemical-engines, extincteurs, corridor-engines and hydrants. The hydrants should be mounted upon every floor in all sections, upon the constant high-pressure water-supply, and they should not be a greater distance apart than forty feet. Hydrants like fire-buckets should be found from roof to cellar, and everywhere provided with canvas hose, "mained," with the nozzle attached ready for instant use. All the necessary fittings and tools, axes, hooks for cutting down scenery, wet blankets, and firemen's paraphernalia should be arranged on the wall so as to be within easy reach. In order to replenish the buckets a tap should be fitted to each hydrant.

The blankets on the stage and in the dressing-rooms must be damp, but not too wet and heavy to prevent them being promptly thrown around a person whose dress may be in flames.

To ensure the thorough working order of the appliances, they should be subjected to a periodical examination by the municipal fire-brigade. The pattern of all fire-hydrants should be the same as that of the brigade, so that the fittings of either the brigade or those of the theatre could be used on any hydrant.

The water must, of course, be obtained at such pressure that the hydrant at the highest part of the building will be as effective as the one at the lowest. In many districts the supply is totally insufficient for this purpose, and large tanks are provided. There is, however, this drawback to the use of tanks, — they are not always full and in addition to that, they fall with the superstructure which supports them. In a building gutted by the action of the flames, they may be considered a source of danger instead of security. Better no tank at all than one which is thought to be full but found empty when needed.

In some theatres water-sprays or rows of perforated pipes are

[1] Atlee *vs.* Fisk, 75 Mo. 100.
[2] Marsh *vs.* Masterson.
[3] By Ernest A. E. Woodrow, A. R. I. B. A. Continued from No. 833, page 168.

placed over the stage, but I do not think one can place much reliance upon them, especially where they are brought into play by an automatic action, such as the melting of solder by the heat of the fire, thus actually requiring the presence of the very enemy they are provided to subdue, before they can be brought into action. I have elsewhere spoken of the evil in placing trust in mechanical automatic appliances of any sort, where reliance is put on these as safe-guards, the ordinary and more effectual precautions are left unprovided.

Firemen. — Unless there is a trained fire-watch all the provisions for fire-extinction lose their value. The bogus, or theatrical fireman, who is no fireman at all, is a delusion and a snare, for, when emergency arises, he is not equal to the occasion. Trained firemen, whose nerve and skill have been tested again and again, are the only men who should be permitted to have charge of public buildings. Men who have served in the municipal brigade are the only fit men for such posts. In a theatre during the performance there should always be a fireman stationed on the stage and he should not leave it till the whole house "before" and "behind" is cleared of audience and performers. Another fireman should parade the auditorium as his presence would create a feeling of protection to the audience.

The fire-watch should never be relaxed day or night, but the same men should not be permitted to watch at night, who have been on duty during the day, as they would be quite unable to fulfil their duty and the day-work would be neglected and the appliances not kept in working order.

Should an alarm of fire occur upon a stage, when crowded during a pantomime or ballet, the noise and confusion would alone create a panic in the audience, but if a recognized authority were at hand, the stage "crowd" would soon be brought into subjection. All the employés in and about the theatre ought to be trained to assist the firemen and wear a distinctive uniform to advertise their presence and authority to cope with a crowd, and their familiarity with the building.

There should be telegraphic and telephonic communication between the theatre and the nearest fire-station of the brigade. Regulations as to fire should be posted in conspicuous places in various parts of the building to enable the employés to become acquainted with their duty. There should, of course, be periodical fire-drills.

The duties of a fireman are concisely set forth in the regulations in vogue in Vienna.

(1) To work the hydrants and buckets, and the blankets and sponges in moments of danger.

(2) To work the fireproof curtain.

(3) To give the alarm and work the signals to the fire-station.

(4) To see that the gas-fittings and gas-meters are in perfect order.

(5) To patrol every part of the theatre.

The perfection of the precautions against fire, or rather the methods of extinguishing fire, depends mainly upon the "management," the architect can do no more than see that when the building leaves his hands, it is well provided with all the necessary extinguishing appliances, the municipal or licensing authorities must then look after the manager to see that he keeps up to the required standard of perfection in looking after his patrons' safety.

Treatment of scenery and stage accessories. — As regards the treatment of scenery and the lighter sort of costumes, there seems to be no doubt but that measures ought to be taken to render them uninflammable or at any rate not easily set on fire. There are many chemicals having the required properties, but tungstate of soda seems to have been employed in many theatres with success; I believe alum is also used in some houses. The lighter woodwork or framework upon which the canvas is stretched, as well as the stage machinery and traps, should be periodically painted with asbestos or cyanite paint.

PREVENTION OF PANIC.

From the foregoing articles it will have been gathered how much the prevention of panic rests with the architect. With a well designed building well managed, panic is almost reduced to a minimum. Where there are no tortuous passages, no winding staircases, where straight exits into the street are provided for every division, and all the other points detailed above are observed, panic would seem almost impossible, but it must still be remembered that the excitable temperament of the human being is a delicate thing to deal with, and some unforseen cause, quite unlooked and unprovided for in these papers might yet arise in the most perfectly planned and constructed building which would lead to loss of life. It is therefore the duty of the management to be always on the *qui vive* ready to cope with any emergency. More depends upon the action of an experienced and judicious manager than is supposed, for many old theatres if well managed are safer, as far as the audience is concerned, than new theatres in the hands of the inexperienced. It is the fashion, now-a-days, for amateur authors to become amateur managers, in order that they may foist the production of their imagination, which no business manager will accept, upon the public; these men run the theatre without any proper staff and the public are in constant danger. Theatrical business, like theatrical architecture, requires a life's training, it cannot be taken up at a moment's notice.

It is immediately after such disasters as at the Ring Theater, in Vienna, and more recently at Exeter, in England, that everybody becomes alive to the grave defects in public buildings of this class. After a lapse of time less stringent precautions are taken, but it is necessary at all times to be constantly on the watch. Architect, manager, municipal officials and the public must ever work together to avoid panic.

Speaking of London in particular, I must acknowledge that during the last ten years theatrical architecture has been going ahead with rapid strides. The Royal English Opera House, which is the last on the list of new theatres, is also the best constructed theatre in London. It is said that the manager, Mr. D'Oyly Carte, has for years past been visiting Continental and American theatres, making notes of the systems and methods employed in various cities, and he has brought the experience, thus gained, into full requisition in constructing his Royal Opera House.

Much of the improvement in London theatres is due, directly and indirectly, to the action of the late Metropolitan Board of Works, which insisted upon structural alterations to so many of our theatres that they have become practically remodelled, in many cases rebuilt, and in some cases pulled down. New theatres have sprung up to take the place of the old ones, theatres which would never have been built but for the action of the late Board of Works. It should be remembered that theatrical business in this country is a private speculation, unaided by State subsidies, and it is, therefore, all the more credit to the managers who spend such large sums in providing every new means of safety, and allowing the old theatres to die a natural death, as their more advanced successors place them out of date. Large outlay has been expended in improving those theatres and music-halls which still live. New and increased exits, staircases, proscenium walls, electric light, all confer benefit on the public, without increasing the nightly takings, calling for an outlay of capital, without any corresponding increase in the returns.

MUNICIPAL CONTROL.

Buildings devoted to public entertainment must be placed under some form of goverment, either under the supervision of the Police, the Municipal Council or a goverment department. It would, perhaps, be as well to review the manner in which these matters are managed in London. In 1878, an amendment to the Metropolis Building Act, gave the late Metropolitan Board of Works power to insist upon the carrying out of such structural alterations to theatres, etc., which might be deemed necessary by the Board for the safety of the public frequenting them. Acting upon these powers the Metropolitan Board had surveys made of all existing licensed places, some 350 in number, and structural alterations were insisted upon in the majority of cases. In a few instances the Board asked so much that the building was either closed and the license dropped or it was pulled down and an entire new edifice erected. After the passing of the Act in 1887 every one intending to build a theatre or music-hall had to submit plans of the proposed building to the Board for their approval before commencing the work, and had, on the completion thereof, to obtain a certificate stating that the works had been carried out in accordance with the approved plans, and that the theatre or hall was fit for the accommodation of the public. Until this certificate was granted the Lord Chamberlain, in the case of theatres, and magistrates, in the case of music-halls, would not give a license for stage plays, or music and dancing.

Under the Metropolitan Board of Works Various Powers Act, the authorities can regulate the times at which the doors are kept open, the nature of the fastenings, and the provision of notices of "exit."

In 1882 the Local Government Act placed all the powers of the late Board in the hands of the London County Council, adding thereto the granting of the music-and-dancing license, and thus giving the Council absolute power over all music-halls. The Lord Chamberlain, however, still retains the granting of dramatic licenses to theatres, although the Council, ever since they first came into power, have been striving to pass a bill to place the theatres as entirely in their hands as the music-halls. As the Council is a changing body, and, when one party is in office may think differently from the party just preceding them, the managers deem it better that a high authority such as the Lord Chamberlain should be at the head of affairs and still grant theatre licenses. So far as structural matters are concerned the Council retains a staff of architects whose duty it is to inspect and report to their theatre committee, at least once a year, upon every licensed place in the metropolis. Extreme judgment and care is needed in preparing these reports as no code of rules or regulations can be made applicable to all places of entertainment, they differ so much in the class of "show" provided, the class of people frequenting them, and the class of managers managing them. Every case must therefore be treated on its merits. I have, however, in the foregoing papers endeavored to embrace all possible circumstances that might arise and to frame such rules as may guide the architect in his work.

Ernest A. E. Woodrow.

A Customs Decision. — The question as to whether 196 blocks of Mexican onyx should be appraised as marble or as minerals in a crude state, or as monument or house-building stone, has been settled by a jury in the United States Circuit Court in favor of the marble classification. The importation was by Batterson, See & Eisele, and it was appraised as marble. The Appraisers were sustained by the verdict. — *Exchange.*

THE MANAGEMENT OF AN ARCHITECT'S OFFICE.[1]—V.

FORMS.

NOTE:—All matter *underscored* is printed.

[*Monthly Statement of Cash*]
for January 1891.

			Dr.
Jan. 1.	By Cash in Bank	$1,606.31	
	By Cash, Receipts:—		
	G. E. C. Co.	477.77	
	H. E. J.	519.04	
	E. B. C.	504.32	
	M. A. J.	399.50	
	S. E. F.	5,000.00	
	S. V. H.	233.37	
	C. D.	275.00	
	P. D.	20.00	$9,035.31

[*Disbursements.*]

		Cr.
Expense account	$2,702.29	
New Office account	2,315.91	
Client account	158.32	
C. M. J., account	337.15	
H. T., account	1,000.10	
Loan account	60.00	
Balance	2,461.54	$9,035.31

[*Form of Bills — Usual Form.*]

New York, May 1, 1891.

*Mr. J. E. H*_____

To Jack & Jill, Dr.,
Architects,
211 *and* 212 *Broadway, N. Y.*

For professional services rendered.

On account of Contracts:—		
H. H. W_____	$9,486.18	
H_____ & C_____	3,985.00	
F_____ Fireproof Con. Co.	661.62	
N. T. V_____ Con. Co.	418.00	
2½ per cent of	$14,550 80	$363.77
On account of Payments:—		
H. H. W_____	$4,847.80	
H_____ & C_____	2,000.00	
F_____ Fireproof Con. Co.	661.62	
2½ per cent of	$7,509.42	187.73
Various incidental expenses to date,		164.36
		$715.86
Credit Cash,		519.04
Balance due,		$196.82

New York, June 1, 1891.

*Mr. H. T. C*_____

To Jack & Jill, Dr.,
Architects,
211 *and* 212 *Broadway, N. Y.*

For professional services rendered.

Balance as per statement rendered May 1		$1,469.81
On account additions to Contract of		
L_____ & W_____	$532.00	
I. N. T_____	944.00	
2½ per cent of	1,476.00	36.90
Account Payments.		
L_____ & W_____		
2½ per cent of	10,000.00	250.00
Additions to Contract of		
S_____ P_____ & Co.	500.00	
F. T_____ & Co.	515.00	
5 per cent of	1,015.00	50.75
Account Payments to		
S_____ P_____ & Co.		
5 per cent of	10,000.00	250.00
Disbursements on acc't travelling expenses during May,		47.07
		$2,104.53

[1] Continued from No. 824, page 29.

[*Form for Alterations where both Ordinary and Fine Work is done.*]

New York, May 1, 1891.

*Mr. H. V. S*_____

To Jack & Jill, Dr.,
Architects,
211 *and* 212 *Broadway, N. Y.*

For professional services rendered.

On account *H*_____ *Bros.'* Contract & Extras for fine work:—

1890.				
July 29.	Original Contract		$12,778.00	
Feb. 27.	Change in flooring		249.70	
Mch. 4.	Extra flooring		17.00	
Mch. 23.	Painting dining-room		45.00	
April 3.	Alteration of stairs to passage.		100.00	
June 4.	Grilles, marble work and picture moulding		269.50	
	10 per cent of	$13,459.20		$1,345.92
	*H*_____ *& C*_____:—			
Sept. 6.	Contract for Balcony, 10 per cent of	$490.00		49.00
	*B*_____ *& C*_____:—			
Sept. 6.	Contract for Balcony, 10 per cent of	$1,923.00		192.30
	*H*_____ *Bros.'* Contract for rough work and audited additions thereto, 5 per cent of	$6,756.95		337.85
	Various disbursements to date for incidentals, including survey			54.52
				$1,979.59
	Credit Cash to date,			1,181.75
				$797.83

Back of stub.		*Checks.*	*Face of stub opposite.*	
May 1.	Bal. in Bank	$1,606.19	*Am't for'd.*	
" 3.	E. F. Co.	477.17	*No.* 2001.	
" 8.	J. H. E.	519.04	May 1, 1891.	
		$2,602.40	*Order of* Smith & Jones.	
			For Investment.	
			Charge ac't. Invest. ac't.	$50.00
			No. 2002.	
			May 4, 1891.	
			Order of Bearer.	
			For	
			Charge ac't. Wages ac't.	312.00
	Balance	1,609.19		
	Ck.	50.00		
		1,556.19		
	E. F. Co.	477.17		
		2,033.36		
	Ck.	312.00		
		1,721.36		
	J. H. E.	519.04		
		2,240.40		
	Ck.	50.00		
		2,190.40	*No.* 2,003.	
			May 10, 1891.	
			Order of Bearer.	
			For Incidentals.	
			Charge ac't. Petty Cash	50.00
			Forward	$412.00

A

NOTE:—This represents the appearance of the pages, when the check-book lies open, the line A being the point of division of the leaves. The left-hand side is the back of the stubs from which the checks have been removed.

[*Left-hand page of Ledger.*]

M. C. H———.

1891 Jack & Jill.

Aug.	31	To fol.	137	291	87						
"	31	"	40	26	20						
Sept.	30	"	46	8	97	Oct.	14	By fol.	50	327	04
Oct.	31	"	55		25	Mch.	4	"	87	231	50
Nov.	30	"	63		69						
Dec.	31	"	70	10	95						
Jan.	31	"	79	1	17						
Feb.	28	"	84	3	78						
Mch.	31	"	90	7	48						
Apr.	30	"	97	8	47						
May	31	"	104		75						

P——— S——— & Co.

Nov.	21	To fol.	385	100	—	June	1	By fol.	104	380	—
Jan.	23	"	74	180	—						

D——— & S———.

Apr.	14	To fol.	96	22	—	May	4	By fol.	102	25	—
May	5	"	98	3	—						

E. T. B——— & Co.

Apr.	24	To fol.	96	177	—	May	31	By fol.	109	207	50
May	7	"	101	30	50						

[*Right-hand page of Ledger.*]

Dr. R——— & McD———. *Cr.*

Aug.	23	To fol.	37	11,675	—	Oct.	15	By fol.	51	1,000	—
Feb.	5	"	83	465	—	Dec.	6	"	67	2,000	—
Mch.	3	"	89	321	25	Jan.	30	"	78	1,500	—
May	3	"	104	20	—	Feb.	20	"	82	1,500	—
						Mch.	20	"	88	2,000	—
						May	2	"	102	2,983	—
						"	2	"	104	35	75

R——— & L———.

Feb.	25	To fol.	81	1,796	—	Apr.	25	By fol.	95	1,450	—
Mch.	26	"	90	75	50						
May	16	"	100	59	80	May	16	"	102	481	30

P. H——— & Son.

Nov.	13	To fol.	62	325	—						

[*Special Orders.*]

[*Stub.*]

*No.*___
*Date*___
*Client*___
*Contractor*___
*Location*___
*Accepting proposal of (date)*___
*For*___
Client's Order,
*Am't $*___

[*Order.*]

*No.*___
*New York,*___ 1891.
*Messrs. (Contractor) proposal of (date) is hereby accepted*___
*For*___
*at*___
Client
*Am't $*___
Jack & Jill, *Architects,*
Superintendent.

[*Certificate.*]

*No.*___ [*Stub.*]
*New York,*___ 1891.
*Messrs. (Contractor),*___
*payment $*___
*Contract dated*___ 1891.
*With Mr. (Client)*___
*At*___
Am't of Contract, $___
Am't previously Cert'f'd, $___
Am't Certified this day, $___
Am't to Complete, $___

Jack & Jill, Architects,
New York City.

[*Certificate.*]

*No.*___
*New York,*___ 1891.
$___
*This is to Certify that Mr. (Contractor)*___ *is entitled to*___ *Dollars, being the*___ *payment on*___ *Contract dated*___ 1891. *with Mr. (Client)*___
*for the*___
*at*___
Am't of Contract, $___
Am't previously Cert'f'd, $___
Am't Certified this day, $___
Am't to Complete, $___

Architects.

[*Requisition for Certificate.*]

New York, June 2, 1891.

H. P. L——, Esq.,
To T. W. C——, Dr.

Builder,

No. 32 West 10th Street.

"Evening Post Building"

To estimate for payment on account of work done at the Evening Post Building, Stuart and Jane Streets, New York City.

Water permit		150.00
Excavation		4,400.00
Concrete foundations		3,165.00
Stone walls		1,772.00
Granite bottom stone		800.00
1,129,000 hard brick		17,499.50
35,000 face brick	45.	1,575.00
7,000′ of work		2,100.00
10,500 cubic feet of marble	4.	42,000.00
Ironwork		23,037.00
Guastavino arches		5,105.43
Terra-cotta		21,000.00
Bluestone		800.00
Carpenter work		5,000.00
		$128,403.93
Less 15 per cent for final payment,	19,360.58	
Credit by cash,	84,000.00	103,260.58
		$25,143.55

[*Ledger Account.*]

Dr. Cash. *Cr.*

Apr.	1	By balance		666	02	Apr.	30	By fol. Ex. acc't.	96	502	09
"	6	To fol. H. T. C.	24	1,500	—			" Client.	97	336	02
"	7	" F. P. F.	92	187	72			" Wages.	96	1,366	—
"	9	" H. P. L.	92	114	30			" Schol.	96	660	—
"	9	" R. D. C.	92	512	50			" J. C. M.	96	242	72
"	15	" N. C. C.	93	418	19			" T. H. C.	97	1,039	54
"	22	" G. E. C.	93	1,042	40			Balance		294	55
				4,440	92					4,440	92
May	1	Balance		294	55	May	31	By fol. Ex. acc't.	104	822	43
"	1	To fol. W. R.	98	1,000	—			" Client.	104	207	75
"	11	" H. P. L.	99	1,514	75			" Wages.	104	1,605	—
"	13	" G. E. C.	99	487	70			" Invest.		4,300	—
"	16	" S. E. F.	100	5,039	20			" J. C. M.		510	90
"	16	" Invest. acc't.		250	—			" T. H. C.		9	49
								" Loan.		1,000	—
								" Balance.		130	13
				8,586	20					8,586	20

CURIOSITIES OF COLLECTORSHIP. — A Leicestershire clergyman, when he died in 1776, left behind him thirty gowns and cassocks, 100 pair of breeches, 100 pair of boots, 400 pair of shoes, eighty wigs, although he never hid his own hair with one, eighty wagons and carts, fifty saddles, thirty wheelbarrows, fifty dogs, 240 razors and so many walking-sticks that a toy man paid his executors £8 for the lot. An old man died in an attic in Paris, who left little behind him save a heap of corks, souvenirs of happy times he had spent in more prosperous days. It had been a lifelong custom with him to preserve every cork drawn for the delectation of himself and friends, and inscribe upon it the date of drawing, and the particular occasion upon which the bottle was opened, so that the cupboard of corks was actually a record of his life. Heber, the famous bibliomaniac, gathered up things merely for the sake of collecting. He spent his fortune and life in collecting books which, when he had secured them, lay untouched and uncared for in the houses he rented in his own country and abroad to store them in. He had over 117,000 books in London alone, while no one knew how many houses full he had abroad. He used to defend his extravagance in buying up duplicate copies of the same work, upon the ground that no man could do comfortably without three copies of the same work — one to be kept at his country house as a show copy, one for the service of borrowing friends and one for his own special use. A New England spinster has made a collection of thimbles used by famous women. She has inherited, purchased, begged or received as gifts over thirty gold, silver, brass or steel thimbles worn by actresses, artists, philanthropists, abolitionists, poets, etc. Another Eastern woman has made a vast collection of tea-pots, having made a journey to Japan and China for the purpose of securing rare specimens of that article. A unique collection is to be seen in the office of the Tennessee Lumber Company in Cincinnati: it is composed of different kinds of saw-dust, contained in over 100 glass vials neatly labelled and in a case. They were collected by Thomas B. Fitts, who commenced to make up the collection some years ago. There is a little history connected with each one. — *The Collector.*

[*Day Book Form.*]

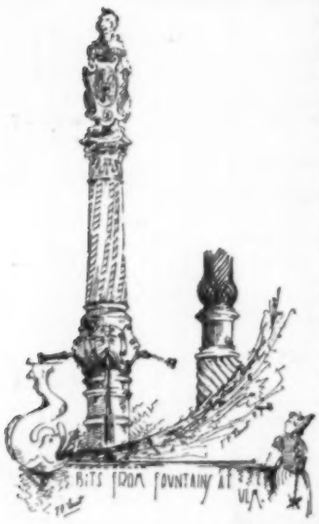
1891. May.

May	20	*Dr.* The E. G. Co.			
		Cr. K. E———		111	
		Various extras vouched May 13 marked with a red c on the annexed mem. and extras slip.			$2,740 57
"	20	*Dr.* Trustees G——— St. Church.			
		Cr. F——— Foundry & Iron Co.		154	
		Extras allowed as per C. E. W——— letter.			125 —
"	21	*Dr.* C. E. B———			
		Cr. P——— & A——— Mfg. Co.		202	
		Extras as per bill of May 13.			609 24
"	21	*Dr.* The H——— Hotel Co.			
		Cr. E——— Electric Co.		176	
		Agreement for bell work.			798 —
"	26	*Dr.* *T——— R. H———*			
		Cr. M. D. C———		162	
		Contract for stable made direct.			1,600 —
"	28	*Dr.* C. E. B———			
		Cr. H. W. J——— & Co.		202	
		Bill of this date for brass frame and setting.			45 —
"	7	*Dr.* S. C. P———			
		Cr. P. J. M———		136	
		S. O. 520 stable screens.			30 50
"	13	*Dr.* H. T. C———			
		Cr. G. F——— & Co.		157	
		S. O. 522 Bowling Alley.			515 —
"	20	*Cr.* S. N. T———		157	
		S. O. 528 Small tower room, etc.			500 —
"	20	*Cr.* S——— P——— & Co.			
		S. O. 529 Change in water piping.		157	944 —
"	21	*Cr.* L——— & W———		157	
		S. O. 530 Floor partitions, etc.	$342—		
"	22	*Cr.* S. O. 531 — Extending drain pipes cost + 10 per cent.			
"	22	*Cr.* S. O. 532 — Foundations for fountain, etc.	190		532 —
"	7	*Cr.* H. T. C———			
		Dr. G. F. & Co. Cert. 722.		158	200 —
"	15	*Dr.* S. P. L. & Co. Cert. 731.		158	1,000 —
"	21	*Dr.* I. N. T——— Cert. 755.		163	300 —

A GLASGOW BELL. — Probably the longest inscription on any bell in the country is that which J. S. Hadden takes from the bell in Glasgow Cathedral. It is dated 1790, and is as follows: "In the year of grace, 1594, Marcus Knox, a merchant in Glasgow, zealous for the interests of the Reformed religion, caused me to be fabricated in Holland for the use of his fellow-citizens in Glasgow, and placed me with solemnity in the tower of their cathedral. My function was announced by the impress on my bosom: 'Ye who hear me come to learn of holy doctrine'; and I was taught to proclaim the hours of unheeded time. One hundred and ninety-five years had sounded their awful warnings when I was broken by the hands of inconsiderate and unskilful men. In the year 1790 I was cast into the furnace, refounded at London, and returned to my sacred vocation. Reader! thou shalt also know a resurrection — may it be unto eternal life." — *The London Daily News.*

THE ITALIAN SPECIALTIES IN DECORATION AND THE INDUSTRIAL ARTS.[1] — IV.

ENAMELLED TERRA-COTTAS.



SOME day, perhaps, I may write to you also about the plain terra-cottas; to-day I must write of the enamelled, or vitrified, terra-cottas, which are the most celebrated, and the most characteristic.

Whoever has been in Italy, and has visited Tuscany, particularly, must have stopped more than once before certain sculpturesque decorations, with bright, almost harsh colors, of a curious appearance and effect. These polychrome decorations form ordinarily the tympanum or lunette of a door, or the framing of a shrine, enclosing a Madonna or saints, frequently in white, on a ground of lively blue. One of the constructions in which colored decorations in terra-cotta is most liberally used is the Hospital of the Ceppo at Pistoja, which has its façade completely ornamented with groups in relief, and decorative forms, in the work of which I speak. So the façade of this hospital is considered a precious artistic possession, even in Pistoja, which is so rich in edifices of the Middle Ages and the Renaissance. Composed of a graceful portico, with Corinthian columns, the façade of the Hospital of the Ceppo is, so to speak, divided by a polychromatic frieze from the story above, which is pierced with windows, and covered with a wooden roof. In this frieze are arranged a series of bas-reliefs, representing the works of Charity, in which the predominating color is blue, — a bright blue, which is pleasant to look at. The figures are colored, the blue forming the ground, and the groups are separated by slender, floriated pilasters, while the tympanums of the arches are ornamented with large and beautiful wreaths of fruits and leaves, enclosing emblems.[2]

This brief description gives but a faint idea of the façade of the Pistoia Hospital, but you will have reconstructed it in your imagination, with all its brilliant colors. For us, the more we possess of such buildings, the more frequently are we tempted to abandon the monotony of color to which modern constructions have been for some time condemned. Moreover, this decoration in colored terra-cotta of the Pistoja hospital is something entirely original, since it leaves the architectural composition to display itself, with its constructive features, and, simply as a surface decoration, brightens and beautifies the architecture in accordance with a definite idea, while, unlike the painted ornamentation of the Greek and Italo-Greek monuments, which intrudes upon and obscures the architecture, it forms a rational and suitable decoration, which beautifies without becoming tiresome.

I have not yet told you, but you undoubtedly know, that the enamelled terra-cottas were revived in the fifteenth century; and more than one of your readers, hearing mention of such works, will call to mind the name of the Della Robbias. Indeed, these terra-cottas, from the family of sculptors which produced a great number of them, were, and still are, called "terre Robbiane."

With us, it is popularly supposed that these productions were invented by Luca della Robbia, the greatest sculptor of his family; and that the invention passed from father to son, and from uncle to nephew, until it was finally lost. This idea, that the invention of glazed terra-cotta had been lost, once excited the minds of certain people to an act of vandalism. In the frieze of the Hospital at Pistoja is a figure, — the first, I think, in the first panel, without a head. The decapitation of this figure was brought about in pursuance of an old tradition, according to which there should have been found, concealed in the poor head, a manuscript, containing the recipe for making the Robbian terra-cotta. The head was, in fact, removed from the figure designated by the tradition, but no recipe was found there. Now every cicerone in Pistoja calls to the attention of the stranger this foolish decapitation.

But who, then, invented enamelled terra-cotta? "Luca della Robbia," is the usual answer; but it would be more correct to credit him with the application than the invention, since even the ancients understood the art of enamelling burnt clay, Italy having received from Oriental countries the knowledge of stanniferous enamel. It is certain, contrary to the common impression, that in the fifteenth century the Hispano-Moresque faiences of Majorca found their way to Italy, where they were the object of a tolerably extensive commerce. This being so, we cannot say that Luca della Robbia may not have studied, and perhaps suffered in order to obtain a durable covering for his sculptures, but the truth is as I have mentioned above. However, I suppose that Luca della Robbia has, at least, a claim to priority in this, that, so far as is known, no one before him, had tried to apply the stanniferous enamel and painting, to monumental sculptures; and this is certainly a merit. Nor is there any doubt that Luca's process was handed down, as a family heirloom, among the Della Robbia; but it is not true that it remained the exclusive secret of this family, as many believe. On the contrary, at the same time with the elder Luca lived another sculptor, who worked with terra-cotta in a similar manner. This sculptor was a certain Agustino d'Antonio di Duccio, or Gucci, who was believed for a long time to be a brother of Luca. Later, the secret was divulged even outside of Tuscany, and among the artists who devoted themselves to this sort of decorative sculpture is mentioned Pietro Paolo Agabiti, of Sassoferrato, who was a contemporary of Andrea della Robbia. From Italy, then, it passed, through the agency of Girolamo della Robbia into France, where the Italian artist had, if not rivals, at least collaborators. In France, if the fury of the Revolution had spared it, we should still be able to admire the Château de Madrid, built by Pierre Gadier and Girolamo della Robbia for Francis I, which was gorgeously ornamented with terra-cottas by Girolamo. But in the Revolution this castle was totally destroyed, and nothing remains of the decorative work of Girolamo della Robbia but a few fragments.[3]

Although in France, through a reminiscence, perhaps, of the polychromatic splendors of the celebrated castle of Francis I, an attempt was made to emulate them in the buildings of the splendid Exposition of 1889, in which, as you will excuse me for recalling, terra-cotta, both plain and enamelled, was largely used; in Italy little or nothing of the kind has been attempted. One would say that the Italian architects were enemies of those pleasures of polychromy which the great architects of Magna Græcia, in the pre-Roman period, and later, in the fifteenth and sixteenth centuries, the family of the Della Robbia, so generously supplied.

But let us return to Luca, if for nothing else, at least to mention the principal features of his life, and point out briefly the succession of his followers. Luca della Robbia lived in the fifteenth century. He was born in the very first year or it — 1400, in that Florence which gave to art Donatello, Brunelleschi and Michael Angelo.

Like Brunelleschi, Ghiberti, Verrocchio, and Pollaiuolo, Luca della Robbia begun his artistic career as a goldsmith, and afterwards devoted himself to sculpture. One of his most beautiful early works is the figure decoration which he executed for the Cathedral of Florence. Without the taste and originality of Ghiberti and Donatello, he knew how to impress upon his sculptures a sentiment of simplicity and truthfulness which has a great charm. His sculptures in themselves, would therefore be sufficient to give reputation to the name of Luca della Robbia, but that which contributed most to render his name familiar was the enamelling, or coloring and glazing of his terra-cottas. When this was once known as his specialty, Luca received more commissions than he had time to fill, so that he was obliged to associate with himself in his work Agostino and Ottaviano di Antonio di Duccio, who have been supposed to have been his brothers, but who were not even relatives. I do not know, and no one knows, whether Lucca della Robbia's share in the work was limited to the modelling and enamelling of the figures, and the ornamental portion was executed by his assistants. It is certain, however, that this ornamental portion is by no means an unimportant part of the Della Robbia sculptures; and from our point of view it is in the highest degree noteworthy, for the taste displayed in the grouping of leaves and fruits in some of the ornamental parts of the Della Robbia work is marvellous. In some of these groups the leaves and fruits have their natural colors, arranged with a brilliancy and delicacy which gives an impression of reality. This sort of ornamentation which, however, Ghiberti had suggested in his famous doors, called by Michael Angelo worthy to be the gates of Paradise, is so much the more noticeable, as employed by the Della Robbia, for the reason that in their time motives of ornament copied or inspired from classic ones, appear to have generally driven out the direct imitation of nature.

I explain the partiality of Luca and his descendants for the faithful imitation of nature in this way; that color, which had become, so to speak, the essential quality of their ornamental work, adapted itself imperfectly to conventional forms, such as were employed by every one in the Renaissance period. However that may be, in this decoration of colored fruits and flowers consists the characteristic quality of the Della Robbia ornamental terra-cottas; and their effect is surprising, particularly when they serve as a frame for a figure, placed at a considerable height, and under the brilliant out-of-door light. But the energy with which those sculptor-decorators modelled their work must be seen to be understood. What deep undercutting! What nervous outlines! Even to-day, here and there

[1] Continued from No. 823, page 9.

[2] The author was Giovanni della Robbia, assisted by some other artist, whose name is at present unknown. This beautiful and extensive frieze was completed in the year 1545.

[3] A capital in the Cluny Museum, and some débris of terra-cotta are all that remain of that ancient château, about the construction of which history has still some uncertainties. For this reason, while, on one side, a document still exists, which appoints as architects Pierre Gadier and Girolamo della Robbia, and all writers, commencing with Viollet-le-Duc, acknowledge the Italian influence in this castle, on the other hand, Palustre (see "*Histoire de la Renaissance en France*"), an enemy to all Italian influence in French Renaissance art, contradicts Delaborde (see "*La Renaissance des Arts à la cœur de France*"), and affirms that Girolamo della Robbia had no part in the Castle of Madrid other than that of a decorative artist in enamelled terra-cotta. This château, which stood in the Bois de Boulogne, was built by order of Francis I, and by him called "Madrid," in memory of his sojourn as a captive in Spain.

timid imitations of it are attempted. Luca della Robbia, who died an old man of eighty-two years, had very many styles of work, yet not so many as would be necessary for some persons, who never see a piece of enamelled terra-cotta without thinking of Luca, and attributing it to him.

Since, as I have said, the invention of Luca passed from father to son, and from uncle to nephew, as a family heirloom, and others in Tuscany practised it with more or less success, some account of the descendants of Luca should be added.

Luca della Robbia had an excellent pupil in his nephew Andrea, (1445–1525) who worked most successfully in terra-cotta. It must be understood that he did not attempt to improve or develop the technical processes of his uncle; but his works had and still have, a high reputation, particularly from the point of view of ornamental decoration. Since Andrea della Robbia distinguished himself particularly in this respect, that is, in the modelling of festoons, medallions and candelabra, which he executed in a most elegant manner, and with wonderful facility, his works are worthy to be cited as examples. Andrea had five sons, all sculptors, two of whom became monks. One of these was Frate Ambrogio, born in 1470, who carried on the paternal art. The other, born in 1468, was named Marco, but called himself Frate Luca. The name of the third son of Andrea was Giovanni, and the last two sons were named Luca and Girolamo. Among these, Girolamo and Luca particularly distinguished themselves. The last executed, besides many other works, the pavement of the Papal loggie, which Leo X had made in Rome, besides those of many rooms, where he represented the coat-of-arms of that pontiff. Girolamo worked in the Castle of Madrid, in France, where he died, leaving behind him several sons, who continued the distinguished succession of merit, honors and wealth.

As has been seen, the genealogical tree of the Della Robbia is well furnished with branches, so that the abundance of "terre Robbiane" in and out of Italy is explained; but there are many works attributed to the Della Robbia which are not authentic.[1]

Among the best known counterfeits may be recalled the series of medallions belonging to the South Kensington Museum, representing the Twelve Months, and so described by Darcel, the Director of the Museum of the Thermæ and of the Hôtel de Cluny at Paris, (the right man in the right place), in his learned "*Notice des faïences peints italiennes du Musée du Louvre.*"

"*Ces medaillons,*" he says, "*sont entourés d'un rang de feuilles d'eau en relief, émaillées de bleu; et leur surface est courbe comme il convenait qu'ils le fussent pour décorer une coupole. Le trait est bleu foncé, assez incertain, large et épais, ombrant les draperies d'un seul coup, tandis que les rehauts d'émail blanc les eclairent, appliqués avec beaucoup de justesse, et une grande liberté de main; de telle sorte qu'il n'y a que trois couleurs, le blanc, le bleu foncé, et le bleu clair du fond, pour dessiner et modeler ces figures, très florentines par style.*" This very beautiful series of medallions, among the most beautiful of the kind in Italy, awakens the interest of Sir C. Robinson, who, in his catalogue, "*Italian Sculpture in the South Kensington Museum,*" described these sculptures in enamelled terra-cotta as a commission given to Luca, to decorate the vault of one of the halls of the palace of the Medici at Florence. The hypothesis, for it can be called nothing else, is ingenious, but lacks proof to sustain it. I have, however, thought it well to mention these London medallions, not only because, whatever their origin, they are artistically beautiful, but to show by a good example the various applications to which the Robbian terra-cottas were adapted.

And here it will be permitted me, turning my course still toward Tuscany, and stopping again at Pistoja, to recall that in the atrium of the Cathedral of Pistoja, there is a most elegant soffit, all in panels, white on an azure ground, and made in enamelled terra-cotta by Andrea della Robbia. The effect of this soffit, which decorates a short barrel-vault, is thoroughly splendid.[2]

In looking at and admiring it, the only regret that one feels is that the Italians, and, in general, all decorators, should not bring back into use the Robbian surface-treatment, in enamelled terra-cotta. These terra-cottas, with their bright colors, compete closely with mosaics. Especially in cold climates, where external fresco does not long endure, the use of colored decoration in terra-cotta ought to become popular. In the north of Italy, as I have said, some attempts of the kind have been made, but have not been repeated. What is the reason? Perhaps the excessive cost of the enamelled terra-cotta? Possibly: but more probably the indifference of our architects to color. In Italy, and in Italy I include also Venice, the city of color, we have towers of frightful monotony; and that because we have neglected the element of color, and place our dependence on a regularity or architectural symmetry, which is our greatest defect, and which the English, with their "Queen Anne style," have been able to combat victoriously. We are, in general, too much "traditionalists." In architecture, we, the sons of classic art, have not been able to cut ourselves loose from this influence. We have preached here and there, "Color! Color!" but the sentiment of tradition seems terrified at this exclamation. It is in vain to praise the genius of the Della Robbia, and the decorative beauty of their terra-cottas, so splendid, and so little affected by the deleterious influences of the weather; no attempt of any importance is made to use such terra-cottas on modern constructions.

I have shown you what æsthetic effect may be produced by enamelled terra-cotta, even when used in very limited proportion; but I have not yet mentioned the portico of the Hospital of the Innocents at Florence. Here, between the arches, are some extremely simple medallions, with a cherub on an azure ground. Can you believe it? These medallions are the very life of the Florentine portico; the soul; like the eyes in the face of a beautiful woman.

But, after all, why should I extol here the graces of color in architecture? We have splendid examples of architecture, where the pictorial decoration, although not derived from the terra-cotta, associates itself wonderfully with it; and you know already a few of these examples.

Therefore I, to-day, limiting myself to my subject, in writing to you of enamelled terra-cottas, have not wished to describe only the history and works, in their most important aspects, of a family of illustrious Italian artists, but I have desired to show the benefit which might be gained for modern architecture from the application of the Robbian terra-cottas (I call them so, only adopting the ancient name for them) whether in civil constructions, or in religious ones. Certainly, the conclusions which follow from my present study will occur to many of your readers, who do not need my encouragement to follow in a path which the old world, which Italy, the ancient fortress of the arts, has pursued in the past, but to-day, alas, can only point out with the eloquence of her examples, to those who have more spirit and more independence than her own sons of to-day possess.

ALFREDO MELANI.

(To be continued.)

[1] Amateurs and collectors of antique objects, when figurative or decorative sculptures are offered them as genuine works of the Della Robbia, should have their eyes well opened, in order not to be deceived. In Italy to-day good imitations are made of the "terre Robbiane"; perhaps they have, as a rule, the colors more lively than the originals, particularly in the blues, but in general they are well done. I will mention the imitations which are made in the manufactory of Doccia, belonging to the Ginori, near Florence. Although culpable speculations are not carried on here, they might be practised by third parties. The price of these decorations in Della Robbia style is extremely moderate.

[2] Speaking of soffits in enamelled terra-cotta: I remember seeing, applied to the soffit of a staircase, and in the form of panels, dishes, real decorated dinner-plates, arranged in a symmetrical pattern. They gave to the place to which they were applied a pretty and artistic air. Would it not be possible to repeat the attempt?

MR. PENNELL AS A PRISONER.

MR. JOSEPH PENNELL, the artist, who has just arrived in London none the worse for his arrest in Russia, is a much-maligned man. *Truth* says he "persisted in sketching and photographing after the police warned him to desist." But the police didn't warn him; they just arrested him. Some one else — the Vienna correspondent of the *Times*, we think—said he was advised by the British Consul. But the Consul didn't advise him at all. The Vienna papers say he saw sixty Jewish families expelled. But he didn't. Another paper says he "amused himself by sketching forts." But he only sketched churches and costumes. And finally, we ourselves half-hinted our belief that, as he is no respecter of persons, he probably gave as much as he got, and didn't adopt the smooth answer which turns away wrath. This was the worst libel of all. Mr. Pennell was as meek and mild, so he assures us, as — well, as an American artist who had travelled fifty hours in search of the picturesque, and when he had found it was not allowed to make full use of it — could be expected to be under the circumstances.

What really happened was this, — Mr. Pennell went to Kieff. He asked the biggest official he could find for leave to sketch the churches — "such picturesque stuff," he says, "you never saw; why, it was as good as St. Mark's." The civil authorities said he must apply to the ecclesiastical. The ecclesiastical official said nothing. In view of the Cronstadt affair, Mr. Pennell thought it would be safe to take French leave. And so it was, for he sketched away unmolested for a week.

He then went off to Berdicheff, and took out his Kodak for a walk. He was instantly placed under arrest, and his passport was taken from him. "He had some negatives? Then he must develop them in order that the authorities might see if they were as innocent as he said." "He could not develop them." "Then he must go to Kieff, and on foot — a matter of fifteen days' march." He then found that perhaps he could develop them. And he did, taking care, however, to destroy one lovely, picturesque view in which a beggar had chanced to "compose" in front of a distant fort. The other photographs were warranted innocent. "Then he might stay?" "No, the orders from Kieff were to send him back there if the photographs were objectionable, and if not to escort him to the frontier. One train left at 2 A. M., another at 6 A. M. Which would he choose?" Mr. Pennell chose to leave so inhospitable a country by the earlier opportunity. The Cossacks took him to the station; and here he is London again, full of copy, artistic and journalistic, and with a very vivid impression of Russian ways to the good.

The officials themselves were polite, Mr. Pennell says — polite but peremptory. He tried to argue with them. They replied in excellent French that they did not understand that tongue. He took a telegram to the office. The clerk — again in perfect French — said they did not take telegrams in French.

"Then they did not put you in prison?" "Not they," replied Mr. Pennell: "they have a more excellent way with prisoners than that. You pay for your own prison keep, because you stay on at your hotel. But a couple of Cossacks are stationed outside, and wherever you go, there are they also behind you. I went out for a walk;

they followed. I entered a shop to buy some paper; they entered also."

"In fact, you were like an Irish minister under police protection, or an Irish suspect under police shadowing?" "Quite so; and very uncomfortable it is, I can tell you. You just try it, and see. Deprived of your passport, you become at once absolutely helpless and you realize very unpleasantly the impotence of the individual in an autocracy. Every one told me that I came very luckily out of it. If they had marched me off to Siberia, nobody would ever have been the wiser." "But didn't you communicate with the *Times's* correspondent at Vienna?" "Yes, but only when I was across the frontier. As long as I was under detention not a word was I able to communicate with anybody."

"Then you can't recommend Russia as a place of artistic resort?" "Not exactly. The artistic material was splendid. But picturesqueness is not improved by arrest in the background. You can live all right in Russia so long as you know how to keep on the right side of the Government. If the Government harries a Jewish family, (and I did see one family bundled off at the point of the bayonet,) and you don't like it, well, you must just not see it. If you do; it will go ill with you. I suppose it was really my sketching the Jews and poking about the Jewish quarters they didn't like. But it was the photographing that did for me. The mere sketching, as I have told you, they didn't so much mind." "Then the moral of it all is that a camera is not a safe travelling companion in Russia. As soon point a pistol at a man's head as a Kodak?" "Yes, that's about it." —*The Pall Mall Gazette.*

THE ARBITRATOR'S AWARD IN THE LONDON CARPENTERS' DISPUTE.

NO INCREASE OF PAY, BUT REDUCTION OF WORKING HOURS, AND ADVANCED PAY FOR OVERTIME.

The arbitrator, Mr. J. MacVicar Anderson, P. R. I. B. A., in the matters in dispute between the Central Association of Master-Builders and the carpenters and joiners of London, issued his award at noon (Thursday) November 19. The document narrates at considerable length, and in some detail, the steps which had led up to the arbitration, giving the eight points of the memorial presented to the Central Master Builders' Association by the United Trades Committee of Carpenters and Joiners, which were, in effect, a demand for (1) a reduction of working-time from 52½ to 47 hours per week, (2) an advance of wages from 9*d.* to 10*d.* per hour, (3) increase of pay for overtime, (4) an allowance for expenses to men sent to a distance from the shop or job, (5) the abolition of subletting and piece-work, (6) the providing in shops and on jobs of a lock-up place for tools, (7) of a place for meals, and (8) one hour's notice and one hour's wages for grinding to be allowed on discharge. These amended rules were, if conceded, to have come into force on May 2; but being refused by the Master Builders, a partial strike against three representative firms took place, replied to on May 23 by a general lock-out. A compromise was offered by the employers on July 27, but, being declined, was withdrawn on August 6. On Michaelmas-day the carpenters asked that the President of the Royal Institute of British Architects would arbitrate, and at a conference held on October 12 both sides agreed to submit to Mr. Anderson's arbitration the matters in dispute. Four representatives on each side, with the respective secretaries, attended before the arbitrator on October 19, 22, and 27, and on November 3, and evidence was also given by representatives of the operative masons, plasterers, and bricklayers. Having heard the arguments for and against the eight points of the memorial, the arbitrator announces that he has come to the following conclusions: —

As regards Clause 1, the carpenters and joiners have established a claim for consideration in respect to the present code of working hours: the abnormal size of London, and the great distances which workmen have to travel, render the conditions of London work exceptional and different from those in any other town.

As to Clause 2, the carpenters and joiners have failed to establish their claims for an increase of pay; the depression in trade, and other conditions which tend to the advancement of cost, being great. The recent strike and lock-out in London have led to a loss from which the men will not recover for a long period, while the difficulty which has been experienced in getting work done has given an impetus to foreign labor. To increase the cost of building beyond the present limits will tend to restraint of trade, and to bring disaster on all concerned.

Regarding Clause 3, it is reasonable that overtime should be paid at a higher rate than ordinary labor; but inasmuch as overtime is often necessary, the rate should not be prohibitive.

Clause 4 of the memorial has been so amended as to include men sent into the country, and is agreed to.

Clause 5 (prohibitive of subletting and piece-work) has not been insisted upon, and I make no rule respecting it.

The remaining three clauses have been practically agreed to, subject to certain modifications, and are embraced in my award.

On and after the date of this award (November 19) the code of working rules for carpenters and joiners in the London district h all be:—

1. The working-time, both in shops and on jobs, shall be 51½ hours per week for 36 weeks in summer, and 47 hours per week for 16 weeks in winter, equal on an average to 50 working hours all the year round. The hour for commencing work to be 6.30 A. M. for the 36 summer weeks, and 7 A. M. for the 16 winter weeks. The hour for leaving off work on the first five working days of the week shall be 5.15 P. M. for the 36 summer weeks, and 5 P. M. for the 16 winter weeks, except in the depth of winter on out-door jobs, when it is to be 4.30 P. M. The hour for leaving off work on Saturdays to be 12 o'clock noon all the year round. Half an hour to be allowed for breakfast every working day, and one hour to be allowed for dinner on each of the first five working days of the week, except in the depth of winter, when half an hour only is allowed. The sixteen weeks of winter are to be reckoned eight on each side of Christmas-day.

2. The standard rate of wages in shops and on jobs to be 9*d.* per hour.

3. Overtime, when worked at the request of the employer, but not otherwise, to be paid at the following rates per hour: From 5.15 P. M. in summer, and 5 P. M. in winter until 8 P. M., one shilling per hour; from 8 P. M. until 10 P. M., one shilling and threepence per hour; from 10 P. M. till the time of starting next morning, one shilling and sixpence per hour. On Saturdays, from 12 noon until 4 P. M., one shilling per hour, and from 4 P. M. till the time of starting on Monday, one shilling and sixpence per hour. No overtime to be reckoned until the full working-day has been made.

4. Men who are sent from the shop to a job, including those sent into the country, shall be allowed as expenses one shilling per day for any distance over six miles from the shop or job, exclusive of travelling expenses, and allowance for time spent in travel.

5. Employers shall provide a lock-up place on jobs where practicable, and shall take reasonable precautions for securing workmen's tools, but without incurring responsibility in case of loss.

6. Employers shall provide, both in shops and on jobs where practicable and reasonable, some suitable place for the workmen to have their meals, a laborer to be provided to prepare the same.

7. Men who are in receipt of full wages, and who have been employed for 49 hours in summer and 45 hours in winter shall, on discharge, receive one hour's notice, to be occupied, as far as practicable, in grinding tools, with one hour's pay in addition. — *The Building News.*

THE ILLUSTRATIONS

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

HOUSE OF HAZARD STEVENS, ESQ., BOWDOIN AVENUE, DORCHESTER, MASS. MR. E. A. P. NEWCOMB, ARCHITECT, BOSTON, MASS.

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

THE VERMONT INSANE ASYLUM, WATERBURY, VT. MESSRS. RAND & TAYLOR, ARCHITECTS, BOSTON, MASS.

THIS asylum is the first State asylum Vermont has had, the insane of the State having heretofore been very efficiently cared for by the private asylum at Brattleboro under the superintendency of Doctor Draper. The problem before the architects was, briefly, to provide accommodations for the various classes of insane in a series of wards, having, so far as possible, all the light and air advantages of entirely isolated buildings, yet adapted by the connecting corridors and glazed sun-rooms to the severity of a northern climate. The aim has been also to keep the buildings as low as possible to facilitate ease of egress in case of fire. The architects were considerably limited in their study of this work by the conditions of cost, and therefore everything was arranged in a very simple manner and of the ordinary materials at hand. The exterior walls and partitions are of common brick with the few trimmings of local granite. The roofs are of slate and the plastering of gray soapstone finish. The heating, ventilation and plumbing were very carefully studied, the heating being largely by indirect radiation, and the ventilation promoted by fans driven by electric motors. The lighting is done by a special electric plant. Two circular wards, one general ward, one criminal ward and the boiler-house are just completed and occupied, and the remainder of the buildings will be built later as required. The cost of the institution complete will approximate to the lowest cost of such structures yet reached in this country, viz, $600 per patient. When complete, the entire building will be about 1,000 feet long, will accommodate 400 patients and will cost about $250,000.

MUSIC-PRINTING HOUSE OF G. SCHIRMER, NEW YORK, N. Y. MR. WILLIAM KUHLES, ARCHITECT, NEW YORK, N. Y.

THIS building measures thirty-three feet front and one hundred and six feet deep. All stories are laid out as "lofts." First-story front piers are of polished and rough granite. The upper part of front, buff bricks and Indiana limestone.

FAIRVIEW. RESIDENCE OF ARTHUR P. GORMAN, ESQ., HOWARD CO., MD. MR. JACKSON C. GOTT, ARCHITECT, BALTIMORE, MD.

HOUSE OF H. G. CAMPBELL, ESQ., PATERSON, N. J. MR. CHARLES EDWARDS, ARCHITECT, PATERSON, N. J.

TOMB OF GEORGE L. RANDIDGE, FOREST HILLS CEMETERY, BOSTON, MASS. MESSRS. FEHMER & PAGE, ARCHITECTS, MR. ROBERT KRAUS, SCULPTOR, BOSTON, MASS.

[Additional Illustrations in the International Edition.]

A COVERED MARKET: THE PLAN. M. PAULME, ARCHITECT.

[Photogravure.]

TWO BAYS OF THE SAME.

[Photogravure.]

CONSTRUCTIVE DETAILS OF THE SAME.

[Photogravure.]

FIRST-STORY CORRIDOR IN THE NATIONAL POSTAL SAVINGS-BANK BUILDING, PARIS, FRANCE. MR. M. J. BOUSSARD, ARCHITECT.

[Etching.]

GATES FOR THE VILLA AURELIA, ROME.

THE Villa Aurelia was formerly known as the Villa Savorelli, on the Monte Gianicolo. This villa has been found to have been built upon and had incorporated into its structure a considerable part of the wall of Aurelian; hence the recent change of name. Large outlays have been made by the present owner to adapt it to English uses, and to repair the injuries done to it during the time that Garibaldi, making this villa his headquarters, held Rome for some time against the French. The Roman Municipality altering the approaches to the Public Gardens in this beautiful western part of the ancient city, the entrance to the villa had also to be altered, and the present design for wrought-iron gates was made. Our plate is from a colored drawing by the hand of the architect, Mr. Thomas Henry Watson, exhibited this year at the Royal Academy.

RESIDENCE, BARNT GREEN, WORCESTERSHIRE, ENG. MESSRS. ESSEX & NICOL, ARCHITECTS.

DESIGN FOR THE COMPLETION OF THE SOUTH KENSINGTON MUSEUM, LONDON, ENG. M. MACARTNEY, ARCHITECT.

GARDEN FRONT OF SAME.

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.]

CATALOGUE-OWNERS *VS.* EXHIBITORS.

November 27, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT: —

Dear Sirs, — In reply to the editorial query in your journal of the 21st inst. and a letter since received, regarding the Boston Architectural Exhibition Catalogue of 1891 and the therein published drawings, I will say that I believe most emphatically that the disposal of a drawing is in the hands of the owner. Interference by other parties is presumptuous.

To have a drawing hung in an exhibition should be an indication of merit and its illustration still more so. This, as well as the return of the work unhung, are salutary lessons which the artist cannot always obtain elsewhere and which I am inclined to consider of more value to me than the larger amount of advertising obtainable through architectural news journals. For this reason I was inclined to encourage the catalogue, but I think the establishment of a principle in the interests of the catalogue publishers would result unfortunately to all, and a principle in favor of architectural journals equally so.

The artist should conserve his influence so that he may be at liberty at all times to exert it for the well-being of his art. In the present state of the controversy I think a declaration in favor of either class of publications would be a relinquishment of this individual right. Yours truly, EXHIBITOR.

[As an example of the responses our inquiry has evoked, we print the foregoing note, and in comment will only say that this correspondent, like some others, has slightly misconceived the situation. We spoke of the matter merely because it involved a principle of very real interest and importance to exhibitors, but in not the slightest degree did we suggest the establishment of "a principle in favor of architectural journals." It is but fair to the New York Architectural League to say that the managers of the approaching exhibition notify us that they will "not attempt to control contributors' drawings in any respect. In fact we have rather gone to the opposite extreme in having at various times given catalogue-cuts to newspapers during exhibitions in order to advertise the show all we could." — EDS. AMERICAN ARCHITECT.]

POWDER-POST.

NEW YORK, November 28, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT: —

Dear Sirs, — In a house I built four years ago — the ash base-boards of fourth-story rooms have become perforated by the boring of some worm or insect — the holes coming through on the face of the wood almost as thick as I show on this paper at margin, and as the collection of two weeks (since room was swept) there appeared a line of fine saw-dust all along the floor where the débris had been thrust out of the holes by the little destroyers.

What can be done to stop the mischief? The owner fears they will next attack her magnificent cabinet-work on the floors below — and as they work from behind outward to the surface, the destruction cannot be discovered until too late. Yours truly

A. B. JENNINGS.

[THESE boring insects, which frequently develop themselves in this way in ash and chestnut, probably come from eggs deposited in the wood before it was cut, and it is not very likely that they will make their way through different materials into the rooms below. Still, it would be prudent to take off the base-boards affected, and either destroy them and put on new ones, or give the wood a good washing from the back with a strong solution of corrosive sublimate — bichloride of mercury — which might also be applied to the grounds, studs and other woodwork within reach of the worms, before the bases are replaced. — EDS. AMERICAN ARCHITECT.]

NOTES AND CLIPPINGS

THE BOURBONS AND ARCHÆOLOGICAL REMAINS. — It would naturally have been thought that the Restoration would have made it a special care to restore and preserve the monuments of the past, but it is a remarkable fact that this epoch was the commencement of a system of almost limitless destruction of the edifices which the Revolution had spared, and that the change of dynasty in 1830 has certainly been productive of benefit in this respect at least. In the time of Napoleon the Minister of the Interior, by his circular of June 4, 1810, proposed a long series of interrogatories to all the prefects relative to the actual condition of the old castles and abbeys in their respective departments. These documents are replete with curious and interesting facts. Under the Restoration, M. Simeon, when Minister of the Interior, adopted a similar measure, but it does not appear that any practical results were obtained. The lamentable system of indifference which prevailed on this subject up to 1830 may be inferred from the terms of that ordinance which can never be sufficiently regretted, by which the splendid depôt of historical monuments formed at the Petits Augustins was destroyed and dispersed under the pretext of making restitution to owners who no longer survived, or who did not know what use to make of the objects so restored to them. It is believed that not one of the monuments given back to individual owners has been preserved; and, notwithstanding the notorious difficulty of disposing of these splendid relics, a steady refusal was constantly returned to the reiterated requests of M. Lenoir, the founder of this unique museum, to re-establish his collection with what remained after restitution has been made to every known proprietor. This contempt for and unpardonable neglect of antiquity in a Government whose chief claim to respect was derived from the principle of antiquity, extended even to the Conservatoire de Musique; the curious collection of ancient instruments of music which had been formed there was ordered to be dispersed or sold at a low price. This ruinous system which prevailed in Paris, was practised on a still more extensive scale in the provinces. It would scarcely be believed that, under a moral and religious government, the Corporation of Angers, which had for its chief a deputy of the extremest ultra-loyal opinions, should have been allowed to convert the Gothic church of St. Peter into a theatre. It is still more incredible, but not the less true, that the church of St. Cesaire at Arles, which the most erudite antiquaries looked upon as one of the oldest in France, was transformed *en mauvais lieu*, without any public functionary protesting against such profanation. Who would think that no effort was made, when the Most Christian King returned to the throne of his fathers, to rescue the magnificent papal palace at Avignon from its military desecration? And who could credit the fact that at Clairvaux, in that celebrated sanctuary which was directly connected with the authority of the State, the exquisite church, so beautiful in its proportions and so complete in its grandeur, which dated from the twelfth century, and was said to equal Nôtre Dame at Paris in size, which was begun by St. Bernard, where so many queens, princes and pious generations of monks were entombed, and where the heart of Isabella, the daughter of St. Louis, was deposited, that this edifice, which had survived the havoc of the Revolution, and the indifference of the Empire, should have been demolished in the very first year of the Bourbon restoration? It was then razed to the ground, with all its projecting chapels, without leaving one stone upon another, or even sparing St. Bernard's tomb, to make room for a square surrounded by trees in the centre of the prison which occupied the site of the venerable monastery. Before leaving Clairvaux, we may as

well mention that a prefect of the department of Aube, under the Restoration, actually sold seven hundred pounds weight of the archives of this famous religious house, and which were removed to Troyes; and the Count de Montalembert stated that, when he was at that place, he walked over a heap of parchments strewed thickly on the floor, from which he picked up a bull of Pope Urban IV, the son of a shoemaker of that very city of Troyes, and probably one of its most illustrious children. The same prefect demolished the relics of the palace of the ancient counts of Champagne, of the noble and poetic dynasty of the Thiebauds and Henri-le-Large, because they were in the line of a crescent which his architectural genius had unfortunately devised. The beautiful gate of St Jacques (constructed in the time of Francis I) and that of Beffroy suffered the same fate. Another prefect of the Restoration, in the department of Eure and Loire, had no scruple in appropriating to his own use, several painted windows of the Cathedral of Chartres to decorate the private chapel of his country mansion. It has been incontrovertibly proved that during the fifteen years of the Restoration, more irremediable devastations were committed in France than in the period from 1789 to 1813. This destruction was certainly not enjoined by the Government, but it was done under its eyes, with its tolerance, and without exciting the slighest marks of its solicitude. — *The Architect.*

The Permanent Residents in Hampton Court Palace. — An interesting chapter in Mr. Law's "*History of Hampton Court Palace,*" is devoted says the *Pall Mall Gazette*, to the residents who occupy (by favor of the Crown) the very numerous sets of private apartments in the palace. One regulation forbids the keeping of dogs, but it is not easily enforced. "Some of the inhabitants, indeed, have not shrunk from covertly disregarding altogether the official ordinance banishing their pets; while one intrepid and determined lady is said valiantly to have hurled explicit and terrible defiance at the whole phalanx of authorities that hold sway over the palace; at the Lord Chamberlain of her Majesty's Household and all his officers and henchmen; at the Lord Steward of her Majesty's Household and his whole assembled 'Board of Green Cloth'; at the First Commissioner of her Majesty's Works and Buildings and each and every member of his 'Board,' with their attendant staff of secretaries, surveyors and clerks, armed in all their panoply of foolscap and quill-pens. Whether an encounter at close quarters ever took place between the two opposing forces — between my lady with her lapdogs and 'my lords' with their red-tape — history does not record; but if such a conflict of giants ever did come to pass we may be pretty sure whatever its issue and whatever the terms of peace, that the lady, after the enemy had withdrawn from the field, immediately reverted to the *status quo ante.*" Another story of a refractory resident refers to a lady occupying some years ago one of the best suites of apartments in the palace. "When informed by the Lord Chamberlain that some fine old tapestry, belonging to the Crown, which hung in her rooms was required for another of the royal palaces, she replied that she altogether declined to part with it. My lord remonstrated, my lady was firm; my lord insisted, my lady was inexorable. At last his lordship threatened that unless she gave it up voluntarily he would send some of his myrmidons and have it forcibly removed, to which her ladyship replied that, if he dared to do so, she would set fire to the palace! The determined character of the lady being well known, her threat prevailed, and she remained in undisturbed possession of the tapestry until her death." In most respects life at Hampton Court is much the same as life anywhere else; but Mr. Law mentions one or two idiosyncrasies: "In the case of suites of apartments entirely in the upper story of the new palace — and consequently at an immense height from the ground — it is customary, for the purpose of hoisting up cards, notes, letters and small parcels, to make use of a basket attached to a string, the lowering of which suddenly about the unsuspecting head of a visitor unaccustomed to this peculiarity of palatial life has a somewhat startling effect. Another idiosyncrasy of the inner life of the inhabitants of the palace is the use of an old sedan-chair, mounted on wheels, drawn by a chairman, and called 'the Push,' which is used by the ladies for going out in the evening to dinners or parties from one part of the building to another. This curious survival of a bygone age is probably the only sedan-chair in actual use in England."

Royal Tombs in the Far East. — The people of the Far East have a curious fashion of giving sepulture to their dead. The cemetery as we know it does not exist, but each family buries its deceased members in a little ditch surrounded by a hillock on one side of the house. The custom of the people is also that of the Eastern Kings. During their lives and generally at the beginning of their reign they choose a site for a country house. In the course of their reign the construction of the palace is begun, and the gardens which surround it are laid out. The richer the court, the longer the reign, the more time and money, are expended upon the buildings. At Annam all the sepulchres of the ancient kings of the country bear this resemblance to country residences. The tomb of Dong-Khang, for example, is composed of two pavilions, is situated at the extremities of a park at the entrance of a pine wood. The two portals leading to the interior are preceded by those interminable terraces placed one upon the other which are the chief characteristic of the art of the Asiatic gardener, and the path is bordered with great vases in which cycas grow luxuriantly. The tomb of Minh-Mang is built after the same fashion. It represents a sort of mausoleum in the form of a pagoda, built at the end of a fine, long, flagged walk, at the entrance of the old royal residence on the banks of the River Hue. On the right is an enormous gold dragon mounted upon a pedestal sheltered by a little roof. A stone mandarin, representing one of the ancient ministers of the dead King, seems to watch over the repose of his royal master. At the tomb of Gia-Long there is also a monumental staircase with the inevitable terraces, golden dragons, and pine groves. To the stone mandarin is added the favorite horse and elephant of the sovereign. The same style and almost the same architecture are found in the tomb of Tien-Tsi. It possesses, however, one original feature, for in the centre of the park there is a great column supporting a funerary urn. The sepulchre of Tu-Duc differs but little from the others. It is erected in an admirable site, on the edge of the River Hue, very near the tomb of Dong-Khang. Two funerary columns and an enormous tombstone ornamented with an Annamite inscription give it character. All these tombs of the Kings of Annam possess one common peculiarity. The exact place where the body rests is concealed with the greatest care, only the members of the royal family being supposed to know it. So the superb mausoleums, the great tombstones, and the funerary columns are in reality only tricks to mislead the mind, designed perhaps to guard against research and profanation. — *Philadelphia Telegraph.*

The Leaning Tower of Saragossa. — The old tower in Saragossa is doomed. It was erected four centuries ago, but it is still, as on its first day, the Torre Nueva. As an example of Spanish brickwork the tower is interesting enough, but to its inhabitants its importance consists in its rivalry to the Pisan structure. The Torre Nueva cannot, however, be treated as a builder's freak. If there is a departure of nine feet from a perpendicular line it is owing to the sinking of the foundations. Cases of settlement are generally chronic, and there can be no doubt of the symptons which are to be observed in the tower. It menaces the people who are so proud of its renown. Although it was restored thirty years since, the ground could not be made firm, and owing to the subsidences the tower was never in a worse state than it is now. The commissioners who have charge of the ancient buildings in Aragon have met and considered the reports of the architects, which state that it is no longer feasible to make the tower secure, and that the safety of the public makes demolition inevitable. But the commissioners have affection for the tower, and instead of approving of the operation they have implored the advice of the Academy of St. Ferdinand, in Madrid. But a Spanish savant needs a long period of time for deliberation, and unless an accident should occur, the tower may be visible for many months or years. The faith of the custodians in its stability continues unchanged, for they allow people to ascend to the upper platform. — *The Architect.*

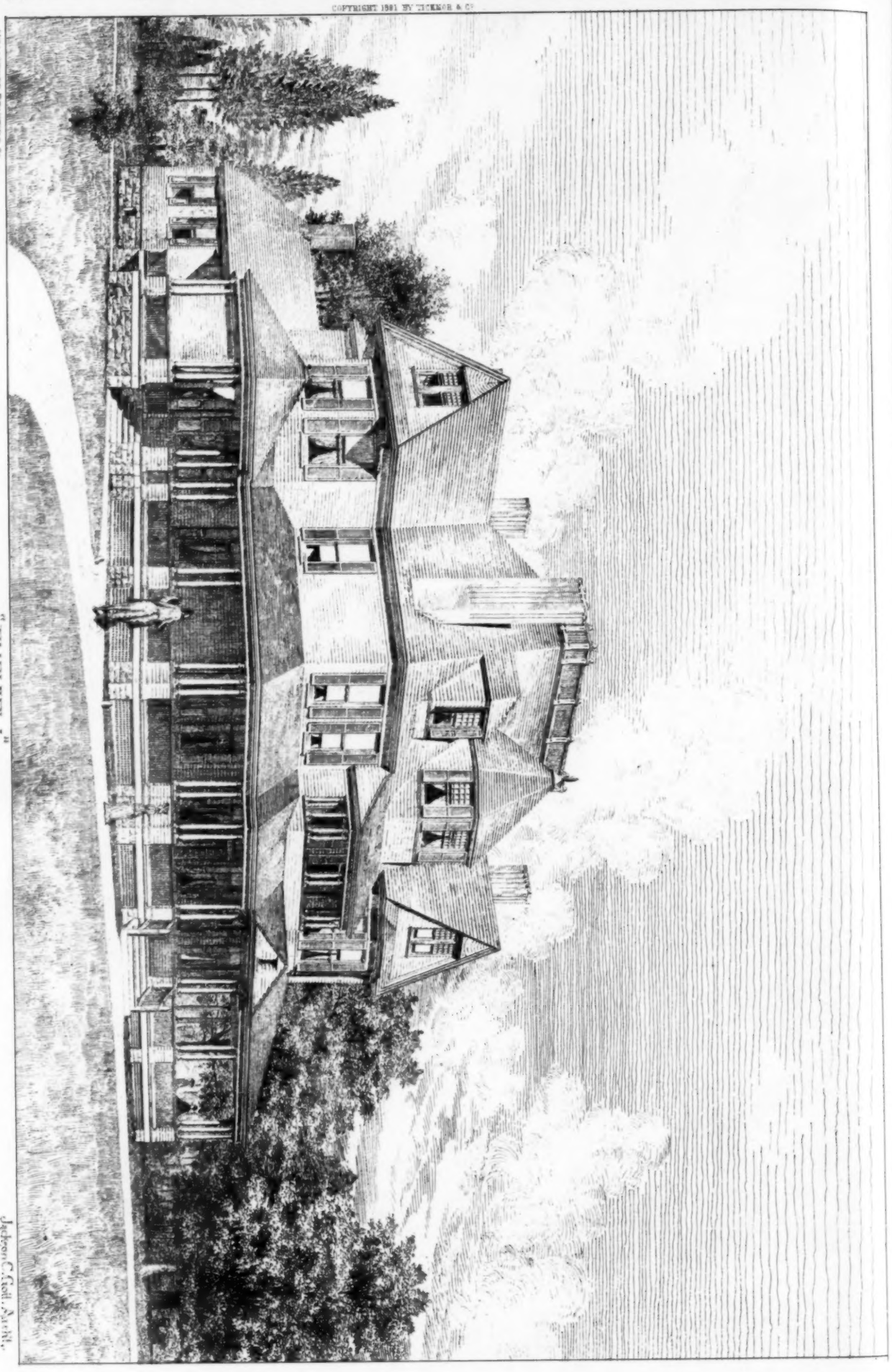
TRADE SURVEYS

Those financial managers who have the actual and advisory control of the millions of idle and opportunity-waiting wealth, especially in Eastern financial centres, are not united in opinion or in conclusions as to the best probable course to be pursued during the coming year. Doubtless many who control money and securities will advise a continuance of the past conservative policy. Stock-speculation, from many evidences, will receive an impetus, because of the estimated fifteen-per-cent increase in gross earning-capacity in freight. An easier monetary situation seems assured because of the return of $29,000,000 in gold, including some arrivals early next week, and because of the demonstrated fact that, while there is not sufficient money for all demands, there is sufficient for all necessities as necessities are at present measured. Stock-exchange managers say there will be a heavy pressure early next spring to list a vast volume of new stocks, many of them without readily ascertainable value, but, perhaps, as good as the average run of fag-end stocks. Promoters of new enterprises say there is a greater number of recently conceived, or half matured schemes and enterprises, than have been in waiting in the anteroom of enterprise for years. Credible land and real estate authorities have lately expressed the opinion that in the wheat and cotton belts, and in the regions given over to animal food-products, an actual and *bona-fide* appreciation of values is in progress, which will assert itself positively by the time the annual outpouring of new farm and ranch buyers arrive. Manufacturers say that raw material is at the lowest point for years, and that the demonstrated fact of bottom prices having been actually reached will stimulate an upward movement in values with the enlarging demand that seems to be in sight. Among mining interests on the Pacific slope, a sort of revival in enterprise is showing itself, but is confined to well-defined properties where much capital is necessary. Hap-hazard hydraulic mining is over, and the new operations will be conducted for the most part by strong combinations. The possible enlargement of the field for silver, perhaps, has something to do with this growing interest. Bankers, whose field of observation and experience is limited by "hand-to-mouth" demands, seem to agree that there will be a strain on the banks to meet business requirements next year — an opinion which is, perhaps, based on the fact of steady growth. Those higher up in financial management know that it has been only by the ablest financial generalship, aided by an accidental crop, that serious conditions have been avoided. The politicians will probably meddle just enough with tariff and silver agitations to keep the public reminded that these topics will be footballs for future national political tournaments. The year is drawing to a close under satisfactory conditions, but there are dangers to be considered, such as a hurtful fluctuation of prices, growing out of the presentation of large requirements. Shrewd business men recognize this danger, and in a multitude of individual cases this month, danger has been averted by liberal contracts for raw material. The great body of the people are waiting to see what everybody else does. If wisdom prevails there will be nothing but a natural demand, because the producing-capacity in every branch of activity is such that no harm can result to slow buyers, provided there is a normal demand. Even now, strange as it may sound, there are dangers of undue fluctuations. The country will soon reach a ten-million-tons pig-iron basis and a ten-million-bales cotton crop, and this will be probably accompanied by a return to a construction of five thousand miles of road per year for increased traffic demands. In the light of these probabilities, financial managers who are advisers as well as investors can make no mistake in keeping a firm grip on their dollars and their friends' dollars until these new demands are clamoring for our increased energy. Any attempt to anticipate the future will cause damage and delay. Our growth must from this out be natural. In years past, transcontinental roads were built to create trade and manufactures, but this policy cannot now be followed. Actual developments must precede, actual wants must arise, before it will be safe or wise for capital to launch out, and, by guessing how much and what is wanted, to overestimate or miscalculate the nation's needs.

S. J. Parkhill & Co., Printers, Boston.

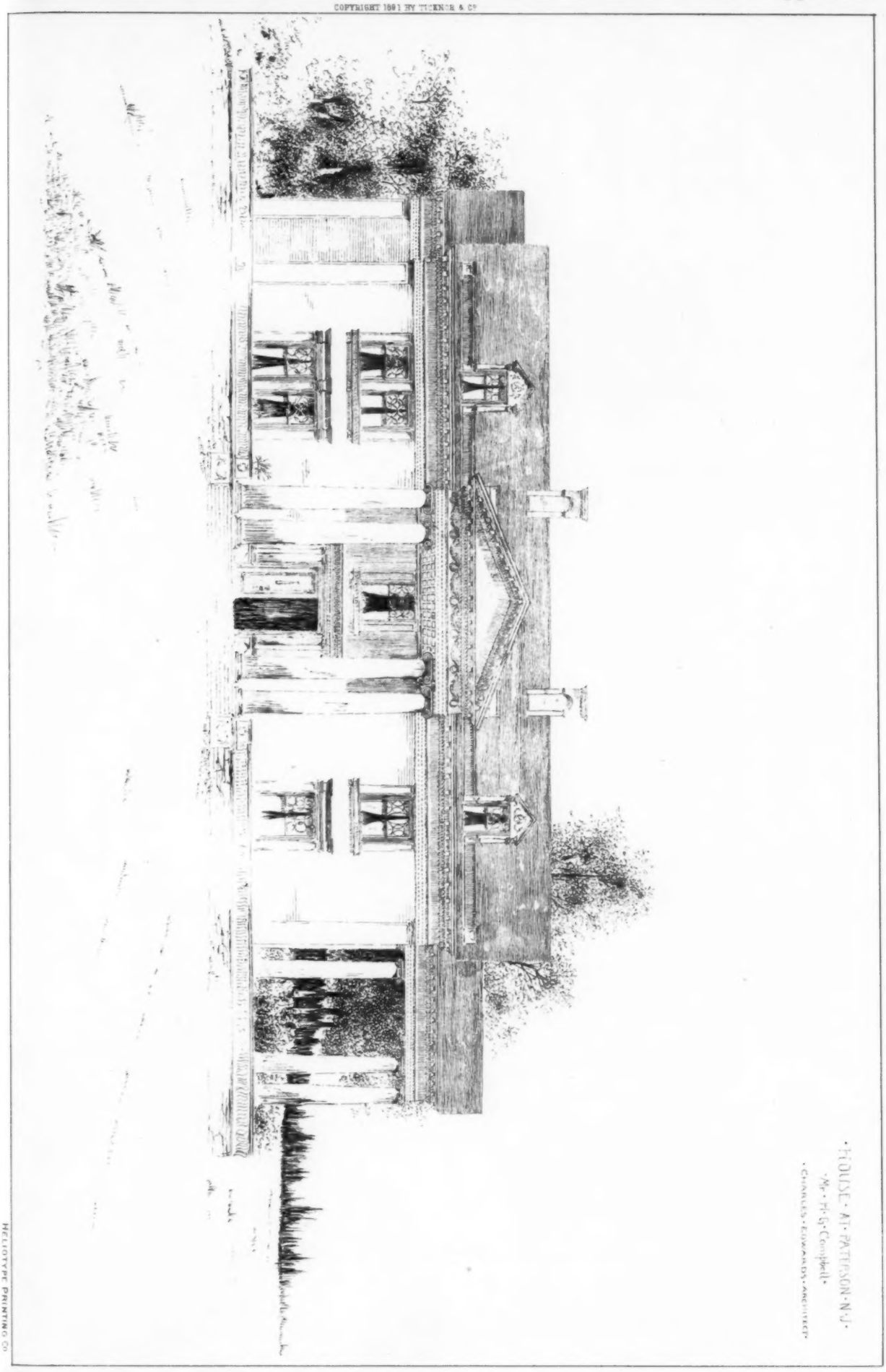
TOMB OF GEORGE L. RANDIDGE, FOREST HILLS CEMETERY, BOSTON, MASS.
FEHMER & PAGE, ARCHITECTS — ROBERT KRAUS, SCULPTOR.

HELIOTYPE PRINTING CO.

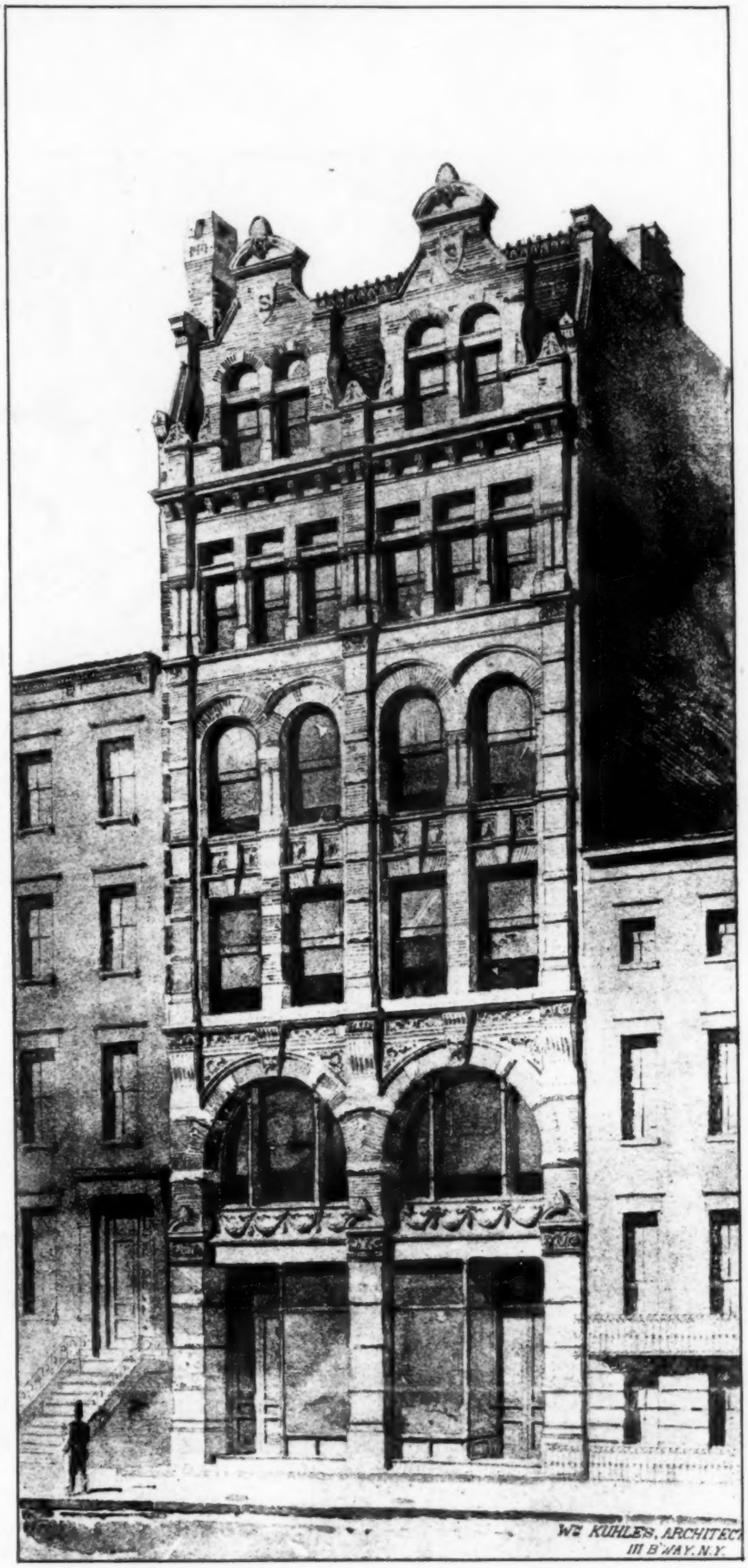


"FAIRVIEW"
The Summer Residence of Hon Arthur P. Gorman.
Howard County, Md.

Jackson C. Gott. Archt.



HOUSE AT PATTERSON N.J.
Mr. H.G. Campbell.
CHARLES EDWARDS ARCHITECT

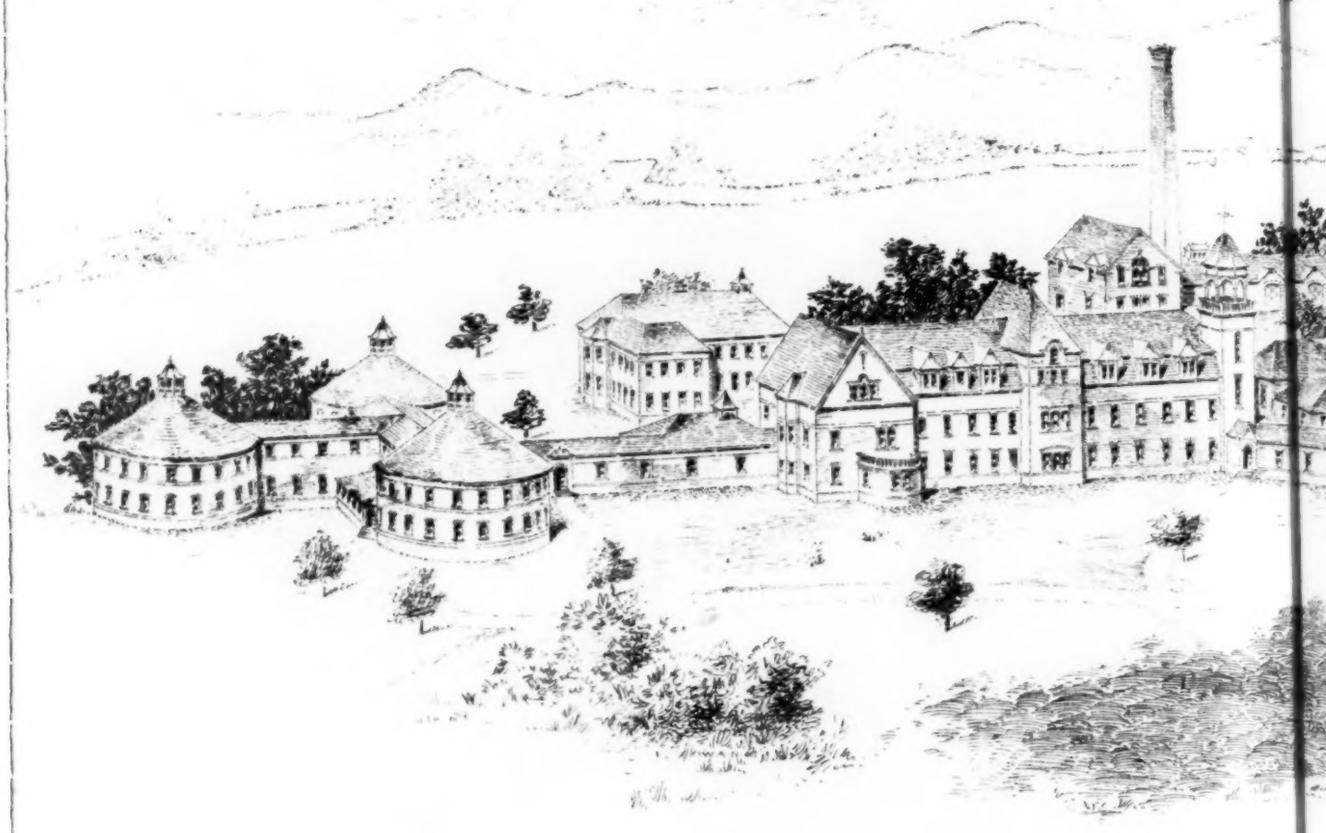


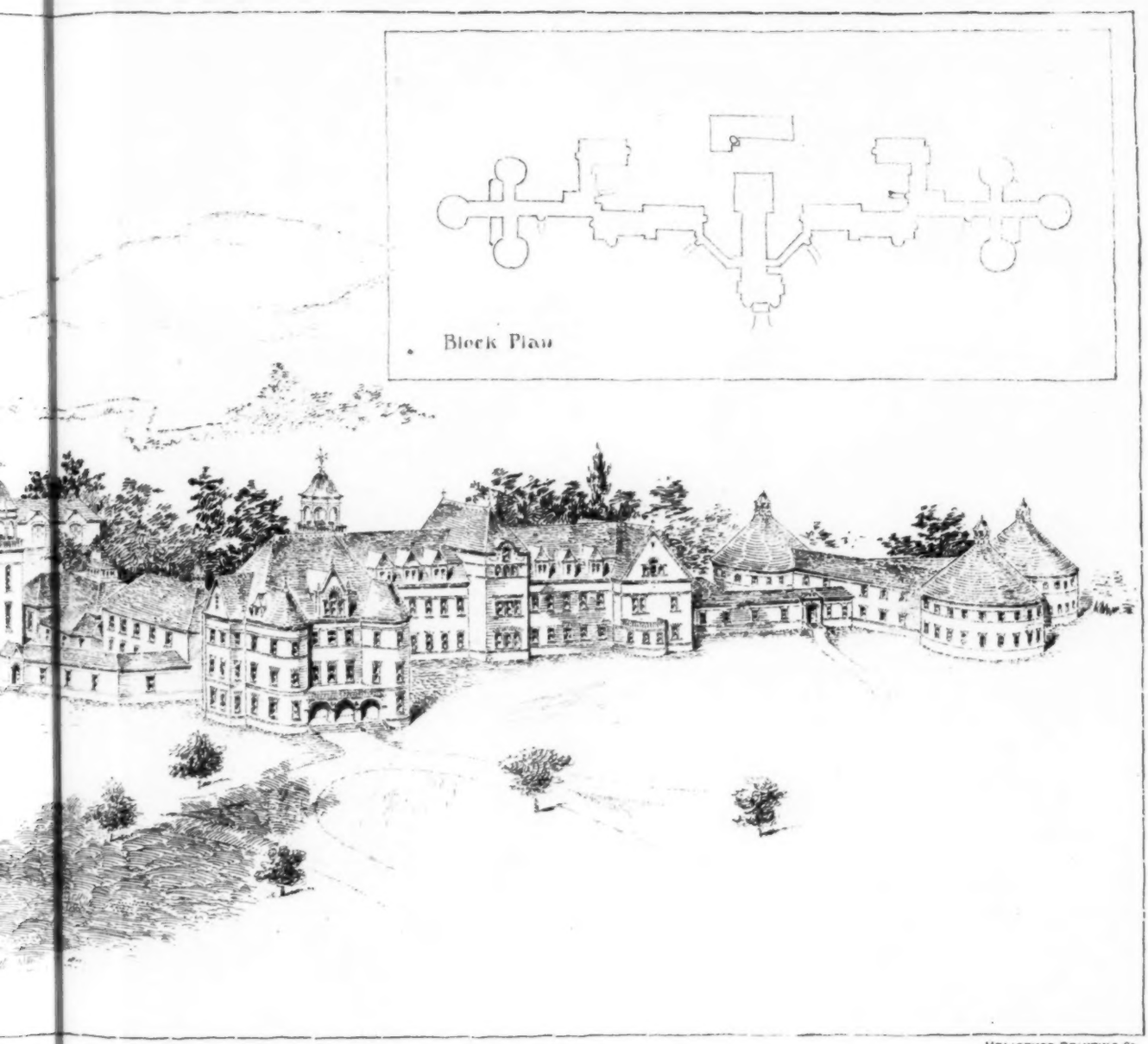
MUSIC-PRINTING HOUSE OF G. SCHIRMER, NEW YORK, N.Y
WM. KUHLES, ARCHITECT.

HELIOTYPE PRINTING CO.

STATE ASYLUM FOR THE INSANE WATERBURY VT

Rand & Taylor Architects Boston





Block Plan

HELIOTYPE PRINTING CO.