

PARIS.

THE TYPICAL MODERN CITY.

INTRODUCTION.



PARIS is the typical modern city. In the work of transforming the labyrinthine tangle of narrow, dark, and foul medieval alleys into broad modern thoroughfares, and of providing those appointments and conveniences that distinguish the well-ordered city of our day from the old-time cities which had grown up formless and organless by centuries of accretion—in this brilliant nineteenth century task of reconstructing cities in their physical characters, dealing with them as organic entities, and endeavoring to give such form to the visible body as will best accommodate the expanding life within, Paris has been the unrivaled leader. Berlin and Vienna have accomplished magnificent results in city-making, and great British towns—Glasgow, Birmingham, Manchester, and others—have in a less ambitious way wrought no less useful reforms; but Paris was the pioneer. French public authorities, architects, and engineers were the first to conceive effectually the ideas of symmetry and spaciousness, of order and convenience, of wholesomeness and cleanliness, in urban arrangements.

There has been some disposition, however slight, among English-speaking people, to undervalue French civilization and to minimize the importance of French services to the world. The attainments of German scholarship in many directions are so colossal, and German energy and prestige are now so dominant, that, in our admiration for the progress and achievements of this younger people, we are in danger, perhaps, of giving the French less than their due. All countries are under lasting obligations for the clear political philosophy that furnished the French Revolution with its principles. And is it a trivial thing that we are indebted to the refined and artistic instincts of the French people for so many of the amenities and comforts of latter-day existence? When they began to show us how to build cities we were far from appreciating the fact that the twentieth century was to dawn upon a race that had, for the majority, adopted city life; and that the difference between good and bad municipal arrangements would mean either the conservation of the race in bodily vigor, and in the education of mind

and hand, or else its rapid physical and mental deterioration. But for urban improvements of the sort that the French people instituted the death-rate would be higher than the birth-rate in all large population centers.

In the past decade or two there are other cities, outside of France, that have adopted appointments that are in some respects more scientific and effective than those of Paris; but it remains true that the French capital is the most conspicuous type of the thoroughly modernized city. Considered as such it would require at least a volume to enter with any fullness of description and analysis into the municipal history and life, the public arrangements and administrative methods, of Paris. Maxime Du Camp, a worthy Parisian author, has recently attempted to cover this subject in a work of six large volumes entitled, "Paris, its Organs, its Functions, and its Life in the Second Half of the Nineteenth Century" ("Paris, ses organes, ses fonctions, et sa vie dans la seconde moitié du dix-neuvième siècle"). It is a monumental work, valuable for reference, but of course too voluminous for the ordinary reader. And now there has appeared another work, also of the highest importance, that should stand next to Du Camp's on the library shelf. It is upon the condition of Paris in 1789—"L'État de Paris en 1789; études et documents sur l'ancien régime à Paris." It is the work of a public commission of historians who have searched old records and official archives. Du Camp describes the new Paris of our time, while the other work reconstructs for our edification the Paris that existed up to the very eve of the cataclysm. The contrast is startling. It is obviously important that there should be placed on record everything that can be known about the Paris of a hundred years ago, the outlines and remains of which have so nearly disappeared.

It is marvelous to note the ceaseless operations of the transforming energy derived from the Revolution. Rather inconspicuously placed in a hallway of one of the buildings in which the municipal authorities of the capital made their extraordinary display at the recent exposition was a map that had a fascinating interest for me. It was a street map of Paris, showing by different colors the periods in which the great boulevards, avenues, squares, and other visible improvements had been constructed. No change in the higher government

had seemed to check the mighty impulse. Everything that lay in the way of the broad, straight swath of a new avenue was razed unmercifully, and the street system of the old inner metropolis was made to conform to the systems of the splendid new quarters that were springing into existence, especially towards the west.

In the days of the Revolution the site of the present Place de la Concorde, where the guillotine was then so active, was upon the very western outskirts of Paris, while the prison of the Bastille — whose destruction in July, 1789, opened most significantly that long course of wholesale Parisian demolition, in order that freedom, science, and sunlight might replace the oppression, ignorance, and gloom of the old régime — was then on the eastern limits, and beyond it lay the open country. North of the inner line of boulevards, which had been already laid out, there was practically no Paris; and south of the Hôtel des Invalides and the Luxembourg, beyond which the vast city now stretches so far, there were in those days fields and a farming population. It should not be inferred, however, that these new parts have since arisen upon a ground plan wisely provided in advance. To some extent, it is true, such has been the case, and in the newest quarters of Paris — for instance, in Passy, Neuilly, and other suburbs beyond the gates on the west — the magnificent avenues have been laid down upon the open fields, and the exercise of forethought will have saved all the cost and trouble of subsequent reconstruction. But even in Paris since the Revolution there has been some of the improvidence that prevails elsewhere; and while the inevitable municipal plow has been cutting its stupendous furrows in one direction, new quarters have been allowed to form themselves improperly somewhere else, with the result of costly reconstruction when the time comes for extending to them the main arterial system of the metropolis.

Perhaps if parts of this Parisian transformation had been delayed until a later period, certain causes would have operated to make it less thorough. At the close of the French Revolution, and for some decades thereafter, there was in Europe no sentiment for old architectural monuments, and especially none for medieval churches. This sentiment now pervades all Europe; and the most affectionate preservation, with cautious, faithful restorations, is the order everywhere.

Such a spirit of appreciation was lacking in the generations immediately preceding our own, and nowhere was its absence more complete than in the French capital. The religious orders had built their great monastic houses and their splendid churches everywhere in

Paris. They were a privileged caste and a heavy burden. The Revolution had no mercy upon them or their beautiful architecture, and the new street system plowed through their churches as relentlessly as through shabby tenement rows. Scores of examples of the most beautiful ecclesiastical structures of the middle ages were obliterated to make room for broad, straight avenues, open squares, and new, regular buildings. Nowadays such sacrilege would not be tolerated.

It is fortunate, therefore, for the Parisians that their central street reforms were chiefly accomplished before the rise of the new appreciation of church architecture. There are enough old churches remaining throughout France, if not in Paris itself, to represent adequately the beautiful art and work of the thirteenth and fourteenth centuries. The narrow old Parisian streets of the last century wound in and out among these venerable piles in a manner that modern traffic could not have endured. To have spared them would have been to deprive Paris forever of an adequate street system. It was far better to sacrifice them and to make the city uncompromisingly modern. The population in 1789 was about 600,000, and in 1889 it was 2,500,000, including that of the immediate suburbs. And with the fourfold increase of population there has been at least a tenfold increase of traffic and of daily pressure upon the accommodations of the main street system. These facts, to my mind, fully vindicate the wisdom, redeem the "vandalism," and justify the immense cost of the modernization of Paris. It was the mission of France to teach the world a lesson of order, system, and logic, of emancipation and iconoclasm. Paris was made the visible embodiment of the revolt against the iniquities of the old régime, and of the creative vigor of the new era. We would not wish to see Rome modernized in any such spirit; and, indeed, the great reforms now progressing there, of which I shall write in a subsequent article, proceed upon the principle of preserving with the greatest veneration and care all important archæological remains and all worthy specimens of ecclesiastical architecture. But it was for Paris to sacrifice everything to the modern ideas of symmetry, spaciousness, and regularity, and to build the great opera house as a central feature, and as a suggestive symbol of the new spirit.

Louis XIV. and Louis XV. had not been without magnificent ideas for Paris, and they had left improvements — palaces, royal pleasure-grounds, boulevards, churches — that make a considerable array when put into a list; but these things, done to gratify the royal pride, had been of almost no benefit to the people, and

had not affected materially the medieval conditions. The absolutism of these monarchs could never have availed to cut the Gordian knots of a thousand claims, prescriptive rights, and intolerable immunities that the nobles, the religious orders, the old guilds, and various other corporate and private interests tenaciously held in the metropolis. Nothing but a revolution, sweeping everything away and beginning anew upon simple principles, could have effected any radical improvement.

The work of remaking Paris after the Revolution was begun upon the lines of a general plan for the cutting of new streets, prepared by a so-called "Commission des Artistes." The plan included 108 distinct projects. Although political changes interfered with the full execution of this particular plan, the work of reconstruction did not cease. Under the great Napoleon the *rues de Rivoli*, *Castiglione*, *des Pyramides*, and various other modern thoroughfares were created. To the fifteen years of the Restoration another considerable list must be credited, including, among others, the *rues de Chabrol*, *du 29 Juillet*, *Lafitte*, and those of the *Quartier de l'Europe*. And under Louis Philippe (1830-48) the *rues de Rambuteau*, *de la Bourse*, *de Lyon*, *de Havre*, and others were opened.

But it was in the period from 1852 to 1871, under Louis Napoleon, that the most comprehensive and magnificent work was done. A huge scheme was laid out, under the supervision of Baron Haussmann as prefect of the Seine, for the binding together of all the quarters of Paris by a system of grand avenues of general communication.

The plan of the new Paris is by no means so geometrical and easily understood as that of Washington, but it is none the less a philosophical and practical arrangement. Originally the narrow streets and lanes of Paris were either parallel with the Seine in general direction or were at right angles with the river. It became necessary to give the new Paris main thoroughfares broad enough and straight enough to accommodate traffic through the heart of the city along these original lines. Further, it was deemed necessary to construct a great number of diagonal avenues and boulevards directly connecting important localities. Still further, new lines of engirdling boulevards were found desirable; and finally, there were important reforms to be instituted in the suburban street systems. The net public expenditure incurred between 1852 and 1870 in carrying out the Haussmann-Napoleon project of new boulevards and avenues was in excess of 1,200,000,000 francs. The gross outlay was much greater, but large amounts of the original investment were recovered from time to time

by the sale of building sites, the municipality having, by condemnation proceedings in every case, acquired the properties through which in part a new street would pass. Since 1870 the work has gone on with less energy, the proposed reforms having been mainly effected. But a number of important new projects have been carried out since 1875, and each year sees some addition to the main street system. Private individuals have been obliged to conform strictly to the plans and regulations of the municipality in building up the new frontage, and thus there has resulted that marvelous regularity — elegant and impressive rather than monotonous — which is the characteristic of Parisian street architecture.

THE FRENCH MUNICIPAL SYSTEM.

To study the governing organs of Paris before the Revolution would be a complicated task, interesting, certainly, but no part of our present purpose. There was, as Mr. Frederic Harrison has recently said, "a chaos of competing authorities, a tangle of obsolete privileges, and a nest of scandalous abuses. Anomalous courts jostled and scrambled for jurisdiction; ancient guilds and corporations blocked every reform; atrocious injustice and inveterate corruption reigned high-handed in the name of king, noble, or church." This, indeed, does not tell us what the mechanism of the municipal government was, but it shows us well enough its spirit and its results. For our purpose it suffices to add that the city, so far as it was centrally governed, was administered by a provost, or mayor, deriving authority directly from the king, and that various old, surviving local bodies shared, in an anomalous way, in the minor affairs of the city. The *communes* of France, of which Paris was the chief, had in earlier centuries won a high degree of local autonomy, and played a conspicuous rôle in history; but they had now been reduced to the condition of the mere territorial administrative units of the centralized authority.

The Revolution instantly changed all this. The ancient *communes*, which lay as a complete network over the whole territory of France,—some of them urban entities, most of them simply small rural townships, but each of them a natural and traditional unit of government,—recovered their dignity, and obtained a system of local representative administration. The old privileges were abolished, and the modern elective principle was introduced. The people of each *commune* were empowered to elect a mayor and several other executive officers, who formed a "corps municipal." They also elected "notables," so-called, to the number of twice the *corps municipal*; and the two

groups, sitting together, formed a "council general" of the commune, while the mayor and the executive officers were in charge of active administration. It was a clear, logical system. The number of officers varied in the ratio of the population of the communes, and the arrangement was thus adapted to the large municipalities on the one hand and to the petty townships on the other. It was a masterly piece of legislation, sweeping away all the fogs and mysteries of the traditional system, and putting in its place a complete and uniform, while simple and elastic, scheme of local organization and government.

With various changes and fluctuations that system of 1789-90 has survived to this day. It drew a logical line between the functions to be intrusted to the communes and those that belonged to the higher authority, and it made the local government absolutely independent and autonomous within the range of its powers and duties. The system was in many respects similar to that now employed in some of our American States, as, for example, Illinois and Iowa. In 1795 the Directory made novel experiments and changes, consolidating the smaller communes, and forming larger divisions called "cantons." But this system was unduly arbitrary, and in 1800 the Consulate restored to each commune its individuality. Freedom, however, was wholly lost, for the communes now became parts of Napoleon's great centralized machine. Napoleon's maxim, as exemplified in his administrative laws of the year 1800, was: "Agir est le fait d'un seul; délibérer est le fait de plusieurs" ("To execute is the business of one; to deliberate is the business of many"). France had been divided in 1789 into departments, districts, and communes. The departments, having a sort of provincial business to do, were at that time given popularly elected representative councils, and the executive work was performed by a standing committee selected from the membership of the council. The district—a subdivision—was governed similarly; and I have already explained how the communes or municipalities were organized. All was free and popular.

But the Directory, in 1795, leaving the deliberative councils to be elected as before, chose to empower the central government of the country to name the executive commissions in the departments, and to tighten the reins of the higher authority. And in 1800 the Napoleonic idea went infinitely farther in the same direction. Each department, by the law of 1800, was to be actively administered by a prefect, named by the "premier consul," *i. e.*, by Napoleon himself; and the deliberative councils of the departments, varying in membership from sixteen to twenty-four members,

were now also to be selected by the premier consul. Then there was to be a "council of prefecture," of from three to five members, to deal judicially with disputes arising in the administration of the department or of its subdivisions, and this council was to be appointed by the premier consul. The districts, or departmental subdivisions,—called in the law of 1800 by the name of "arrondissements," which they still retain,—were governed by an under-prefect and a council of eleven members, all named by the premier consul. Coming down to the communes and municipalities great and small, thousands of them altogether, we find them governed by a mayor and several "adjuncts," or assistant executive officers, and by deliberative councils; and we find that all the mayors, officers, and councilors were named by the premier consul, except as in the small communes he delegated the task to his agent, the prefect of the department.

Here was centralization absolute and complete. It shocks our ideas, yet we must remember that it bore no relation to the absolutism of the old régime. The new centralization was founded upon equality, justice, and the reign of law. It was a wrong system, but it was symmetrical and logical. Possibly it was for a time a better system for the French people, just emerging from the old tyranny of local lords and church dignitaries, than the free, popular system of 1789 would have proved. We can, however, but prefer infinitely the laws of 1789, based upon trust in the people and the natural right of local autonomy, to the huge centralized machine constructed by Napoleon as the instrument of imperialism.

The system of 1800 was maintained for thirty years; but it was much liberalized in 1831 as one of the results of the revolution of 1830, which unseated the Bourbon successors of Napoleon and placed Louis Philippe upon "a throne surrounded by republican institutions." The revolution of 1848 did still more to free the municipalities and communes; but another Napoleon was destined to restore the centralized system.

The third republic, which has now weathered the storms of twenty years, at the outset adopted a less liberal policy than that of the first and second republics. It was menaced from without by foreign complications and threatened from within by powerful monarchical factions, and its leading spirits were afraid to relinquish a firm central hold upon local administration throughout the country. Their policy in this regard was a complete mistake; but the third republic has been disposed to feel its way, and its system of administration has been more monarchical than that of most monarchies—notably more so, for instance, than Belgium's, Italy's, or Austria's.

At length the smaller communes were allowed to choose, through their councils, their own mayors and executive officers; but the larger municipalities were obliged to submit to mayors chosen by the central authorities. And in all their deliberations and activities the municipal councils and officers were subject to the departmental prefect named by the central power.

Great improvements were made by the consolidated municipal government act of 1884, which remains in force. This law gives the communes universal manhood suffrage in electing their municipal councils. It gives the councils of great as well as of small communes — excepting Paris, of which we shall subsequently speak — the right to elect from their own membership the mayors and adjuncts. It prescribes a considerable range of local affairs in which the communes are competent to act finally, without waiting in every instance, as was previously necessary, for the sanction of the prefect of the department. It also puts limitations upon the power of the prefect to suspend a mayor or a whole municipal council, and upon the right of the higher authorities to order a dissolution and a new election. There is still a needless and humiliating centralization, and an altogether objectionable amount of administrative authority in the hands of the prefects and sub-prefects, who emanate from the central government, and do its bidding. But the system is otherwise a fairly good one.

In summing up, let me commend the simplicity of the organization of French municipal government. The people elect a council, varying in numbers according to population upon a scale fixed by general law. In all but the large places the council is elected upon a general ticket. The important cities are usually divided into sections, or large wards, to each of which several councilors are assigned, and the ward chooses its councilors upon a general ticket. The councilors hold office for four years, and all retire together — being, of course, eligible for re-election. The English and American system of partial renewal annually or biennially is contrary to French habits and ideas. The council names the mayor, and also his executive assistants, from its own membership. The mayor is the presiding officer of the council, as well as the executive head of the municipality. His adjuncts, or executive assistants, are designated by their fellow councilors. In large places these number ten or twelve, and they have no executive duties except such as are specifically assigned to them by the mayor. The council holds four ordinary sessions every year, each of which may last for fifteen days, while the one in which the annual budget is discussed may last for six weeks. But the mayor may call extra sessions at any time, and he is

obliged to convene the body upon request of a majority of the councilors. The council appoints consultative committees which meet *ad libitum* between sessions, with the mayor as nominal chairman of each, while one of his adjuncts is more usually the actual chairman. The mayor has the appointing power, and names the minor officials of the commune, subject in some cases, however, to the approval of the prefect of the department. With the advice of the council, and under the surveillance of the departmental authorities, the mayor executes the business of the commune. The council has a large authority in the levying of taxes, authorization of public works, provision for education, etc., but in most of these things its decisions must be approved by the higher authorities.

Such is the French system. It differs from the English in making the mayor a fully empowered executive officer, while limiting the council chiefly to deliberation. But the mayor is the creature of the council, his adjuncts are councilors, and the system is therefore logical and unified; and with all its differences, it seems to suit the French people as well as the English system suits the needs of British municipalities. The English system is that of administration by the municipal council. The French system is that of administration by a mayor and his adjuncts, forming a "corps exécutif." The American system is an absurd and futile attempt at combining the two systems. We attempt the hopeless feat of a government by the council and a government by the mayor at the same time. The result is conflict, dissipation of authority, and degradation of municipal life.

THE MECHANISM OF PARIS GOVERNMENT.

THE liberal legislation of 1789-90 gave Paris, with the other communes of France, a fully constituted, autonomous municipal government. The city was divided into forty-eight sections, each of which elected two common councilors, or notables, in addition to which a body of thirty-two councilors of higher rank, or aldermen, were elected, while the executive work was entrusted to a popularly elected mayor and sixteen administrators, so-called. The whole body of 145 governed the city, the mayor presiding over the council and directing the active administration of the city. In the fact of the popular election of the mayor this constitution resembled those of our American cities. The councilors and administrators were elected for two-year terms, and half of them were renewed annually. It was a fairly acceptable form of municipal government. But the Directory, in 1795, with its theory of cantonal

administration, consolidated the smaller communes of France and cut up the larger ones. Paris was divided into a dozen municipalities, with some sort of central administrative bureau, which the Directory constituted and managed in its own interest. The work that the Directory began Napoleon completed. He abolished absolutely the central mayoralty, and created the semblance of a central communal council, all the members of which were his own appointees. In each of the twelve sections, or *arrondissements*, as they have since that time been called, he established a so-called mayor, with assistants. But these officers were simply the local agents of the prefect, and were in no true sense municipal authorities. The real governor of Paris was the prefect of the department of the Seine—a department including Paris and some suburban communes. All administration was in his hands. In the levying of taxes and the planning of public works he had the advice of the municipal council of Paris and of the council-general of the department, all the members of which were the appointees of the central power. The revolution of 1830 improved matters to the extent of giving Parisians of certain electoral qualifications the right to choose the municipal council. But the central mayoralty was not revived, and the prefect, with his subordinates, and with the appointive officers of the *arrondissements*, governed the city still.

As in the country at large, so in Paris the brilliant revolution of 1848 restored for a brief interval the autonomy of communities. Paris again had its own municipal government, its own chosen mayor and executive staff. But the empire of Louis Napoleon took the city completely out of the hands of its inhabitants and restored the system of the first empire. The national assembly of 1871, after the downfall of the empire, gave back to Paris its elective council, but stopped there, promising that further concessions to the principle of self-government should be made at some subsequent time. Since then the suffrage, which was virtually universal, has been made entirely so. But Paris is still actively governed, as under Louis Napoleon, by the prefect of the Seine and his colleague, the prefect of police, both of whom are appointed by the general government and are amenable directly to the Minister of the Interior. In the smaller communes of France the police power is now confided to the municipal authorities, and is exercised actively by the mayors. In the larger ones a purely domestic police authority is exercised by the municipal officers, while a general control of police is vested in the prefect and his sub-prefects. But Paris is deemed too vast for the union of ordinary business administration and

police administration in the hands of the one prefect of the department, and the police authority, covering a wider range of functions than the simple organization of the police force and the management of the police courts and station-houses, is put in the hands of a separate chief, the prefect of police.

Paris has now for many years been subdivided into twenty *arrondissements*, and in each of them there is a central building called the "*mairie*," in which is the bureau of an officer called the "*maire*" (mayor). He is assisted by three adjuncts. These men, who are appointed officers of the general government, and are, in fact, simply the agents or delegates of the prefect of the Seine, with a staff of clerks and assistants attend to a vast amount of routine business for the higher authorities and for the city, so far as the population of their several *arrondissements* is concerned. They make the registration-lists for elections. They record births, deaths, and weddings, and perform the civil ceremony of marriage. They receive taxes, have to do with matters of elementary education, render "*assistance publique*,"—*i. e.* administer the poor laws in their respective districts,—enroll under the army-service acts those liable to military duty, and perform various other routine functions. These twenty Parisian centers of local administration are admirably organized and conducted, and under any scheme whatsoever of a reconstructed municipal government they would be allowed to remain.

The municipal council of Paris consists of eighty members, four from each of the twenty *arrondissements*. Each *arrondissement* is subdivided into four quarters, and each quarter elects a municipal councilor. They are elected for three years, and all retire together. The municipal council of Paris, plus a few representatives of the outlying communes of the department of the Seine, constitutes the council-general of the department. Since these outlying communes are, in fact, the immediate suburbs of Paris, there seems to be no good reason why the city's jurisdiction should not be made coextensive with that of the department, so that the business of the municipal council and that of the council-general might be merged. These communes outside the fortifications of Paris have their elective councils and distinct municipal organizations, but all come under the common executive control of the two prefects.

SOME PROPOSED REFORMS.

EVER since 1871 there has been a constant demand upon the part of Paris, as represented by its municipal council, for a restoration of its

central mayoralty and a release from its position of tutelage. The situation of the council is certainly humiliating and unsatisfactory. It is dominated by the prefect, who has the right to attend its sessions and to take the floor whenever he pleases, and who is absolutely unaccountable to it for his management of the city's business. The council has, it is true, large discretionary power over finances and taxation, and indirectly it controls the departments of administration and the construction of public works through its hold upon the purse-strings. But it is, at best, hampered and restricted. The prefect is in theory accountable to the Minister of the Interior: but the prefect has not only to administer the affairs of the city, but also to act as the political representative of the government of the day; and in fact it is in his character as the political agent of the government that he is held accountable. French ministries are too short-lived, and too busy with interests more vitally affecting themselves, to permit the Minister of the Interior to hold the prefect of the Seine to a frequent and careful accounting for the ordinary administration of the affairs of Paris.

There is some reason to believe that the time may not be far distant when Paris will be given back to its citizens by the general government. The question has been much considered by the municipal council. A few years ago a council committee of which Sigismund Lacroix was chairman reported an interesting scheme of municipal organization for Paris. It provided for a council consisting, as at present, of at least four members from each arrondissement, but with additional representation for the larger ones, increasing the total body from 80 to 109 members. The councilors were to be elected for three years, one-third retiring annually, as in England, and the elections were to be upon general arrondissement ticket—a great improvement upon the present plan of “uninominal” election in quarters, which necessarily tends to fill the council with obscure men. It was provided that this council should be free from the present possibilities of suspension and dissolution by the higher authorities. Paris is the only French city that is without its own mayor, Lyons having, two or three years ago, been allowed to resume a full-fledged municipal government after years of tutelage similar to that of Paris. The proposition to which I refer authorized the council to elect from its own membership a mayor and eight adjuncts, forming an executive corps. Each of the adjuncts was to be assigned to the headship of a municipal department, for which he should be responsible to the council, while the mayor was made accountable in a general way as chairman of the executive corps. The mayor and the

adjuncts were to keep their seats in the municipal council with power to speak and to vote. In all the other French cities the mayor is also the presiding officer of the council; but Lacroix's committee held that in the case of Paris it would be advisable for the council to relieve that functionary of the routine duty of the presidency, and to name another member of the council for the task of the speakership of the municipal parliament. The executive corps, *i. e.* the mayor and his eight adjuncts, were invested with the appointing and removing power for all employees and agents of the municipal administration, upon the initiative of the adjunct at the head of any particular department. To do the routine work now done in the mairie buildings of the arrondissements, it was provided that four or five officials should be appointed by the mayor's corps as “delegates of the mairie” to render the services now performed by the agents of the prefect. The council was to have full control of taxation and finance, but could not borrow money without the direct ratification of the voters at a popular election. The municipal authorities were to have entire management of the education system, primary, secondary, and higher.

These propositions, as it seems to me, embodied a most excellent municipal constitution. Its harmony and simplicity are not the least of its merits. Although it was an unrealized project, it is worthy of notice as an indication of what current European judgment and experience would pronounce a good framework of municipal organization.

It must not be supposed that all elements in Paris are clamorous for a larger degree of municipal autonomy. The educated and propertied classes, as a rule, prefer that the general government should keep its strong hand upon Parisian administration. They are somewhat distrustful of the municipal council, which they regard as radical and socialistic in its tendencies. There is very much to be said upon both sides. Paris has always, except for the brief intervals of the first and second republics, been administered by the central authorities. The change of prefects has at times been very frequent as ministries have risen and fallen; but the skilled administrative heads of the various municipal services, together with their corps of trained civil servants, have been practically permanent. It has been possible to carry out great policies of public improvement, and there has been a high and well-ordered efficiency in the execution of all kinds of municipal functions. If the municipal council had been all-powerful, it is possible that public business would have been less effectively prosecuted, and also that public works would have been upon a less

magnificent scale. Upon the other hand, it is possible that the real welfare of the masses of the Parisian people would have been more carefully guarded, and that the burdens of taxation would have been lighter.

The municipal council certainly contains a number of able and honest men; but as a whole it is open to the charge of being a body of men mediocre and unknown, and the primary reason for this is plain enough. Each member is elected in a separate district, eighty in all. The opportunity for what we in America call "ward politics" is altogether too favorable. It is not, of course, legally requisite that the councilor should be a resident of the quarter he represents, but in practice he is likely to be. Candidate A placards the quarter with gaudy posters declaring that as a resident he can represent the people far more satisfactorily than candidate B, who lives in an arrondissement at the opposite end of the city. Whereupon candidate B issues a manifesto in which he promises to obviate the difficulty by moving into the quarter if he is elected.

Such a system does not tend to fill the council with men known to Paris at large. Election upon a general arrondissement ticket, as proposed in the Lacroix draft, would result in greatly improving the average quality of the council. I am inclined to the opinion that it would be still better to elect a portion of the council upon a general ticket for the whole city, with the idea of securing men of acknowledged note and standing for candidates. While, then, I must confess my sympathy with the idea of greater municipal autonomy for Paris, I can also appreciate the reasons which actuate conservative Parisians, remembering the horrors of the commune of 1871, in clinging to the strong arm of France. Yet Paris will never have the government that is best for all its people until it intrusts itself to the people.

I would not for a moment have it inferred that the present council of Paris is not a far more intelligent, upright, and efficient body of men than the average council of a large American city. If it had full control over the executive administration, and if it were elected upon a less minutely local plan, I believe that it would soon become a magnificent body, to which it would be a great honor to belong, superior, possibly, in distinction to the councils of Berlin and Vienna, and equal to the new council of metropolitan London. Such positions should have no emoluments, or else should have large ones. A Paris councilor is not supposed to draw a salary, but he has been accustomed to allow himself 4000 francs a year for expenses. In view of exceptional demands, he increased this allowance for

the recent exposition year to 6000 francs (\$1200), and he has since neglected to reduce it. This transaction has an unpleasant savor about it, and seems to indicate a rather petty type of man. The movement for greater municipal autonomy is at present led with much vigor by M. Richard, president of the council, who, on December 15, 1890, issued the first number of his new daily newspaper, "La Cité," which is devoted to the advocacy of the claims and municipal interests of the commune of Paris.¹

THE POLICE ADMINISTRATION.

BUT more important than anything else in the scheme of Lacroix and his colleagues, it was proposed that the odious prefecture of police should be abolished and that the police authority should be invested in the municipal government, as was the case in the law of 1790. The prefecture of police for the department of the Seine was the masterpiece of Bonaparte's administrative system. This police prefect was reconstituted in 1853 by Louis Napoleon as an indispensable part of his centralized government, and it was characteristic of the third republic, with its centralizing and monarchical instincts, that it chose for its own ends to retain the police prefect.

He is to-day the most unaccountable and the most powerful man in France. His functions are highly varied. He controls not only the ordinary police that patrol the streets and keep order, but also the detectives and officers who constitute the "police judiciaire," and who work up criminal cases. Besides these, he is master of the political police,—the government's secret agents,—and he has in his hands a secret-service fund to spend unaccountably except as regards his immediate superior, the Minister of the Interior. His department covers the maintenance of order everywhere in streets and public places, the punishment of misdemeanors, the inspection of weights and measures, the organization of important life-saving and sanitary services, authority to permit or to forbid public spectacles, licenses of numerous sorts,—such as omnibuses and cabs and river steamers,—the regulation of certain trades and callings, and, in general, the control of a great number of services that affect the security of life and property, the public health, and the convenience of a great community.

In all this varied array of business the prefect of police has practically nobody to please but himself. His budget goes to the municipal council, and it is obligatory upon that body to

¹ M. Richard died suddenly in January, just after the references above were written.

allow it and to appropriate the funds demanded. He is accountable nowhere for the expenditure of the vast sum that he draws from the municipal treasury every year. Thus his function seems to be one of darkness and mystery. He was a fit creation of such rulers as the Napoleons, but he has no proper place in a republican form of government. Engaged as he must be in the secret service of politics, he is not the suitable person to administer the ordinary police government of a great city. It would certainly seem feasible and reasonable that the central authorities, retaining the control of the "police judiciaire" and of such other police agents for the general service of the state as might be deemed desirable, should confer upon the people of the city, to be exercised by their responsible elective servants, the ordinary municipal police authority.

But it would be a great mistake to jump at the conclusion that the existing police administration is not orderly and efficient. The real protection that the people have against the theoretical absolutism of the prefect of police lies in the magnificent organization of the great machine that the prefect superintends. Every one of the numerous bureaus is manned with permanent officials, who have entered the service upon examination and who are promoted for merit. The ten or twelve thousand officials who are upon the pay-rolls of the prefecture of police constitute a body of men who are as methodically organized as an army; and nothing could be much farther from the truth than to assume that the excessive power vested in the prefect means looseness or corruption in the ordinary administration of the police system.

"THE BEST-LIGHTED CITY IN THE
WORLD."

LIKE American cities, and in this respect wholly unlike those of England and Germany, French cities have been in the past, and still are, wholly disposed to leave the manufacture and sale of illuminants to private companies. But the resemblance between French and American cities as regards their management of this important service ends abruptly with the simple fact that they have chosen to employ private instead of public initiative. Municipal Paris has always fully protected public and private interests in its dealing with lighting companies. Even yet American cities have not thoroughly learned the simple lesson that there can be no real competition between gas companies in the same area, and that it is the height of foolish stupidity to attempt to regulate by competition a business that is monopolistic in its very nature. Paris, forty

or fifty years ago, in the experimental period of public gas-lighting, had seven or eight different gas companies. But each was restricted to its own district; each was chartered upon terms that gave the city authorities large control; each furnished its quota of gas for street lights and public buildings at a price fixed by charter contract and approximating actual cost of manufacture; each paid a moderate street rental for the privilege of laying pipes under the sidewalks; each submitted to a scale of prices for private consumers, arranged by agreement with the city upon the basis of reports made by commissions composed of scientific authorities and experts; each submitted to a daily official examination of the quality of its gas and to penalties for failure to reach the standard, and each laid its pipes in its respective territory under strict regulations respecting injury to the pavement and the disturbance of traffic. All these matters involved very much discussion and no small difference of opinion, but all were from time to time adjusted in an equitable and enlightened way. I might easily write a small book upon the history of the Paris gas-supply; but simply to have known and appreciated the main facts in that history, accessible as they have been, might have saved our American municipalities many millions of dollars in the aggregate. But our municipalities have contemptuously refused to learn anything from foreign experience.

The six companies which for some years had been engaged in the distribution of gas to Paris were fused into one great company in 1855. Some of our American cities have in recent years been well-nigh convulsed with excitement and indignation because their local gas companies had been consolidated or brought under a unitary management. And yet it ought to be perfectly obvious that a consolidated-gas supply can be more economically produced and sold. The fusion of the Paris companies in 1855 was effected only after several years of negotiations between the companies and the government, and it rested upon a basis carefully prescribed. The results were highly beneficial to all parties concerned. In 1861 a fusion was accomplished between the Parisian gas company and the smaller companies that had supplied the suburban districts, Paris having meanwhile annexed the outer belt of arrondissements and given the city its present area, with the engirdling fortifications as the municipal limits.

In 1870 the charter of the gas company was renewed and revised, and was placed upon a basis that still exists, and that will hold good until 1910. The contract might have been studied with great advantage in this country; and even now, after the lapse of twenty years, it is a more

enlightened and satisfactory arrangement than any that has been made by large American cities. The capitalization of the company was fixed at 84,000,000 francs. The quality of the gas and the method of testing are prescribed. Pipes must be laid each year wherever the public authorities determine, and their removal, alteration, replacement, etc. are all subject to the order of the authorities at the expense of the gas company. There must be two lines of piping along each street that is fourteen meters or more in width, and along each street that is paved with asphalt, no matter how narrow. It is arranged that the company shall pay the city 200,000 francs each year for the right to lay its pipes under the sidewalks. In lieu of an octroi tax upon the coal consumed in making gas, the city receives .02 francs for every cubic meter of gas consumed in Paris. The price of gas per cubic meter to private consumers is fixed by agreement, and the price to the city for public purposes is fixed at about half that which private consumers pay. The company is allowed, after paying fixed charges and placing a certain lawful sum in its reserve fund, to devote 11,200,000 francs of net profits to paying dividends and interest upon its 84,000,000 francs of capital stock. All surplus dividends must be equally divided between the company and the municipal treasury.

The financial aspects of this charter can be briefly summed up. The company must furnish gas to individuals at a price not exceeding a fixed maximum. It must supply gas for public uses at what is practically the cost of manufacture. It must pay the city 200,000 (ultimately 250,000) francs a year for the right to pipe the streets. It must pay a tax of .02 francs on each cubic meter of gas supplied to Paris. Finally, it must not "water" its stock, but must keep its capitalization at 84,000,000 francs, and after paying 13 $\frac{1}{3}$ per cent. out of net profits as dividends to the shareholders it must divide the surplus profits with the city. Finally, at the expiration of the charter, all rights revert to the city, which becomes also the owner of all the subways, piping, etc. that pertain to the plant. The city's share in the profits has steadily increased until the receipts from the gas company have become a large item of revenue. In 1870 about 5,000,000 francs were received from the company. For the year 1875 the amount exceeded 8,000,000 francs. In 1880, 12,400,000 francs were received, and in 1882 more than 15,000,000. For several years past the annual payment of the gas company to the city has been approximately 20,000,000 francs. As compared with American cities, this large sum is clear profit; for we do not in this country ordinarily obtain any public revenue from gas companies. On the other hand, moreover, it is

to be noted that Paris enjoys the further advantage of obtaining gas for public lighting at rates approximating the lowest actual cost of manufacture. Most American cities would congratulate themselves that they had made an extraordinary bargain if, in return for the privileges they accord to the gas companies, they should have the streets and public buildings lighted at cost. But Paris obtains that concession, and 20,000,000 francs a year in addition to it. Inasmuch as street lamps and various public establishments consume nearly one-fifth of the total supply of gas in Paris, it is obvious that there is very substantial advantage in obtaining the public supply at cost. I would suggest that American municipal authorities might profitably take to heart the fact that in the past ten years the Paris gas company has paid into the city treasury 200,000,000 francs, or \$40,000,000.

The inspection of gas manufacture, the testing of the quality of gas, the supervision of gas fittings in all kinds of buildings, and the management of the public lighting, belong to one of the bureaus of the department of public works, and come under general charge of an engineer-in-chief, who has under him a staff of nearly one hundred ordinary and assistant engineers. It is needless to say that this, like all other bureaus of the executive municipal government, is a model of efficiency. Paris, under its intelligent operations, has been, and remains, the most beautifully illumined of all large cities. Every detail of the service is brought under strict regulation, and there is the least possible ground for complaint against the gas company as a private monopoly. The question naturally arises whether the Paris plan is a wiser one than that of many great cities elsewhere in Europe which have assumed the gas manufacture as a public monopoly. Frenchmen decidedly prefer their own system. But I am inclined to the opinion that the largest possible use of gas, like that of water, is to be obtained under a system of public ownership, and that this large use is so eminently desirable in a city as to justify direct municipal administration. That the poor people of Paris could be provided with gas, both for light and for fuel, at a lower rate than they are now obliged to pay, if the municipal government were to supersede the existing company, seems to me to be indisputable. However, the present system is so good that there is comparatively little reason to desire a radical change.

But, satisfactory as are these arrangements, Paris is now on the eve of a revolution in her lighting system. Gas-lighting was first introduced in England, but Paris followed in good time and with a splendor unequaled elsewhere. In like manner America, Germany, and some

other countries have been earlier in the use of electric-lighting; but the Parisians, with their superior taste and skill in all matters of municipal arrangements and appointments, are destined to make by far the most brilliant use of the new illuminant. Within one year, or within two years at the farthest, it is confidently claimed that Paris will be incomparably the best-lighted city in the world and that electricity will have superseded gas in public use. In 1878, at the time of the universal exposition, the municipal government ordered the experimental illumination of the Avenue de l'Opera and several open spaces with electricity; but the new system was not ripe for large use, and the experiment was soon abandoned. Its principal effect was the stimulus it gave to the gas company, which invented and put into use certain large compound burners using 1400 liters per hour, and giving a most brilliant light. The great electrical improvements of the past decade were exhibited in the French exposition of 1889, and were studied with the utmost care by the Parisian authorities and municipal engineers. Undoubtedly the displays at the exposition had the most pronounced effect in stimulating the new zeal Paris is showing for the appliances of the electric age.

The manner in which Paris is now proceeding to introduce electricity in every portion of the municipal area is of the utmost importance to all other cities that have to do with similar problems. There has been no undue haste. On the contrary, the subject has been treated in a patient, scientific, systematic way. To begin with, the municipality has spent 2,000,000 francs or more in making a central electrical installation of its own in the basement of "Les Halles Centrales," the great central market of Paris. This plant is conveniently situated for the illumination of a number of public buildings and establishments, and it can be enlarged indefinitely. But it has never been intended to use this or any other municipal installation for the general work of lighting the city. It is for experimental purposes, and also for the purpose of acting as a regulator of charges. It enables the municipality to command the situation, and gives it a corps of men who understand the practical details of an electrical establishment. For the purposes of general illumination the city has been divided into seven "secteurs electriques." Paris is approximately a circle; and the secteurs are segments, the dividing lines of which radiate from the vicinity of the Halles as a center and extend to the circumference. Each of these secteurs has been granted exclusively for a short term of years to a responsible electric company. Thus Edison has been accorded one, the great Paris contractor, Victor Popp (using the Thom-

son-Houston system), has two, and the others are conceded respectively to the Messrs. Rothschild, the Société Alsacienne, the Ferranti Company of London, and Naze & Co. (representing the Westinghouse system). Several of the secteurs were granted in the latter part of 1890, completing the distribution. As one of the conditions, it has been required that the companies proceed at once to make their installations and that within two years their districts shall be completely served with main cables. Thus, before the end of 1892, such provision will have been made that, if desired, every street in Paris, as well as every house, can be illumined with electricity. It is required that the companies shall supply street-lighting upon terms that are as favorable as possible,—at cost or even less,—and a maximum rate of charge to private users is prescribed. Each company has been required to give a guaranty fund of several hundred thousand francs to insure the fulfilment of all the conditions imposed in the concession. No payment has been required for the charters, the terms being short, and permanent arrangements being deferred until use can be made of the results of five or ten years' experience. Meanwhile the city has its own central plant, and it is not debarred from laying its cables into any or all of the secteurs, with a view to regulating prices by competition. Thus Paris is on the point of being more completely supplied with electric-lighting facilities than any other large city in the world.

It should be noted that the question how to dispose of wires,—a question that makes so vast and so continually recurring an agitation in all American cities,—never comes up at all in Paris, and is seldom mentioned in any European city. There are absolutely no obstructive wires in Paris. The government has purchased the telephone as well as the telegraph system, and all the wires for these services are placed in the subways or sewers. The wires of the electric companies are buried under the sidewalks. Armored cables are laid in simple conduits, or even in the bare soil, without the slightest difficulty from any point of view. In crossing streets it is forbidden to break the paving, and underground connection is made from the manholes of the sewers. The whole city of Paris will have been laid with a network of electric-lighting cables a few months hence, and traffic on the sidewalks and in the streets will have suffered a minimum of obstruction, while no injury whatsoever will have been done to pavements. All these minor questions of practical municipal engineering that we in our cities are attacking in a fumbling, rude, original way, heedless even of the experience of our nearest neighbors, while densely and contentedly ignorant of the expe-

rience of foreign cities, have been thoroughly solved in Europe. Instead of leading the van, we are from ten to fifteen years behind Europe in all these matters. Even in our own field of electrical methods, as a prominent American electrician assured me in Paris last December, we are now five years behind the Continent. He declared that the difficulties our American corporations still complain about, when asked to bury their telegraph, telephone, and lighting wires, were all met and vanquished in Europe several years ago, and that our fellow countrymen insist upon remaining in a state of invincible ignorance rather than learn anything from the technical and scientific achievements of Europe. But perhaps he stated the case too strongly. Doubtless we shall in time learn to be ashamed when we come to a realizing sense of the fact that the one city of Paris has at its command a larger and more brilliant array of engineering and architectural talent than all the important cities of the United States taken together can show, and that many a small European town is better supplied in this respect than many a large American city.

POPULATION, HOUSING, AND TRANSIT PROBLEMS.

UNQUESTIONABLY the immediate problem *par excellence* of all great cities is the transit problem. Possibly some municipal economist of experience and repute may reply that the proper housing of the people is a more imminent problem. But in point of fact the two go hand in hand; and it is my profound conviction that more can be done to relieve the congestion of overcrowded urban districts by improved facilities for cheap and rapid transit than by direct treatment of the housing question, although I do not for a moment deny the imperative necessity of a clearing out of insanitary tenement property and a police regulation of house occupancy. It is but just to acknowledge that American cities have led the world in the development of the means of cheap public transit, and that one of the most important consequences has been the distribution of our urban populations over comparatively large areas, with the great advantage to health and morals of abundant air and light. Speaking in general, American cities cover several times as large an area for a given population as do European cities, and convey several times as great a number of people annually in street cars and suburban trains. European cities have a traditional compactness that has given direction even to their more recent growth and construction, and it is obvious that the more compact is the population the less business there is likely to be for transit systems.

Before giving an account of the transit arrangements of Paris it may be well to make some observations upon the growth and distribution of the population that is to be transported. Paris has from time to time made a number of concentric accretions. Its street and boulevard system and the division lines of the *arrondissements*, as indicated upon a map of the city, show some of its more important successive lines of cincture. Originally the "Ile de la Cité" in the Seine was the sum total of the municipality. Through the centuries it has annexed widening zones of territory. Henry IV. increased its area to 567 hectares (a hectare contains 2.4711 acres); under Louis XIV. it grew to 1103 hectares; Louis XV. revised the limits and made them include 1337 hectares, and finally, just before the Revolution, a hundred years ago, Louis XVI. more than doubled the area, and made it include 3370 hectares. The Paris of the Bourbons was nearly round, and was almost equally divided by the river one way and by the boulevards St. Michel and de Sebastopol at right angles with the river, being encircled by what is now known as the inner line of boulevards, with the Bastille at the extreme east, the Madeleine, Place de la Concorde, and Hôtel des Invalides at the extreme west, and the Mont Parnasse and Port-Royal boulevards marking the southern curve. Louis XVI.'s great annexation included chiefly the districts lying on the north side of the river, between the inner and outer lines of boulevards, an accretion very distinctly indicated on the map. This area remained without change until January 1, 1860. The government had constructed within the preceding two decades the great outer girdle of fortifications, and it was inevitable that this should sooner or later become the boundary line of the city. For more than thirty years, then, the limits have remained as established by the law of 1859. At that time the existing limits of the *arrondissements* were fixed, the old area being divided into what are known as the ten inner *arrondissements*, and the annexed districts, or "faubourgs," with adjacent parts of the inner city being divided into the ten outer *arrondissements*, each one being given a name and a number. At the same time each *arrondissement* was divided into four quarters, each of which was named.

The Paris of one hundred years ago contained a population of 600,000, the area now comprised in the outer ten *arrondissements* being rural, with only ten or fifteen thousand people. At the time of the annexation in 1860, as shown by the census of 1861, the inner ten divisions had more than 900,000 people, and the outer ten more than 700,000, a total exceeding 1,600,000. It is extremely interesting to

follow the subsequent development of population. The inner ten divisions actually lost more than 30,000 people in the decade from 1861 to 1871, a period in which great demolitions and street improvements were made; and in the same decade the outer ten divisions gained more than 200,000 people. From 1871 to 1881 the inner ten gained 116,000 while the outer ten gained 300,000. From 1881 to 1886 the inner ten lost 18,000 and the outer ten gained 94,000. The net result of the twenty-five years from 1861 to 1886 was a gain of 64,845 for the inner ten arrondissements and of 611,850 for the outer ten, the one half having 1,010,970 people, and the other 1,330,580, a grand total of 2,344,550. Obviously the inner divisions have reached their maximum inhabitancy, and the census of 1891 will doubtless have shown a slight further decrease. What we may call the old Paris has for fifty years had a population averaging about 1,000,000; and there have been added, up to date, nearly 1,500,000 more people, occupying the new belt of arrondissements inside the fortifications, the Paris of to-day having nearly 2,500,000 inhabitants.

Meanwhile the suburban population outside the fortifications has been growing rapidly. The little communes of the department of the Seine outside of Paris are grouped in the two arrondissements of Saint Denis and Sceaux. Altogether this exterior belt had a population of about 255,000 in 1861, which had grown to 617,000 in 1886, and will doubtless be shown in the present year to have attained a population of fully 725,000.

The existing Paris covers 19,275 acres, or about 30 square miles, while metropolitan London with 4,000,000 population contains 118 square miles, and Chicago, as recently enlarged, provides an area about as extensive for 1,100,000. The average distance from the center of Paris to the circumference is only three miles. Minneapolis, with only 165,000 people, has a municipal area more than twice as large as that of Paris. Almost the entire population of Paris is housed in the flats of tenement structures averaging from four to five stories in height. According to the revised figures of the census of 1886 there were nearly 75,000 houses in Paris, and the average number of people in a house was about 30. In the old arrondissements of the inner Paris there are probably about 30,000 houses, accommodating about 1,000,000 people. For a total contrast in the plan of house-construction we have only to cross the channel and to examine London, where we find an average of about eight persons to a house for the whole metropolis. But the people of Paris are better housed, all things considered, than those of London. A popula-

tion of 2,500,000 within a circle whose radius is only three miles is certainly very dense, but it must be remembered that Paris is a many-storied city.

All these considerations bear most vitally upon the question of transit. The people of inner Paris have not, as a rule, far to be transported from their work. They live on the *étages* above their shops and business places. Instead of taking street cars or omnibuses to go home, they simply walk up-stairs. And the same thing is true of the major part of the population of the outer arrondissements. Every quarter of the city is at once a business quarter and a residence quarter. Nevertheless, as the city grows in its outer districts, and as population rapidly increases in the suburbs beyond the gates, there is a vastly enhanced regular daily movement to and from the central portions where the principal business operations are massed. Thus the transit question assumes constantly increasing importance in Paris, as in the other large cities of the world.

There are two kinds of municipal transit that must be recognized, just as there are two kinds of streets in the great European cities. These cities have (1) their network of minor streets, and (2) their system of great thoroughfares and boulevards pertaining to the metropolis as a whole. Similarly, they have their systems of merely local street transit, by cabs, street railways, and omnibuses, and their more rapid system of what may be called metropolitan transit. It is this latter system that great cities are now earnestly discussing. In London it takes the form of the underground railway connecting the great passenger stations, and of innumerable suburban trains on all the railway lines. In New York and Brooklyn it has its beginning in the elevated railway system, and it is to have great extensions in the early future. In Boston it is the topic of the day. In our western cities surface, cable, and electric lines are made to answer temporarily the double purpose of local and metropolitan lines. The Berlin system I shall describe in another paper. But Paris, thus far, has developed no metropolitan system at all except the belt line, the "Chemin de Fer de Ceinture." The density of its population and the prevalence of high houses, as I have shown, sufficiently explain the tardiness of this great capital in such matters. The merely local system of transit, by cabs, omnibuses, and tram-cars, has had a steady development in Paris, however, and for a number of years the public authorities and skilled engineers have been anticipating the necessity of a metropolitan rapid transit system and have given the subject a vast amount of study and discussion. The consequence is that an important beginning is about to be made, and

after an account of the existing transit arrangements I shall explain the new proposals.

All kinds of passenger transportation in Paris have always been strictly supervised by the authorities. The omnibus system of the metropolis became important about sixty years ago. In 1854, by arrangement with the administration, fifteen existing omnibus lines became absorbed in the "Compagnie Générale des Omnibus," to which an exclusive franchise was given for thirty years upon condition of large annual payments to the city — a franchise that was renewed after the enlargement of the city in 1860, and was then extended to the year 1910. Under the plan of 1854 the company was required to pay the city 640,000 francs a year, with additional sums for each vehicle exceeding 350. By the arrangement of 1860, which is still in force, the company agreed to pay 1,000,000 francs a year, and to pay in addition for every omnibus used beyond the number of 500 an annual fee of 1000 francs until 1871, to be increased to 1500 francs from 1871 to 1886, and thereafter to be fixed at 2000 francs. Thus the present payment is 2000 francs each for every omnibus in use, and the number actually in use in 1889 was 639. After 1873, street railways came into considerable use, and those of inner Paris were constructed and operated by the Compagnie Générale des Omnibus as an added part of its business, its street railway franchises also extending to the year 1910. The company pays into the city treasury 1500 francs per year for each tram-car on its lines, and in 1889 there were 300 in operation. There are also two other street-railway companies operating in the newer and suburban parts of Paris, one system being on the north side and the other on the south; the southern system paying the city 1500 francs a year for each car and the northern system paying 750 francs per car.

The omnibuses and street cars of Paris are very large, ponderous, and slow, but they are operated upon the most methodical system in the world. The routes are precisely defined, and along each route is a series of neat stations built upon the sidewalk. Everything pertaining to the size and construction of the cars and busses and of the station-houses; to the style of rails and placing of tracks; to the arrangement, change, and addition of routes; to the prices charged and the transfers given; and to almost every other imaginable detail affecting the business, is prescribed by the public authorities. Upon the principle employed in dealing with the gas company as a chartered monopoly, the city has a right, after dividends and all public charges and private expenses are paid, to one-half of the surplus profits of the "Compagnie des Omnibus et

des Tramways"; but thus far little has been realized from residuary profits. The Compagnie Générale transported in its omnibuses in 1889 more than 121,000,000 passengers and in its tram-cars more than 80,000,000. Its business had grown from 108,754,560 passengers in 1872 to 201,945,280 in 1889. The other two tramway companies transported some 25,000,000 passengers each in 1889, making a grand total for Paris of 121,000,000 passengers carried by omnibus and 130,000,000 carried by street railway. These are not large figures when compared with corresponding ones for American cities; but it is worth while to remind American readers that the Parisian transit companies pay more than 2,000,000 francs a year to the city treasury as a rental for the privileges they enjoy on the streets.

Nearly all the cabs and public carriages of Paris belong to one great company,—the "Compagnie Générale des Voitures de Paris," which has about 8000 vehicles in use. For the use of the public cab-stands, and their license to do business, each carriage must pay an annual license fee of 365 francs — a franc per diem. In 1855, following the Compagnie Générale des Omnibus and the fusion of the gas companies, monopolies being the fashion, special privileges were accorded to a great cab company that was formed to absorb numerous small proprietorships; and in 1862 this company obtained an exclusive franchise for the use of cabs and public carriages throughout the enlarged municipality, upon the basis of a payment to the city of one franc per day for each vehicle and of a division with the city of the surplus profits, as in the case of the gas and omnibus companies, the patrons being protected by a fixed scale of charges and a minute code of regulations. But this monopoly was not deemed advantageous, and the exclusive privilege was revoked in 1866. To the surprise and indignation of the city government, the cab company obtained a judicial award of damages to the amount of 300,000 francs per year for each of the remaining 47 years of the original 50-year grant. That excessive award has of course given the company an advantage over all competitors, and it has steadily grown. Since 1866 the cab business has been free to all applicants, subject to the laws regulating the details of the service, and the fee has remained at 365 francs a year. There are probably about 10,000 public carriages in Paris, of which four-fifths belong to the general company. The annual receipts of the city from cab licenses exceed 3,600,000 francs; and the total receipts under the head of "voitures publiques" exceed 5,600,000 francs. In the past ten years, therefore, Paris has received between 50,000,000

and 60,000,000 francs as rentals from companies and individuals using the streets for passenger transportation. Undoubtedly for a number of years past the city council has not been especially friendly to the great monopoly companies of Paris, and it would be more than willing to have them superseded by a system of direct municipal operation. But conservative public opinion prefers the existing arrangements, and assuredly they are not seriously disadvantageous. What is especially needed in transportation facilities is a very great extension of the street railways and omnibus lines, with the introduction of small, frequent, and rapid vehicles, and a modification of the system of licenses that puts a penalty upon an increase in the number of tram-cars and omnibuses.

But in addition to these facilities for local transit, Paris needs a metropolitan system. I have referred to the belt railway. It follows the perimeter of the city just inside the fortifications. It is primarily a line for the connection of the great railways entering Paris. Only one of these roads has its passenger station conveniently near the center of the city, and the transfer of goods and passengers has been extremely inconvenient. The girdle line also serves, however, for a considerable amount of ordinary local transportation of passengers, and may be deemed part of a system of metropolitan rapid transit. For the completion of such a system several elaborate plans have at different times been worked out under the auspices of government and municipal engineers. Some have been plans for underground and others for elevated lines. But all have involved great expenditures and heavy subsidies or guaranties. Now, however, one of the great railway companies, the "Compagnie du Nord," and a well-known engineering and contracting firm, that of the famous M. Eiffel, have come forward with a joint plan requiring no public contributions or guaranties, and asking simply the right to proceed. The Compagnie du Nord proposes to build underground lines connecting its central station and the girdle line with the Halles Centrales on the one hand and with the Madeleine Quarter on the other; and M. Eiffel proposes, in continuation, to construct an inner circle of underground lines that shall follow in general the grand boulevards and shall pass under the Seine. The lines will be below the sewers and conduits, will be operated by electricity, brightly lighted, of course, with electric lights, and reached from the frequent stations on the streets by large passenger elevators. It is altogether probable, at the moment when this sketch is written, that the proposals will be adopted and the work taken in hand soon. The total cost is estimated at somewhat more

than 100,000,000 francs. The system thus begun can at any time be extended. The underground electric road is, in my judgment, to be the permanent rapid-transit system of the world's greatest cities; and Paris seems now to be destined to resume her place in the forefront of progressive municipalities by securing the *Nord-Eiffel réseau* of underground lines. The fact that the abolition of the fortifications is now seriously contemplated, and that Paris is sure to expand rapidly in all the suburban directions, adds much to the timeliness of these new transportation projects.

WATER SUPPLY AND DRAINAGE:

Two kindred functions of the modern city that are now deemed primary and vital are the supply of water and the provision of drainage facilities. In a general way it may be said that the amount of pure water that is daily distributed to the people of a great city, and that is safely drained off with its accumulation of impurities, measures the progress of material civilization. In the first decade of this century the average daily water supply of Paris was 14 liters per inhabitant. At present there are important works in progress, begun in 1890, that will bring the supply up to 250 liters per head of population. Until 1855 the supply was decidedly insufficient; but at that time great projects for improving it were set on foot. It was then determined to make use of a double system of pipes, so that pure water for domestic purposes could be supplied to houses, and common river water, unfit for drinking and household uses, could be supplied for street sprinkling, for sewer-flushing, and for other purposes. It was also decided that the pipes should, wherever possible, be placed in the sewers, and that new aqueducts and reservoirs should be constructed to bring the supply up to an average of 200 liters per day. These projects were in part carried out; but the annexation of the suburbs in 1860 made important changes in the program. By this extension of the municipal limits 500,000 persons were brought into the city who were being supplied with a wretched quality of water in painfully insufficient quantities at exorbitant prices by a private monopoly, the "Compagnie Générale des Eaux." The city of Paris had always dealt directly with the users of water, and the question arose how to solve the problem of the suburban supply. It was finally decided that the city should own and control the entire plant and supply, and should in every way regulate the water system; but that it should charter the Compagnie Générale to conduct the business of dealing with householders and private users throughout Paris,

accounting from week to week to the city treasury. The company was allowed to earn a dividend upon 20,000,000 francs (\$4,000,000), and all profits accruing above such dividend were to be divided between the city and the company. The municipality is in absolute control of the entire supply, public and private, and the water company is simply the city's agent for collecting rentals, making house connections, and transacting all business with private users. Meanwhile the company has nothing whatever to do with the second set of main pipes that carry water for street and public uses. As income from its share in the surplus profits of the business transacted by the company the city receives more than 12,000,000 francs a year. The company's charter will expire at the end of the year 1910, after which its services will doubtless be found superfluous. Meanwhile the arrangement works very well, and the whole management of the water question in Paris, whether from the administrative or the engineering standpoint, is in most favorable contrast with that of metropolitan London. The sources of supply are various springs and streams in the Seine valley within a hundred miles of Paris, as well as the Seine itself; and the system of canals, aqueducts, pumping-stations, reservoirs, filtration works, and other engineering appliances for collecting and distributing 500,000 cubic meters or more of water each day is extremely elaborate, and in most respects very scientific and admirable. There will have been spent between 1856 and 1892 upon the construction of water-works by the municipality of Paris a sum reaching nearly or quite 200,000,000 francs.

The development of the famous sewer system of Paris has been most intimately associated with that of the water supply. No city in the world possessed forty years ago what would to-day be called a tolerably respectable or complete system of underground drains. It was not until 1830 that the sewers of Paris began to have any considerable extension; and only in 1856, the date of so many of the huge reforms of Paris, did the present system, along with the enlargement of the water supply, have its beginning. It was in that year that M. Belgrand, *Directeur des Eaux et Égouts* (Director of Water Supply and Sewers), laid out the existing system of main sewer tunnels, or "collecteurs," as the French well call them. Of the collecteurs of the first class there are three: one on the right bank of the Seine, which is nine kilometers long and empties into the river at the Asnières bridge; one on the left bank, which is a little longer, and which passes under the Seine at the Pont de l'Alma, and joins the first collecteur at Clichy; and a third, which begins in north Paris at the Cemetery Père-Lachaise, fol-

lows the outer boulevards, and empties into the Seine at St. Denis. It is nearly twelve kilometers long. Besides these three great ones, there are several secondary collecteurs. As for the regular street sewers, it is the Paris principle that every street, however narrow, must have at least one sewer, and that every street of twenty meters or greater width must have two, one running under each sidewalk. The collecteurs and the principal street sewers are of enormous size, and accommodate large boats and wagons specially constructed. With reference to drainage, the Paris streets are divided into two categories, those of the "grande circulation" and those of the "petite circulation." The former, of course, have much the larger sewers. The average size in the ordinary streets is a sewer of elliptical shape about seven feet high and five feet wide. Small as is the area of Paris, it has not far from six hundred miles of good sewers, in all of which tall men can stand erect. These capacious tunnels have been costly, but Paris is finding them an excellent investment. All the water-pipes of the double water system are carried in the sewers and are easily cared for, replaced, or mended. The government is now the proprietor of telephone as well as telegraph lines, and the Paris municipality has various electric wires of its own; and all are readily accommodated in the sewers. Pneumatic tubes, for one purpose or another, are also distributed in these convenient subways.

Although carrying off all surface water, and a large amount of liquid refuse from houses and various establishments, the Paris sewer system was not originally constructed to receive solid waste. Under each house is a water-tight "vidange" or cesspool, constructed with strict reference to sanitary conditions, which is periodically emptied, under a scavenger system carefully regulated by law. But what the French people call the system of *tout à l'égout* (everything into the sewer), which prevails in the English and American cities, is being gradually introduced. The main difficulty to be met is the lack of sufficient fall in the sewers. Means are, however, being found to overcome all obstacles; and the highly objectionable system of cesspools will in the early future be totally abolished.

Paris, like all other great cities, has been much concerned with the question how to dispose of sewage. At present most of the outflow of the collecteurs pours into the Seine, to its serious pollution. But some years ago the municipality purchased several thousands of acres of land in the plain of Gennevilliers, a few miles down the river, and began the experiment of a sewage farm. The project has been an unqualified success. An extension from the Père-Lachaise-St. Denis collecteur carries a

large quantity of sewage to the farm, where it is used by irrigation as a fertilizer, with the best of results in every way. At present one-fifth or more of the total sewage effluent of Paris is used on the land at Gennevilliers; and in due time the whole quantity can be diverted from the river to this and other tracts of land which have been selected as suitable for the purpose.

WHAT PARIS DOES FOR ITS CITIZENS, AND
WHAT IT ALL COSTS.

As the most highly organized of modern communities, a detailed study of Paris in all its municipal activities would easily fill a thousand pages. I can only hope to present the general characteristics and aims of the Parisian system, with a few salient facts and statistics. Paris, within its present limits, covers thirty square miles, ten of which are occupied by streets, waterways, and parks. Two and a half million people dwell upon the remaining twenty square miles. They live in a remarkable condition of order and apparent thrift and comfort. But, of necessity, their existence under such circumstances requires an exceptional development of social organization. In French parlance and law Paris is a "commune"; and, in fact, the Parisians are a community. An intelligent study of the municipal budget shows in the briefest possible way how much they have in common. It requires an ordinary expenditure of from 250,000,000 to 300,000,000 francs every year to defray the expenses of the city government—\$25 for each man, woman, and child. This sum is more than twice as great as the average corresponding figure for the other great cities of Europe, such as Berlin and Vienna. The great public improvements and transformations of Paris have imposed a debt upon the municipality of nearly \$400,000,000, upon which the annual interest charge is about \$20,000,000. This is a vastly greater debt than any other city carries; but it is steadily shrinking under a system of terminable annuities by which the yearly interest payments gradually extinguish the principal. Assuming the annual cost of the city government per inhabitant to be 125 francs, it may be instructive to show where the money is expended. Twelve francs go to the maintenance of the police department with all its various services; three are paid for the cleansing and sprinkling of the streets; three and a half are paid for public lighting; half a franc goes for protection against fire; ten francs are expended for the maintenance of the schools; ten more go for the support of hospitals and the relief of the poor; from eight to ten are spent in maintaining the ways of communication; a sum that varies greatly from year to year, but

which we may assume to call five francs, is paid out on new construction of streets and means of communication; and forty francs are required to meet interest and other payments on account of the municipal debt. The expenses of the general offices and city council, with a large salary list, and of various minor departments and services that need not be specified, easily account for the remainder of the 125 francs.

Most of these items seem enormous when compared with corresponding figures for other European cities. But it does not follow that taxation is ruining the Parisian people, or that the heavy municipal expenditures are a hardship. Thus the cost of maintaining, cleaning, and sprinkling the public highways is vastly greater per capita than that of almost any other European community; but the work is done in the most thorough and scientific manner, and the money is honestly and skilfully applied. The Parisians live in such a way that clean, smooth streets are from every point of view a wise investment. Health and private property alike require freedom from dust.

Public lighting is so generous in amount that it is of necessity expensive, but it would be easy to demonstrate the soundness of such an investment in Paris. The paving of streets is as perfect as possible, regardless of expense, and is in the hands of the most expert government engineers. Such paving for Paris, if not for other cities, is a measure of true economy.

The expense of public education in Paris will not be seriously criticised in any quarter. Probably no other city in the world secures equally advantageous results from the outlay upon schools. Under the compulsory education act the attendance of children in elementary schools has actually been made almost universal. But Paris does not stop with elementary education in reading, writing, and numbers. It maintains a marvelous system of industrial and trade schools for both sexes, in which almost everything that pertains to the production and traffic of Paris is taught and encouraged. American and English visitors at the exposition of 1889 will remember the remarkable display of the Paris industrial schools, especially in lines of decorative manufacture and art. It is in these schools that Parisian dressmakers, milliners, artificial-flower makers, furniture designers, house decorators, skilled workers in metals, and handicraftsmen in scores of lines of industry are educated to do the things that keep Paris prosperous and rich. It is public money wisely spent that maintains such an educational system. I need not refer to the higher schools of science, of classics and literature, of engineering, and of fine art. All the flowers of civilization are encouraged by the Paris mu-

municipality. The yearly expenditure of a moderate but regular sum for the promotion of fine arts, by means of the purchase, under a competitive system, of designs for public statues, of pictures and mural designs for schools and various public buildings, and of other artistic works, not only educates the popular taste and adds to the adornment and beauty of the city but helps to keep Paris the art center of the world, and thus to maintain what, from the economic point of view, is one of the chief and most profitable industries of Paris. The mercantile schools that train so many thousands of women as well as men in bookkeeping and penmanship are also an admirable investment.

The city's care for its poorer population, as shown in the famous Mont de Piété and in the great system of savings banks, as well as in the various kinds of hospitals and retreats, seems fully justified by the facts of Paris life. The Mont de Piété, now venerable, but thoroughly active, has been imitated in various other European cities. It is a great public pawnshop with several central establishments and with twenty or thirty branches in the different parts of Paris. It receives money on deposit from the thrifty savers, and it loans on chattel security at fair rates to everybody who needs to borrow in that way. Undoubtedly it has saved hundreds of millions of francs for the poor of Paris. It handles in a year some 4,000,000 pieces of property, and does a business exceeding 100,000,000 francs. On any given day its books would show nearly 2,000,000 articles loaned upon, and nearly 50,000,000 francs outstanding in the hands of borrowers. It is successful in the highest degree. The municipal savings bank is another great establishment that represents the thrifty side, just as the Mont de Piété suggests the unfortunate side, of the life of the common people of Paris. The savings bank receives no money except from Parisians, and on the 1st of January, 1890, its actual depositors numbered 582,043, to whom was due the sum of 139,804,413 francs. The number of patrons increases steadily each year. In addition it should be said that the Paris offices of the national postal-savings-bank system have a still larger number of depositors, although they receive a smaller aggregate sum of money. In the two systems there are not far from a million individual accounts running, with deposits probably reaching 240,000,000 francs. The savings bank of Paris has a branch in each one of the twenty arrondissements of Paris except the first and second, which are readily accessible to the central establishment.

It has seemed to me well to pass with only general mention the relation of Paris to what

the French expressively call "approvisionnement." The great markets belong to the city, and the whole supply of food and drink comes under well-organized official cognizance. Paris was the first great city to abolish all private slaughter-houses and to concentrate the business in well-appointed municipal abattoirs. The municipal laboratory of chemistry is constantly testing foods and drinks, and the sanitary inspection of every kind of food supply is scientific and elaborately organized.

Having given the cost of Paris government, I must not omit in a summary way to explain how the 250,000,000 francs or more a year come into the treasury. More than 140,000,000 francs accrue from the octroi taxes—levied as local customs dues upon foods, wines, fuel, building-materials, and certain other articles brought into the city—and are therefore indirect taxation. Some 35,000,000 francs are obtained by direct forms of taxation, chiefly upon rental values and house occupancy. From 30,000,000 to 40,000,000 francs are gained by the profits of the city's various enterprises such as markets and abattoirs, and from its relations with the gas, water, street-railway, cab, and other profitable monopolies. The rest comes in large part from the national treasury, which pays its considerable proportion towards the cost of police, of paving, and of some other services in which the country as a whole is concerned. The octroi system, which prevails throughout the French towns and cities, tempts a digression. The chief arguments in its favor are its long-time existence, the fact that the people are accustomed to it, and the great practical difficulties that would be encountered in attempting to secure as large a municipal revenue by any other means, the national government having appropriated and applied almost to the limit of endurance nearly all the other usual sources and methods of taxation. In practice the Parisian octroi system is less objectionable than it is in pure theory, and there is no prospect of its abandonment in the early future. The large income that Paris derives as profits from special enterprises is a noteworthy topic. A critical discussion of the Paris budget is not in order in a descriptive article, and I may only say that my earlier unfavorable impressions, due to figures so large in comparison with other European cities as to seem indicative of extravagance, have been in the main removed by more careful study. If Paris spends vast sums in her municipal housekeeping, she has diverse, magnificent, and permanent results to show, and her people are, as I believe, enriched rather than impoverished by their common investments as a municipality.

Albert Shaw.