CITY PLAN. BY CHARLES R. LAMB.

In those days when the Western prairies were not gridironed by railways and the wagon train was the only means of transit, each evening was seen in its simplest form an example of the formation of a city, by the "camp-out." The wagons, arranged in a large circle, wheels interlocked with wheels, formed a barrier surrounding the camp itself, a necessary wall of defense against the possible attacks of the Indians. This curving line of interlocked wagons personifies all the various means of defense that cities have had, from the simple stakes bound together of the African tribes to the heaviest and most solid of the walls of the towns of mediaeval Europe.

The principle of defense, that of the wall pierced with narrow openings at infrequent points for egress, necessarily determined the city's plan, and from the fact that the walls were solid and practically unpierced, buildings were backed against the walls and faced toward the city's streets. Thus, the more important buildings were brought to the center of the enclosure into the more open spaces, and if a careful study be made of practically all the buildings of the Middle Ages, this principle—that of the important civic buildings erected in the central, open space, and the more unimportant buildings on the outer part of the circle against the ramparts of the town's defense,—as stated, will be realized.

The argument is the same when cities are found on river sides: the river was its own defense against all but those who attacked by boats, and the ease with which the river could be made impassable, added to its advantages at all other times as a means of traffic for commerce.

In modern times, the outer walls of the old cities have disappeared or are unused; in many cases the actual ground on which they stood being made a distinct modern improvement in the city's scheme, owing to the fact that the area belonging to the city makes it possible to design this, as a distinct addition, into parks and open spaces. If we might now consider planning a city de nouveau for modern conditions, in these times when the determining idea of offense and defense on the part of ancient cities could be modified to the modern conditions of commerce, it would be relatively easy to establish those principles which would give the maximum convenience, the greatest advantages to the inhabitants, and secure the best aesthetic results.

Although American cities are considered the most rapid-growing in the world, they yet have their origin in those combinations of commerce which brought them into contact with the business of the country. Thus, with no comprehensive plan, established in advance, to direct such cities' growth, they inevitably developed in an erratic way. The innumerable difficulties caused by the ownership of realty has prevented any but the most accidental improvement, even when improvement was possible.

We have, in the Capital, a city planned
practically in advance, under the professional ability of the French engineer, L'Enfant, and the intelligent judgment of our first President, Washington. Wherever this plan has been deviated from during the past century, it has been found to be a mis-

the National Capital, practically advised the return in every essential particular to the plan as first developed by an engineer and a statesman, when the ground was all a series of farms extending over a rolling country. What was the basic principle of

take, and recently a Commission formed by Congress, after a careful survey of the entire question, as to the full relation of the differences between the Washington as first laid out and the Washington of to-day, and with a careful surmise as to the future of the design?—A few main lines of radiation from common centers, which gave the most direct access to the different parts of the city.

In counter-distinction to the plan of Washington, the gridiron system of New
York, also the outcome of a commission, can be shown as possibly the most unsatisfactory of all forms of street arrangement, if the convenience of the citizen be considered, while the artistic possibilities have been ignored by having the rectilinear plan driven through tons and tons of natural rock to the destruction of the natural contours, and to the great expense of the community at large as well as of individual house-builders. It is a geometric axiom that the distance of two sides of a right angle triangle is greater than the third, and that, therefore, any system of transit through streets of right-angled plan, north or south, east or west, must necessarily increase the distance to be traveled, as against the diagonal streets leading from one quarter of the city to another. Broadway, the one great diagonal through New York, proves how essential such diagonals are, and it is but recently that a serious attempt has been made to suggest modifications and improvements in the present plan of New York, so as to rectify
many of the difficulties and adjust the changes to the inevitably increasing congestion of the growing metropolis.

It might be suggested as a wise measure to discuss the ideal city and assume for the moment, as Dowie did in Zion City, the designing of a city entirely from the commencement and arranging in the plan the possible developments of the future. This has frequently been done in an academical way, but never, to the writer’s knowledge, with a full reference to the problems embodied in such a scheme. Indefinite statements about an “Ideal City,” the “City Beautiful,” or a “City of the Future,” mean little, unless they embody the practical ideas which inevitably dictate the development of the schemes. Municipal Art must have for its foundation practicability. Its very essence is dependent upon the harmonious relations between this and beauty, and, therefore, a city planned to be developed in artistic and aesthetic directions, must be based upon the most practical plan. And what is such a plan? To the writer’s mind, all forms of rectilinear designs must be discarded. The cutting of these with diagonals is, after all, but a make-shift. If not an oblong or a square, what form would be the basic one upon which to found the city? After the fullest consideration of all the possibilities that geometric figures give, the writer is tempted to suggest the scheme shown in the accompanying diagram, the hexagon. This permits the development of the city to the utmost that might be possible within many decades, because with the hexagon, the great advantage of the diagonal already discussed is secured, and, at the same time, intervening spaces which can be secured for playgrounds and park areas, between the large central

areas, which, in turn, can be used for groups of civic buildings in certain parts of the city, and, again, in other parts of the city seats of learning, recreation, business in all its forms, banking, publishing, the newspaper industries, and the thousand and one trades, which, in their turn, seem to be desirous of grouping themselves around a common center.

The tendency of different businesses to centralize in one locality has been recognized for many years. This tendency is not restricted merely to business, however. Theatres and all buildings for the recreation of the people gravitate toward one quarter of the city. Educational institutions, hospitals, etc., each, in turn, are found gravitating toward their fellows. This tendency suggests that in the model city of our argument such areas could be located in zones—zones of learning, zones of pleasure, zones of medicine and surgery, zones of business. They, in turn, would have from them radiating, through the nearer territory, such buildings as would instinctively consort with the idea presented by the zone. Thus each zone would have not only its administrative buildings but also buildings of habitation; the minor businesses for local distribution; the schools to serve the children of the zone, etc. In this way each zone, in its own group, would be practically a city complete, self-supporting, divided from its neighboring zone or city by the small park, and yet connected with it by the diagonal streets. The power of extension of such a plan is infinite. The danger of congestion by the excessive growth of cities has in such plan been eliminated, or, at least, reduced to its minimum.

The more this plan is studied, the more it will be found to approach the idea of prac-
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ticability, primarily in regard to shorter distances that a person would have to walk or drive from any one point to another. The sub-division of the interests into groups by a division of the park area, is to be distinctly commended from its sanitary point of view, as these interruptions of natural foliage give the greatest advantage to the inhabitants of each quarter. Aesthetically, the grouping of the public, semi-public and private buildings around common centers largely increases the architectural and artistic possibilities over the accidental opportunities offered by the ordinary plan of the city; while the angles caused by the hexagon permit interesting variety in the treatment of the street façades over that developed by any straight or continuously curved street.

Of course, such a plan is assumed primarily for a level country, and the argument must, naturally, be modified when the conformation would indicate distinct changes in levels. This point, which would seem most obvious, is indicated here, because, as a rule, the method of procedure with most city officials and most city plans is to forget the question of altitude, and to force any scheme to comply with all differences in the elevation of the ground.

It is, as yet, a debatable question as to how large a city or town should be to secure the most healthful environment for the inhabitants; but it must be admitted that the smaller the group and the more frequent the interruptions by parks, the more satisfactory the result artistically, and the improvement by such breathing spaces of the health statistics, as well as the improvement

The Pan American Exposition: a suggestion how to have saved its main attractions as a park, with new residences on either side

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in the morals of the people shown by the police records, could easily be witnessed.

The park system, if properly developed, would give an open area and breathing spot in every section of the city so close together that at no time would the distance be farther than a short walk; for it must be remembered that a park for the people is to be reached (if it is a park for the people) by walking, for a park which is ten cents away from the poor man’s home is not one which he or his children can utilize. The Parkway, that is, connecting streets which tie the series of parks together, is the most happy solution of the difficulties that has been found in existing laws, most of which seem to be legislation against the beautification of the streets even by the use of foliage. When a street becomes a park-way, however, it then is brought within the jurisdiction of the Park Department, and the use of trees in the park being fundamental, it becomes the principle for the treatment of the parkways, and thus lines of green are formed connecting the greater areas of green—the extension of the system but adds to the beauty of the city.

The Pan-American Exposition was located, it will be remembered, on land which adjoined the principal park of Buffalo, the reason for the selection being that the entire tract covered by the Exposition could be secured from one “Estate.” When the close of the Exposition approached and the beauty of the Court of Fountains and the great Electrical Tower were to be lost, it seemed as if some method should be found by which these features strongly built of good material could be retained as a definite asset in the beautification of the city.

Realizing as the writer had, the possibility by re-planning areas intended for buildings, on such lines as give direct access to the main parts of the area and, by so doing, establish locations for important buildings, he suggested in the design presented to the Board of Directors of the Exposition the re-planning of that section to the right and left of the main court with reference to the future streets, so as to secure two large courts facing toward the fountains for semi-public buildings and also the largest amount of street façade for the new buildings, which would become the new residential section of the city, while the central part of the Exposition should be bought by the city of Buffalo from the “Estate” and thus by its
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location be a permanent addition to Delaware Park.

The argument financially stated was:

First: The purchase of the most important part of the Exposition: the Bridge, Esplanade, Court of Fountains, Electric Tower, Plaza and Stadium;

Second: By the co-operation with the “Estate” so to lay out the streets of Buffalo in the new section as to secure the advantages shown in the plan, thus giving to the “Estate” the opportunity of sale at an increased valuation, owing to the fact that so large a number of the plots would face directly upon a park, and securing for a smaller area (that is, smaller by the amount taken for the park) a price which would be equal to the value of the entire area if sold at the lower value if the park did not exist.

The principal point of the argument was based upon the necessity of the city of Buffalo recognizing the death of the late President, memorializing his visit to the Exposition by dedicating this park to the people. Unfortunately, the gloom and depression caused by the assassination of the President at the Exposition itself made it impossible to have the scheme effectively considered; and the shortness of time, the closing of the Exposition, the necessity of returning the land to the “Estate” in the condition in which it was originally, started the work of demolition, which, in its result, killed the force of the argument for the memorial park.

The scheme is interesting to mention in this connection, as showing a possible cooperation in the future between municipalities and the people who own large tracts of land which may come by process of growth of the cities within the area of street planning. When municipalities realize the great advantage to the city from the question of taxation alone developed by an intelligent plan, then we may expect the officers responsible for the finances also to realize the necessity that the plan of the city be developed so that the city will increase in taxable value proportionately to its increase in area.

What can be done when a city is already built, is still growing, and when the general plan is unsatisfactory? This, probably, is the most vital question which can affect any community. Upon its successful answer hangs the future of the city, and the expense to be borne by the taxpayers will increase a hundredfold by the acceptance of an unsatisfactory plan, as against the intelligent acceptance of a practical scheme so designed as to develop automatically, so to speak, with the development of the city itself. How can the best results be accomplished? Primarily, by the city's realizing the necessity of having competent people supervise the plan as already existing, forecast the possible development of the city, suggest such changes as may be most advantageously undertaken at the present time, indicate those lines for the future growth of the city, which, by being established at an early date, would facilitate the location by private capital of the new buildings of the future greater city.

The congestion of population has naturally been more a difficulty in city problems in the old world than in the new, and, therefore, a few examples are given in the illustrations to show what radical measures are being taken or suggested to eradicate, if not entirely to remove some of the plague spots of the foreign commonwealths. For it must not be forgotten that bad planning induces
bad building, and bad building and bad planning combined, induce dirt and disease, and thus, like the loss of character in an individual, the breaking down of the lines of health and decency go hand in hand with the evils of a bad scheme.

The surgeon's knife is sometimes the last resort, so, in the suggestive examples, Cologne, Hanover and London, the lines of the surgeon's knife are shown in the new streets to be cut directly through the crowded areas. Compare the map of the buildings in the London example as they exist to-day and the radical changes suggested, and you will realize with what courage the municipality is facing the difficulties which it has allowed heretofore to develop unchecked.

Shaftsbury Avenue, London, was designed to fill two purposes: one to destroy the plague spot of Seven Dials; the other to connect Charing Cross with High Holborn. To-day, Shaftsbury Avenue, one of the notable new streets in London, has accomplished both purposes and Seven Dials disappears from the map of London and, at the same time, from the records of the police courts. It was thought that this great avenue would solve the difficulty of transit across the city, but already the necessity of extra lines paralleling Shaftsbury Avenue has been found, and to-day the City of London has decided upon the important thor-oughfare to be cut from Westminster Bridge and the Strand straight through the network of narrow streets which pass the Law Courts into Holborn, and, under the super-
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vision of the architect of the County Council of London, W. E. Riley, the work has been begun.

Why should we wait to have our death rate increased, rather than accept the experience of the older cities—begin intelligently to re-plan our cities, not only in their old sections, but, in the new ones, to lay out the lines intelligently for the future growth?

Why is it that we speak of the great streets of Europe in a personal way that brings them as definite pictures before our mind? Paris and one sees the Champs Elysées; Berlin and we think of Unter den Linden; Rome and the Corso; London, the Strand, Fleet Street and Picadilly. Why is this? Because these streets being the more important ones of the city, to them naturally gravitate the people of the city; place in the opposite scale our “Main” streets or “Broad” streets or “Front” streets, and then we can appreciate by the very names themselves how unsuccessful has been the system of growth and how inadequate the planning on the part of the authorities responsible for our cities.

A straight line is the shortest distance between two points. This is axiomatic, and yet nearly all cities are so planned that two streets of a right angle have to be traversed for the journeys that one makes. If the loss of time, if the expenditure of energy, if the wear and tear of the vehicles which are used, if the thousand and one expenditures of traffic in a city could be estimated and the direct loss to the community could be found, owing to the difference between a straight line and a right angle, the sum total would be so startling as to seem incredible. If, therefore, the argument is to be developed in

the interest of the financial side alone, the advisability in considering the planning of the city is so great that no other one question is of such vital importance to a municipality.

The tendency to centralize taxation upon real estate already exists and will continue. Our statesmen should think most carefully of the possible value which intelligent planning would give to areas either as yet unproductive or which, by bad planning, will not equitably bear a high tax. Why is it a recognized fact that streets facing upon a park have a distinct advantage and that the
area so located sells for a higher rate? The answer is obvious: light, air and sunshine have a financial value, and if, therefore, this is true, streets so planned as to give the best sites for buildings, sites securing the maximum of light, air and sunshine, will, in their turn, be the greatest tax producers for the income of the city.

out knowledge as to their ultimate outcome, because of the lack of intelligent action on the part of the municipality, with reference to the inevitable growth of the city. The future will unquestionably bring a direct change in this connection and municipalities will wisely, if well planned, unwisely if badly planned, attempt to develop the lines of future growth, so that capital may be induced by the promise of the municipality itself as to the future plan of the city so to invest itself as to develop the areas included in such plan.

The State as well as the General Government can also aid, to a much larger degree than has been generally thought possible, the work outlined above for the municipalities, by locating the main highways so as to connect town and village with the city, and thus each highway will become the extension, so to speak, of the very angle streets already discussed as so essential in any scheme of city planning.

A prominent architect, in a recent speech, didactically stated that the fault of the cities primarily was that they were laid out by engineers, and that the remedy lay in having architects in the future assume this work. But does this in any way explain why the architectural profession should be supposed capable of designing adequately for the combined interests represented in the problems of the city's development? The truth is, no profession has given an adequate study to these problems, certainly not the architectural. The profession as such has never in any way expressed a realization of the possibilities in such work, or indicated the responsibility of the architects to the solution of the problem, except with reference to the recent work in Washington—
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and here, while endorsing the original plan of L'Enfant, they ignore the fact that he was an engineer and not an architect. It is rather with surprise one hears the argument quoted above (now that the work has developed and its importance is being universally recognized), that the result must inevitably come into the hands of those who have hertofore ignored any responsibility in the matter. As a rule, they have repudiated their responsibility with relation to the larger scheme needed for any re-organization or re-planning of a municipality as to any of the individual units they have been called upon to design as architecture. Who but the architects have defied all rules of co-operative planning and stood for the selfishness of the individual unit called architecture? Municipal planning is of much greater importance than is generally considered, and the actual facts are that the idea has been developed by a few individuals in various countries, not by any means of any one profession, but, as a rule, of varied professions: statesmen, politicians, real estate owners, lawyers and citizens at large—principally by those who have the love of their city at heart, and rarely by the so-called professionals.

He only should be entrusted with the re-planning of the city who has shown by his imagination the power of looking not only "backward" but also forward so as to forecast the needs of the city of to-morrow as well as appreciate the difficulties of to-day. Who he is, is yet to be determined, and when he is found, a new profession will have been established: not that of architecture or engineering, but that of "Artistic Municipal Construction," and then that small group of men who have been faithful in preaching the ideal possibilities as well as the practical necessities of our cities will come into their own, and their status, not as prophets, but as leaders, will be recognized.

In the development of an artistically built city, problems have appeared within problems. It has been found necessary to divide the city into parts, according to the purposes it serves; and each of these parts has presented a question of development by itself, while the great, all-embracing urban problem has proved to be the coordination of these into a single scheme comprehensive and harmonious.

There is evidence of progress in the perception that the problems are collective—in a recognition that their sum is far more than an architectural question. For merely to build with an eye to beauty, while itself a forward step, is the first one to be taken; but first to place well and then to build well shows a yet further advance. "Man," says Bacon, "comes to build stately sooner than garden finely, as if gardening were the greater perfection;" and John Addington Symonds, writing of the Renascence in Italy, remarks, "Architecture is always the first of the fine arts to emerge from barbarism in the service of religion and of civic life. A house, as Hegel says, must be built for the god, before the god, carved in stone or figured in mosaic, can be placed there;" and council chambers, he continues, "must be prepared for the senate of a state before the national achievements can be painted on the walls."

—Charles Mulford Robinson in Modern Civic Art