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CONTENTS.

EDITORIAL SUMMARY.
FRENCH ARCHITECTURE.—I.
A RUN THROUGH SPAIN.—IX.
LETTER FROM PARIS.
" " LONDON.
BOOKS AND PAPERS.
COMMUNICATIONS.
NOTES AND CLIPPINGS.
TRADE SURVEYS.

CHURCH OF THE SACRED HEART OF SAINT MARY, DETROIT, MICH.
COTTAGES AT BUCHANAN, VA.
CHURCH AT ST. PAUL, MINN.
THE CHARLESCATE APARTMENT-HOUSE, BOSTON, MASS.

Additional Illustrations in the International Edition.

MONUMENT TO THE GRAND ADMIRAL, GASPARD COLIGNY, PARIS, FRANCE.
[Photogravure.]
PLAN, SECTION AND DETAILS OF THE SAME. FOUR PLATES.
[Photogravure.]
ORGAN, ST. SEPULCHRE'S, HOLBORN.
WINDOW, DORCHESTER CEMETERY CHAPEL.
MEMORIAL WINDOW.
HOUSES IN BECKENHAM PARK, BECKENHAM, KENT.

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SUMMARY:—

A Book Department. — Civil Service in its Application to the Office of the Supervising Architect. — The Timber-framed Buildings of East Anglia. — Half-timber Construction in this Country. — Baron Haussmann's Work. — Railroad Building in Asia Minor.	1
FRENCH ARCHITECTURE. — I.	3
A RUN THROUGH SPAIN. — IX.	5
LETTER FROM PARIS.	8
LETTER FROM LONDON.	13
ILLUSTRATIONS:—	
House of Samuel K. Ward, Esq., 1608 K St., Washington, D. C. — Flats for J. Caldwell, Jr., Louisville, Ky. — Church of the Sacred Heart of Saint Mary, Detroit, Mich. — Cottages at Buchanan, Va. — Church for the Bethlehem Presbyterian Society, St. Paul, Minn. — The Charlesgate Apartment-house, Boston, Mass.	14
Additional: Monument to the Grand Admiral Gaspard Coligny, Paris, France. — Plan, Section and Details of the Same: Four Plates. — Organ, St. Sepulchre's, Holborn. — Window, Dorchester Cemetery Chapel. — Memorial Window. — Houses in Beckenham Park, Beckenham, Kent.	14
BOOKS AND PAPERS.	15
COMMUNICATIONS:—	
Chimneys. — The Auditorium Tower.	15
NOTES AND CLIPPINGS.	16
TRADE SURVEYS.	16

WE are, of course, always willing to give our subscribers any information in our power as to the book or books which may aid them in prosecuting their studies or investigations. At the same time, it is much easier to ask than to answer a question, and we often have to spend a good deal of time in hunting through catalogues and libraries. Moreover, the same questions are asked and answered again and again, and so, perhaps, use for the benefit of a single questioner an unjustifiable amount of our space. To cure these slight evils, we have established a department for book advertisements — which will be found elsewhere in this issue — and we hope that before writing to us for assistance, those who stand in need of a book will examine this list carefully — and then write for it, not to us, but direct to the firm who advertises it. We believe that our subscribers will find this new department of use, and we know that publishers stand ready to expand it to many times its present volume if they find that architects wish to procure books in this way.

THE New York Times says that there is trouble in getting competent assistants in the office of the Supervising Architect at Washington, and that, apparently, with the idea of rendering the task more easy, a regulation was passed by Congress, just before the adjournment, exempting the office from the operation of the Civil Service Act, so that the Supervising Architect can appoint any one he likes. It will be remembered that a great uproar was raised during Mr. Freret's term, about the Civil Service examination for a few vacancies in his office. The disappointed candidates, or the newspapers for them, protested that one man's brain could not hold all the knowledge they were expected to possess; and, in point of fact, no one passed the examination, although we do not remember seeing any of the questions quoted which appeared to us beyond the reach of human intelligence. Now, however, it appears that not only qualified candidates, but candidates of any sort, are lacking, and that the Supervising Architect is compelled to put up with inferior assistance, because he cannot, for the salaries which the Government is willing to pay, get such men as a private architect would employ for such work. As it has been demonstrated officially, over and over again, that the cost of the architectural work on the Government buildings, under the present system, is greater, in some instances very much greater, than if it were done by private architects, as it is everywhere else in the world, and according to present accounts, the work is worse done, we should think it would occur to some one besides the architects, who know it well enough, but do not like to be conspicuous in calling attention

to it, that it is about time to put a stop to the practice. The fact is that the Supervising Architect's office has no reason for existing, and ought to have been abolished long ago. It is generally supposed to have been instituted, in the corrupt period which followed the war, to serve under a thin veil of plausibility, as a political agency. Under the faithful and upright direction of the men who have administered it, the expectation that it could be used for such a purpose has been disappointed, and under the more wholesome conditions which now exist at Washington, there is no probability that it can ever be used as a means of corruption. Meanwhile, however, it pursues its ponderous way, grinding out its mediocre designs, and filling the country with public buildings which have not the slightest artistic interest, or even superior merit of arrangement, while, if the ordinary practice of civilized countries had been followed for the last twenty years, we should by this time have had nearly every important town in the United States adorned with a masterpiece of the best work that American architects are capable of, and should, besides, have saved many million dollars.

MR. JOHN S. CORDER recently read before the Leeds and Yorkshire Architectural Society a very interesting paper on the "Timber-framed Buildings of East Anglia." We all know something of the appearance of the old English timber-houses, but very few people, even in England, know much about their history, and Mr. Corder's information is not only valuable, but new to most of us. According to him, all the timber-framed buildings in the East of England were erected during the fifteenth, sixteenth and seventeenth centuries, that is, during the reigns of the later Plantagenets, the Tudors and Stuarts. All, or nearly all of them, it appears, belonged to merchants, or their guilds or companies, or to religious institutions. As in modern days in this country, the frame of the timber-houses with which our ancestors were familiar, rested on a sill, often of large size, — a foot square or so, which was laid on the rubble foundation, the angles being halved or framed and pinned. Originally, all the timbers of the framing were visible outside, and the sill was often moulded on the exterior, so as to form an ornamented plinth. The sill was mortised for the studs, which were often seven or eight inches wide on the face, and were set eight or nine inches apart, making the spaces between them nearly of the same width as the timbers themselves. Just below the second floor, the studs were framed into what we should call a girt. At points where a particularly heavy timber above was to be supported, a thicker stud was set, which was usually moulded on the inside, and carved on the outside, or formed like a pilaster. All the posts appear to have been cut off by the girt, the corner-posts not running through the next story as they would with us. The second-story beams rested on the girt, and projected over it from one foot and a half to two feet, carrying at their outer end a sill, on which rested the studs of the next story. These carried another girt, and the next tier of beams projected again in the same way. The walls of the upper stories were braced with curved timbers, halved upon the studs and pinned. When the frame was up, the intervals between the studs were filled-in with a mixture of clay and chopped straw, plastered on a sort of basket-work panel, of willow twigs woven together, fitted into the spaces between the timbers, which were often previously grooved to receive it. After the clay was hard, the panel was finished by plastering it with lime-mortar, mixed with clay, on both sides, flush with the studding; and ornamental figures were often drawn in the fresh mortar, and decorated with color. This construction was then known as "post and panel work." The filling between the timbers, of lime mortar on a clay foundation, was likely to swell and decay if it should get soaked with water, and for this reason each story was made to shelter the one below it, by the projection characteristic of the style. This explanation is, we believe, new, but it seems extremely reasonable. Mr. Corder acknowledges that, in city houses, greater space was obtained for chambers, without encroaching on the street, by the projection of the stories, but he observes that the same projection was used on nearly all half-timbered houses in the country, where plenty of room was available, so that he believes that the constructional reason was the more important one, and in this most architects will agree with him.

AS those architects who have attempted half-timber construction in this country are aware, a wall built by the ancient method soon begins to admit air freely, through the crevices left between the posts and the plaster panels by the shrinkage of the timber. Our ancestors felt the draughts coming through these crevices, and tried to stop them by hanging the inside of the walls with tapestry, or by covering it with panelling; and panelling was sometimes applied on the exterior to cover the joints; but the cheaper and more effectual method of lathing and plastering both the inside and the outside of the walls soon prevailed over the others, and a large proportion of the English half-timber structures have been treated in this way. Where a house stood on a corner, it was obviously desirable to have it overhang on both streets, but, as architects need not be told, this was not always an easy thing to accomplish. Usually, the difficulty was met by putting at the angles in the first story, an enormous post, sometimes three feet square or more, which carried a diagonal girder into which the floorbeams were framed, all the floorbeams running at right angles to the street over which their outer ends projected. A post of such dimensions, particularly with the bracket which was usually formed on it to carry the outer end of the projecting girder, and which was often a piece of a natural branch, offered a tempting opportunity for carving, and these corners are generally elaborately sculptured, with figures, coats-of-arms, and so on. The floors were usually covered with inch boards, the beams which supported them being moulded or carved, and left exposed; but the transmission of sound through them was found objectionable then, as it is with similar floors now, and in the better class of houses boards were nailed to the underside of the joists, and the joints covered with moulded battens—a construction which is even now quite common. Later, the same effect was obtained in a much cheaper way, by lathing the underside of the joists, and covering the whole with a uniform coat of plastering, in the way which has ever since been generally followed. The rest of the construction was quite simple. Panelled doors were then little known and most doors were of moulded sheathing, battened, and hung with large wrought-iron hinges, which spread so far over the door as to give stiffness. The windows were usually mullioned in wood, and glazed with leaded glass, set in tight, with the exception of a few swinging lights, in iron frames.

LA SEMAINE DES CONSTRUCTEURS gives a very good account of the famous Baron Haussmann, who died recently in Paris, at the age of eighty-two. Since the fall of the Second Empire, Baron Haussmann has lived very quietly, but he had a great part in the making of the modern Paris, and will be long remembered as one of the most energetic instruments of the reforms carried out by Napoleon III. Curiously enough, Haussmann was educated for a musician, at the Paris Conservatoire; but, before he had completed his course, concluded to study law, and was admitted to the bar. After the accession of the Orleans family, while he was still a very young man, he was appointed sub-prefect of Nerac, and was transferred later to Saint Giron and then to Blaye. Under the Republic, he was advanced to the rank of prefect, first of the Department of Var, then of Yonne, and then of the Gironde. In 1853, at the age of forty-four, he was made Prefect of the Seine, to succeed M. Bayer, and began the career which made him famous. He found a firm supporter in the Emperor, and, by attacking with a resolute hand the nests of filth and vice of which Victor Hugo tells us, sweeping away rotten hovels, and opening wide, straight streets everywhere, he let in light, air and decency through nearly all Paris. To him is due the "*percement*" of the Boulevard de Sebastapol, the Boulevard Saint Michel, and the Boulevard Haussmann, while his example led the way to the later improvements of the Boulevard Saint Germain and the Avenue de l'Opéra; and he was the first to secure the improvement of the Bois de Boulogne, the Parc de Vincennes, the Parc Monceau, and that of the Buttes Chaumont; while the whole Batignolles quarter, now one of the most beautiful parts of Paris, was developed by him, by skilful widening and planning of streets, from a wretched district, inhabited by the vilest poor. Just before the Prussian War, the Imperial finances having fallen into confusion, violent attacks were made on the great Prefect, who, it is certain, was not a person who looked to economy in his designs for public improvements, and the Emperor was forced by the clamor of his ministers and the newspapers, to ask his resignation. He declined to offer it, and was removed, just before the

collapse of the Empire itself. He was afterwards elected Deputy from Corsica, but took no active part in political matters, and, on the expiration of his term, retired altogether to private life, busying himself by writing his autobiography. He was, notwithstanding his age, still strong and active to the time of his death, and might have lived many years longer but for the depression which followed the recent death of his wife and daughter. Notwithstanding the immense expenditure of public money which he directed, he died poor, and if it had not been for his wife's income, he would have been absolutely destitute.

ASIA MINOR seems likely to be the next region to be vigorously attacked by the railway builders. Most civilized countries have already more railroads than they can support, while the uncivilized ones, such as the interior of Australia and Africa, present few attractions to merchants or tourists; but Asia Minor is a most beautiful and fertile district, producing in immense quantities articles, such as rugs, dried fruits, and many other things, which are exported to all parts of the world, while it supplies with more perishable products the great market of Constantinople. In addition to the local business with which it could furnish a system of railways, Asia Minor forms the terrestrial connecting link between Europe and Asia, and, over the routes which the railways will, for the most part, follow, thousands of richly-laden caravans have been annually passing since the days of the Trojan War. There is a saying that a railway will be profitable over any route where a stage-coach will earn its expenses, and, in view of the vast traffic which has for twenty-five centuries passed through Asia Minor in all directions, it is not wonderful that, since the movement has begun, new surveys have been following each other rapidly. At present, English companies are engaged in building lines inland from Smyrna, but important concessions have been granted to German companies, and two main lines have been surveyed, which, starting opposite Constantinople, will penetrate the very heart of Asiatic Turkey in two different directions. As at present laid out, these two lines will be united in one from Maida, nearly opposite Constantinople to Ekischehir, a town at the head of the valley of the Sangarius, or Sakaria River. Here they will divide, one line running easterly, through the ancient Phrygia, to Angora, the ancient Ancyra of the Galatians. From Angora, which is a mountain fortress in the range of the Asiatic Olympus, the line passes southeasterly to Kaisari, the ancient Cæsarea, in Cappadocia, under the shadow of the Mons Argæus, now the Arjish Dag. The next important stopping-place, still in Cappadocia, is Malatia, the ancient Melitene, on the upper course of the Euphrates; and the line then crosses the Euphrates and runs a short distance to Diarbekr, the ancient Amida on the Tigris, another fortress of the Classical and Byzantine age. From Diarbekr the road follows the Tigris to Bagdad, and thence to Bassa, the Bassora of the Arabian Nights' Entertainments, on the Persian Gulf. The second line, parting from the first at Ekischehir, runs southerly, through Kutaya, the Classic Cotyæum to Afium Karahissar, literally, the Black Opium Castle, a large city, in the very heart of the Phrygian mountains; thence, by Akschehir, to Konia, the ancient Iconium, for centuries the Moslem Capital. From Iconium, the line crosses the Taurus Mountains, following nearly Alexander's route, to Adana; and thence to Aintab, the ancient Antiochia-ad-Taurum, on a branch of the Euphrates. At this point the railway emerges into comparatively familiar ground, and passing through Aleppo and Damascus, will end either at Acre or Jaffa, probably the latter. A more interesting country than that which these two lines will traverse does not exist in the world. The northern part of Asia Minor, in which lies the route from Constantinople to the Persian Gulf, is believed to be inhabited by the descendants of the same people who lived there in the days of Homer. This country has been traversed by troop after troop of Persians, Greeks, Saracens and Turks, but their very defencelessness has preserved them, and no conqueror has thought it worth his while to exterminate them. Naturally, they have adapted themselves to the religion of their successive masters; and there are no more devoted followers of the Prophet than the posterity of the Christians of the Seven Churches; but their humble domestic arts and customs have probably been preserved nearly intact. The southern route is more closely identified with the Crusaders and their Saracen opponents, and nearly all the principal stations on the line are fortresses of the Seljuk sultan, and they have not been greatly changed since they were the centres of Saracen art and power.

FRENCH ARCHITECTURE.¹—I.

IN the fifth century, A. D., at the period when the Merovingian invasions passed the barrier of the Rhine and spread over our land, Gaul had accepted Roman rule. Her manners, institutions, architecture, everything had become Romanized; the process of assimilation had been rapid and thorough.

Then followed an era of violence, plunder and murder, during which it seemed as though every trace of the ancient civilization would disappear forever. Several centuries elapsed; the Carolingian occupation made the yoke still heavier, and yet there was a foreshadowing of better days when, by the side of more orderly institutions, the arts might once more flourish.

In the tenth century, an awakening did, in fact, take place in the centre and south, in those provinces of ancient Gaul which had remained most unshackled; a sort of Renaissance began; it extended to the provinces of the north, which were under direct subjection to the Franks of Neustria and Austrasia. There, it underwent modifications at the hands of a race, which was still barbarous, but which was preparing for new destinies, as soon as it should be touched by southern civilization.

A school of architecture soon sprang up there, full of vigor, originality and productiveness. Though inspired at the outset by the Romanesque Renaissance, it afterwards abandoned this lead and flowered out magnificently. For three centuries it flourished, then, after a final transformation, disappeared rapidly and forever, leaving no trace of its passage. Art immediately entered upon a directly opposite path, and no tradition of the former school survived; on the contrary, succeeding generations, yielding to the violent reaction which set in, disowned the past or viewed it with mere scorn.

It would be difficult to find in the history of architecture another example of an end so extraordinary, a disappearance so complete. Usually, the architecture of a people is co-existent with the people itself, following its destinies and moving slowly downward from its zenith, through a period of decadence often centuries in length. Certainly extraordinary circumstances must have been required to terminate a vigorous and fruitful art so summarily, and replace it at once by another in striking contrast to itself. What were these circumstances is the question which we propose to discuss here.

In fact, to put this query is to ask how the Roman and Gaulish civilization was superseded for a time by feudalism, and why the latter, in its turn, was overthrown by the monarchical organization of France. It is, likewise, to demand how the Gallo-Roman people, rendered powerless at first by the invasions of the petty tribes of the North, so recovered its energies as to participate in the grandest events of our history and finally became the French nation. In reality these various questions all revolve themselves into one, for the social institutions, manners and architecture of a nation are closely related to its ethnological beginnings and to one another; they are only different forms of the outward manifestation of the nation's soul.

It might seem strange that, in this sketch of French architecture, we should digress to such an extent as to attempt to indicate broadly the sources of the French race, and the development and successive transformations of French institutions and social conditions. The above preliminary remarks will serve as our excuse, if, indeed, the truth be recognized that the architectural achievement of a people does not constitute an isolated fact, that it is not like a meteor which appears, speeds through space, and disappears as a solitary existence;

but that it is fixed by a thousand deep roots in the soil from which it has sprung, that is to say, in the very existence of the people itself.

I.—CIVIL SOCIETY FROM THE FIFTH TO THE TWELFTH CENTURY.

On the downfall of Roman supremacy in the West, two races, broadly speaking, confronted each other in what is now France: the Gallo-Romans, who were spread over the entire land; and the Franks, Germanic tribes, which arrived in successive invasions and sought to establish themselves, but were pushed farther and farther by new bands, until at last they occupied largely the regions north of the Loire and, to a certain extent, though always precariously, the country to the south of this stream.

When the Roman government retired, powerless before the invasions of the barbarian hordes, and finally abandoned Gaul to itself, the only bequests of the ancient civilization to the new which survived the general dissolution, were the municipal system and the religious institutions.

The barbarians brought with them nothing resembling a regular social condition, and nothing which enabled them to reconstruct the administrative plan of the conquered country.

However, as it is impossible for men to live in a state of complete isolation, even the barbarians necessarily possessed a more or less imperfect conception of a social state—a conception which might or might not be suited to take root definitively on Gaulish soil, and which they were destined to develop sooner or later. They did, in fact, found in the midst of the conquered population, though as it were outside of it, the régime which became feudalism.

Thus we find in Gaul at this time two totally dissimilar races: the one an ancient race, retaining from its former civilization a municipal organization and firmly fixed religious institutions; the other, not yet out of barbarism, but engaged in creating and organizing the feudal régime. Such are the heterogeneous and even hostile elements which the invasions had opposed to each other, and which were doomed to contend against each other until, after centuries of struggle, they should be fused into a national unity.

The Germanic tribes which successively invaded the different parts of Europe were originally composed of two classes of members: one, sedentary and supported by the toil of their *coloni* and slaves, remained at home, and were the ancestors of the present inhabitants of Germany; the others were grouped around a military chief and lived by constant expeditions abroad, which were often carried to distant lands and ended either in defeat or the final expatriation of the adventurers. Like the Saxons of olden times, the Goths and Burgundi, the Franks who conquered Gaul were warfaring bands, who gradually became settled inhabitants while preserving their own customs and traditions.

In the Germanic band no man was engaged except of his own will. In this we find an early expression of the character of absolute independence which is the distinctive mark of the Germanic races. "The warrior chose his chief and his companions, and undertook nothing except by an act of his own will. Besides, in the bosom of the warfaring band, the inequality was not great between the chiefs and their men; there was nothing more than the natural inequality of strength, skill or courage; an inequality which afterward becomes fruitful, and which produces sooner or later immense results, but which, at the outset of society, displays itself only within very narrow limits. Although the chief had the largest share of the booty, although he possessed more horses and more arms, he was not so superior in riches to his companions as to be able to dispose of them without their consent; each warrior entered the association with his strength and his courage, differing very little from the others, and at liberty to leave it whenever he pleased."²

Here, then, are the characteristic features of the society of the German warfaring band: no spirit of discipline; absolute and voluntary devotion to the person of the chief; complete individual independence; no necessity of a bond or political organization. As decisions had to be formed in common, since they were purely voluntary in all circumstances, the freemen

² Guizot. "Histoire de la Civilisation en Europe" and "Histoire de la Civilisation en France." On the history of the formation of the French social polity the following authors should also be consulted; Augustin Thierry. "Lettres sur l'Histoire de France"; Mignet. "Etudes Historiques" and to some extent Michelet, in his *Précis* rather than in his great *Histoire*. We shall draw constantly from these various sources. The passages cited in this chapter are quoted from them.

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

were brought together in public assemblies; these were held frequently at the beginning of the invasion or invasions, but became more impracticable and far rarer when the conquerors, becoming proprietors, had scattered themselves over the land. Every one then lived in almost complete isolation, surrounded by only a few companions-in-arms, who followed his fortunes to the end.

To Gallo-Romans, this sort of existence would have seemed hard; it was quite natural to the Franks and was in entire harmony with their character. This taste, we might say passion, for solitary life, this desire to isolate by means of a wall or a moat one's domestic existence and hide it from the gaze of the world, constitutes one of the distinctive characteristics of the races derived from Germany. Do we not see it exemplified to-day, even after the lapse of centuries, among the Anglo-Saxons, for example?

On the other hand there was no more sociable being than the Gallo-Roman. In ancient times, social life was always sought in the open air, on the public square, in the circuses, the thermæ, the academies, in the agitation of philosophical converse or political discussions. A civilization thus conceived found an admirably well prepared soil on Gaulish territory: the Gauls, said Cæsar, were fighters and fine talkers. At the dawn of the new day, when a stronger hand interfered in their interminable quarrels of tribe with tribe, the Gauls immediately accepted a regular organization and a common administration. They entered the Roman armies, to which they furnished brave, faithful and well-disciplined cohorts. In imitation of Rome, thermæ and schools were established everywhere, whose reputation soon became world-wide. "The Romans frequented the Greek schools of Marseilles. The keen, intriguing Gauls of the south were destined to succeed both as fine talkers and as physicians, and above all as mimes; they gave to Rome her Roscius (who was the Talma of the period); they succeeded likewise in other lines. We will merely mention by name Trogus Pompeius, Petronius Arbiter, Varro Atacinus and Cornelius Gallus, the friend of Virgil. The first rhetorician at Rome was the Gaul, M. Antonius Gniphio; he prepared the way there for the two great orators of the time, Cæsar and Cicero. Under Tiberius, the Montani were in the foremost ranks among orators, both in respect to ease and true genius. Caligula, who prided himself upon his eloquence, counted as his friends the two eloquent Gauls, Valerius Asiaticus and Domitius Afer. The Gaul, Zenodorus sculptured the colossus of the Gaulish Mercury for the city of the Arverni; Nero, who revelled in the massive and the stupendous, summoned him to Rome to erect a statue of himself, one hundred and twenty feet high near the Forum." We find among the Gauls, poets like Antonius Primus, a native of Toulouse, and the friend of Martial; illustrious generals, like the Provençal Agricola. The chief glory of Gaul was, however, her claim to the pious Antoninus, father of Marcus Aurelius; he was descended from a family of Nîmes.

It is easy to imagine with what facility and earnestness this people of artists, orators, poets, rhetoricians, physicians and soldiers adapted themselves to the ancient civilization, and with what zeal they adopted the graceful, polished and frank manners of the Roman world.

The ideal deeply rooted in the heart of the peoples of the north is, as we have seen, independent and solitary existence; to those of Gallo-Roman stock, it is sociability. These are constitutional characteristics which even centuries could alter only superficially, and the recognition of which may serve the historian as a sort of reagent. Wherever, in the various phases of our history, the first characteristic is the one most impressed upon society, it may be assumed that the Frankish races have the preponderance. When sociability sets its stamp on manners and customs it may be as unerringly inferred that the predominance is once more with the Gallo-Roman peoples.

Let us see, now, with what institutions Gaul had been endowed.

The Gallo-Roman population was, in a general way, divided into four classes; senators, *curiales*, the people, properly so-called, and the slaves.

The first were the descendants of the great Gaulish families, certain members of which had very probably been called to the Roman Senate; the *curiales* were landed proprietors in easy circumstances, members of the municipal body or *curia* of their own city; the people comprised petty landholders, small trades people and free artisans; these last were grouped in trade corporations, the origin of which goes back far beyond the Middle

Ages, although this fact has often been disputed. As for the slaves, they were variously ranked, their grade depending upon whether they worked in the cities or fields, and upon the nature of the engagements by which they were bound. Their condition was often far less cruel than the general designation of slaves would suggest; some were regular rent-paying farmers; others were *métayers*, that is they cultivated the ground in consideration of receiving half the produce; some were almost free workmen; some farm-hands working for wages.

Such were the social classes; the government was in the hands of the imperial court at Rome. Under the superior direction of a prætorian prefect residing at Trèves, Gaul, properly so-called, was administered by a vice-prefect, who was placed over its seventeen provinces. The latter were specifically governed by *consulares* or by presidents.

These imperial officers were charged with the collection of the taxes and the administration of the public domains, the direction of the imperial posts, and the levying of troops for the army; they, moreover, had civil and criminal jurisdiction (almost exclusively). The analogy existing between their functions and those of our old provincial governors is evident. A magistrate, the *defensor* elected by the *curia* or municipal body, represented the popular interests before the imperial authorities and was charged with their defense; he exercised in such matters the jurisdiction in the first instance.

Under orders of these officers, each special department was administered by functionaries whose duties and powers were carefully defined; collectors and receivers of taxes, directors of public works and civil constructions; commissaries of army supplies, chiefs of the police and gendarmery; notaries, registrars and so forth, all of whom had at command an entire force of clerks and agents, just as in modern times.

It was, as we see, a very complete and rigorously officered organization, a cleverly adjusted machine, which would bear comparison in more than one respect with the governmental mechanism of some of the best organized peoples of recent times. The incessant warfare waged among themselves by the Gaulish tribes in early days, and the despotism exercised by the proconsuls during the period of military occupation had, then, both been superseded by an orderly regularity, which had made it possible for the country to adapt itself at once to Roman civilization. The Gauls thus enjoyed a period of true prosperity and of progress in the manners and intellectual training of the different tribes. Their moral education also gained therein, by the introduction of the law, that is to say, of the written law, unchangeable and equal for all, which was substituted for the daily interpretations of an equity which might be swayed by the chance of circumstances, interests and influences.

Public enterprises, commerce, fortune and general comfort developed rapidly; Roman occupation, and we may also say, Roman colonization, speedily introduced very tolerable forms; the Gauls were not enslaved; they were not reduced to the rank of a conquered race, nor were they despised as an inferior people; a number of Gauls, belonging to families of local influence, were called to Rome, played there an important rôle, and were admitted to the most valued honors of the Empire; there were Gaulish emperors. Such were the natural tendencies of the national spirit that there were always Gaulish troops at Rome, esteemed and courted for their bravery and fidelity, as there were literary men, lawyers and philosophers, numbered among the most illustrious of their kind.

Such were the advantages of the Roman civilization, and this accounts for the fact that it has left an ineffaceable impress upon the French nation. But when the Germans, who had up to that moment been held in check beyond the Rhine, began to force back the Gaulish and Roman troops which defended the frontiers, signs of decadence had already appeared. Rome had no longer anything to offer to the conquered provinces in compensation for that portion of their independence which they had been asked to sacrifice for the establishment of imperial unity. In default of a common origin, the peoples united under one rule, must needs at least have a common interest, namely, that of defence. Now, Rome had so extended her frontiers that she was threatened on all sides by barbarous, warlike and turbulent hordes; it was impossible to defend her territory on all the exposed points, and she therefore employed the forces of the Empire to fight the nearest enemy, and left the distant provinces to take care of themselves. While all the time drawing off armies from them to defend herself, while continuing to recruit her own troops from the vigorous and soldierly

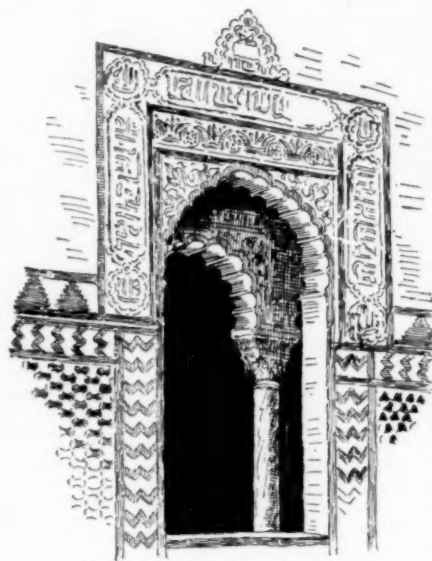
youth of the land, Rome withdrew the Roman forces from the frontiers and thus delivered the disarmed country as a prey to the invaders.

The government, with its complicated hierarchical system, still existed; but its functions were now mainly confined to securing the major part of the financial resources of the country, in order to bear them to Rome; this fresh cause of enfeeblement joined to the first, led to the surrender of Gaul in a defenceless state to the barbarians. There was nothing left but a sort of abstract organization, a skeleton hierarchy; the local aristocracy had long been stripped of all influence in the country; many of its members had emigrated to Rome; those who remained at home had been subordinated to Roman functionaries and were no longer the natural chiefs of the nation; the *curiales* were destitute of authority and had no responsibility except to gather in the contributions for the imperial government; their burdens were looked upon as a scourge, which every one sought to escape, and they had to be imposed by force; as for the people, they had long since lost all sentiment of solidarity; the Gaulish nation had ceased to exist when Gaul became a mere province of Rome, deprived of all her separate interests and resources and held like a satellite to the Roman destinies.

[To be continued.]

A RUN THROUGH SPAIN.¹—IX.

THE HOUSE OF FIGARO.



A WINDOW - ALCAZAR - SEVILLE.

IT is well that one visits Seville before going to Granada, because one expects Moorish work as he goes South and is disappointed at not finding more of it. When, therefore, he sees such a mass of it as the Alcazar or the House of Pilate in Seville, the sight is most entrancing. But when he afterward sees Granada, the remembrance of Seville fades from the memory and becomes as a shadow.

Like a fortress wall rises the Alcazar, and one would hardly suppose so much of interest lay behind such plain walls.

It was a terribly hot day and the sun seemed as if it had engaged itself to stew and frizzle every person who appeared in the great square opposite the Cathedral. The only one who seemed at all oblivious to the heat was a little old fellow, wrinkled and twisted in form, but with a bright face, and who was selling "cooling drink," consisting mainly of syrups and water, the favorite drink of every Spaniard, in lieu of wine.

We entered the deserted square, and appeared at the little office for a ticket of admission.

"Americans?" and the little man smiled. "Ah, Señor, 'tis a far country."

"Yes," I replied, "therefore as we have come so far, condescend to allow us to loiter in the grand old place and sketch."

"It is granted," replied he, with the customary Spanish politeness. So we approached the wonderful palace which is identified with the life of that cruel monarch Pedro, who reigned during the middle of the fourteenth century, and whose deeds were marked by a trail of blood, which, the guide assures you, it is impossible to erase.

We have seen nothing like it thus far, and as the great door swings on its hinges and we are admitted into the first of the series of rooms, the scene is a veritable kaleidoscopic creation of an Arabian Night's dream, and one can almost expect to see an Aladdin glide through the courts with his golden lamp, in search of something which his heart desires. But if we could have looked back to the old Moorish reign, we should have beheld a strange sight indeed. The Spanish youth courts his sweetheart in good earnest from before the iron guards of her window, the Italian courteously asks permission of the master to press his suit, the American goes about it as he pleases, the Sultan orders his mistress to his harem, while the old Moorish, sovereign was very particular; the number must be an even hundred and the conditions must be fifty rich girls and fifty poor girls;

whether good-looking or otherwise, I do not know. At any rate, all the young ladies who answered to the call were summoned into the court and passed in review, and I can imagine the old nabob pointing out his finger and remarking, "you, and you, and you," and so on until he had procured his requisite number.

The glorious Hall of the Ambassadors with its *naranja* ceiling comes next, and it is a marvel of hanging lace-like ornament in gold and color, which runs into the wall-surface of raised ornamentation and glowing tile-work. Red, blue and gold, predominate everywhere, and one can imagine how soft must have been the effect at eventide, when the beautiful old hanging-lamps shone forth with their soft lustre. Wherever there are columns they are of alabaster, if I mistake not, at least they look almost like polished ivory.

And with all this beauty surrounding him lived the old Don Pedro, completing his palace after many years of labor and then staining its beauty by the blood of those whose acts displeased him.

"And what kind of wages do you suppose he paid his workmen?" asked our guide.

We could not guess of course, and were rather surprised at his very suggestive motion as he drew his finger across his windpipe and remarked that "Pedro sent them home with their heads cut off, after they had completed the work."

Well, well, what a horrible fellow he was to be sure; but what a delightfully simple method of settling one's accounts; no money required, no grumbling about the exact amount and no strikes.

"Pedro was a strange man," he went on, "and he liked nothing better than the adventures of midnight rambles, disguised as a lover. The story is told of his amours with a lovely maiden whom he found with another lover at her side one night, and with kingly grace stabbed him to the death. Then he ordered his alcalde to find the murderer, or lose his own head. The frightened alcalde found out who did the deed, made a puppet of the king and in due time presented it to him, with the proclamation, 'there is the man.'"

"What a capital idea," we said.

"Yes, Señor," he went on, "and to show the natural sagacity of the king, hear the sequel. Pedro could not very well kill his own alcalde, neither did he deem it a pleasant proceeding to cut his own head off, so he split the difference and hung the puppet with due solemnity and went on his way rejoicing."

Admirable method, was it not?

But to continue. Charles V found infinite pleasure in this old palace, but his pursuits were of a different nature and are seen in the beauties of the garden at the rear of the palace. At the entrance is a large font in which Charles V fished to his heart's content and if you to-day throw in a few crumbs, hundreds of little golden-backed fish spring up and make the water a sparkling pool. All around are gardens of orange trees laden with rich yellow fruit, large date palms, huge bunches of bananas and everywhere the curious hedges of myrtle which are filled in with tropical foliage. Turning back, one may pass under the buildings and see the huge foundations of dungeons and the subterranean bath which was made for the cruel Maria, mistress of Pedro. What strange stories could these passages tell if they could speak: stories of dark deeds, of murders, the sound of which was entirely hidden from the ear of mankind and in which the cruel king revelled!

While deep in the contemplation of the character of this fearful wretch and emerging from the deep shadows of the arches, we



walked down the garden paths and could not help contrasting the two monarchs Pedro and Charles. Suddenly we seemed enveloped in a spray of water which caused us to jump and run, pell-mell. But the little jets followed on all sides, and seemed to spring from the very ground we trod, like a veritable sprinkling-bath. I suppose every one gets the same wetting. It is one of the jokes of the old king. You drop a nickle in the slot and see the fountain play. That is, figuratively speaking; an examination shows the guide's laughing face at the end of the garden and a pavement full of little pin-holes through which the water can be turned at will.

"Aye, verily," laughs the guide, "our King Charles was quite a joker in his way."

But the sun of Spain is warm and soon dries off the spray.

One can walk through the living-rooms of this wonderful palace and see much of the life of the Moorish kings. The walls are covered with the most intricate ornamentation of tiles, mosaics and sculpture. The courts are surrounded by beautiful columnated arches, whose delicate ornamentation seems like lace-work and the

dreamy atmosphere dulls the senses and fills the imagination with the images of past ages. And if one is of a poetical turn of mind he may take almost any room or tower and weave around it a story full of love and intrigue such as any novelist might revel in. Beautiful sultanas would undoubtedly peer down from the arched balconies and bewitch us with their sparkling black eyes; and cannot one fancy Maria Padilla and her daily life in this network of lace and gold? Was she as beautiful as poetry and romance would have us believe, and did the old Pedro treat her so disdainfully after winning her youthful heart? How could it have been thus, and what an old wretch he must have been, anyway! Thus does fancy rush to our aid as we walk slowly through her deserted gardens and halls.

When we first entered Spain, I said to myself: Now it will be possible to find such tobacco as would have made the mind of Sydney Smith wild with envy. The mistake was very quickly discovered; but still, desiring to see the manner of persons who concocted such vile weeds and having always heard that the Andalusian damsels were such as might delight the eye of an artist, we spent an hour at the immense Fabrica de Tabacos with its twenty-eight patios and its corps of five thousand girls. If I remember aright, one crosses an old bridge spanning a moat and enters at last a building that might once have been a palace. A moat for protection, thought we? "Ah, no," answers the matron, "you are at liberty to run away with any beauty whom you chose to pick out. But they might possibly give you a great deal of trouble, those black-eyed damsels." "The moat is to prevent smuggling out tobacco," she adds.

I have heard people rave over the beauty of these girls, but I could not join in with them. The heat is oppressive, the odor is terrible, the girls have removed every article of clothing possible except their veils of modesty, which are very thin at best, and they sit at their tables with voluptuous abandon hard to find in any other place. A few of them are old women, some married who bring with them their babies whom they rock alternately with rolling their cigars.

I think I shall not enjoy a cigar this evening, I soliloquize, for the scene is not reassuring. Cigarettes are better here.

The roguish-looking faces glance up as we pass, a set of beautiful teeth gleam as they pass a joke about the Americans, and one can never swear that he did not see many a sly wink, which gave every indication of deviltries innumerable. One is not impressed with their modesty at least, and I cannot think that their purity was equal even to their good looks.

Our companion, who was well up in Spanish small-talk, kept up a running fire, which they seemed to enjoy, and as their day's work was almost up we saw them pass out by the hundred.

"Ah, Señor, a *peseta* for a dance," they cried!

"What! you would dance in the street?"

"Why not, is it a bargain?" they cried, as they drew up their skirts displaying very dirty ankles, and began a fandango with a twist of the body.

"Enough, enough, *Señorita*," for a dozen had started to dance, and would have danced us pocket poor in half a minute.

Seville is not the purest city of Spain, and these poor girls know little of good morals. A student of human nature would go into an elaborate treatise on the cause of their evils, the voluptuous influence of the climate, and the herding together of these thousands, where the tide of morality is constantly on the ebb, and where the men seem to have nothing to do but to allow their evil passions full play. Look not, then, too hardly on their faults, but rather be thankful that we are not placed in such a country and amongst such surroundings.

You ask why the youth of Spain do not work as in our country? Ask them and they will shrug their shoulders and ask what there is to do. Industries are well-nigh dead, business is confined to the few who cater to the traveller, and the hot blood of the Spaniards leads them naturally to a life of pleasure rather than of work. How they all live, Heaven only knows, we could never exactly work it out ourselves.

On returning home one must not forget the Barber of Seville! Poor Figaro, he gets much more attention being dead than he probably ever got when alive. His house is pointed out, but be sure you take into your gaze at least six houses, so you may be sure to have seen the house. What a pity he could not have found the elixir of life so that he might have enriched himself by the shekels of a host of people who walk down the Calle de Francos, stop opposite the small door, look in their guide-books with delicate earnestness, look again, sigh, expect to see "tonsonial artist" over the lintel, and go away with the pleasant assurance that they have seen the home of the famed Figaro.

An incident at the hotel goes to show the relations existing between master and servant in Spain. I had bought a guitar, and coming out from dinner into the beautiful *patio* spoke to one of the attendants asking if he played the instrument.

"Oh yes, Señor," he replied, with pardonable pride, "every Spaniard plays the guitar."

So he sat down and quickly tuning it, ran his fingers over the strings in a peculiar minor key, and gradually swayed backwards and forwards to the swinging melody. Hardly had he commenced, when all the attendants, the master of the house and his family gathered around, shouting bravo, bravo, as they chimed in and sang a lot of Spanish melodies. Then they started a dance, and inside of ten minutes the owner of the house was pirouetting up and down with his servants, laughing and shouting and imitating the movements of the

castanets. And this continued for a half-hour as we smoked our cigarettes and sipped our coffee.

"Ah, what a beautiful instrument," sighed the attendant, "but I cannot stay longer as I must hurry in to wash my dishes," and in a moment he was elbow deep in soap-suds.

Fancy it, from music to soap-suds!

A ludicrous incident occurred in Seville when I attempted to take a bath. That the Spaniards practically never bathe must be a fact.

Although one of the noted things about the Moorish houses was the attention paid to the baths, the Spanish houses are destitute of such luxury. I asked the boy-of-all-work where the bath-room was located.

"The bath-room, Señor, there is none!"

"Well, what do you do?" I asked.

"Why, we never bathe, Señor."

I looked at him more closely and concluded that he had spoken the truth. His outer habiliments were washed once a month or so, himself never.

Then I tackled my waiter at the table, asking him if there wasn't

any place in the house where I could get under water.

"No Señor," he answered, "not here, but you may go down to the river and take a plunge at night."

Then I asked the little fellow who put the shine upon our shoes if he couldn't help me out. But he said that he bathed in the fountain in the court, very early, before people were up.

Thank Heaven, I thought, the boot-black bathes, and I am bound to have a bath if I have to steal down in the night and wallow in the basin of the big fountain.

But I bethought myself of the landlord himself, and so went to find him.

"We will send up a pitcher of hot water," he said, "and that will be sufficient."

"Not much," I replied, "I want a bath, a regular soak, so to speak, and am bound to have it."

"When do you want it?" he asked.

"Right away," I said, "if you can give me one at all."

But he shook his head and said, "in an hour or two."

So I waited and waited, until at last a low rumbling noise was heard that seemed to permeate the whole building. This kept growing louder and louder, and was emphasized by a bump and a thud that made me wonder what it all meant. But after a few minutes I heard voices, and grunts and swear-words came thick and fast, as three men knocked at the door. I opened it and what do you suppose it was?

Upon my word, an iron tub six feet long, put on a little wheel-car, and steaming away with water hot enough to remove freckles bodily.

"Well, I swear," I exclaimed, "if you Spaniards are not the biggest fools that I have ever had the pleasure of meeting?"

They couldn't understand my compliment, but commenced wheeling this steaming tub into the room, and I doubt not echoing my own exclamation. But I got my bath anyway—after waiting an hour for the thing to cool down—and was probably the first bather that has had the courage to order such a thing for years.

There was once a man in Seville who bore the voluminous name of Fadrique de Rebera, a Marquis of Tarifa, and withal a godly man. At least he had never killed his man, did not carry a dirk in his belt, and was known to have made a pilgrimage to Jerusalem in 1520 and ever after referred to this trip when he was desirous of offsetting any little irregularities of his life. He had been greatly struck with the residence known as the House of Pilate, and on his return set about reproducing the house as he remembered it, and although his name has been forgotten, the house still remains and retains the name of the Casa de Pilatus. One enters under an archway of no pretentiousness whatever, passes through a yard, then through a loggia into the central *patio*, not unlike many Spanish houses, but in the style of the Moors, with interlaced windows, and several beautiful wrought-iron *rejas*. I sketched one of these grilles as we passed; it was surrounded by a mass of foliage and the good people had formed a bed of potted plants under the window. When we came to examine



OUR PATIO—SEVILLE

the grille it was found to be hand-wrought, the frieze with repoussé work, and the balusters with raised leaf-ornaments. I have tried to use this grille since this time, but iron-workers assure me that one grille will cost as much as the sum of one small building, and this would never do, of course.

If we remember the prototype we see that the fifteenth-century Moors copied in turn the Saracens. This patio, however, is large



and grand, the walls under the columned colonnade being wainscoted with beautiful tile-work of mosaic of a peculiar iridescent color, dazzling in the sunlight, but charming in its arabesque designs. The fountain is here also, and in addition are four heroic statues in marble at the corners. There are several beautiful apartments with highly carved ceilings, but by far the most interesting part is the grand staircase and hall, which is a mass of mosaics, risers, strings

and side complete, so that the effect is dazzling in the extreme when the sun shines through the windows, and is full of rich dead lustre when it does not shine. Altogether it is interesting but hardly practicable.

Another interesting building in Seville is the Hospital of the Caridad, a retreat for poor worn-out humanity, and containing a goodly supply of this commodity.

"There are very few men who live to see themselves buried," remarked the custodian.

"To be sure," we replied, "such a coincidence is remarkable. Pray tell us about it."

It turned out thus: Don Miguel de Marrana was a perfect Don Juan and lived in the seventeenth century. He had been off on



one of his terrible spree one night, and upon starting home met the ghastly procession of the dead bearing their burden upon a couch surrounded by torches. Now this is not a remarkable sight in European cities, but the vision was very suggestive to the Don.

"Who is the corpse?" hiccupped he with tipsy solemnity.

No answer being forthcoming, he staggered up to the bier and beheld — himself.

Now it must be admitted that such a coincidence was strange, and liable to give any man a shock. But so horrified was the Don that he accompanied his own corpse to the church, actually prayed over himself, and was picked up from the pavement senseless. But fortunately they buried the corpse instead of himself, and the Don staggered out of the church a changed man, gave up the evil of his ways, set himself to right the wrongs he had committed, and henceforth devoted himself and his money to errands of mercy. He, moreover, built the Hospital and endowed it forever. And now for the strangest part of the story. He died like other men, in good time, but so honest was he that he requested that he be buried in the Hospital and that the following epitaph be cut in the stone.

There it is to this day. "*Cenizas del peor hombre qui ha habido en el mundo.*" Here lies the most wicked man in the world.

It is here that the famous picture hangs, painted by Baldez, the master of Murillo, and from whom the latter master is said to have received his instructions as to realism in painting. It is called "Annihilation" and represents an archbishop's last resting-place, his staff broken, himself decomposing with so much truth that Murillo was wont to hold his nose as he passed it. We followed his example, since it was so horribly real.

A suburb of Seville well-known to every traveller is Triana, the home of the black-eyed gypsies, and therefore of bull-fighters, smugglers, dirt and immorality. To say therefore that it was well-known by every artist would be superfluous, as nearly all the Spanish models of Seville came from this place. The appearance of a stranger is the signal for calls from all quarters, and if he is in a carriage a



dozen or more imps will climb all over the vehicle, while if he is afoot it is nearly as much as his life is worth to pass through the village.

"Ah, Señor, por Dios," they cry with one voice.

"All right," we cried, "but for Heaven's sake climb out of the carriage and not cover us with vermin."

"Ah, Señor, por Dios," they still cry, and clutch, and fight and laugh at each other.

"Here," I cried, "scatter!" And at the same time I threw a handful of copper coin away back of the carriage, which caused such a scampering that for a moment we were left. Then we stopped to see the fun.

"Now," I said, "dance, dance, a copper coin for each dance!"

Then up went the copper, and pell-mell went the whole crowd of girls and boys.

"Dance, dance, another copper for another dance!"

The old mother hags put forth their favorites, laughed and shook their castanets, and in five minutes not one mother's son of them, or daughter either for that matter, but was dancing their very best, while the coppers flew up at every interval to be scrambled for. But this thing couldn't last long, and for fear they would actually jump out of their skins like a Chicago sand-fly, we threw another handful of coin and whipped our horses into a dead run.

Lest you think us improvident wretches to be thus throwing around money, it might be well to remark that a whole handful of the coin was worth less than a five-cent piece.

Lovers of ancient history recognize the names of Trajan, Hadrian and Theodosius, but very few are aware of the fact that Seville boasts of their birthplace, in an adjacent spot known as Italica, and easily reached. The trip, too, is not devoid of interest, since the end of the route brings one to a dirty little village where may be seen mud huts actually built upon the ruins of ancient palaces; and carries one to the ruins of the old amphitheatre, the scene of many an ancient conflict. Huge fig and cactus trees now embower the walls in a mass of beautiful foliage, and an interesting underground passage leads directly to the centre of the arena.

Here are the pens for the wild beasts, there is the spring at which the gladiators drank their fill when heated with the sports, and there are the old goals from which they ran.

Ah, it is the place for a poet!

The huge walls with the seats rise on all sides, and it is possible

to picture them crowded with a tumultuous crowd shouting and applauding. Then come the hoarse cries of the gladiators as they fight for supremacy, or the groans of some dying wretch who bites the dust and is borne away in the agony of death. Those days have past and will come no more to Italica. Even the river which swept past her very walls has sought a new channel, her kings are no more, her palaces have fallen, and the dust of ages that covers her yet speaks eloquently of what she was. 'Twas thus with Rome herself, and Italica was but one of her children.

On the bank of the river stands an old brick tower which arrests the attention, and which from its color is called the Terre del Oro. As a child I read of Bluebeard, of his beautiful wives and his curious method of working out his own divorces. Here was its prototype. Old Pedro used to amuse himself by confining his wives here, as well as his treasures, and many little "removals" were here perpetrated in an artistic manner. It is now an office of some kind, and is very commonplace, but like almost every building in Seville would tell an interesting story if it could.

One can spend days around Seville and pick up many bits for his sketch-book. The patios, many of them very large, are used as wash-places, and I remember one, the Corral del Conde, where we entered and found a huge stone fountain basin in the centre. Around this were a dozen women in picturesque costume, washed unmentionables of all sorts, and then hung them up on lines stretched from balcony to balcony. Bisected, quatersected and vivisectioned garments made picturesque foregrounds, while buttons flew off on all sides as the women pounded and rubbed those ornaments off. Heaven help the remnants, we exclaimed as we glanced down at our garments which were needing some such treatment after a month or so of wear.

On all sides are seen the little belfries hung with bells, that were undoubtedly used to call the hungry man to his humble meal. Tiles are used oftentimes in the simplest of forms and I noted many a lot that I would have given much to possess, and indeed two such came into our possession in exchange for a *peseta*.

As we go towards the cathedral we pass a noted building, La Casa del Ayuntamiento, which is the corporation house, and built in 1564. The exterior is an exquisite example of Spanish plateresque,

as delicate almost as the work of a silversmith. I could not help getting a little photograph of its façade, and have often wished to use it in some façade, but when the expense is considered it is necessary to cut out the very character that makes it beautiful.

Of course the little churches in this beautiful city may be counted by scores, each one possessing a bit of interest. San Marcos is a delightful piece of *medieval* architecture, whose portal is exquisite and whose tower is the highest in Seville. Indeed, it is said that Cervantes used to ascend it in order to look down with loving eyes upon the house of his beloved Isabel. My companion remarked that any American lover fired with such a sixteenth-century frenzy of love would have entered boldly and pressed his claim rather than simply look down from a tower. I think that was a true saying, but very hard-hearted upon poor Cervantes, who may have been slightly bashful.

Then there is San Pedro, an excellent example of Moorish architecture with its *artesonado* roof; it was here that Velazquez was baptised. Santa Catalina with its magnificent nave roof, and Moorish vaulted ceilings of one of its large chapels. San Clemente with a splendid *alerce* roof, and Santa Paula which shows how tiles may be introduced with good effect, forming a style peculiar to Spain and known as *azulejo*. There is also a little church near Italica, where the doorway is made up of a combination of tile and colored bricks. It is known as San Isidoro, and is worth a visit. Lastly, Santa Isabel will furnish a good example of Spanish Renaissance in its large doorway. Age has worked wonders in coloring, where the tile and brickwork have become mossy and stain covered; nothing but a water-color can do it justice.

A hundred other places of interest might be named in this charming old city, but one has at last to move on. It was at such a time that our good host shook our hand cordially, wished us God speed and remarked, "You will come again, *Señor*, oh, yes, you will surely come again."

I cannot tell. I hope his prediction may prove true some time, for one could spend a year in Seville and yet find something of interest.

C. A. RICH.

(To be continued.)



WORKMEN'S DWELLINGS.—II.

WE studied in the preceding article the cheap dwelling place in the large cities, where it is indispensable, considering the price of ground, to have recourse to constructions having several stories of height and constituting real tenement-houses. The

inconveniences of agglomeration are there contended with as capably as possible; but in spite of all the hygienic precaution which can be taken, the results cannot be as satisfactory as if each family of employed had its own little private and isolated dwelling. This programme, which cannot be realized in cities, can be realized in the suburbs and round about the grand centres of industry. It is a very interesting problem from a social point of view, since it offers to the workman the possibility of having a healthy dwelling, where he is really at home, and which can finally be acquired by himself. Already, before the founding of the Société Française des Habitations à bon Marché, this idea had inspired M. Cacheux to build on some land belonging to him, in the neighborhood of Paris or in its faubourgs, groups of cheap houses, completely isolated or in pairs, separated only by a party-wall. These houses have either a simple ground-floor consisting of three or four rooms, with a water-closet, or a ground-floor and first story. Their cost varies from 3,000 to 12,000 francs, including the fence, but not the ground. The most costly, which are really little country houses, contain on the ground-floor, two sitting-rooms, a dining-room, kitchen and water-closet. Upon the first-floor four chambers, two dressing-rooms, and in the attic a servant's chamber. This is the luxurious

LES LOGEMENTS A BON MARCHÉ EN FRANCE.—II.

NOUS avons étudié, dans un précédent article, les habitations à bon marché dans les grandes villes où il est indispensable, étant donné le prix des terrains, d'avoir recours à des constructions en hauteur prenant plusieurs étages et constituant de véritables maisons à loyer. Les inconvénients de l'agglomération y sont combattus le plus possible; mais, malgré toutes les précautions hygiéniques prises, les résultats ne peuvent être aussi satisfaisants que si chaque famille d'ouvriers ou d'employés avait la petite maison particulière et isolée. Ce programme irréalisable dans les villes peut l'être dans les environs et autour des grands centres d'industrie. C'est un programme très intéressant au point de vue social, puisqu'il offre à l'ouvrier la possibilité d'avoir une habitation saine, où il est bien chez lui et qu'il peut même acquérir par la suite. Déjà, avant la fondation de la Société Française des Habitations à bon Marché, cette préoccupation avait inspiré à M. Cacheux la construction, sur des terrains lui appartenants autour de Paris ou dans les faubourgs, de groupes de maisons économiques, complètement isolées ou réunies deux à deux et séparées par un mur de refend mitoyen. Ces maisons ont: soit un simple rez-de-chaussée comprenant trois ou quatre pièces avec water-closet, soit un rez-de-chaussée et un premier étage. Leurs prix varient de 3,000 à 12,000 francs, compris clôture, mais non le terrain. Les plus chères, constituent de véritables petites maisons de campagne comprenant, au rez-de-chaussée: 2 salons, salle à manger, cuisine, water-closet; au 1er. étage: 4 chambres et 2 cabinets de toilette, et, sous les combles, une chambre de domestique. C'est le type luxueux! Le locataire a la faculté de devenir acquéreur en payant pendant quinze ans, outre le loyer, qui est de cinq et demi du prix principal de vente, une somme annuelle équivalente à quatre et demi pour cent de ce prix. A l'expiration du bail, on fait alors un contrat de vente.

Pour acquérir un immeuble de 6,000 fr., par exemple, il y a à payer 200 fr. au moins, comptant.

BILLIGE WOHNUNGEN IN FRANKREICH. ZWEITER ARTIKEL.

IN einem vorhergehenden Artikel haben wir die billigen Wohnungen in den grossen Städten besprochen, in denen es, angesichts des Preises der Bauplätze, geboten ist zu hohen Gebäuden von mehreren Stockwerken, also zu eigentlichen Miethcasernen, seine Zuflucht zu nehmen. Die Unannehmlichkeiten der Bevölkerungsüberhäufung sind in denselben zwar nach Möglichkeit beseitigt, aber, trotz aller hygienischen Vorsichtsmassregeln, können die Resultate doch nicht so befriedigend sein, als wenn jede Arbeiteroder Beamtenfamilie ihr kleines eigenes und isolirtes Häuschen hätte. Dieses, in den Städten nicht zu verwirklichende Programm, ist nur in den Vorstädten und in der Umgebung der grossen industriellen Mittelpunkte erreichbar. Vom gesellschaftlichen Standpunkte aus betrachtet ist dieses Programm äusserst interessant, indem es dem Arbeiter eine gesunde Wohnung sichert, in der er für sich abgeschlossen ist, und die er sogar im Laufe der Zeit an sich bringen kann. Schon vor der Gründung der "Société Française des Habitations à Bon Marché," war Herr Cacheux, in Folge der Beschäftigung mit diesem Gedanken, darauf gekommen, auf ihm gehörigen Ländereien in der Umgebung und in den Vorstädten von Paris, Gruppen von Häusern zu bauen, welche entweder vollständig isolirt, oder je zwei und zwei zusammen gebaut und durch eine mittlere Trennungsmauer geschieden waren. Diese Häuser bestanden entweder nur aus einem Erdgeschoss mit drei oder vier Zimmern und einem Abtritt, oder aus einem Erdgeschoss und einer Etage. Die Kosten variierten von 3,000 bis zu 12,000 Franken, einschliesslich der Umzäunung, aber nicht des Grund und Bodens. Die theuersten waren wirkliche kleine Landhäuser, mit zwei Empfangszimmern, Speisezimmer, Küche und Abtritt im Erdgeschoss; vier Schlafzimmern und zwei Ankleidezimmern auf der ersten Etage, und einer Stube für die Magd unter dem Dach. Das ist der Luxustypus. Der Miether kann Käufer werden, indem er während fünfzehn Jahren, ausser dem Miethzins von fünf und ein halb Procent auf die Hauptkaufsumme, noch eine weitere jährliche Zahlung im Betrag von vier

type. The lessee has the right of becoming the owner by paying during fifteen years, in addition to the rent, which is $5\frac{1}{2}$ per cent on the selling price, an annual sum equivalent to $4\frac{1}{2}$ per cent of this price. At the expiration of the lease, the deed is delivered to him.

To acquire a property valued at 6,000 francs, for instance, there must be paid down 200 francs at least, leaving 5,800 francs. During fifteen years it will be necessary to pay an annual sum of 580 francs, which consists of 319 francs for rent and 261 francs for the sinking-fund. At the end of the lease the costs of sale, in order to perfect the contract, reach about 540 francs. Basing its actions always upon these same principles, and pursuing the same object, the Société Havraise des Cités Ouvrières has built, up to the present time, 117 houses in two groups, one of 77 and the other of 40. This society, formed in 1871, with a capital of 200,000 francs, received from the City of Havre a subsidy of 25,000 francs at the time of the building of the first group. To-day, out of the 117 houses, seventy houses have been entirely paid for.

We give below the plans of the houses in the group of forty, the price of which is divided as follows:

Cost of one house.....	3,050 Fr.
Outbuildings and fencing.....	650 "
Cellar.....	700 "
Land (120 metres at 5 francs).....	600 "
Total.....	5,000 Fr.

These houses have a ground-floor and an upper story.

The Orleans Railroad has built for its employés, at Laqueuille, in Auvergne, houses, each containing two tenements. Each dwelling contains, as can be seen from the plans annexed, four rooms, with fireplaces, water-closet, cellar and storeroom. The house cost 13,600 francs, which makes the cost of each tenement 6,800 francs. Probably this cost will seem rather high, but these buildings, intended for its own employés, had to have a certain air of relative comfort. It would have been easy to keep the expense at a lower figure by employing less costly materials. The railroad company built three of these houses, and the rent paid by its employés is equal to one-tenth of their pay, conformably to the rule established by the company for all of its agents who are lodged in buildings belonging to it.

So we see that in France for several years attention has been turned in an active manner to the question of lodging workmen and minor employés. The new Société Française des Habitations à bon Marché proposes to continue and encourage the movement already begun.

It is with this object that it opened during the last summer, in July, 1890, a competition for cheap dwelling-houses to be erected at St. Denis, near Paris. The question was: to devise different types of lodging and small healthy houses of one or two stories (ground-floor and a first story) containing three or four rooms at most, with cellar and garden, all within an area of 100 square metres. These houses must be built upon a site at St. Denis having an area of 10,092 square metres. This competition, which closed November 15, 1890, drew together forty-eight designs, which were exhibited at the Hôtel de Ville. I do not know how better to give a description of the general appearance of this competition than by borrowing some extracts from the *Bulletin* published in July by the Société Française des Habitations à bon Marché. There were two important points to consider in judging this competition. First, the utilization of the ground and the grouping of the buildings. Second, the arrangements and the types of the isolated buildings.

It was necessary to examine under the first head the greater or less area occupied by the buildings as designed, their height, their importance and their general disposition from the double point of view of general circulation and their success in

Reste 5,800 fr. On aura à verser pendant quinze ans une annuité de 580 fr.: comprenant 319 fr. pour le loyer et 261 fr. pour l'amortissement. A la fin du bail, les frais de vente pour réaliser le contrat s'élèvent à environ 540 fr.

Se basant toujours sur les mêmes principes et poursuivant le même but, la Société Havraise des Cités Ouvrières a construit, jusqu'à présent 117 maisons, en deux groupes de 77 et de 40 maisons. Cette société, constituée en 1871, au capital de 200,000 fr., reçut de la Ville du Havre une subvention de 28,000 fr., lors de la construction du premier groupe. Aujourd'hui, sur les 117 maisons, 70 sont entièrement payées. Nous donnons ci-joint le plan des maisons du groupe des 40, dont le prix se divise ainsi:

Prix de revient d'une maison.....	3,050 fr.
Dépendances et murs de clôtures.....	650 "
Etablissement d'une cave.....	700 "
Terrain: 120 m. à 5 fr.....	600 "
Total général.....	5,000 "

Ces maisons sont à un étage sur rez-de-chaussée.

La Compagnie des Chemins de Fer d'Orléans a construit à Laqueuille (en Auvergne) des maisons à deux logements pour ses employés. Chaque ménage possède, ainsi qu'on peut le voir sur les plans ci-joints, quatre pièces à feu, un cabinet d'aisances, un cellier et un grenier. La maison a coûté 13,600 fr., ce qui met à 6,800 fr. le prix de revient de chaque logement.

Ce prix paraît peut-être un peu élevé; mais ces maisons, destinées à des employés, doivent présenter un certain confort relatif. On pourrait facilement arriver à une dépense plus faible en employant des matériaux moins coûteux. La Compagnie d'Orléans a construit trois de ces maisons, et le loyer payé par les employés logés est égal au dixième de leur traitement, conformément à la règle établie par la compagnie pour tous les agents qui sont logés dans des bâtiments leur appartenant.

On voit donc que depuis plusieurs années, on se préoccupe, en France, d'une manière active, de la question du logement des ouvriers et petits employés. La Société Française des Habitations à bon Marché se propose de continuer et d'encourager le mouvement commencé.

C'est dans ce but qu'elle a ouvert l'été dernier (Juillet 1890) un concours pour l'étude d'Habitations à bon Marché à élever à Saint Denis, près Paris. Il s'agissait de trouver différents types de logements et de petites maisons salubres à un ou deux étages (rez-de-chaussée et premier étage) et contenant trois ou quatre pièces au plus, avec cave et jardin, le tout d'une contenance de 100 mètres carrés. Ces maisons devaient être construites sur un terrain sis à St. Denis, d'une superficie de 10,092 mq. Ce concours, qui fut clos le 15 Novembre, 1890, produisit l'envoi de 48 projets qui furent exposés à l'Hôtel de Ville. Nous ne saurions mieux rendre compte de la physionomie générale de ce concours qu'en empruntant quelques extraits au rapport du jury, publié dans le *Bulletin* de la Société Française des Habitations à bon Marché. "Deux points importants étaient à considérer dans le jugement de ce concours:

1er. L'utilisation du terrain et le groupement des constructions; 2me. Les aménagements et les types de maisons isolées.

Il fallait examiner dans la première de ces données la plus ou moins grande surface occupée par les constructions projetées, leur hauteur, leur importance et leur disposition au double point de vue de la circulation générale et de leurs rapprochements pour satisfaire aux conditions économiques et hygiéniques. Une grave question s'imposait: celle de la maison à étages, qu'il serait préférable d'éviter au point de vue de l'hygiène sociale; mais que le prix du terrain et aussi des matériaux impose, au moins pour une partie des constructions, dans la région de Paris. Il y avait lieu

und ein halb Procent auf dieselbe Summe leistet. Nach Ablauf des Pachtecontracts wird ein Verkaufscontract gemacht.

Um z. B. eine Liegenschaft von 6,000 Franken zu erwerben, wird eine baare Anzahlung von 200 Franken gemacht, bleiben 5,800 Franken. Während fünfzehn Jahren hat man nun eine jährliche Zahlung von 580 Franken zu machen, einschliesslich 319 Franken für Miethe und 261 Franken zur Kapitalstilgung. Bei Ablauf des Pachtecontracts, belaufen sich die Spesen für Abschliessung des Verkaufscontracts auf ungefähr 540 Franken.

Auf denselben Principien fussend und dieselben Zwecke verfolgend, hat die "Société Havraise des Cités Ouvrières" bis jetzt 117 Häuser, in zwei Gruppen von je 77 und 40 Häusern, gebaut. Diese Gesellschaft, im Jahre 1871 mit einem Capital von 200,000 Franken gegründet, erhielt, zur Zeit als sie die erste Gruppe baute, von der Stadt Havre eine Subvention von 25,000 Franken. Bis jetzt sind von den 117 Häusern 70 ganz bezahlt. Anbei geben wir den Plan der Häuser in der Gruppe von 40, deren Kosten sich folgendermassen stellen:

Kostenpreis eines Hauses.....	3,050 Fr.
Nebengebäude und Umfriedigungsmauern.....	650 "
Herstellung eines Kellers.....	700 "
Bauplatz, 120 m. zu 5 Franken.....	600 "
Summa.....	5,000 Fr.

Diese Häuser bestehen aus einer Etage über einem Erdgeschoss.

Die Eisenbahngesellschaft von Orleans hat in Laqueuille, in der Auvergne, Häuser mit je zwei Wohnungen für ihre Angestellten gebaut. Jedes Gelass hat, wie man das aus den beigegebenen Plänen erschen kann, vier heizbare Räume, einen Abtritt, einen Keller und einen Speicher. Jedes Haus kostet 13,600 Franken, so dass sich jede Wohnung auf 6,800 Franken stellt. Dieser Preis wird etwas hoch erscheinen; aber die betreffenden Häuser, für Angestellte bestimmt, müssen verhältnissmässig gewisse Bequemlichkeiten bieten. Es würde ein Leichtes sein, durch Anwendung weniger kostspieliger Materialien die Baukosten zu verringern. Die Orleanser Gesellschaft hat drei solcher Häuser gebaut, und die Miethe welche die darin wohnenden Angestellten zahlen, beträgt, nach der Regel welche für alle in den Häusern der Gesellschaft wohnenden Bediensteten festgestellt ist, ein Zehntel ihrer Besoldung.

Man sieht, dass man sich seit mehreren Jahren in Frankreich sehr lebhaft mit der Frage der Beschaffung von Wohnungen für Arbeiter und niedere Beamte beschäftigt. Die neue "Société Française des Habitations à Bon Marché" hat es sich zur Aufgabe gemacht die begonnene Bewegung fortzusetzen und zu ermuthigen. Zu diesem Zwecke hat sie letzten Sommer, im Juli 1890, eine Concurrenz eröffnet behufs Herstellung billiger Wohnungen in St. Denis, bei Paris. Es handelte sich darum verschiedene Typen festzustellen für gesunde Wohnungen und kleine Häuser von ein oder zwei Stockwerken (Erdgeschoss und erste Etage), mit höchstens drei oder vier Räumen, nebst Keller und Garten, von einem Gesamtflächeninhalt von 100 Quadratmeter. Diese Häuser sollten auf einem in St. Denis gelegenen Stück Grund von 10,091 Quadratmeter errichtet werden. Die Bewerbung, welche am 15 Nov. 1890 schloss, ergab die Einsendung von 48 Projecten, die im Stadthaus ausgestellt wurden. Wir wüssten den allgemeinen Character dieser Concurrenz nicht besser zu kennzeichnen, als indem wir dem Bericht der Jury, welcher in dem "Bulletin de la Société Française des Habitations à Bon Marché" veröffentlicht wurde, einige Auszüge entnehmen. Zwei wichtige Punkte waren es, welche die Preisrichter zu erwägen hatten: — 1, Die Vernutzung des Bodens und die Gruppierung der Häuser; 2, Die Zweckmässigkeit und die Typen der isolirten Häuser.

Unter dem ersten Gesichtspunkte war zu bedenken die grössere oder geringere

satisfying economical and hygienic conditions. A grave question demanded attention, namely, the matter of houses of several stories, which it would be desirable to avoid from the standpoint of social hygiene, but which the cost of land and also of materials make obligatory, at least for the greater part of buildings in the neighborhood of Paris. It was necessary to consider the position which these several-storied houses should hold in the general scheme rather than their internal arrangements, for experiments already made at Paris and elsewhere had fixed, at least for the present time, the opinion of all as to the best mode of dividing up buildings of this class. In the small houses, on the contrary, the arrangements can be varied in an infinity of ways.

Certain schemes align the rows of the houses on the same interior passageway, or back them up against the bounding wall of the neighboring property. Others seek various groupings, sometimes quite original, and thus break the monotony of the general appearance by ingenious combinations of isolated houses, semi-detached houses, or blocks of four, thus

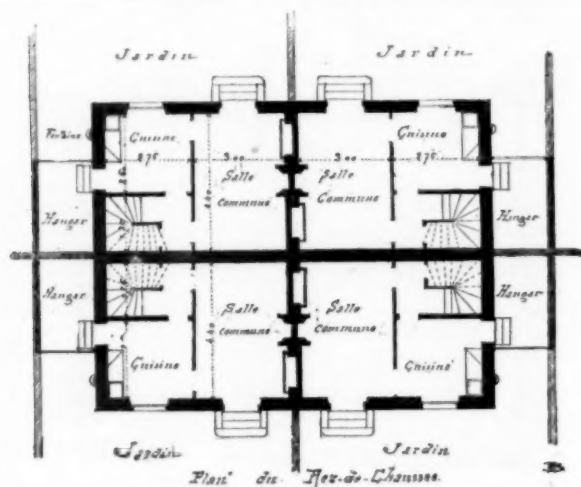
de se préoccuper plutôt de la position de ces maisons à étages, dans le plan d'ensemble, que de leurs dispositions intérieures, car les expériences déjà faites à Paris et ailleurs ont fixé, au moins quant à présent, le jugement de tous sur le meilleur mode de répartition des locaux de ce genre. Dans les petites maisons, au contraire, les dispositions peuvent varier à l'infini.

Certains projets alignent des bandes de maisonnettes sur une même voie intérieure ou les rejettent le long des murs séparatifs des propriétés voisines; d'autres cherchent des groupements variés, parfois très originaux, et rompent ainsi la monotonie de l'ensemble par d'ingénieuses combinaisons de maisons isolées ou de maisons réunies par deux ou par quatre, rappelant ainsi le type Mulhousien; enfin les jardins, mal disposés et offrant peu de ressources à la culture chez les uns, atteignent chez d'autres une importance réelle au point de vue du jardinage, et deviennent une ressource qui n'est nullement à dédaigner en même temps que, par leur dessin, ils fournissent un heureux élément de pittoresque.

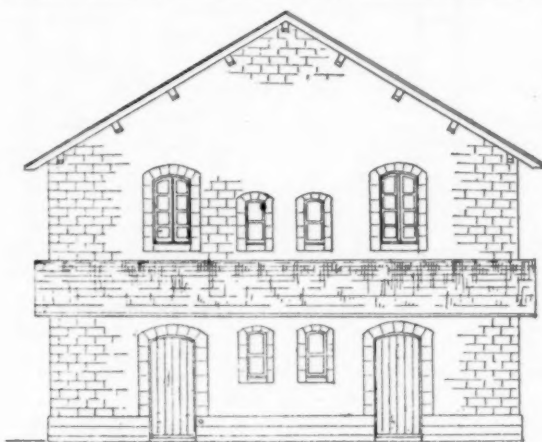
Une question intéressante, dans les habitations à bon marché est l'importance relative

Bodenfläche, welche die projectirten Bauten einnehmen sollten, ihre Höhe, ihre Wichtigkeit und ihre Anordnung, in Bezug sowohl auf die allgemeine Zugänglichkeit, als auch auf ihre Stellung mit Rücksicht auf die Anforderungen der Oeconomie und der Gesundheitspflege. Eine wichtige Frage machte sich geltend:—ob es nicht möglich sei, mit Rücksichtnahme auf die gesellschaftliche Hygiene, Häuser mit mehreren Stockwerken zu vermeiden, während dieselben doch, in der Region von Paris, wenigstens zum Theil, durch den Werth des Bodens und auch des Baumaterials, geboten sind. Es war hier nöthig sich mehr mit der Lage dieser Häuser mit Stockwerken im Gesamtplan zu beschäftigen, als mit ihrer inneren Einrichtung, da die in Paris und anderswo schon gemachten Erfahrungen, vor der Hand wenigstens, das allgemeine Urtheil über die Eintheilung solcher Localitäten festgestellt haben. In den kleinen Häusern dagegen kann die Eintheilung bis ins Unendliche variiren.

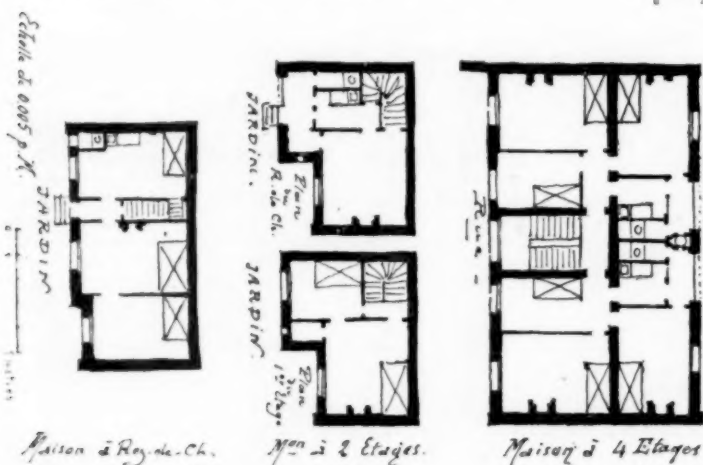
Einige Projekte reiheten kleine Häuschen längs einer gemeinsamen inneren Strasse aneinander, oder vertheilten sie an den Tren-



St. Denis Competition. First Prize, M. G. Guyon, Architect.



Houses at Laqueuille for the Orleans Railway.



St. Denis Competition. Third Prize, MM. Dupeyard & Cintrat, Architects.

recalling the type of the Mulhausen dwellings. And finally the gardens, ill-arranged and offering little chance for cultivation in some cases, acquire in others a real importance from the point of view of gardening, and become a resource which is not to be disdained, at the same time with their designing they furnish a happy element of picturesqueness.

Another interesting question as to these cheap dwelling-houses is the relative importance given to one room which has a direct approach, and serves as a common sitting-room, sometimes as a small workshop, and always as a dining-room. From an economical

donnée à une pièce d'un accès immédiat, servant de salle de réunion, quelque fois de petit atelier, et toujours de salle à manger. Au point de vue économique, grâce à l'installation de fourneaux et d'éviers perfectionnés, cette pièce pourrait se confondre avec la cuisine. Nombre de concurrents mal familiarisés avec les habitudes des ouvriers et ignorants des nécessités budgétaires de leur vie ont étudié leurs types de maisonnettes comme de véritables petites villas suburbaines, recherchant le pittoresque au moyen de silhouettes, peut-être artistiques, mais à coup sûr coûteuses.

nungsmauern welche die benachbarten Grundstücke abgrenzen; andere versuchten allerlei Gruppierungen, zuweilen auf sehr originelle Weise, und durchbrachen so die Monotonie des Ganzen durch isolirte oder in Gruppen von zwei oder vier vereinigte Häuser, im Anschluss an den mulhausener Typus. Die Gärten, endlich, welche in manchen Fällen schlecht geplant waren und sehr wenig Gelegenheit zur Nutzbarmachung boten, erreichten in anderen eine wirkliche Bedeutung für die Bepflanzung und wurden zu einer Hilfsquelle, während sie zu gleicher Zeit, durch ihre Anlage, ein schätzbares Element des Malerischen darboten.

Eine interessante Frage in der Einrichtung billiger Wohnungen ist die relative Bedeutung, welche einer Räumlichkeit mit direktem Zugang zuertheilt wird, die als Wohnzimmer, manchmal auch als kleine Werkstatt, und immer als Speisezimmer dient. Vom Sparsamkeitsstandpunkte aus betrachtet, kann diese Räumlichkeit, Dank vervollkommenen Heiz- und Spülvorrichtungen, auch mit der Küche zusammenfallen. Viele der Concurrenten hatten den Character ihrer Häuschen, in Folge von Unkenntniss der Gewohnheiten der Arbeiter und der finanziellen Bedingungen ihres Lebens, als wirkliche kleine vorstädtische Villen aufgefasst und suchten das Malerische in den Umrissen auf vielleicht künstlerische, aber zu kostspielige Weise. Aber neben solchen Verirrungen muss in einigen Projecten, wie z. B. in dem des Herrn Blanchard (2. Preis), die Einrichtung von Anbauten, als gemeinschaftliche Waschküchen mit Trockenraum und Vereinigungslokalen für Kinder, hervorgehoben werden.

point of view, thanks to the introduction of stoves and sinks, this room can be used also as the kitchen. A number of competitors, ill-informed as to the habits of the working-class and ignorant of the financial necessities of their way of living, have studied their little houses as if they were real suburban villas, seeking for a picturesque outline, which is, perhaps, artistic, but, of a surety, expensive.

Side by side with this error must be pointed out in some schemes the introduction of subsidiary conveniences, such as a communal wash-house with drying-room and a common playroom for children, as was the case with M. Blanchard's design, which received the second prize.

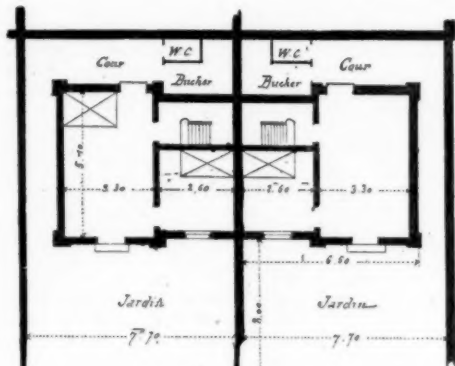
We give below some of the plans which received recompense. Those of M. Guyon George, who obtained the first prize of a thousand francs, show with what simplicity

Mais à côté de ces erreurs, il faut signaler, dans quelques projets, l'établissement de services annexes, comme buanderie commune avec séchoir, et salles de réunion pour les enfants; ainsi que l'a fait M. Blanchard (2e prime.)

Nous donnons ici quelques plans des projets primés. Ceux de M. Guyon George, qui obtint la première prime de mille francs, montrent avec quelle simplicité cet architecte a satisfait au programme. Chacun de ses pavillons isolés est divisé en quatre logements. Nous donnons le plan du rez-de-chaussée de l'un d'eux, qui se compose d'une cuisine et d'une salle commune. On trouve au 1er étage deux chambres à coucher et un cabinet d'aisances. Ces pavillons, au nombre de six, occupent, dans le plan d'ensemble, le centre du terrain tout en longueur. Deux larges voies les séparent des maisons d'un type plus

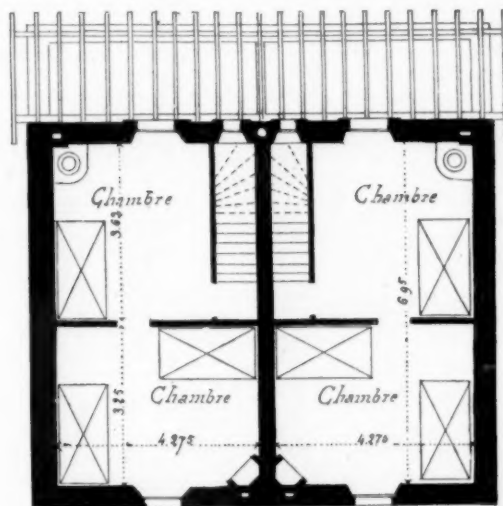
Wir geben hier einige der prämierten Projekte. Die des Herrn Guyon George, welche den ersten Preis von tausend Franken erhielten, zeigen mit wie einfachen Mitteln dieser Architect dem Programm gerecht wurde. Jede seiner isolirten Bauten ist in vier Gelasse eingetheilt. Der beistehende Plan des Erdgeschosses eines dieser Häuser zeigt, dass es aus einer Küche und einem Wohnzimmer besteht. Auf der ersten Etage finden sich zwei Schlafzimmer und ein Abtritt. Diese Häuser, sechs an Zahl, nehmen auf dem Gesamtplan der ganzen Länge nach die Mitte des Terrains ein. Zwei breite Wege trennen sie von Häusern eines einfacheren Typus, welche in geschlossenen Reihen auf der Umfassungslinie des Terrains stehen und demgemäss eine ununterbrochene und etwas monotone Folge bilden. Die Einrichtung einer jeden dieser Wohnungen ist fast identisch mit einer der vier Abtheilungen in den vereinzelt stehenden Häusern.

Zwei weitere Preise wurden zuerkannt: — Einer von 800 Franken an Herrn Blanchard,

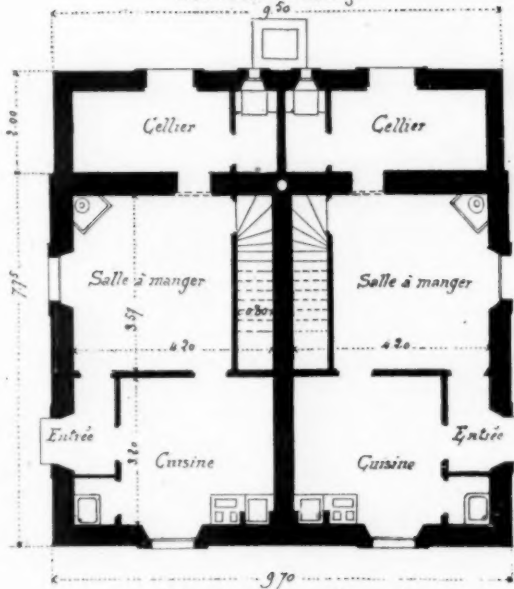


Groupe de 2 Maisons

Plan du Rez-de-Chaussée
House of the Société Havraise.

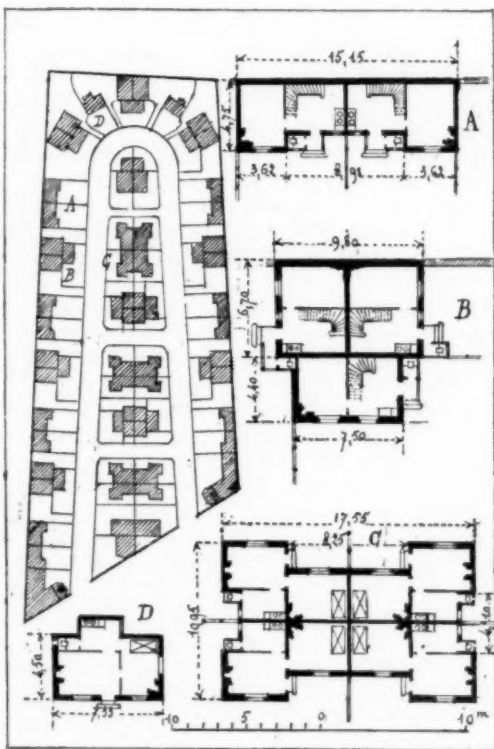


Plan du 1er Etage



Plan du Rez-de-Chaussée

Houses at Laqueuille for the Orleans Railway.



St. Denis Competition. First Mention, F. Paumier, Architect.

this architect satisfied the programme. Each one of his isolated pavillons is designed for four lodgings. We give here the ground-floor plan of one of them, which is composed of a kitchen and a common sitting-room. On the first story are two bedchambers and a water-closet. These pavillons, six in number, occupy

simple qui, en rangs serrés, occupent le pourtour du terrain et forment alors une suite ininterrompue et un peu monotone. La disposition de chacune de ces habitations est, à peu de chose près, identique à l'une des quatre divisions des maisons isolées.

Trois autres primes ont été accordées:

Architekten; einer von 600 Franken an die Herren Dupeyard und Cintrat; und einer von 400 Franken an Herrn A. Lequeux. Ausserdem wurden die Herren F. Paumier, Delpierre, G. Courtois, und M. Pichon ehrend erwähnt.

Die Herren Dupeyard und Cintrat, welchen

in the general plan, the centre of the site longitudinally. The wide passages separate them from houses of a similar type, which in close rows occupy the periphery of the site, and thus form an uninterrupted succession which is somewhat monotonous. The arrangements of these dwellings are almost identical with the arrangements of one of the four divisions of the isolated houses.

Three other prizes were awarded, one of 800 francs to M. Blanchard, one of 600 to MM. Dupezard and Cintrat, and one of 400 francs to M. A. Lequeux. Also four mentions were obtained by M. F. Paumier, Delpierre, G. Courtois and M. Pichon.

MM. Dupezard and Cintrat, who won the third prize, distinguished themselves through the clever arrangement of their four-storied houses, shown on the annexed plans. A broad staircase gives access to two dwellings at each floor, consisting of three rooms, a kitchen and a water-closet. These two latter rooms are ingeniously lighted and ventilated upon an open gallery. An open hopper, extending the full height of the house, allows of the immediate discharge of fecal wastes. As to M. Paumier, it was the happy arrangement of his general plan which won for him a first mention. He treated each type of his houses through seeking differences of level, which of course produced picturesque outlines, but certainly would lead to greater outlay.

The success of this competition, as well as the initiation in a great number of places throughout the country of an important movement in favor of the work to which the Société Française des Habitations à bon Marché has devoted itself, has encouraged it to open a new competition, which will be closed December 31, 1891.

The effect is as if an immense investigation had been opened throughout France to study the needs of each region and seek for the means of assuring to the working population healthful and economical dwellings. These solutions demand the collaboration of architects, students of hygiene, of economy and of finance, who represent the different points of view of the problem, and who must be united in philanthropic endeavor in order to attain the desired end.

The competition, then, consists of three parts:

First, an inquiry, having for its end the resuming and completion of the studies, begun fifty years ago, into the conditions affecting cheap dwelling-places in France, not only in cities, but in the country in the neighborhood of great industrial establishments, agricultural undertakings or mines.

Each one of the competitors will confine his investigations to a fixed locality, so as to form a kind of local monograph upon the subject.

Second, a scheme either for houses combining several dwellings, or of isolated or grouped dwellings, for the purpose of remedying the evils disclosed by the inquiry.

Third, the financial combinations which must be adopted in order to build the houses, and to assure, so far as this may be possible, the ownership to their several lessees.

The prizes consist of a grand prize represented by a gold medal, valued at three thousand francs, which will be awarded to that one of the competitors who shall present the work best answering the three heads of the programme. Then for those who shall have treated satisfactorily only such and such portions of the three heads, a silver medal of a thousand francs, two silver medals of five hundred francs, and honorable mentions together with a bronze medal of the society. The competitors must be Frenchmen. We will keep our readers au courant with this interesting movement, and will at the proper time discuss the questions connected with it.

Une de 800 francs à M. Blanchard, arch.; une de 600 francs à MM. Dupezard et Cintrat; et une de 400 francs à M. A. Lequeux.

En outre, quatre mentions ont été obtenues par MM. F. Paumier, Delpierre, G. Courtois, et M. Pichon.

MM. Dupezard et Cintrat, qui ont mérité la 3me. prime, se sont faits remarquer par la bonne disposition de leurs maisons à quatre étages. (Vois les plans ci-joints.) Un large escalier donne, à chaque étage, accès à deux logements composés de trois pièces, une cuisine et une cabinet d'aisances. Ces deux dernières pièces sont ingénieusement éclairées et ventilées sur une galerie ouverte. Une trémie ouverte dans la hauteur de la maison, permet de se débarrasser immédiatement des ordures.

Quant à M. Paumier, c'est surtout la bonne disposition de son plan d'ensemble qui lui a valu sa première mention. Il a traité chacun des types de ses maisons en cherchant des décrochements qui doivent évidemment donner lieu à des silhouettes plus pittoresques, mais entraînent certainement de plus grandes dépenses.

Le succès de ce concours, et aussi la constatation sur un grand nombre de points de notre pays d'un mouvement très important en faveur de l'œuvre à laquelle s'est vouée la Société Française des Habitations à bon Marché, a encouragé celle-ci à ouvrir un nouveau concours, qui ne sera clos que le 31 Décembre, 1891.

C'est comme une immense enquête ouverte dans toute la France pour étudier les besoins de chaque région et rechercher les moyens d'assurer à la population ouvrier et industrielle, des habitations salubres et économiques. Ces solutions demandent la collaboration des architectes, des hygiénistes, des économistes, des financiers, qui représentent les différents points de vue du problème, et doivent être unis par la philanthropie pour atteindre le but proposé.

Le concours comprend donc trois parties:

1. — Une enquête, ayant pour but de reprendre, en les complétant, les études commencées, il y a plus de cinquante années, sur la situation des logements à bon marché en France, tant dans les villes que dans les campagnes, aux abords des grands établissements industriels, agricoles ou miniers.

Pour chacun des concurrents, cette enquête se restreindra à une localité déterminée de manière à constituer une sorte de monographie locale.

2. — Un projet, soit de maisons collectives à plusieurs logements, soit de maisonnettes isolées ou groupées, pour remédier aux maux signalés par l'enquête.

3. — Les combinaisons financières à adopter pour édifier ces constructions et en assurer, quand ce sera possible, la propriété à leurs locataires. Les récompenses comprennent: un grand prix représenté par une médaille d'or de trois mille fr., qui ne sera décernée qu'à celui des concurrents qui aura présenté le meilleur travail répondant aux trois parties du programme. Puis, pour ceux qui n'auraient traité convenablement que telle ou telle de ces trois parties:

Une médaille d'argent de mille francs.

Deux médailles d'argent de 500 francs.

Des mentions honorables avec médaille de bronze de la Société.

Les concurrents doivent être Français.

Nous tiendrons nos lecteurs au courant de ce mouvement si intéressant et nous traiterons, en leur temps, les questions qui s'y rattachent.

M. BRINCOURT.

der dritte Preis zukam, machten sich bemerkbar durch die gute Einrichtung ihrer Häuser von vier Etagen. (Man sehe die beigegeben Pläne.) Eine geräumige Treppe giebt auf jeder Etage Zutritt zu zwei Gelassen, bestehend aus je drei Stuben, einer Küche und einem Abtritt. Die beiden letztgenannten Räumlichkeiten sind sehr sinnreich von einer offenen Galerie aus beleuchtet und ventiliert. Ein Schacht in der ganzen Höhe des Hauses ermöglicht die rasche Beseitigung von Abfällen.

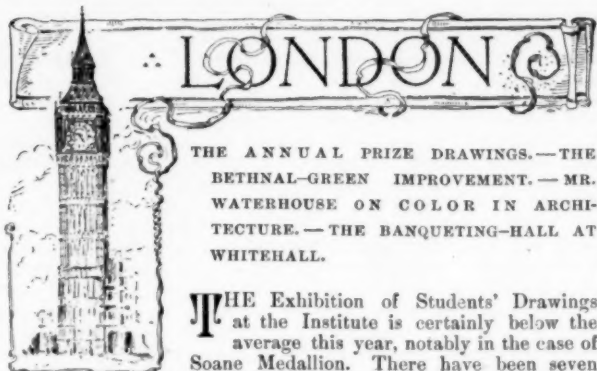
Was Herrn Paumier anbetrifft, so war es vor Allem die gute Disposition seines Gesamtplanes, welche ihm die erste Erwähnung eintrug. Er hat die verschiedenen Typen seiner Häuser mit Rücksicht auf ihre gegenseitige Wirkung behandelt, wodurch sich augenscheinlich mehr malerische Silhouetten ergeben mussten, freilich aber auf Kosten der Billigkeit. Der Erfolg dieses Preisausschreibens, sowie die Constatirung einer sehr kräftigen Bewegung in vielen Theilen unseres Landes zu Gunsten der Ziele welche sich die "Société Française des Habitations à Bon Marché" gesetzt hat, hat letztere ermutigt eine neue Concurrenz zu eröffnen, welche am 31 December, 1891, schliessen wird. Dieselbe gewinnt die Gestalt einer ungeheuren, sich über ganz Frankreich erstreckenden Untersuchung zum Studium der Bedürfnisse jedes Landestheiles und der Erforschung der Mittel, welche nöthig sind um der Arbeiterbevölkerung gesunde und billige Wohnungen zu sichern. Die Lösung dieser Fragen bedarf der Mitarbeiterschaft der Architecten, der Hygieniker, der Nationalöconomen und der Geldleute, indem diese die verschiedenen Gesichtspunkte des Problems repräsentiren und durch die Menschenliebe vereinigt werden müssen, falls der gewünschte Zweck erreicht werden soll.

Die Concurrenz wird daher drei Theile umfassen: — I: Eine Untersuchung, deren Zweck es ist, die vor mehr als fünfzig Jahren begonnenen Studien über die Lage billiger Wohnungen in Frankreich, in den Städten sowohl wie auf dem Lande, in der Nachbarschaft der grossen gewerblichen, ackerbaulichen und bergwerklichen Etablissements, wieder aufzunehmen und zu Ende zu führen. Für jeden Concurrenten wird sich diese Untersuchung auf eine gewisse Localität beschränken, um auf diese Weise gewissermassen eine locale Monographie zu erzielen.

2: — Ein Project zur Herstellung, entweder von Collectivbehäusungen mit mehreren Wohnungen, oder von isolirten oder gruppirten Häusern zur Beseitigung der Uebelstände, welche die Untersuchung ergibt.

3: — Die zu ergreifenden finanziellen Massregeln, welche nöthig sein werden den Bau durchzuführen und, womöglich, den Miethern die Erwerbung des Eigenthumsrechts zu sichern. Die Prämien bestehen aus einem grossen Preis, in Gestalt einer goldenen Medaille im Werthe von 3,000 Franken, welche nur demjenigen unter den Concurrent, en zuerkannt werden wird der die beste Arbeit über alle drei Theile des Programms liefert. Ferner, für diejenigen welche nur den einen oder den anderen der drei Theile genügend behandelt haben: — eine silberne Medaille von 1,000 Franken; zwei silberne Medaillen von je 500 Franken; ehrende Erwähnungen, nebst der bronzenen Medaille der Gesellschaft. Die Concurrenten müssen Franzosen sein.

Wir werden unsere Leser in Betreff dieser interessanten Bewegung auf dem Laufenden halten, und werden, von Zeit zu Zeit, die Fragen behandeln, welche damit zusammen hängen.



THE ANNUAL PRIZE DRAWINGS.—THE BETHNAL-GREEN IMPROVEMENT.—MR. WATERHOUSE ON COLOR IN ARCHITECTURE.—THE BANQUETING-HALL AT WHITEHALL.

THE Exhibition of Students' Drawings at the Institute is certainly below the average this year, notably in the case of Soane Medallion. There have been seven sets of drawings submitted for this competition, but there is not one which shows any firm grasp of the subject. There is a want of proportion and of knowledge of detail in the elevations, some of which are really badly drawn, and the plans seem for the most part careless and ill-considered. The subject, a Technical College, was certainly difficult, as the question of technical education has not yet received sufficient attention in England to warrant the establishment of many leading principles, such as those which govern the planning of schools or hospitals; but, even admitting this, the type of design was far inferior to that which obtained some three or four years ago.

The Pugin Studentship has brought out some more excellent gifts. Mr. Greenslade, the successful candidate, is a master of the pencil. He works with a firm, accurate line on metallic paper, ignoring the material and all the incidentals of his subject, and contenting himself with a somewhat severe representation in outline. Most unfortunately, he is an enthusiastic devotee of the scrappy style, wherein it is usual to simply show a small piece of moulding at the springing and key of an arch-mould, leaving the spectator to imagine the intervening portion. This method, carried to excess, as, for instance, in a complicated vault, tends to render the drawing, as very dryly described by Mr. Millard, a "fine description in shorthand." Mr. Greenslade was hard pressed by a disciple of Ruskin, Mr. D. J. Blow, and the comparison of the two collections of sketches, placed side by side, was very interesting, representing, as they did, two diametrically opposed schools of thought. While Mr. Greenslade was severely accurate, and despised all meretricious aids, Mr. Blow's drawings were full of feeling, almost poetical, grasping eagerly, even accentuating, the externals which Mr. Greenslade ignored. To the one, the outline was everything and the appearance nothing, while the other drew as he saw, and cared only for his impressions.

The Owen Jones Studentship proved the success of the year, and produced a first-class competition. This continued advance of the study of color by students of architecture is very encouraging, and leads one to the hope that we are in measurable distance of the time when color will take its proper place in an architectural ensemble. The President of the Institute, in his address, referred to this subject of color very fully, as described elsewhere. Mr. Francis W. Bedford carried off the prize.

The Tite Prize, the essay, the measured drawings, the Godwin Bursary, the Grissell Medal and the Scientific Masonry Prize were all poorly competed for, and in no case was any work produced above the average, in many cases, indeed, it fell distinctly below.

The Association has at length completed its prolonged and wearying discussions upon its rules, and is now furnished with not only a new set of rules, but a brand-new "Constitution," which is to be almost as unchangeable as the laws of the Medes and Persians. Having spent about nine months in discussing technical questions raised upon the new education scheme, it is to be hoped that some vigorous and decisive steps will be taken to carry the scheme into effect.

The London County Council is proceeding apace with its great Bethnal Green Improvement Scheme, to which I referred in detail last month. The Housing of the Working Classes Committee presented a report to the Council on January 27, which described in some detail the course the Committee deemed it best to pursue to secure the satisfactory execution of the scheme. The report recommended that the area should be divided into three sections, and it was proposed that Section 1, which contained the most insanitary portions of the area, should be first cleared away. When dwellings for the working classes had been erected on Section 1, Section 2 would be commenced, and those displaced from the latter section could find accommodations in the new buildings on the former. Section 3 would then be dealt with in a similar manner. There would be displaced from the whole area 5,720 persons, and in four-storied dwellings there would be ultimately rehoused about 4,600 persons; but their proposal provided for housing about 2,000 persons elsewhere, to enable a part of Section 3 to be dealt with for purposes of a more remunerative character. The accommodation for the 2,000 persons outside the area was made up by vacant accommodation which was found to be existing within the near vicinity of the area itself, and by similar vacant accommodation in the suburbs

within easy reach of the area by train, by new buildings which are to be erected by the Guinness Trustees near the site, and partly by some new buildings the Committee proposed that the Council should erect itself on a vacant site in Goldsmith Square, about 1,000 square feet from the area itself. This latter proposal met with the greatest opposition in the Council, for it places the Council in the position of builders, and enables them to produce dwellings for the working classes at a cheaper rate than is possible at the hands of private individuals or companies, because the Council has only to realize enough profit to pay low rate of interest on municipal loans which it would raise to cover the costs of building. This principle, it is contended by many, is in direct contravention of the acknowledged laws of political economy, and would inevitably tend to stifle private enterprise, and so do more harm than good. The advocates of the proposal contend, however, that the advantages of the command of this low rate of interest will enable the Council to deal with the sanitary question of dwellings in a more masterly manner, and, instead of lowering the rents, to benefit the poor by providing them with larger rooms, more spacious yards and playgrounds, and sanitary conveniences which financial difficulties prevent their having at present. The Council, after a long debate and many amendments, decided to purchase the site, but, by a verbal alteration in their resolution, shirked the final decision on this important question.

We had the pleasure of hearing from Mr. Waterhouse upon the occasion of his last address to students from the Presidential Chair of the Institute, a very fascinating and instructive lecture upon "Color in Architecture." After aptly introducing his subject by a courteous reference to the generosity of the last surviving sister of Owen Jones who had recently bequeathed all her property to the "studentship for the study of color, which had already been founded as a memorial to her brother," he deplored the inability of the English nation to realize its ideals of color in architecture. For this failure he assigned two chief causes: one, our national inaptitude for the task, our want of the true instinct for color, and secondly, our climate, which requires far more attention and care to avoid color contrasts in violation of good taste than is needful in sunnier climes. The constant presence of smoke in ever-increasing density was another enemy the artist in color had to contend with, especially in London, though the President felt that there was one material extensively used in London, which was absolutely improved by smoke, and that was Portland stone. This is very true, and the curious harmony in black and white presented by many of our national buildings situated in London is most striking, but, as Mr. Waterhouse truly observed, "harmonies in black and white can hardly be called great achievements in color."

Then again, another difficulty to be contended with was the opposition felt at the present day to anything approaching crude contrasts of color. "Former ages," said the President, "even the most refined were not only tolerant of excess of color, but delighted in it in a way which would be repellent to our present peculiar phase of civilization," and then he laid it down that though it was not necessary to abandon all color in this critical age, it would have to be used with reserve and judgment if it were to find acceptance with the phase of cultivated taste peculiar to the present day.

The application of color to the various materials of commerce such as tiles and faience led to some very thoughtful remarks, but when the President reached the question of the stained-glass of modern times, his feelings burst forth in an anathema maranatha, "Of all the stained-glass with which the churches of this country have been flooded within the last half century, there is not one bit in a hundred that could not be very easily spared. In the majority the drawing is bad, the sentiment is mawkish, and the color, which is the real excuse for shutting out the cheerful light of day, is the worst thing about these stained-glass windows; and yet there they are for all time, unless conflagrations, or another revolution conducted like our first by iconoclasts intervene to rid us of them. The old glass we could ill spare; but, with some few rare exceptions it is different as regards that which has succeeded to its place of honor."

An alteration has lately taken place in the use of the banqueting hall at Whitehall, the only piece of Inigo Jones's great conception of a royal palace at Whitehall that was ever built. Until quite recently this building was used as a chapel royal for the celebration of divine service, but it was considered desirable to discontinue the services and to utilize the building as a Museum for the United Service Institution. The fear that this change of purpose might possibly result in damage to the building, induced the Institute to forward a memorial to Lord Salisbury, wherein it was stated that the building was a remarkable record of seventeenth-century art, and pointing out that the ceiling of the hall was adorned with paintings by Rubens. The memorial went on to say, "The fact that the Chapel Royal at Whitehall has been closed and the rumored possibility of its conversion to purposes likely to necessitate serious modifications of the interior, have induced the Council to express to your lordship [Lord Salisbury] an earnest hope that, to whatever use the government may hereafter devote the building, no structural alterations, internally or externally, may be permitted to mar its beauty as a great work of architecture—the most celebrated example the country possesses of the genius of Inigo Jones." This action of the Institute has been warmly approved by the profession at large, and it is to be hoped that it may be regarded as an earnest of the position the Institute contemplates assuming in future as the authorized champion of our national buildings against all unwarranted interference.

Two interesting lectures have lately been delivered at the Architectural Association on "Opaque Glass" (or Glass Mosaic) and "Wood Carving." It will be remembered that I gave an account of a meeting at the Institute upon a recent occasion dealing with the subject of "Decorative Plaster Work." February 20, the Architectural Association is going to listen to papers on "Marble and Mosaic." These papers, stimulating interest and inquiry into the various crafts which are really part of the great art of architecture, are of the highest value to students and the hope is felt that similar subjects may be treated from year to year.



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

HOUSE OF SAMUEL K. WARD, ESQ., 1608 K STREET, WASHINGTON, D. C. MESSRS. HORNBLOWER & MARSHALL, ARCHITECTS, WASHINGTON, D. C.

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

FLATS FOR J. CALDWELL, JR., LOUISVILLE, KY. MR. J. J. GAFFNEY, ARCHITECT, LOUISVILLE, KY.

CHURCH OF THE SACRED HEART OF SAINT MARY, DETROIT, MICH. MESSRS. SPIER & ROHNS, ARCHITECTS, DETROIT, MICH.

COTTAGES AT BUCHANAN, VA. MR. PERCY ASH, ARCHITECT, BUCHANAN, VA.

THESE cottages are built by the Central Land Company of Buchanan. The contract-prices for Major Johnston's house and for cottages Nos. 1 and 5 were, respectively, \$1,200, \$800 and \$1,000.

CHURCH FOR THE BETHLEHEM PRESBYTERIAN SOCIETY, ST. PAUL, MINN. MESSRS. GILBERT & TAYLOR, ARCHITECTS, ST. PAUL, MINN.

THIS church, which cost about \$8,000, is built of rough yellow quarry-stone from local quarries.

THE CHARLESGATE APARTMENT-HOUSE, BOSTON, MASS. MR. J. P. PUTNAM, ARCHITECT, BOSTON, MASS.

THE "Charlesgate" apartment-house is now being built on the Back Bay Park, corner of Beacon Street and Charlesgate, East. The basement and first story will be constructed of Indiana limestone, the remainder of brick, with limestone trimmings. A picturesque effect is obtained by grouping the bays on the Charlesgate East front in pairs, and surmounting each pair with gables of brickwork in the Queen Anne style, and by relieving these features against a high roof of green slate. The Beacon-Street front repeats the motif of the Park front in the form of the gables. The building is to be of the slow-burning construction. All the main partitions from basement to second story are of brick. Above this, the main partitions are to be of 4" x 8" posts, protected by plaster and resting on iron partition-caps. All the floor-joists throughout the building will rest on either brick or iron, and in no case on wood caps. There will be no furring-strips on brickwork or floor-joists, and, consequently, no wooden flues for the transmission of fire. The plastering will be applied directly to the brickwork and to the joists. Moisture will be kept out by a peculiar method of vaulting in the exterior walls, whereby both basement and roof space are thoroughly ventilated, the ventilating current passing through the vaulting and drying out the moisture which permeates the outer walls. Condensation is prevented by the use of galvanized-steel bonding-ties. A sheet-copper bond is used over every window in the building, and serves the double purpose of a bond and a water-shed.

The roof rafters will be of iron. The floors will be thoroughly deafened with four or five thicknesses of asbestos and other felting. Every apartment will be provided with both direct and indirect heat-supply, and also with open fireplaces. An external fire-escape staircase of iron will be built on the rear walls, accessible from every suite, and descending to the inner court-yard or garden. Every bath-room will be ventilated by a special 8" x 8" brick flue, and every suite will have one or more special fresh-air supplies, through brick flues, independent of any other suite, the fresh air being warmed in the basement on special steam coils up to about 65° Fahrenheit before being introduced into the suites. The main entrance halls and corridors will be built of fireproof materials, and the staircases will be built of marble on the entrance and basement floors. There will be four electric elevators, and the building will be lighted by electricity throughout. The ground-plan of the "Charlesgate" lot is peculiar in having a large open area in the rear for sun and air. Of some 14,000 square feet in the plot, about 6,000, or over a third, is to be left open and laid out in grass-plots and flower-beds; while the building, being of an L-shape, following the lines of the two streets, has practically at no point a depth of more than two rooms, and every rear room is allowed almost unlimited sunshine.

This, too, is done in face of the fact that this particular corner has a very unusual amount of open space in its outlook, facing to the southwest a broad park, and to the northwest a broad river-basin, with, in both cases, an almost uninterrupted view of the hills and country beyond. Nevertheless, the first result of this experiment has proved, by the rapid renting of the suites, that even from an economic point-of-view this sacrifice of land was advisable.

This result, to be sure, in this instance, was undoubtedly partly due to the exceptional situation of the building in its outlook from both streets on the front of the park and river, but beyond doubt the result should be equally attributed to the liberal allowance of rear land and sunshine. Even if, as in this instance, the suites of rooms were let at rentals no higher than those of corresponding size in the more contracted situations, the fact of having a building absolutely filled at the outset, and presumably kept filled afterward, will fully make up for the loss usual with ordinary apartment-houses in the first year or two in getting a complement of tenants, while from the more important sanitary point-of-view much is gained. A large number of the people constantly coming into city apartments do so from the country or suburbs, and exchange, for the sake of convenience, sunny rooms for ones half of which—occupied, too, by men, women and children—hardly ever have a ray of sunshine. However careful the sanitary conditions are as to ventilation and plumbing, the change cannot be a healthful one, and it is much to be wished that in the construction of apartment buildings the investors would carry out the general idea in the plan of this one, and not only gain for their tenants these very essential advantages so far as health is concerned, but further, even at some small sacrifice of land, give their architects sufficient latitude to admit of effective exteriors among a class of buildings becoming yearly more and more conspicuous on our city streets.

[Additional Illustrations in the International Edition.]

MONUMENT TO THE GRAND ADMIRAL GASPARD COLIGNY, PARIS, FRANCE. M. CRAUK, SCULPTOR, M. SCÉLLIER, ARCHITECT.

[Photogravure.]

GASPARD COLIGNY, Grand Admiral of France, a thinker of much force and a most sagacious observer, unfortunately for himself, succeeded, two centuries too soon, in disentangling from the half pagan Italian form of worship, with its solemn pomps and superstitious rites, a simple but austere form of religious belief and practice. Yet the too great contrast between the rites observed by Coligny and his coreligionaries and the established forms of worship brought upon them discredit and abuse, and finally cost them their lives. Amongst the many disgraceful blots on the history of France, the Massacre of St. Bartholomew is one of the most ineradicable. He must be either a king or—an Italian to cut the throats of sleeping and unarmed Frenchmen to the sound of the midnight tocsin. We have little concern with the quarrel between Catholicism and Protestantism, but over the fog of old-time prejudices the indignant soul to-day rises to pay its salute to Coligny as an admirable type of Gallic independence and liberty of conscience. The sculptor, Crauk, has admirably caught and interpreted this feeling of revolt, which expresses itself in the Coligny, and serves to attract the attention of the passer and remind him of that disgraceful, though historic, incident. M. Scellier, of Gisors, has prepared for the statue an architectural background and support which admirably harmonizes with the statue, and is so refined and consistent that it is thought worth while to reproduce the work in detail.

PLAN, SECTION AND DETAILS OF THE SAME.—FOUR PLATES.

[Photogravures.]

ORGAN, ST. SEPULCHRE'S, HOLBORN. MR. W. D. CAROE.

WINDOW, DORCHESTER CEMETERY CHAPEL. MR. C. W. WHALL.

MEMORIAL WINDOW. MR. C. W. WHALL.

HOUSES IN BECKENHAM PARK, BECKENHAM, KENT. MR. G. WARREN COOPER, ARCHITECT.

ONE of the houses was built for Mr. T. H. Wallis, and contains three reception-rooms, billiard-room, about eight bedrooms, dressing-rooms and bath-room. The brickwork is of red bricks with stone dressings, and the roof is boarded and covered with Broseley tiles. All the barge-boards and sashes and frames are of oak. It has about an acre and a half of ground, and is approached from the lodge entrance of the park, and also from the main road. The other house was built for Mr. Horton with similar materials.

THE EARNINGS OF THE BUILDER ARCHITECT.—To combine the functions of builder and architect is an arrangement that does not carry with it the emoluments of both. This was recently made apparent when Mr. Wilson Garner, "builder and architect," sued Mr. George Lindsay in the Margate County Court for the balance of a building account, including five per cent for his "architectural duties." These, it seems, included the preparations of plans and the supervision of the work. The judge, however, could not see why a builder should be paid for supervising his own work, and the architectural portion of the claim was therefore reduced to two-and-a-half per cent.—*Specialty.*

BOOKS PAPERS

THE supposedly incendiary fire that, in September last, did considerable damage to the portions of the Alhambra that time, earthquake, war and malicious mischief had left to posterity, excited great interest as well amongst those who have been so fortunate as to visit and delight in its wonders, as amongst those whose heresy knowledge has been enlightened by prints and photographs. The second class is, of course, the larger; but though their regret lacked some of the qualities of acute affliction, through having had no intimate personal knowledge of what had been destroyed, all lovers of art and history are sufficiently familiar with the main features of the building to feel as much aggrieved as though similar mishap had befallen Westminster Abbey or the Cathedral of Notre Dame.

The three parts of Max Jungbühel's superb work¹ that had already appeared had contained many plates illustrating portions and details of the palace-castle, for according to a prevailing European fashion, in the publication of unbound books on art, the plates are not issued in their final order — though this is indicated — but are published in whatever order the several plates chance to be completed; so that one may get half the details of a building before the general view comes to hand, while the plan may not appear till long after interest has been attracted to other subjects. The plan and a general view of the Alhambra had in this way already appeared, but while examining these, attention was so attracted to the Moresque side of the subject, that the existence within the castle of Charles Fifth's unfinished palace was rather overlooked. So it was with something of a feeling of surprise that there was discovered in this fourth portfolio two views which very fairly declare the intention of this magnificent fragment, so wholly at odds with its surroundings, so entirely the prospective home of a great monarch, who, nevertheless — probably because of his dislike for his Spanish subjects — allowed work upon it to cease in 1533. During the seven years of building the exterior had been carried to a height of two stories, and as the building is a square of 220 feet on a side, the work must, while it lasted, have proceeded most industriously, for it is likely that the material had to be dragged from a distance and up a difficult hill. The feature of the building was to be a great circular hall, ninety-two feet in diameter, with two-storied colonnades which are still in place, and waiting, perhaps, for the row of Corinthian shafts that were to complete the ordonnance or, perhaps, waiting for the dome to be sprung over the great space from the main wall just behind them. Perhaps though, this was to be an open *patio*, a kind of modern atrium shaded at times by some substitute for the ancient velarium. If this is so, then there was no special desecration in using this convenient space, with its deep-shadowed encircling corridors, as a bull-ring; for many a bull has, in these later days, been baited to death in the space where Charles V hoped some day to entertain the grandes of Spain. Spanish wealth, however, was dissipated almost as quickly and easily as it was acquired, and the work on this great fragment so strangely pitchforked into the companionship of the fantastic and delicate work of the Moors is hardly likely ever to be finished. At one time there seemed to be a possibility that something more might be done to it, for it was offered to the Duke of Wellington, on condition that he would finish it. Although he had been created a grandee of Spain in return for his aid in driving the French from the Peninsula, Wellington had no love for the natives and did not care for more than an honorary foothold in the country, so that this half-hearted offer of incomplete magnificence was declined with thanks.

Looking at the plain and unattractive exteriors of the Moorish portions of the Alhambra, their plain blank walls and few and small windows scattered over the surface without apparent purpose, one certainly would not expect to find within them the intricate architectural beauties that every one is familiar with.

The nineteen plates of the Alhambra that have thus far appeared, including as they do the admirable bird's-eye view of the whole group and the plan, upon which the station points of the camera are carefully noted, give a better notion of the building than any set of photographs we have ever seen — and these plates will not fade. Two of the plates in this Part are colored and though the chromo-lithographic work is excellently done, for German work, they are just as unsatisfactory as colored views of the Alhambra decorations usually are. They are true to nature, doubtless; but these fragments when taken by themselves are so bright and garish, so loud and vulgar, that the delicacy of the geometric pattern quite loses its value. In such bits as these no impression can be conveyed of the tonality of the whole. Here the bright individuality of some part of the pattern quite stares you out of face, while in the original, the mere quantity of items however vivid they may be in themselves, bring about optical impressions of quite another kind.

This Part does not bring to the same stage of completeness the series of views of other buildings of which it contains one or more details. The Escorial, of which the intense gloom was pictured by Mr. Rich in these columns a few weeks ago, is further explained by a plan and cross-section which do not add much to our knowledge as

the plan is not lettered and there is no legend to describe the distribution of the many divisions of the immense structure. A detail or two is given of the *ayuntamiento*, or town-hall of Seville, of which a portion was illustrated in these pages a short time since — a portion of that wing of the structure where the carved detail has been completely finished, and exhibits a rich though hardly a chaste example of Spanish Renaissance design; the other wing of the building is left quite untouched by the sculptor's chisel and the effect is really quite as good as that of the finished part. The Spanish Renaissance follows the manner of the Italian work in that style — but at a very respectful distance — and it is not often you find an entirely satisfactory composition, though you often come upon bits which are altogether charming though there are no examples of it in this instalment. The Spanish architect of the period felt more at home in the Plateresque, so-called, style where he felt at liberty to be as eclectic as he pleased to the very verge of Barocco. He was an artist with an eye for rich effects, though he cared little for the purity of form and the integrity of style.

The Plateresque style is one which is hard to describe or define, for it seems to have no well settled limits and under this head are classed buildings which cannot properly be classed elsewhere. Yet it is rather a surprise to find our author, whose attributions we have generally been able to agree with, calling the Cathedral of Segovia a Plateresque structure although in other analogous cases he has called such buildings partly Gothic, partly Plateresque. Here at Segovia are crockets and pinnacles in abundance, flying-buttresses and low pointed arches, gargoyles and pierced Gothic balustrades while all that seems to be Plateresque are two nondescript little domes, an entrance — beneath a full-centred arch — around which the Classic orders have been used and a sprinkling of Plateresque panels, escutcheons and so on. Perhaps it is the interior that gives the building its classification but as yet no plate has appeared which shows what is the character of this interior.

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.]

CHIMNEYS.

LOUISVILLE, KY., March 6, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—Can you furnish us or inform us where we can get a work on chimney-flues. What we want is a book that will give us this information, "How to build a flue correctly; causes of smoky flues, and how to correct same."

Respectfully,

HEGAN MANTEL CO.

["The Open Fireplace in All Ages," by J. P. Putnam, Price \$4.00, Ticknor & Co., publishers, is an excellent guide for ordinary practice. "Tall Chimney Construction," by R. M. and F. J. Bancroft, published by J. Calvert, Manchester, England, deals with factory chimneys.—EDS. AMERICAN ARCHITECT.]

THE AUDITORIUM TOWER.

CHICAGO, ILL., March 24, 1891.

TO THE EDITORS OF THE AMERICAN ARCHITECT:—

Dear Sirs,—In the *American Architect* of March 21st, your Chicago correspondent refers to the Auditorium Tower and deduces from its experience an inference unfavorable to the erection of very high buildings.

Please permit me to state that the erection of the Auditorium Tower seems to have exercised the very opposite influence upon architects and property owners in this city. Before the erection of this tower, which is really a small office-building, containing nine offices on each floor, and which is 258 feet high from the foundations to the top of the wall coping (not including an observatory 30 feet high built upon the roof), it was generally assumed by constructors that the limit of height for safe building on Chicago soil was twelve to thirteen stories; but the precedent set by the designers of the Auditorium Tower has encouraged others to extend the height of their buildings to a still greater altitude, the buildings enumerated by your correspondent being the most noteworthy. In the case of all these buildings, however, the system of construction adopted has been a skeleton of steel columns and beams, filled-in with a very light shell of brick or terra-cotta, while the walls of the Auditorium Tower are of solid stone and brick masonry, four feet thick at the sidewalk line, diminishing to two feet six inches at the top. It will, therefore, be seen that the more recent construction very materially diminishes the ratio of load upon soil to height of buildings.

Yet, it is true, as your correspondent states, that the settlement of the Auditorium Tower was greater than the allowance made by its architects; this was due, however, not to any occult or mysterious cause, but to an increase of load from 14,800 tons as designed and calculated, to 16,000 tons, as built, which increase was consequent

¹"Die Baukunst Spaniens" in ihren hervorragendsten Werken, Dargestellt von Max Jungbühel, architect. Part IV, J. Bielel, Dresden; Brentano, Chicago, sole agent for the United States. Price \$10.00 per Part.

upon an addition of 18 feet to the height of the Tower and a radical change in its internal arrangement; all determined upon by the owners of the building nearly one year after the completion of the foundations. The action of the tower was simply another demonstration of the correctness of the theory upon which Chicago constructors work: to wit, that equal loadings per unit of soil area of different adjacent foundations produce equal settlements; that unequal loadings per unit of soil area produce unequal settlements and that the inequality of movement increases very rapidly with increase of load per square foot of soil.

Very respectfully yours,

D. ADLER.

NOTES AND CLIPPINGS

RUINS IN MASHONALAND.—The following information regarding these famous ruins was received from Mr. E. A. Maund by the Royal Geographical Society, London, which he obtained from Mr. Phillips, in correction and amplification of the remarks made by him at the meeting of the Society on November 24, 1890. Mr. Phillips was all over that part of the country in 1890, and was with Mr. Hartley the year after, and saw many old gold-diggings near the hill which then first got its name of Hartley Hill. In 1868 he and Mr. Westbeach crossed the Hanyani and went down the Mazoe. In October, 1871, he was hunting at the junction of the Ingwezi and Lundi Rivers, when a letter was brought to him from Herr Mauch. It was not signed, but the writer reminded him of an adventure they had together with five lions on the Mahalapsi, so that he might identify him. Mauch said he was living with a man named Renders (not Kinders), and was in a bad plight, having been robbed of everything except his papers and gun. He begged him not to bring a Matabele with him, as they were living among the Mashonas. Phillips went and found Mauch and Adam Renders, an American, living on the top of a kopje, a few miles southwest of the ruins of Zimbabwe. It was a pretty place. A waterfall coming down from the ridges above fell into a pan by the hut, in which it disappeared, to come out again in a gushing fountain several hundred feet below, a cave of refuge being close by, with water flowing through it, to which they and their Mashona hosts could fly, and barricade themselves in with a bowlder of rock, when Matabele raiding-parties were afoot. Mauch told him of some ruins in the neighborhood, and next day the party went to see them. It was really Renders who first discovered these ruins, three years before Mauch saw them, though Mauch and Baines first published them to the world, and they only described what the old Portuguese writers quoted by Mr. Maund talked of hundreds of years ago. Mauch, on their arrival at the Zimbabwe ruins, asked what they thought of them. He (Phillips) confessed that he was not greatly impressed, as they were exactly like several others he had seen in other parts of the country. There were the same zigzag patterns, and the mortarless walls of small hewn stones. Shortly before, when hunting in the mountains to the west of Zimbabwe, he had come upon a regular line of such ruins, one of which must have been a very large place. It had three distinct gateways in the outer wall, which were at least thirty feet thick at the base; and an immense ironwood tree, that would have taken hundreds of years to grow, had grown through a crevice in the wall and rent it asunder. On the side of a gateway were vast heaps of ashes, with occasional potsherds about, the only evidence of the old inhabitants. He had found the same kind of ruins all over the country, very frequently on the summit of difficult kopjes. Those at Tati and Impakwe are good examples; but the most perfect, perhaps, of all lies northwest of Tati. The tower there is about sixty feet in length and breadth, and eighty feet high; the walls about fifteen feet thick; and it is entered by a passage winding spirally to the top, which is so arranged as to be commanded by archers from the interior all the way, and is so narrow that it admits of the passage of one person only at a time.—*Science.*

THE VYRNWY MASONRY DAM.—This work has lately been completed for the purpose of storing the waters of Vyrnwy lake for the city of Liverpool. Aside from its engineering features—which are sufficient to make it notable—its architectural symmetry is such as to attract instant attention. There are captious critics who denounce in unmeasured terms the desecration of picturesque localities by the engineering structures which the exigencies of our civilization call into existence. In many cases such reproaches may be deserved, since the engineer, in the effort to accomplish his objects, has in mind the great questions of economy and utility, and places so low a value upon the architectural and general artistic effect of his work, that these are ruthlessly sacrificed wherever they may come into conflict with the others. In this case, the eye of both engineer and artist will be charmed with the effect, and the natural beauties of a picturesque region, if not enhanced by the artificial structure, at least are not marred thereby. We give in what follows, a brief outline of the more important facts and figures relating to the Vyrnwy dam. The artificial lake formed by it has an area of 1,165 acres and is $67\frac{1}{2}$ miles from the previously-existing storage reservoirs. In order to obtain the required storage-capacity for the Vyrnwy lake, it was found necessary to give the dam a height of 144 feet above the lowest part of the bar of rock on which it was constructed, and of 84 feet above the bed of the river. The length of the embankment is 1,255 feet. Above this again, a viaduct, 1,173 feet long, is built upon the dam, the central portion, 593 feet long, of this viaduct being carried upon arches. Beneath these arches the overflow from the lake passes in times of flood, and falls over the back of the dam to an artificial basin below. The compensation water to the Vyrnwy and Severn Rivers is discharged through the dam near the river-level by one of two tunnels, or sluice-valve culverts, each fifteen feet in

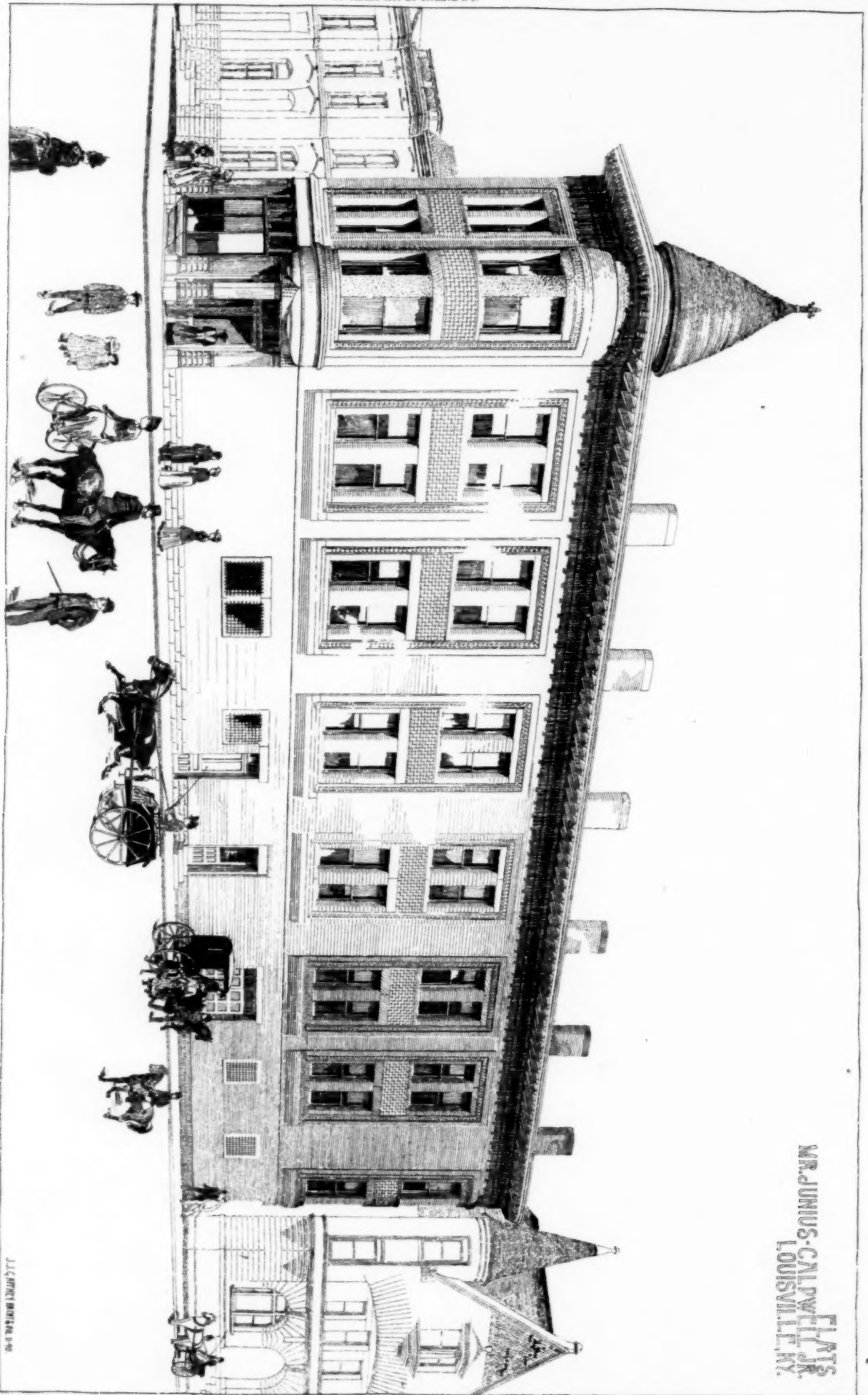
diameter. The area of a cross-section of the wall composing this dam is 8,972 square feet; its weight, one foot thick, 644.2 tons; length of the base line, 117.75 feet. The material used in its construction is what is called, most appropriately, Cyclopean rubble. Thirty-three per cent of the stones weigh over four tons each, and twenty-one per cent weigh between two and four tons. The lake formed by the Vyrnwy dam stands at a height of 525 feet above the level of the sea, and a natural flow of the water the entire distance to Liverpool is thus afforded.—*Manufacturer and Builder.*

SAND BRICKS.—According to the *Brickmaker*, bricks are now being made from the waste sand employed in grinding and polishing plate-glass. Plate-glass is ground by means of wooden plates covered with iron, between which quartz sand abundantly moistened with water is brought. By the manipulation of grinding, the quartz sand becomes mixed with particles of iron and sand, and, after it has lost its sharpness, is piled up near the manufactory as worthless material. This sand contains about 15 per cent of glass particles and 2 per cent of iron particles. It is very hygroscopic, and before it can be used for the manufacture of bricks, has to be dried, and is then pressed into the mould under enormous pressure. The bricks thus obtained are subjected to a temperature of 2,732 degrees F. At this temperature the glass enters into combination with the sand. The bricks thus produced have a specific gravity of only 1.5; they are perfectly white and are not attacked by acids, and for this reason would be especially desirable for use in factories of chemical products, particularly in factories of sulphuric acid: they also resist frost.

TRADE SURVEYS

WITHIN the past ten days or two weeks, a very large amount of business has been transacted by builders and others engaged in various construction enterprises in the way of securing raw material for the coming season. The activity has extended over almost the entire line of construction-material, from iron and steel down to the smallest articles that go into house, mill and shop construction. Large contracts have been made for brick, lumber, cement, planing-mill supplies, shingles, lath and hard woods in different states of completion, as well as builders' hardware, electrical supplies and a long list of other products which must be ordered for weeks or months before they can be delivered. This activity has not yet shown itself in the iron markets. So far as it goes, it shows that there will be a great deal of work done, but there is no telling as yet whether the volume of work will reach or whether it will exceed that of last year. Builders, engineers, contractors and others have been rather slow to begin, but the break they have just made affords some encouragement that the season will be up to the average. So far as can be learned, the prices at which goods and supplies have been bought are a little below the prices of last year. Prominent builders who have been consulted with regard to the probable course of building activity say that there will be much more building in small towns and cities this year than last; in short, they think the tendency to decentralization of industries is more strongly marked than heretofore. They also note the fact that there is a stronger tendency in the translocation of industries from one State, city and town to others. This is especially true as between the Northern and Southern States. A great many industrial establishments are being transferred from the North to the South, but it is doubtful whether the capitalists in the South are greater than in the North; that is to say, the extensions and additions to industrial establishments in the North will probably more than offset the planting and transplanting of new establishments in the South. With reference to the labor question, there is as yet nothing upon which to base opinions or inferences. The only general strike anticipated is that of the miners, as has been stated. Negotiations for more favorable terms with workmen are in progress in New York, Chicago, St. Louis and in four or five farther Western cities. The builders in these cities think these negotiations will terminate harmoniously, and that work will be continued without interruption. With reference to the monetary situation, there is still a good deal of dissatisfaction, not so much among the banking interests themselves as among the smaller class of borrowers, who are comparatively new in business. Old established concerns find no difficulty in effecting loans and in being accommodated. There is a large class of new and small concerns that are compelled to struggle; first, because of the fact that there is a sufficient demand for all available money from the older concerns, and, second, because of the fact that the new concerns are not sufficiently known, or do not possess the proper commercial standing. With reference to the agitations in the Western States concerning mortgage loans, it must be said that money-lenders have cause for discouragement, at least on the surface. It is hardly probable, however, that the discontent will assert itself finally in the enactment of actual vicious legislation. Glowing reports continue to be received from the farther West, and especially in the mining sections and in those developing industries which follow in the train of prosperous mining. A great deal of capital which has been afraid of railroad enterprises is drifting gradually and in a fragmentary way into enterprises of one sort or another in the far West. Land-values are improved in that locality, and are following the course of the improvement in the Gulf States. In the Southwest there is also noticeable a continuance of industrial activity. Shops and factories are springing up in Texas, where it might be supposed there was very little room for them. This tendency has been referred to heretofore, and it is referred to again only to emphasize the fact that the springing up of little shops and factories in remote States is going on at a greater rate. The industries in general are in a thriving, though not strictly in a vigorous condition. Manufacturers are working only up to a safe and clearly-defined demand. Jobbers report a good demand in all lines and kinds of goods. Textile manufacturers are pretty well satisfied with the shape things are taking. Southern cotton goods are meeting with fair demand, and the projection of new factories is quite frequent. Carriage and wagon works are very busy at present. Farmers and cotton-planters are evidently preparing to extend their areas of cultivation. With all the complaining that is heard concerning financial conditions of the cultivators of the soil, they are, in fact, improving year by year, and are less subject to extortionate rates either from banks or from petty merchants.

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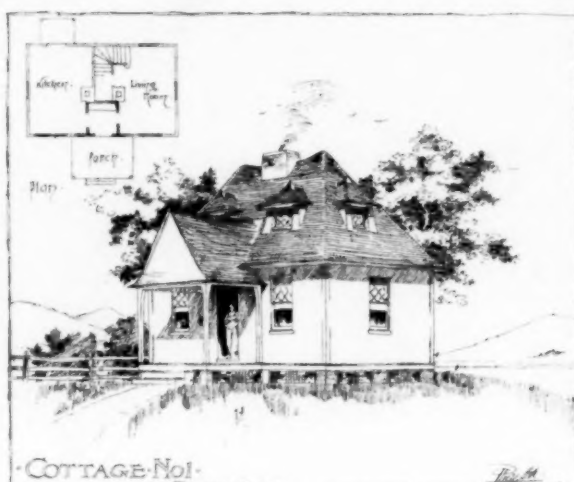
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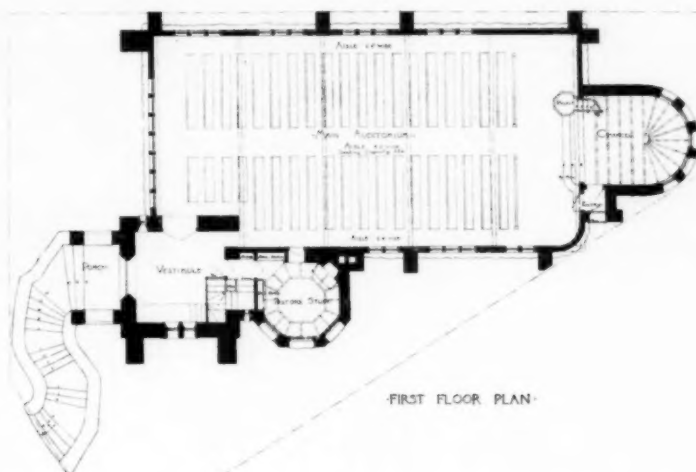
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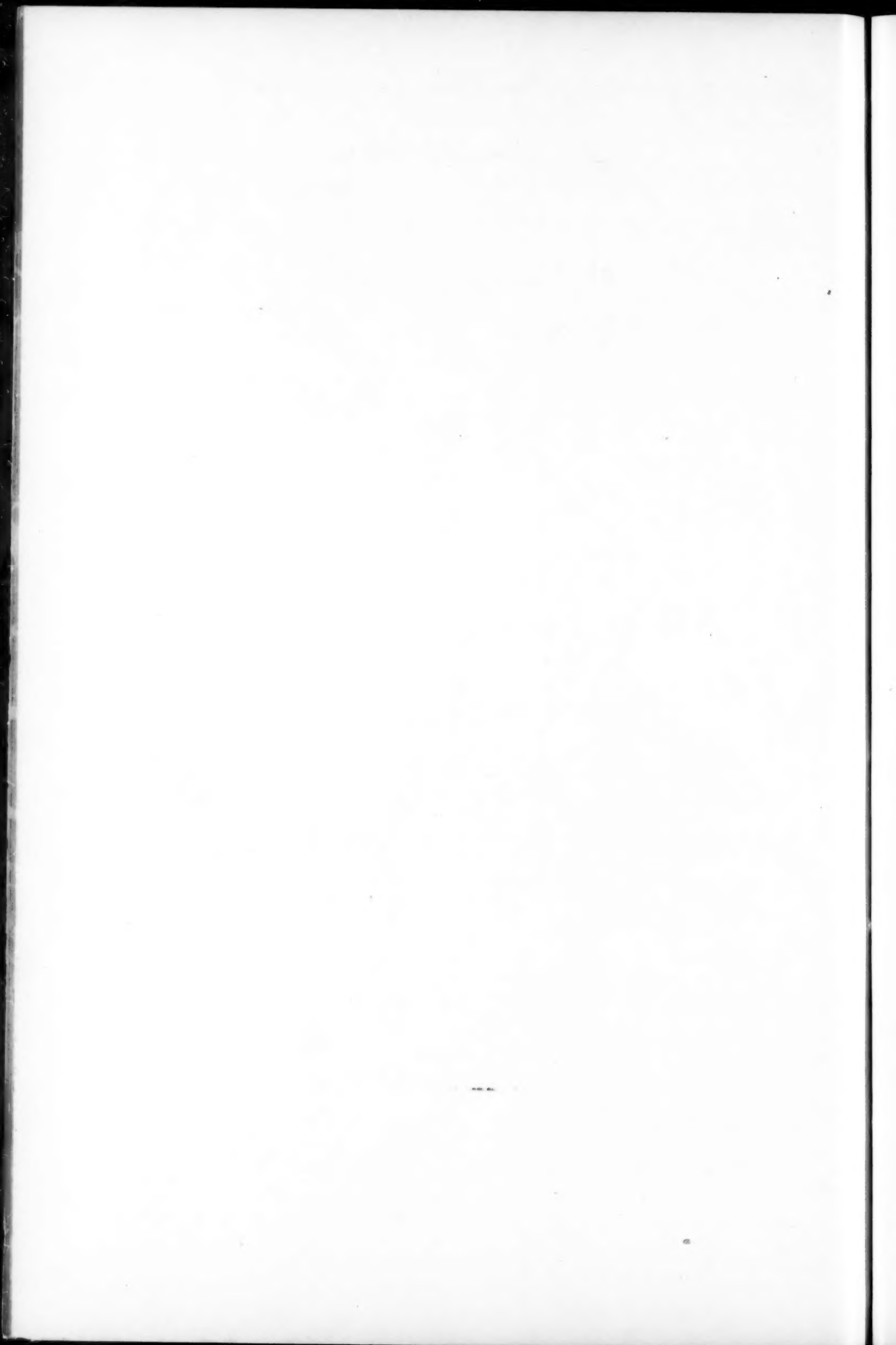
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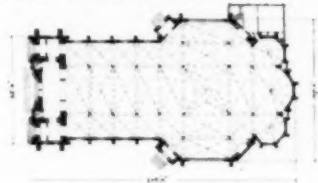
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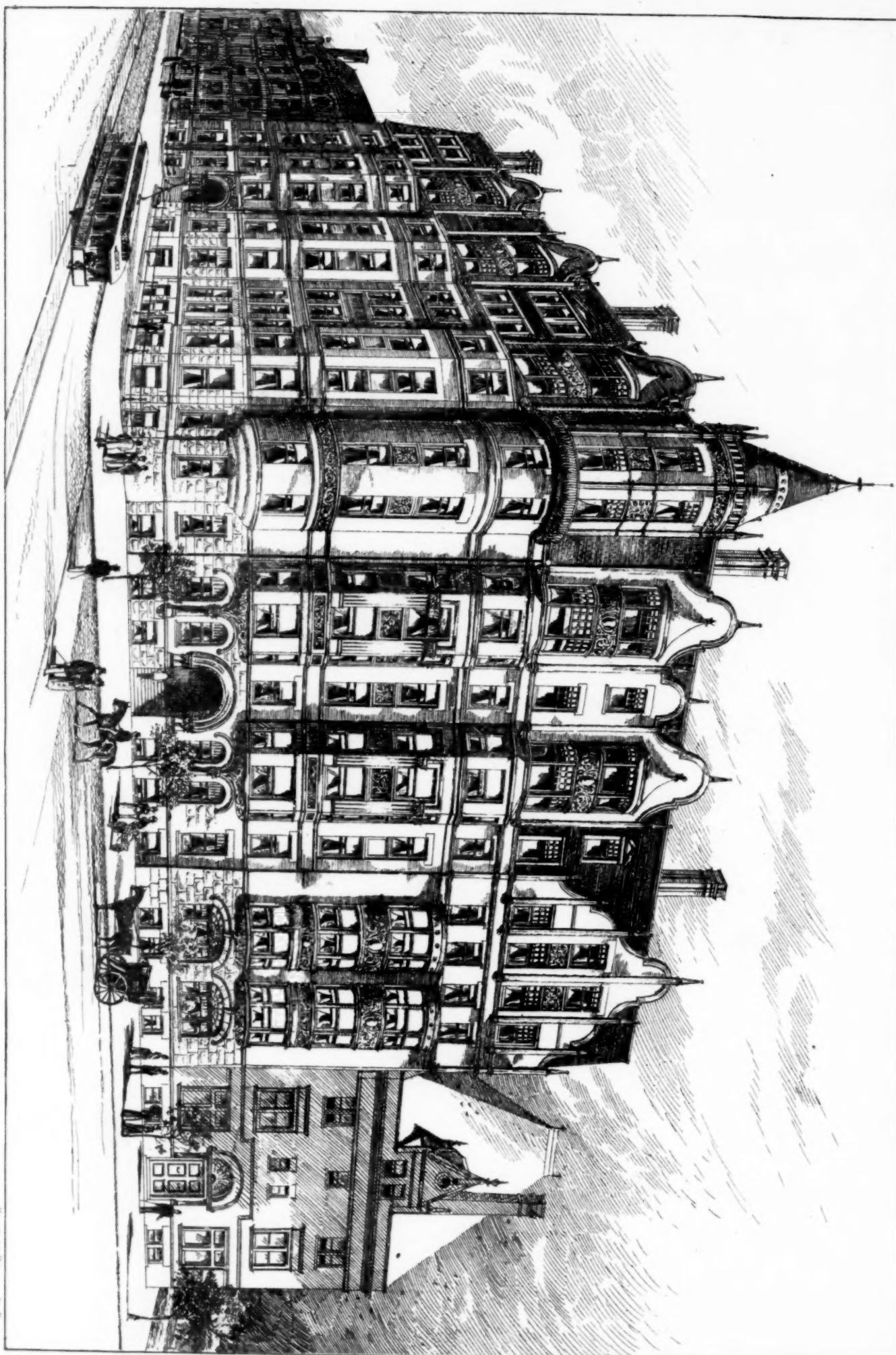
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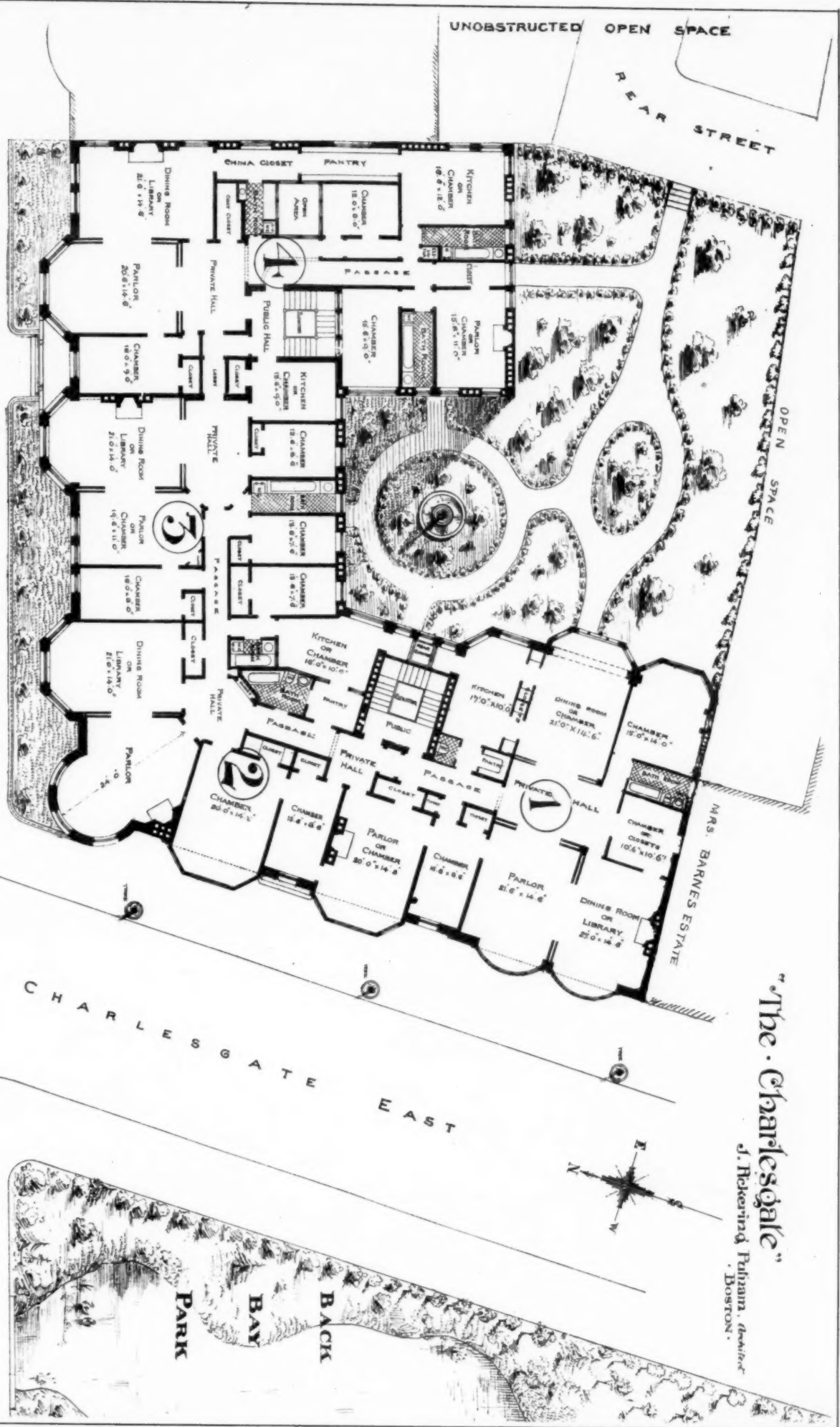
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J. McKim F. Johnson, Architect
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