

this responsibility on himself for a year, and with the time thus gained it was possible for the Hungarian State Railways to arrange a competition for the planning of a new station building, but the rules of the competition also made provision for proposals for the modernisation of the existing building.

Out of the 43 entries submitted, the first prize was awarded to Dr. Tibor Sigray because his plan envisaged the retention of the historical structure and its reinforcement in an ingenious fashion. This produced the best possible result for the monument, both from the functional and the aesthetic aspect. In the opinion of the jury, the many proposals for a new building had not succeeded in finding a solution on a par with the original building. Under Sigray's plan, the corroded parts, which accounted for 50 % of the structure at some points, were replaced and the static regulations were satisfied by the application of scarcely noticeable reinforcements.

There was a further problem which still remained to be solved. On account of the great volume of building works in progress which were causing great strains on the country's industry anyway, Hungary's iron mills were booked up for years and would not have been very willing to undertake the works involved in the replacement and reconstruction as they would have entailed a very great deal of specialist work. However, time was short because the train shed was to be incorporated in the new metro station then under construction. The train shed would have to be ready in time for the opening of the new metro.

The Hungarian State Railways solved the problem by entrusting the work mainly to older specialists in the railway operating depot at a small village for which their predecessors a century earlier had had to go to Paris to the world-famed firm of Eiffel.

The reconstruction works were completed on time and cost less than the 100 million Forints (about 900.000 Marks) originally forecast. The restoration of the train shed is, of course, being followed by that of the adjoining station buildings. This work is still in progress. The completed royal waiting room is an example of the success already attained.

LES GRANDS MAGASINS: PARISIAN CIVIL ENGINEERING ARCHITECTURE IN THE SECOND HALF OF THE NINETEENTH CENTURY

Ruth-Maria Ullrich

Since the middle of the last century, the appearance of the Parisian townscape has been given a characteristic stamp by representative major buildings, the manifold space programme of which required a large building volume so that the area occupied by the construction often necessitated several blocks of houses. This form of block construction - in general a characteristic of public buildings, such as Garnier's Grand Opéra and Lefuel's new wing in the Louvre - also became a characteristic feature of private commercial organisations, the "Grands Magasins".

In 1907, Paul Göhre compared them to ocean liners, "in their interior every inch of space is exploited as carefully and thoroughly as possible, into which the whole complicated life of modern society is compressed. Both, the ocean liner and the department store, are triumphs of modern socially organised work".

The space concept of the "Grands Magasins" included a central hall and staircase for the circulation of the public, galleries for the sales of the various kinds of goods, "comfort rooms" for the customers, such as a buffet room, a billiard room, a library, an art gallery and a winter garden, then studios, administrative offices, dormitories and dining rooms for the staff, basements for the stores, heating, lighting and water supply, stables for the cavalry, depots for the delivery carts.

However, the facts of the history of the construction of the major Parisian department stores show that they were not constructed on a gigantic scale right from the beginning. Generally the company grew up from small beginnings in a small boutique with the continuous purchase of further shops and dwellings. Only after the whole block of houses had been acquired was it possible to begin with the construction of the final structure. Thus in 1867 nine houses along the Quai de la Mégisserie fell victim to "La Belle Jardinière", by 1881 the "Le Printemps" site covered eleven house numbers. The evolution of the "Grands Magasins" as major sales outlets for products of the most varied kind can be traced back to the period following the French Revolution. With the "Proclamation de la Liberté du Travail" of the 2nd March 1791, freedom of trade was proclaimed and the guild system with its concession system hindering competition was abolished. The development of major industry began, followed by growth of the towns and a strengthening of the wealthy bourgeoisie. It was not just the flood of industrial products which was decisive for the economic growth of the "Grands Magasins", but also the new stimulating methods of trading: reduction of the profit margin made possible by increasing turnover, fixed prices, the waiving of any compulsion to buy, allowing goods which had been already purchased to be returned, profit sharing by the sales staff.

The fascination generated by the new forms of trading, the secret of their success, "the uninterrupted and rapid turnover of capital on the principle that the main thing was to convert the latter into goods as often as possible within a year" - according to Zola - is still shown in his novel "Au Bonheur des Dames" from 1883 with the department store as "The ladies' paradise". Zola also described the negative social side of the phenomenon, such as the destruction of the small shop through the competition of the department store, the

unscrupulous exploitation of the staff. But he did believe that a "phalanstery of trade", in the sense of the utopian Charles Fourier, could restore social justice.

After the middle of the century, the opening up of new thoroughfares in the Haussmann era provided the opportunity for tradesmen operating in cramped conditions to expand their premises into the adjoining sites. That was how the "Galeries Lafayette" and "Le Printemps" developed along the Boulevard Haussmann, the "Magasins du Louvre" in the Rue de Rivoli and the "Magasins Réunis" on the Place de la République. On the other hand, "Bon Marché" on the south bank of the Seine expanded at the expense of the narrow plots of land of old Paris, "La Belle Jardinière" and "La Samaritaine" at the Pont Neuf. The fact that the department stores specialised on specific groups of customers added to their economic success: "Bon Marché" served the suburban and provincial middle classes, "La Samaritaine" the working classes of the district around les Halles, "Le Printemps" the monied classes of the Opera district.

The new structural task of the "Grands Magasins" in the nineteenth century did not - apparently as a result of the hectic development within just a few decades - bring about any unified progressive development of the building form. For its building blocks, which are classified in French terminology as "édifice-flots", with their boulevard frontages in magnificent Neo-Renaissance and Neo-Baroque forms, intended to inspire the customers' confidence, drew their inspiration from the previous architecture of the "palais-flots", although there was no further future for the building form of the private town mansion in the second half of the century. But a casual glance does not take in a remarkable fact: the noble elements of the stone architecture are only a facing, the bearing function is taken over by a steel skeleton. Until the eighteen-nineties, the civil engineering architecture of the walls along the Parisian streets remained concealed from passers-by. It was not until the time of the art nouveau movement that the steel was once again made visible as a constructive and decorative material.

On the other hand, in the interior the visitor does not only discover the exposed glass and iron construction of the light well - already an attribute of greenhouses, market halls, passages and railway stations - but also of the galleries above, as they had been developed in the universal exhibition halls - with the Crystal Palace in London to the fore.

Paris can claim to have developed the glass-roofed, airy light well of the "Grands Magasins", the three or more galleries of which rise up towards the glass cupola and have an open area in the centre where a curved staircase provides a decorative link between all the storeys. This aesthetically impressive solution, made necessary by the purpose, enables even those rooms farthest away from the external walls to be provided with light and air from above.

While this type of area was not able to make much progress in Great Britain on account of fire-prevention regulations, on the Continent the French ideas were being continuously developed: thus, for instance, Victor Horta with "L'Innovation" in Brussels, 1900-1901, Sehring and Lachmann with "Warenhaus Tietz" in Berlin, 1898, Alfred Messel with "Warenhaus Wertheim" in Berlin, 1896-1904. Already as early as the first half of the nineteenth century three principal building types in simultaneous development were gaining in importance for trade. Their common factor was the use of glass as a roof or roof light, which is why they are all unmistakably linked with the later

"light well". Firstly, the passage, the glass-roofed street of shops, the best known of which was the "Galerie d'Orléans" in Paris, 1828-1830. Then the bazaars which offered the most varied selection of goods on simple sales stands. The engravings by François Thiollet, Paris 1832, have preserved two important bazaars for us: "Le Bazar de l'Industrie" by Paul Lelong, 1827-29, with a hall lit from above and a gallery all round, and the "Galerie de Fer" by Antoine Tavernier, 1829, the three two-storeyed halls of which had glass roofs. Finally, the "Magasins de Nouveautés" which Göhre described as "a collection of retail shops with all lines under one roof and in one hand". The addition of the term "de Nouveautés" indicated the sale of goods which were in particular demand. "Pygmalion" in the Rue St. Denis is regarded as the first of this kind because of the early date of its foundation in 1793.

Within the course of the development of the "Grands Magasins" which began about 1850, the buildings of two famous Parisian undertakings show - from the aspect of the history of types - transitional solutions. "Les Grands Magasins du Louvre" - originally identical with the "Hôtel du Louvre" - owed their success to the two businessmen Chauchard and Hériot who purchased the block, which is still in existence today, bit by bit. The former sumptuous hotel, the frontage of which continued the system of arcades along the Rue de Rivoli begun by Percier and Fontaine, was built in 1855 at the request of Napoleon III for visitors to the universal exposition of that year. As a special feature it had a glass-roofed "cour d'honneur" which was surrounded by ring of shops right from the outset.

A Belgian company took a different path with the "Magasins Réunis" erected at one go for the universal exposition in 1867. The flexible design by the architect, Gabriel Davioud, envisaged the conversion of the shops into rented accommodation in the event of bankruptcy. The ground plan and cross section published in the Revue Générale de l'Architecture in 1870 and 1877, clearly show the possible double use. Similarly, the richly decorated façades with their projecting centre section, corner pavilions, and attics - which have recently been restored - remain linked to the tradition of the mansion-like "immeuble d'habitation".

I should now like to present three climaxes in the development in department store architecture in the period 1872-1912 as brief structural analyses.

"Au Bon Marché"

The first "Grand Magasin" to incorporate all the new elements, built between 1872 and 1874, a pure iron skeleton structure, even though with enclosing walls, "Au Bon Marché" was built under the direction of Louis-Charles Boileau (as architect) and Armand Moisant, with the assistance for a time of Gustave Eiffel (as civil engineers). The owner, Aristide Boucicaut, who had built up his department store from the most modest beginnings in 1852 until at the time of his death in 1877 it enjoyed as good a reputation in America as in Europe, left a fortune of 100 million francs. His wife, who shared his philanthropic inclinations, was responsible for the establishment of numerous foundations, among others for a hospital and for the Institut Pasteur. After her death in 1887, the Assistance Publique in Paris became the sole heir to the department store block of approx. 10,000 sqm, which is still in existence today.

Boileau's commentaries and plans published in the Encyclopédie d'Architecture in 1876 and 1880 allow us to reconstruct the sequence of building: The "Bon Marché" block, consisting of two basement levels, three main floors and two garret storeys, was constructed over a period of several decades in numerous lots, progressing from south to north. In its interior it presents a triple-row sequence of light wells, arranged from north to south, adjoined in the south, where the original building was sited along the Rue de Sèvres and where the first section was erected, by a second, irregular sequence of light wells from east to west. The cross section, also from east to west, shows the building blocks of conventional appearance, parallel to Place Boucicaut and Rue du Bac, with the roofed light-wells in between. Their arrangement corresponds to the scheme adopted for the first section constructed: front building, courtyard, rear building.

After trade profits had risen from 452,000 francs in 1852 to seven million francs in 1863, work was begun on an extension in 1869 to the plans of Alexandre Laplanche. Iron constructions were used only sparingly, because the façades, rear walls and the corner pillars of the light wells were constructed in masonry. Laplanche had only envisaged the use of iron pillars for the alternating intermediate supports behind the shop windows on the ground floor and for the large sales floor space.

In 1872, Louis-Charles Boileau was commissioned with the next stage of construction. His proposal that the new building should be erected as an iron skeleton is hardly surprising, for in 1855 his father, Louis-Auguste Boileau, had made the iron construction used for St. Eugène famous far beyond Paris. After the rejection of the design, the mixed method of construction begun by Laplanche with bearing masonry pillars and alternating iron columns was continued. But soon, owing to the appearance of differences in the rate of settlement - the stone pillars with more than forty joints had become shorter by comparison with the iron supports - and because of the increasing need for room for equipment, Boileau went over to an improved system of construction. Probably from the third stage of construction onwards, from 1874 on, he had the whole building, from the basement to the garret, erected as an iron skeleton, with hollow pillar cross sections formed from profiles mounted together to accommodate sanitary installations, for the extraction of smoke and fumes and for draining off rain water. Specially designed intermediate pieces in the ceilings connected the vertical system of channels with a horizontal one which was continued in the ceiling joists. In order to retain the unified character of the stone façades, Boileau had the iron framework enclosed in walls. Furthermore, the iron ceiling supports were concealed behind profiled plasterwork. In 1880 he announced full of pride, in the Encyclopédie d'Architecture that "in fact, the building consists of an iron network from the Rue du Bac to the Rue Velpeau, 80 m long and 30 m high. If the panels and surfaces, which are unnecessary for stability, were to be removed from the structure, then we would be left with an immense metal cage, in which every support and every beam is linked together".

In 1876 Boileau had published a three-page article in the same periodical on the light well of the main staircase, entitled "Grand Escalier". With references to Viollet-Le-Duc, Percier, Fontaine and Lebas, he reflects on the correct balance of natural light, iron construction and massive architectural members in a department store building. Without any doubt, the iron constructions spanning the light well with their maintenance duckboards, shade equipment and

ventilation rodding were important organs in the architecture for him. But their inherent heaviness and necessary complexity will cause confusion to the observer and "his eyes are hurt by seeing masses of metal here". Boileau overcame the aesthetic problem troubling him by concealing the construction between a glass roof above and a translucent ceiling suspended beneath, a solution which was copied again and again in department store construction. Because "the glass ceiling does not arouse any impression of heavy material requiring beams and pillars. To the observer it appears just like light and air themselves. In this concert of light, massive architecture has to play the role of a mounting for a precious stone". He makes the fact "whether iron construction should be left concealed or made visible" dependent solely on "what impressions we wish to impart to the observer of our works".

Boileau's words give expression to a new notion of architecture which divides the first half of the century from the second. It is not those criteria with which we are familiar today of a material, functional and constructional appropriateness which are the determining factors, as the civil engineering architecture of the Crystal Palace displayed in anticipation of the modern period, but an anti-rationalism which does not wish to form the things themselves, but their ideas. Three motifs from Boileau's work were of decisive importance for the later "Grands Magasins":

1. The grand staircase, inspired by examples from court, the two flights and symmetrical curvature of which are in purely formal connection with the lines of the arch-shaped recesses in the ceiling, and cannot be regarded from the constructive aspect. It can be traced back - like the light well itself - to the traditional cour d'honneur with its representative flight of stairs. Garnier had already employed the motif of the grand escalier in his opera house.
2. The immaterial glass roof-light, with bevelled edges, refracting seven times in the cross section, copied from the structure of the crystal, a new glass and iron form of construction making every normative requirement for the representation of supports and spanning members superfluous.
3. The architectural mounting of this light crystal in an attic structure with numerous consoles, projecting far into the room.

"Le Printemps"

In order to do justice to the change in the room structure in "Le Printemps", it is necessary to recall the atmosphere of the Parisian universal exposition, with the massive show of products in temporary glass and iron palaces. The first department store of this name was in existence as early as 1865 on the western part of the present-day "Le Printemps" site. At that time the opera house was still under construction, work on cutting through the Boulevard Haussmann was not yet complete. The businessman Jules Jaluzot, who had been trained as a salesman and then department manager in "Bon Marché", invested his wife's dowry in the construction of a tenement and shops building in the Rue du Havre. On the ground floor and mezzanine and in the basement he had a "Magasin de Nouveautés" constructed by the architects Jules and Paul Sédille.

The fire of the 9th March 1881 which destroyed "Le Printemps" all but the ready-made clothes department, forced Jaluzot to form a "Société en Commandite" to finance the new building.

The success was unexpectedly large, not least because wealthy female clients invested large sums of money. The new buildings, for which Paul Sédille again provided the plans, encompassed the entire block bordered by Boulevard Haussmann, Rue du Havre, Rue de Provence and Rue de Caumartin. Instead of the many light wells as used in "Bon Marché", the architect arranged the three upper sales floors around a single central area, 51 m long and 12 m wide. A broad sales gallery in entresol and two narrow bridges at first floor level provided the cross link between the side aisles of the hall area.

Arch forms dominated the massive main nave: as apsidal ends to the hall, as riveted, arched latticework, stabilised with decorative panels, they rose up to a height of 19 m above the ground floor. They supported a basically stepped, decorated translucent ceiling, the clerestory of which, with posts and diagonally set frame elements, served to provide longitudinal bracing. Just like the latticework trusses, the arched girders along the upper gallery were borne on the capitals of the square hall pillars, which, significantly enough, were decorated with women's heads.

With complete aplomb, the supports showed their constructional details with rivetted iron sheets, fitted together as a double T. The flanges with the four rows of rivet heads faced towards the hall, obliquely to the same the installation compartments in the webs, faced with reddish marble. The transom profiles facing the inner area are reported to have had, like the capitals and bases, panels and facing in marble. Coloured ornamentation in bronze and gold tones, earth-coloured enamelling as a woven band along the translucent ceiling covered those areas still unpatterned. Three metres above the decorated translucent ceiling, finally, a second row of arched lattice girders - with bent upper flanges and a mounted ventilation lantern - bore the glass roof proper. Apart from the aesthetic aspects, it was again and again for practical reasons, such as keeping the translucent ceiling clean, protection from condensation and heat, ventilation and problems of the slope, and details in the glazing of the roof which led to the expensive solution of double glazing in the cupolas above light wells.

The optical exposure of the iron construction with its mounted, rivetted profiles, cast-iron decorative corbels, capitals, sculptures, the bridges, roof trusses and decorative railings attained a maximum effect in this light well. In the adjoining sales areas too, the pillars were unpanelled with a framework of main and subsidiary girders above; the lift-shafts and staircases were also left unpanelled.

In contrast to the heavy construction members used by the iron construction companies in the interior, the iron of the external architecture, above the large shop windows, the entrances and windows, was used with much more discipline and restraint. Sédille had developed the principle of the double shell, with a decorative masonry façade and the iron cage behind further compared to "Bon Marché". Moving back the glass and iron shell made it possible to prevent the four-storeyed design from being apparent on the outer façade. The system of open loggias and arcades blurred the outlines of the floors and gave the impression of a two-storeyed structure.

In 1905, a new manager, by the name of Gustave Laguionis, commissioned René Binet, the much renowned architect of the "Porte Monumentale" at the universal exposition of 1900, with the redesigning of the light well. Instead of four cumbersome, space-consuming stairways and the compact gallery bridge, an elegantly formed construction with eight flights of stairs now filled the centre of the hall. Even before the

completion of reconstruction work, René Binet had to deal with the plans for a much larger block adjoining to the east on the Boulevard Haussmann, work on which began in May 1907. While the façade structure was largely copied from Sédille's "Printemps" with regard to the material used, floor arrangement, design as also the four corner towers, Binet gave the interior a new, up-to-date appearance: two octagonal light wells of 25 m diameter each - the western one with a green cupola, the eastern one with a blue one, both in decorative lead glazing - brought light into the main hall and the galleries. Compared with the shallow translucent ceilings of "Bon Marché" and the old "Printemps", they rose up much higher above the uppermost sales floor. The difficult transitions from the octagonal ground plan with its balcony-like projections to the circular cupola apex are solved almost playfully. That would not have been possible without the exterior cupola behind, constructed in glass ribs above lattice girders and circular purlins.

Sédille's and Binet's light wells differ only slightly with regard to the quantity of iron used. However, in contrast to Sédille, Binet had concealed the heavy construction with filigran structures in decoratively shaped cast and wrought iron. These structuring elements were:

1. the network of the glass and iron cupola which rose up out of a broad, coloured decorative frieze of hand-wrought plant ornaments,
2. the decorative railings which were of a different design on every floor, the varying ceiling cornices, balconies and the lift cages added at a later date,
3. the extremely slender tubular supports linking the cupola projections and the balconies which were made of cast-iron with wrought-iron leaf and foliage ornamentation.

The light wells of both the old and the new "Printemps" (which latter also burned down in 1921) have long since been built over for economic reasons. A reminder of the former glory of decorative glass and iron architecture is still provided by the blue cupola hall, which nowadays houses a restaurant, even if the earlier link with the architecture of the light well is missing.

"La Samaritaine"

With this third example of Parisian department store architecture, the tendency towards an increased use of iron, thus displacing stone architecture reaches an absolute climax. In "Bon Marché" iron was only visible in the light wells, in both "Printemps" buildings it already dominated the whole interior area. In "La Samaritaine", iron architecture finally prevailed both inside and out.

The origin of the giant department store complex was a small shop in the Rue de Rivoli on the site of the present-day Magasin I, which had been leased by Ernest Cognacq who hailed from the provinces and who had made several prior attempts in vain to become settled in Paris - the previous one as a street trader. By 1885 he owned the whole block of houses which he had rebuilt by Frantz Jourdain - who was to remain his house architect until the completion of all the buildings of "La Samaritaine". In 1890 followed the parts of the building in the north of the later Magasin II. Finally, in 1904, after years of disputes with the municipal authorities and after payment of a large sum of money, permission was given to build a basement beneath the Rue de la Monnaie as a two-storeyed gallery linking Magasins I and II. By 1910 the stage by stage construction of Magasin II was completed.

The block construction with four floors above ground level, the two-storeyed mansard roof, the rectangular light wells and the main frontage facing the Seine and which was originally flanked by two round towers, showed the standard solutions as applied since "Bon Marché". The method of construction and the architecture had, however, changed radically. In place of the stone façade superimposed in front of the iron construction, it was the glazed iron construction itself which now came to the fore. That did not just save time and money, but also helped to satisfy the demand for larger shop windows and more light for the interior sales space. Coloured enamelled lava panels - red and green on an orange background - with vine and flower ornamentation, ceramics, chased copperwork and carved woodwork covered the parapets and supports, transoms and sign panels, the latter bearing the names of the articles on sale. Wrought-iron leaves and tendrils, volutes and decorative corbels projected from the pillar tops, supported the projecting, rising façade of the main entrance and accompanied the latter's glass canopy vaulting. Glass cupolas in the form of onions, illuminated by night, crowned the corner towers of the souther façade, rising up to a height of 28 m.

Frantz Jourdain, who had really wanted to become a musician and had broken off his training at the Ecole des Beaux-Arts, was a decided opponent of official art. In 1902, as president of the association "Nouveau Paris", he campaigned against the exaggerated protection of old Paris in order to prevent, as he argued, "that the city should become a museum for the amusement of the rich". In his essay "L'Art dans la Rue" in 1892, he developed the idea of street art for the working classes, for which the architect should be responsible. "It is one of his obligations to frame the streets - the museums for the poor - with precious architecture". - "In order that the architecture may give pleasure to those who have not been initiated into the language of the educated, the façades must be decorated simply, cheerfully and colourfully with flower motifs from France's finest flora which is so multitudinous and decorative". Only little has survived of the mounted wrought-iron plant ornamentation until today, none of the corner towers is left, probably for reasons of lack of permanency as well as the opposition to this architecture which existed right from the outset. There were protests about the alien object in iron with its colourful shining surfaces so near to the most venerable monuments in Paris, against the intolerable form of the onion-shaped cupolas which towered above all other buildings. All that remained of these facades is the technical structure of a framework of supports and parapet strips which the mansard roofs do not match at all.

In the interior of the building, the constructive substance dominated over the decorative accompaniment: thus the diagonally mounted support framework of the light wells which provided stiffening for each other, between which were spanned the welded lattice girders. The curves rising up to the centre reflected the static loading. But, above all, the roof girder construction, completely visible, right down to the last rivet and joint, with a crossed grid to bear grooved glass panels - the whole a translucent floor - showed a clarity and density of detail which did indeed allow a form to develop from the function. Here the volute-like rolled diagonals of the lattice girder did appear like a natural emphasising of the main constructive elements. Nowadays the light well lacks the powerful structure of the bearing construction, because in order to gain more sales space, the edge girders of the light well had cantilever beams added, and the ceiling and floor constructions were expanded out over them at the expense of the light well.

At the present, there are only a few glass-roofed central areas still to be found: one in "Les Magasins Réunis", Avenue Niel, two in "La Samaritaine", one in "Le Printemps", three in "Bon Marché". The finest light well to have survived is to be seen in "Galeries Lafayette". As the most recent of the "Grands Magasins" still in existence, the "Galeries Lafayette" - one of the first examples of ferro-concrete construction - are not strictly within the scope of this colloquium. But this light well as a space type undoubtedly does have its place in the second half of the nineteenth century. Built in 1910 by Ferdinand Chanut and decorated by Louis Majorelle, it gives expression to the epoch's feeling for pomp. Divided up by ray-like girder ribs, the blue, flower-decorated light cupola crowns the circular festive area, with the rising galleries drawing the eyes upwards, just like the tiers in an opera house. Contemporary reports enthused on the yellow light which filled the mosque-like area, fed from invisible sources.

Notes

- François Thiollet: *Serrurerie et Font de Fer*, Paris 1932.
François Thiollet et Roux: *Nouveau Recueil de Menuiserie et Décorations Intérieures et Extérieures*, Paris 1837.
L.C. Boileau, fils: *Magasins du Bon Marché à Paris*, in: *Encyclopédie d'Architecture*, 1876, pp. 120-122 and 1880, pp.183-185, plans.
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Frantz Jourdain: *L'Art dans la Rue*, in: *La Revue des Arts Décoratifs*, Paris 1891-92.
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M.L. Clausen: *La Samaritaine*, in: *Revue de l'Art*, Paris 1976, pp. 57-71.
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