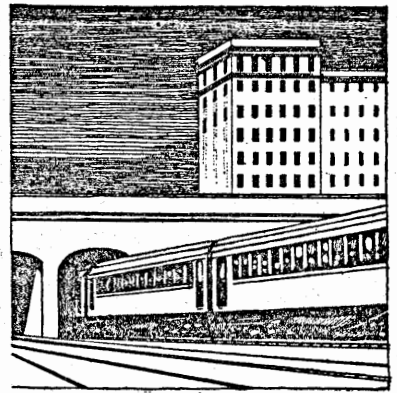
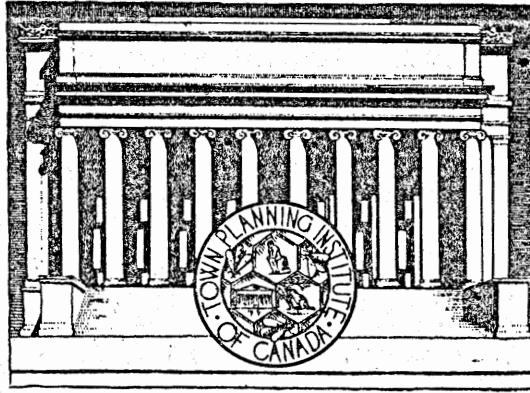


TOWN PLANNING



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Town planning may be defined as the scientific and orderly disposition of land and buildings in use and development with a view to obviating congestion and securing economic and social efficiency, health and well-being in urban and rural communities

NEWS AND NOTES

A Wise Mayor

The first place in the present issue of *Town Planning* is given to an illuminating statement of the uses of town planning by the Mayor of Boston, the Hon. James M. Curley, which appears in the second number of the *American City Planning*. The welfare of a city, that is the welfare of a collection of human beings, men, women and children, is dependent to such a pathetic, not to say tragic extent, upon the psychology of its chief official, "His Honor the Mayor", and so often mayors of cities come and go and leave not the slightest physical or spiritual impress on their field of government. They are often elected for reasons that only omniscience can fathom. Often they are men destitute of cultural sympathies, untouched by social passion to the end of their brief day of authority and innocent of and indifferent to the progress of sociological research and the world movement for the improvement of urban conditions because they have no leisure for or taste for study. The emoluments of their office are usually not sufficient to attract and retain financially am-

bitious men and the dignity of the office has been depressed by the appointment of men who make thoughtful citizens despair of democratic suffrage. Their chief function seems to be to say "No" to every movement that has a little broader reach than the measure of their minds and to "keep down the taxes", which they seldom do because they do not know wasteful expenditure when they see it, or the financial value of projects touched with a little idealistic beauty and what Seeley called "the enthusiasm of humanity."

To town planners and sociologists it will be refreshing to listen to a mayor who has the qualifications of a leader in constructive social thinking and is something more than a wet blanket upon the constructive thought of his best fellow workers. Boston has had to pay the price, as the article will show, of the unimaginative and unpassioned mayors of the past, the so-called "practical men" who thought that a building could be put up anywhere because it was supposed to be "good for trade" or "good for revenue."

The article is commended to those Canadian mayors who think the prosperity of the town can be achieved by "boosting" alone and by hideous wayside advertisement. It may also serve for encouragement to those mayors who realize that the old jumble way of town building is bad for the town and bad for the people and that a better way has been discovered of which the whole civilized world is taking note.

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Another Kind of Mayor

Some years ago the town of Aylmer, Quebec, eight miles from the Capital city of Canada was partially destroyed by fire. A public spirited citizen of Ottawa, in no way professionally connected with town planning and with no personal end to serve, consulted with Noulan Cauchon, Chairman of the Town Planning Commission of Ottawa, and several other engineers and surveyors, and made a proposal to the then mayor of Aylmer. The town lies on the lovely lake Deschenes. It has a water-front that might make the fortune of any town, if intelligently planned. It is an ideal place for what the English town planners call the satellite city. The town had been built in jumble fashion, common to new towns in Canada, and the fire which destroyed it was due to bad planning.

The proposal was that the town should be properly planned so that from the devastation should arise a more attractive and efficient town and that the planning should cost the community—nothing. The answer was that what the town needed was immediate financial help, and not town planning. Since then new houses have been built, with the help of the Federal building loan, below the level of existing sewers, which has involved the town in the enormous cost of a new sewer and, of course, have been built with no regard to a comprehensive plan of the town. It seems clear that town planning would have been of immediate financial assistance to the town of Aylmer and possibly would have determined its future prosperity to an extent not realized by the officials.

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Ottawa—the Capital

A writer in the Calgary *Herald* commends the idea for the creation of a National park in the Gatineau regions and wonders why, since the idea was so dear to the heart of Sir Wilfrid Laurier—and was not therefore born yesterday, the park has not been established. There is nothing narrow or parochial about the patriotism of the writer and surely there will be many Canadians who will share his views. "Ottawa", he says "as the Capital of Canada belongs to all Canadians. Do the people of Ottawa realize this? Do they realize that thousands of school children everywhere in Canada look upon Ottawa almost as the symbol of love of country and that they love it without ever having seen it? And those who have seen Ottawa know that if all these children could be taken to Ottawa they would love the actual city even more than they love the city of their pat-

riotie dreams."

This is good and sound writing, but the patriotism that ignores facts must sooner or later peter out. The decency of truth rebels against it. "From parliament hill", says the writer, "one looks upon a spacious and beautiful area. The immediate view is softened by the trees that line the banks of the Ottawa." The truth is that the immediate view is shocked by the City of Hull and the City of Hull is a sad mess of jumble building and barbarous paving which makes the entrance to it a torture for motor traffic. It has been burned out once or twice by what is perhaps rightly called in this case "An Act of God." When Hull turns its chemical "digester" on Ottawa the \$12,000,000 House of Parliament is the first building to shut its windows. Providence has given Ottawa plenty of sweet pure air, but when the chemical "digester" from across the river pours its stinks upon the Capital, Ottawa shuts its windows tight and curses in silence. Some day it will appeal to the Dominion parliament, and the Dominion parliament will only need to open its windows to understand the question.

There are two or three examples of industrial tyranny in Ottawa and vicinity that call for vigorous civic rebellion—and they are all questions of town planning and they all involve the deprivation of the rights of people. One is this chemical digester stink, which robs the people of their rights to breathe pure air. Another is the violation of the people's rights to sleep, by night shunting on the cross-town tracks of the railway. Industrialists should be shown that they cannot rob a city of its pure air and sleep just because their operations are profitable to them. Ottawa needs a "Bill of Rights."

* * * *

The Survey Graphic for May

Members of the Institute are recommended to secure a copy of *The Survey Graphic* for May, which may be got for 30 cents by writing to the publishers, 112 East 19th Street, New York. The price sounds ominous but as a matter of fact, a reprint of the number in book form would make a volume for which a number of dollars might reasonably be asked.

The number is devoted entirely to town and regional planning and most of the writers dig deep, not only into the facts but also into the philosophy of the movement. It denotes the release of the American town planning mind from bondage to property interests, which has so far hampered it very seriously and from a certain nationalist consciousness that city planning in America must somehow be different from city planning in all parts of the world. These writers have probably always known that the American ideal of bigness in the development of their cities was leading to national disaster but the courage to say so and to point out the facts in plain words and champion the welfare and happiness of the common people needed a band of men who were willing

to risk something to get the truth under way. The men are there, sincere and true and loveable as the Hebrew prophets but they are not yet much beyond the staggering critical stage. They are formulating their gospel, however, and when it is complete it will not be very different from the town planning gospel that is moving the world to a finer civilization. The traffic in land values will have to be tackled sooner or later if the American city planning movement is to be of real social benefit to the American people.

* * *

Dinosaur Cities

Mr. Clarence Stein's article on "Dinosaur Cities" is a brave and significant document. It is an exposition of the text, "We boast of the great cities that were born of the three migrations, and rub our hands as they grow greater. But even as we boast they are failing like the dinosaur; they are too big, and we pay dear for our illusion of grandeur."

Mr. Stein describes the great city as a "turbid mass of traffic blocking the streets and avenues, the slow-moving crowd of people clambering into street cars, elevateds, subways, their arms pinioned to their sides, pushed and packed like cattle in ill-smelling cars with a mingling of bodies which would be indecent were it not for the suffocation and discomfort that acts, as it were, as a counter irritant." "What part does art, literature, culture, or financial opportunity play in the lives of the millions of men and women who go through the daily routine of life in our great urban districts? To the few the great city gives all; to the millions it gives annually less and less. In spite of sanitary codes, tenement house laws, and various other urban reforms, the prospects for decent human living have become distinctly worse in New York during the last generation. And New York, unfortunately represents the goal towards which all our bigger centres are striving.

Mr. Stein puts on record the "serious breakdowns" that have attended the growth of New York. As far back as 1835 there was created a housing and slum problem and New York "has never caught up with its original shortage. To-day half the population of Manhattan are living in quarters below the standard fixed as safe and sanitary by the tenement house law of 1901; these tenements are within reach of the unskilled worker because they do not possess running water, the heating apparatus and sanitary facilities which represent the minimum standard for safe living quarters to-day..... In the great city there are not enough decent quarters to go round and even the decent quarters are not good enough..... What have these bleak and over-crowded homes to offer adolescent boys and girls?"

The second break-down of the big city is its water system and its sewers, and Mr. Stein prophesies that the time must come when water will become a luxury supplied at an uneconomic rate for the same reason that bread and shows and baths

were provided in ancient Rome, namely, "to keep the population contented. The sewage problem has defiled the Hudson, East River and the Harbor and cut the city off from 80 per cent of its shell fish, increased the danger of typhoid and now threatens the bathing beaches of Coney Island and Brighton. The disaster can only be avoided by building an elaborate plant and equipment to meet the problem temporarily, at an enormous expense. The "overhead" of the city is increasing to a point at which it will outmeasure any of its tangible or intangible benefits. There is an impressive chapter on the breakdown of the street system and the inability of the overground and underground ways to carry the load of traffic. At the present time New York, with its 5 cent fare is losing more than \$12,000,000 annually on the money it paid for constructing subways and will lose even more on projected new lines, it is stated, which will be three times as costly.

In the case of industry Mr. Stein shows that it costs more to carry on manufacturing on the congested island of Manhattan than it does in the smaller industrial centres because the transportation of goods through the streets and on railways is the very life-blood of industry; and in all our big centres these arteries are clogged. The trucks of New York city spend less time in active hauling than in unproductive work—locked in congested streets, or waiting at the crowded loading stations and stores, the few hours of the day that the trucks actually move at a snail's pace has already made the automobile uneconomical. The crowded conditions of the streets have also increased the overhead within the factory, high rent, high taxes and high cost of fireproof structures have so raised overhead costs that the garment manufacturers of New York find it difficult to compete with those in small cities, where these costs are lower. "Inadequate housing facilities, inadequate water supplies, inadequate sewage, inadequate streets and inadequate transportation—these are but the larger and more obvious ills that derive from the congestion of population."

* * *

Why Food is High

Mr. Stein and the group of writers who have made the May number of *The Survey Graphic* an historical document in the changing thought of American sociology are not voices crying in the wilderness. After an impressive assembly of figures showing that the cost of food rises four or five times between the farmer and the consumer *The New Republic* remarks:

Competitive individual enterprise never worked to worse public advantage than in the marketing of foods. After all is done that can be done, we may find that the very existence of the enormous unplanned city is the greatest of all causes of waste. There ought to be a saving in the living together of a fairly large number of persons. But the concentration of population may already have gone

by its own momentum far beyond the point of diminishing returns—either in food costs or in happiness.

The following paragraphs show the mounting costs of food due to the mere dragging of it about a badly planned city. The properly planned city places its distribution centre in one place and prevents inestimable waste of money and time for all concerned.

It costs more to get a box of Oregon apples from the freight train to a New York table than it does to get them from the blossom to the packing box and across the continent to Hoboken. Of the \$5.09 which is paid at retail for a box of such fancy apples, the grower's portion—for the packed container—is only \$1.19. The retailer's margin is larger than the farmer's, or \$1.90. Besides these principal items, the shipping organization adds 26 cents, the transportation charges 78 cents, the wholesaler 43 cents, and the jobber 53 cents.

Northwestern apples happen to be typical of the situation for nearly all fruits and vegetables. On fourteen varieties, about 47 cents of the consumer's dollar is pocketed or used by the retailer and jobber after the product reaches the port. It is therefore up to the city consumer to see what he can do about the high cost of living at his end of the route before he begins to bellow for lower freight rates or bargain with the farmer.

Terminal handling and cartage costs, although less than 10 per cent of the total retail price, are a shining illustration of wasteful distribution. It costs 42 cents to haul a 150 lb. sack of potatoes 1120 miles to the terminal. It then costs 62 cents, or nearly half as much again, to take them 15 miles to the retailer. The first part of the haul is at the rate of less than four-hundredths of a cent a mile, the last part at the rate of over four cents!

A study of the waste time of trucks brings this out. Out of every 100 hours of truck service paid for, only 36 were productive of service, or a little more than one-third. Delay at terminals and stores, trips with part loads, and the like, accounted for a waste of 29 hours. Completely idle time because of no work took up the other 35. Thus only 26 cents out of every dollar paid for trucking is spent for actual service. Profit takes 14 cents, and waste eats up the rest. If that waste could be completely eliminated, cartage costs would be reduced 60 per cent without shaving off a dollar of profit or wages.

* * * *

A Garden City for Canada—Perhaps

It looks as though the idea of the better-built city were catching on in Canada—and what a business opportunity there is for any man or group of men who will build the First Garden City of Canada! Why, the name itself—if there is any

reality and not a sham behind it—will be worth millions of dollars. It is said that \$70,000,000 is to be spent on developing a "model city" on the banks of the Saguenay river when the Aluminum Corporation of America establishes itself there. Much less than this sum would do the job if a competent Canadian town planner were appointed to do the work of planning, and the land values and public services were conserved for the benefit of the people who create them, for thus would be founded a perpetual revenue which would "take care of" the city and soon return the original investment. Much less! Possibly seventy times less, since they are finding in the United States that a million dollars, wisely spent, will found a "demonstration town." The First Garden City of England was founded on even less capital than a million dollars and it is now a paying concern with assets in land values and public services much larger than all the capital that has been put into the project. We quote from the *Ottawa Citizen*:—

Building a New City

A report from Toronto says that 40,000 people are expected to be placed on the banks of the Saguenay river when the Aluminum Corporation of America establishes itself in Canada, and that the company will spend \$70,000,000 in developing a "model city."

How this announcement must make the heart of every town planner leap. What a golden opportunity for some happy man who will have the job of creating this new community in the Quebec wilderness. And what a chance to build a city that will for long be regarded as a model for others.

It has been the experience in the past that cities in Canada have grown up without order or plan, and that citizens of the present day suffer from the mistakes of their predecessors, resulting in enormous outlays to attain even elementary improvements in the physical character of established communities.

But in the case of the new model city on the Saguenay, those constructing it will have the longed-for opportunity to begin at the beginning. It is possible to make the most of that opportunity and to create a town which will meet the ideal of perfection which all town-planners cherish.

Before the rattle of the typewriter of this paragraph has died away comes the "news" that the American Aluminum Corporation has no such intentions as are here described. Still the idea is good and there is no telling when an idea may fructify and the latest "news" may also be denied. What should we do for "news" if we had to rely on fact? The "reporter" must have had an idea which he thought too good to waste.

* * * *

The Hexagonal or Honeycomb Block

Mention has already been made of the fact that Noulan Cauchon's plan for arranging residential

blocks in hexagonal or honeycomb fashion instead of on the gridiron pattern and his scheme for rapid transit created a great amount of interest at the recent International Town and Regional Planning Conference at New York. The proposal is—as readers of the last issue of *Town Planning* will remember—to arrange dwelling units in new subdivisions—which we call “blocks” in hexagonal fashion and place in the middle of the hexagon a playground for children or a small park for adults as a refuge from the intolerable conditions of street traffic brought by the motor car and at the same time provide independent rights of way for rapid transit—an “express system”, which will be relatively free from intersections.

Since the article entitled “Arterial Highways and Hexagonal Planning” appeared in *Town Planning* there have been many signs that the proposals contained therein are attracting unusual attention among American planners. The American Civic Association have asked for fifty copies to distribute among their members. Assurances have come from Mr. John M. Gries, Chief, Division of Building and Housing, Department of Commerce, Washington, Mr. Albert Lilienberg, Professor of Town Planning, Gothenburg, Sweden, Mr. Bancroft Gherardi, Vice President of the American Telephone and Telegraph Company, New York City, Mr. E. A. Fisher, Consulting Town Planner of Rochester, N.Y., Professor Leonard S. Smith, University of Wisconsin, Mr. G. F. Shyrock, Town Planner, Baltimore, Mr. J. C. Grinnalds, Secretary of the Board of Zoning Appeals, Baltimore, Dr. Raymond Unwin, Town Planning Adviser to the British Government, Ellwood Wilson, Vice-President of the Fairchild Aerial Surveys Company and others have written expressing their lively interest in Mr. Cauchon's new principle for the planning of housing groups. The plans have been republished in about a dozen leading American and Canadian journals.

The *Ottawa Citizen* “commends the plan to the study of the City Fathers of Ottawa who, so far as available records go, have not made a public mention of the scheme, assuming they are aware of its existence.”

The *Hamilton Spectator* says “one of the most interesting, as it was certainly the most novel of the papers read at the International Planning Conference in New York was that on Arterial Highways and Hexagonal Planning, by Mr. Noulon Cauchon, President of the Town Planning Institute of Canada. The Tye-Cauchon report on local conditions showed Mr. Cauchon to be a man of daring originality and ambitious vision; but this paper on hexagonal planning eclipses anything which has preceded it in the revolutionary character of the suggestions made.”

* * * *

Roadside Billboards

Mr. J. Horace McFarland, who for many years has waged a vigorous warfare for the civilized conservation of natural beauty in the United States, has made a proposal to the state executive of

Pennsylvania for the control of wayside advertisements which has the new feature of placing the matter under the mysterious American deity called “Police Power.” The appeal to decency was first tried, and when this manifestly failed the argument was used that hideous wayside advertisement is so offensive to those who love the beauty of the countryside that the immense expenditure upon it is sheer waste of money because it makes enemies for the advertising firms. Apparently large business firms who have spent enormous sums on this kind of advertisement have been reached by this argument and have withdrawn their advertisements from the highways.

It is now proposed to put this offence to decency under police power, which has jurisdiction in all matters shown to be a public danger. It is pointed out that the state of Pennsylvania spent \$180,000,000 on their highways system from 1919 to 1923 and all improvements tend to increase the speed of travel and the number of accidents and deaths from excessive speed and that therefore any use of the highway which diverts the attention of the driver and is so intended and obscures the vistas of the highway may be pronounced an unlawful use of the public highway to which advertisers make no contribution. Mr. McFarland has discussed the matter with eminent American Lawyers who have declared the argument legally sound.

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Concerning a Roadside Beer Advertisement

An Ottawa versifier seems to have strong feelings on this matter.

THE BEER ADVERTISEMENT ON THE CHELSEA ROAD.

(After the Poet Laureate)

I will not drink your beer—
E'en though there be no other four-point-four;
What though my thirst prostrate me on the floor;
Your hideous Ad. I say will leave me dry
Each time I pass your monstrous bottle by—
I will not drink your beer.

I will not drink your beer—
There where the winding road was like a bower
Wrought by that Loveliness which is God's dower
To reverent men—there you have placed your
hideous Ad.—
E'en though my thirst should drive me raging mad
I will not drink your beer.

* * * *

Town Planning and Parks

Parks and Recreation is inclined to deplore the fact that “not much time was spent discussing parks and parkways as such” at the New York International Town Planning Conference and declares that “the fact is that city and regional planners in their studies have not reached parks in detail.” The criticism, however, is friendly and sympathetic, though town planners will be surprised to encounter this “fact.”

The writer sees that “the inquiry of planners into the make-up of cities has become more and more searching and fundamental.....they find the city

gradually congesting or strangling itself. The larger the city the worse the condition and *the higher the cost of industrial production*. They recognize the high value of outlying parks and parkways in helping to bring this about. They see the need of larger open areas than have ever before been suggested, but they see a greater remedy in the decentralization of industry."

The writer thinks that town planning "began with aesthetics, but for the time being that is the subject farthest from their investigation."

There is some truth in this with regard to American city planning but very little as applied to the British movement. The "City Beautiful" was the first American response to the British town planning movement but soon the American mind recognized that there was much more in Mr. Howard's book than aesthetics—good and necessary and indispensable as this sentiment is.

The American "City Beautiful" movement did not go far. It was only when the American mind saw that town planning meant the re-construction of cities—physically, economically and aesthetically and that its results would be the improvement of living conditions and so the improvement of the race, as well as the prevention of ugliness and the extension of beauty into the lives of the poor that its splendid enthusiasm was touched into power.

But aesthetics—the cultivation of the feeling for the beautiful is by no means, even for the time being, "the subject farthest from their imagination." John Galsworthy's exclamation—rather nicely touched with humanistic passion—"I said 'men do not love beauty enough'" would meet a fervent response in most of the minds of the leading town planners. It goes deep.

Nor is it quite fair to say that town planners "recognize the high value of outlying parks and parkways," because, although this is true it does not say enough. They want outlying parks and parkways but they want a park, or playground within reach of every child and are so planning their areas—five per cent and ten per cent of all subdivisions to be devoted to parks, playgrounds and open spaces. Dr. Raymond Unwin scarcely ever speaks or writes without insisting on the nearness of open spaces to the homes of the people and the utility of beauty.

Mr. Noulan Cauchon's hexagonal or honeycomb plan for the arrangement of houses would place a playground in the centre of each block, to save the children from the terror of the modern streets and give to all homemakers immediate touch with beauty in the surroundings of their own homes.

The splendid work of the parks' executive is not being under-estimated by town planners. The "fact" is that they are all agreed as to its social value. But meanwhile the world is made up of a vast majority who "do not love beauty enough" and they have to be persuaded that town planning is "good for business," and that the confusion, ugliness, congestion and waste that have hitherto characterized

the building of our towns and cities are good for nobody and are destroying the very fibre of the race.

And town planners have to settle among themselves important questions on which they are not all agreed, such as the conservation of land values in towns and cities for those who create them, the people themselves. The English Garden City folks have settled this problem and are drawing their revenue from the land values and public services created by themselves and are not allowing them to be mopped up by high finance and people who come along when the prospect pleases and "buy up the place" and make it impossible for working families to use it. American thinkers doubt if this conservation of land values for the community can be done in America. They will doubt for a decade, as they did about town planning, and then they will just do the right thing with a magnificent energy that will put all English effort in the shade. Sooner or later we have to come to the conclusion that where men and women congregate in towns and cities "conditions" and problems are much the same and demand the same solution. In London they use a red light for danger; in New York a green. But danger is much the same in both cities and the two classes—the quick and the dead—are also much the same.

* * * *

Red for Danger—or Green

"But the green has changed to red since you were there" says a bystander. Very well! Then New York and London are agreed upon red for danger. Sometime they will agree that every home should have a share of sunshine and not only the homes of the rich.

Courageous members of parliament are asking in London:—

Whether in view of the ascertained facts that garden cities have now passed the experimental stage and are a profitable investment of public money, that they relieve congestion of population and traffic, take manufacturers and workshops into the country, supply houses for all classes, show satisfactory health statistics, stimulate agriculture, horticulture and market gardening and allotments, create new markets, and develop mentally and physically a vigorous and contented population, he will take steps to appoint garden city commissioners with powers to raise capital, acquire sites, issue loans, and in all possible ways facilitate the establishment of garden cities?

Some time there will be some reason why poor people should vote for members of parliament. At present there seems to be extremely little. Most of them have apparently no idea or no concern as to how poor people live. Parliament house is the best club in London, Washington, Ottawa—and an excellent debating society, and then there is that "indemnity."

THE PHILOSOPHY OF CITY PLANNING

By THE HON. JAMES M. CURLEY

MAYOR OF BOSTON, MASS.

In a broad and general sense the term "City Planning" visualizes that conception of municipal government and administration which looks beyond the tax-payer and tax-spender to the human being; which seeks to supplement the economics of the city by a consideration of the spiritual and aesthetic elements in the life of the dwellers of the city; which recognizes that certain intangible and hitherto neglected factors of human life are of first importance in the growth and prosperity of every community; which has re-discovered and seeks to apply the philosophy that physical beauty of street, square, park and open space is practical and profitable, since such beauty materialized and visible in architectural appeal, in horticultural decoration, in spacious vista, in cleanliness, order and public convenience, promotes peace, security, communal pride, and creates individual contentment and happiness reconciling humanity to the sordid and material things in civilization. What we term "City Planning" is the thought, discussion and study which bring a knowledge of actual conditions home to us, and by which we can plan and provide for the changes, transformations and improvements that will bring the community approximately closer to the ideal.

It has taken the world a long time to learn the mere rudiments of what constitutes real civilization, and to understand that while perfection in things human is an iridescent dream, no approach to that ideal can be made as long as humanity refuses to recognize that the spiritual and material elements of life are inseparable.

Man does not live by bread alone. Man consists of body and soul; to feed the body and starve the soul is to court disaster; the nourishment of both is necessary to a full, rounded, vigorous life, individual and communal; and if bread be the food of the body, beauty, art, the intangible and immaterial things of life, are the food of the soul; and the strength, happiness and contentment of the soul is reflected in the vigor, vitality and efficiency of the body.

This is the philosophy, the common sense of "City Planning."

Here in Boston we have waked up none too soon to a realization of the truth that the sin and ignorance of the fathers are visited on the children; and in our inheritance of slums, alleys, narrow and congested ways, a restricted and tortured expansion, and a policy of penny wisdom and pound folly, we have begun to see how the greed, ignorance, timidity and indolence of one generation can penalize the living conditions of another. We have learned in

pain and waste, in the price every community must pay for dirt, disease, congestion and ugliness, that eternal vigilance is the price of health and happiness; and that the plainest fact written into modern life is that we are our brother's keeper. We have learned to distinguish between the picturesque and the beautiful; that cleanliness and health are the hand-maids of happiness and prosperity; that prevention is better than cure; and prevision and preparation are the foundation stones of economy and efficiency.

This is the philosophy and creed of the Boston City Planning Board; and we realize today, ruefully, that ignorance and neglect of their principles have cost this community incalculable sums of hard cash.

Today we are planning for generations yet unborn, using with wise generosity the substance of the city and the gifts and bequests of men of heart and vision, to wipe out the material blots and blemishes that have been our unhappy inheritance from an unwise past.

The noble foundation of the late George Robert White has placed in Boston's hands a remedy for very present evils, and for work that lies outside the chartered function of the municipality, enabling the city to wipe out slums and centers of congestion and evil conditions, and carrying in its splendid possibilities the promise of benefits to posterity measurable in dividends of health, happiness and communal wealth, three prime essentials of human life and living, not too frequently found together. From the income of the White Fund we have begun the erection of a series of "health units" each one of which is centrally located in densely populated districts, replacing a slum, a danger spot, by a structure architecturally beautiful, with ample, open, wholesome space about it; and this "unit" is a social and moral lighthouse that radiates light, leading, health and happiness in a neighborhood, and is a place of beauty where counsel, instruction and neighborly advice and guidance are free to all.

Moreover it is an agency that dissipates the mystery of the business of government, humanizes administration and demonstrates to those who come there, that government is the affair of all, the business of everybody. The Health Unit heaps to give people some knowledge of the simplicity that lies in the core of all municipal problems, in such things as education, law and order and the necessity for them, health and its protection, the safeguarding of life and property, as personal responsibilities.

"City Planning" concerns itself with playgrounds for children, parks and squares for leisure

and recreation, and the education of people in their purpose and value and their influence on the life and labor of the citizen. More and more we are teaching the indifferent and unthinking the value of wholesome conditions, of fresh air, breathing spaces; and impressing upon them by these seemingly unprofitable utilities the necessity for recreation, play, sports and wholesome idleness, as a requisite to human health and happiness and the economic efficiency that flows out of them.

Just as rest, recreation and change from the monotony of daily toil constitute the best medicine for a weary body, so beauty of landscape and architecture, the flower garden, and the greenery of tree, shrub and lawn, are a tonic for the mind and soul of him liberated from shop and factory and the grime and noise of machinery; and together these things renew the freshness of body and soul, are the elements of contentment and happiness, a fillip to efficiency, and the certain antidote for the discontent and restlessness that disturb communities and wreck governments.

City Planning is the sanest philosophy and the most far-reaching influence in modern municipal life and government; it is a rising tide of wisdom which gives promise of overflowing from the cities into the state and the republic, fertilizing all with its beneficent results. Its fundamental principles, lying

under all its healing activities, is the betterment of humanity by the betterment of its environment. Every activity, every influence, that improves the person and condition of the human unit, is worthy of encouragement and support, for the Republic, the State and the City are the unit multiplied; and as that unit and individual is raised towards the ideal standard, his social usefulness, economic efficiency, moral worth and political dependency are demonstrated increasingly in the wealth, prosperity and stability of the Nation.

This is the real significance of City Planning and the measure of the value of its work in Boston and in every other community where Planning Boards have been established. In a broad sense they are the seed-sowers of harvest that will feed and foster the humanity of a coming day; and in a modest way they are showing the path to higher and better things by arresting the eye and ear of a careless world and teaching men that the things of the body and soul, the material and spiritual affairs of humanity, are inseparable; and that the antidotes for most of our human ills are right at our hand if we will but see them and use them.

This is my conception of the work that City Planning may do, can do, and will do, if we will only understand the spirit of its philosophy.

CAUCHON'S PLANS FOR OTTAWA

Mr. Noulon Cauchon, chairman of the Ottawa Town Planning Commission, is still pegging away at his plan for a Federal District of Ottawa and Hull and doing all that a fertile imagination and constructive genius can do to supply "seminal logoi" for the fructifying of official minds. Meanwhile his hair is greying but his enthusiasm is as young at it was fifteen years ago when he began preaching town planning for Ottawa and believed that a great idea, carrying immense social benefit must be by a sort of divine necessity adopted as soon as stated. *Quot homines, tot sententiae.*

Ottawa Zoning Scheme

Meanwhile, before presenting his zoning scheme for Ottawa to the City Council, experience has suggested the advisability of submitting it to a large number of committees of professional men — legal, architectural, real estate and the like, so that, when the final decision is made concerning it a sufficient number of representative men will know something about it by actual study of it in detail and will not reject it because they have not bothered to study it and don't know what it is all about. We understand this process of preliminary examination by professional committees is practically finished and that the zoning bylaw will shortly be submitted to the City Council. Incidentally, the decision of the

City Council may determine Mr. Cauchon's future connection with town planning in Ottawa. If it is passed he will be encouraged to proceed with his comprehensive town plan for the City of Ottawa, of which the zoning bylaw is but a small part.

Vimy Way; Development of Major's Hill Park; Centenary of Colonel By

Contributory to this complete plan of Ottawa and his plan for a Federal District, Mr. Cauchon has prepared the accompanying sectional plans for the construction of a noble Memorial Way in the vicinity of the Parliament buildings, to be called "Vimy Way", which would be a joy to all Canadians who wish to be proud of their Capital City as well as to visitors who wish to know what can be done with so magnificent a natural eminence as Parliament Hill.

The second illustration further outlines a suggested treatment of Major's Hill Park and neighbourhood, which would destroy nothing that is beautiful and add greatly to the dignity and convenience of the whole territory. Provision is made for a memorial to Colonel By, the founder of Ottawa, whose centenary will be celebrated next year; who built the Rideau Canal from Ottawa to Kingston for the defence of Canada in a time of national danger; planned the only major streets in Ottawa

that are fit for modern traffic and died a neglected and broken-hearted man.

These sectional plans would involve no great outlay of money, since they are all laid on Government land. It is not yet understood that the chief object of a plan is to control *future* development and prevent disastrous and costly mistakes and that a plan by no means involves immediate expenditure of large sums of money.

Mr. Cauchon's explanations of these plans are given in his own picturesque diction. The report on Vimy Way was presented to the City Council on January 19, adopted and instructions given that copies be forwarded to the Prime Minister and Minister of Public Works.

REPORT No. 1 OF THE TOWN PLANNING COMMISSION

6th January, 1925.

To the Council of the Corporation of the City of Ottawa, meeting 19th January, 1925.

Gentlemen:—

1. "VIMY WAY"—National War Memorial—

The Plan Commission submits herewith portion of an outline plan for a National War Memorial effort to be known as the "Vimy Way."

The "Vimy Way" is designed as a generalized symbol of the historic path of Canada, ever resounding to the tramp of her generations. It also affords the setting for special individual recognition of duty and service along its way in the toll of time.

This proposal co-ordinates with the comprehensive plan of the City and its surroundings within five miles as evolved by the Plan Commission by virtue of provincial authority over the use and development of land.

This comprehensive plan is being implemented by the City as fast as time and circumstances allow.

Your Commission contemplates the "Vimy Way" as a great highway upon the axis of greater traffic, east and west, throughout the larger areas and to and from beyond it.

The plan extending the highway between Broad Street and Sussex Street as now submitted covers the central link and offers the setting for its fitting climax in the Special War Memorial cenotaph as shown.

That portion of the "Vimy Way" from Broad Street to Pooley's Bridge and as far east as Bronson Avenue is mainly on City owned property—plans for which were sent to Council with Town Planning Commission Report No. 1, dated 15th

January, 1923, and could be the City's contribution towards the War Memorial.

The portion of the plan affecting federal property comprises the highway skirting the cliffs and fills, in front of the Wellington Street Departmental Building area and of Parliament Hill, crossing of the Canal at the foot of the locks, also further connections alongside the railway to St. Patrick Street and the Interprovincial Bridge, also to the Lady Grey Drive.

A feature of the "Vimy Way" proposal is that where it cuts Cliff Street into a miniature canyon it will thereby isolate to the north a large block of rock from the main land.

It is proposed that this huge isolated core of cliff be moulded and heightened architecturally and sculpturally from the water's edge upwards into a soaring, colossal, unique cenotaph—a symbol of glorified national being.

The Sphinx of Egypt sprang from a like opportunity.

On the nature and art of the symbolism we are temporarily withholding a suggestion pending acknowledgment of the general principle involved.

The Commission would, however, point out that to increase the prominence and impressiveness of the symbol, the ground to the south of the "Canyon" should be terraced back to the site of the Departmental Buildings, as skilful landscape architecture would avail.

A sequence of block plan, on assumption of "Chateau" treatment, has been suggested for these buildings which would enhance the general effect in the massing of the Federal group and permit an impressive co-ordination by landscape treatment into a single unified composition rising from the plane of the Ottawa River and extending from the Chaudiere to the Canal Locks.

Your Commission begs Council to submit to the Dominion Government the idea of the "Vimy Way" and the accompanying tentative plan as a suggestion for consideration and with the assurance that the City and the Plan Commission are ever ready and sympathetically anxious to collaborate with the Federal authorities towards the attainment and fulfilment of the Ideal for the Capital, in plan and expression.

Respectfully submitted.

(Signed)

NOULAN CAUCHON, Chairman.
CHAS. A. HODGETTS.
JOHN BALHARRIE.
W. J. McCAFFREY.
LOUIS COTE.
E. D. LOWE.

The "Vimy Way" is detailed passing over the Canal Locks, under the railway tracks and through the cliff by a short tunnel, thence rising up to a traffic circle joining it in continuation with the Interprovincial bridge route to Quebec Province, to the Lady Grey Drive, St. Patrick Street and also by a canyon road to York Street and the heart of the city.

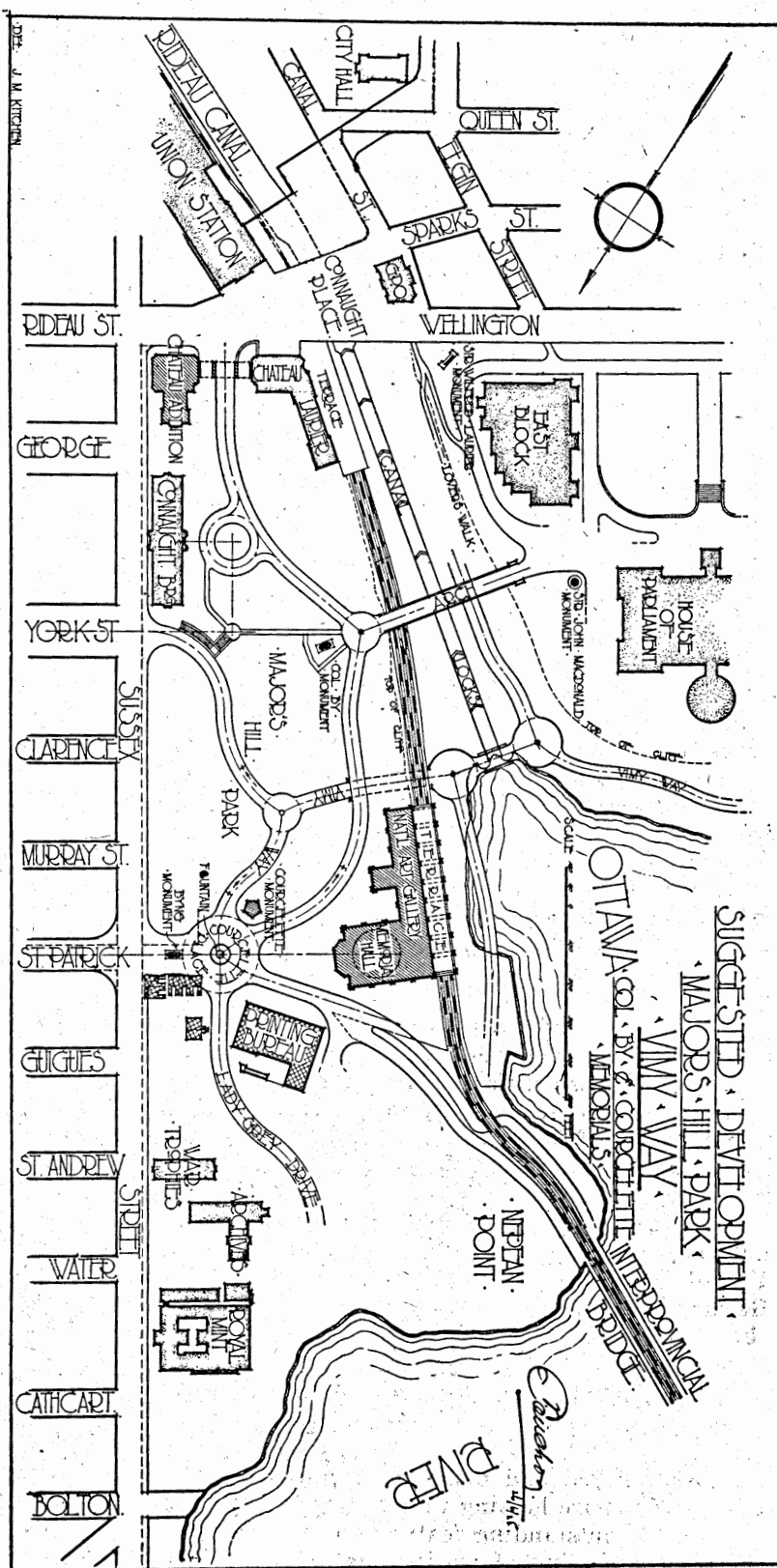
The big circle is named Courcellette Place as a fitting stage on the generalized path of Canada, the Vimy Way. Location is provided for an individual monument to the action and heroes of Courcellette; possibly in the form of an altar of sacrifice having fine descriptive panels.

A site upon the Vimy Way facing Courcelette Place has also been reserved for an equestrian statue of Lord Byng who enjoys the unique distinction in Canada of being the only Governor General, direct representative of the King, who has commanded a Canadian Army at war.

The works here suggested are upon government property and could be carried out progressively as an integral part of the necessary development of the national grounds.

I've now arrived, thanks to the gods,
Through pathways rough and muddy;
A certain sign that making roads
Is not this people's study.

And tho' I'm not in Scripture crammed,
I'm sure the Bible says,
That heedless sinners shall be damned
Unless they mend their ways.



PLAIN WORDS FOR MONTREAL

By JAMES EWING, M.E.I.C.

Vice-President Town Planning Institute of Canada*

Town Planning a Business Proposition

You are all busy men and the time is short, so I am not going to indulge in a dissertation on general Town Planning principles, even though these principles may be rather imperfectly understood by the otherwise well informed mind.

I would like, however, to dispel from your minds the commonly prevailing notion that Town Planning is a wild, fanciful and extravagant dream, the hair-brained conception of well meaning but impracticable faddists; and to instill in its place the fact that it is a sound, practical and economic, good business proposition; and further, to show in striking contrast, that it is our present shortsighted policy of drift that is wasteful, extravagant and unbusiness-like in the extreme.

The New York Conference

If anyone had any doubt in his mind on that score he had only to attend the recent conference held in New York of the International Federation for Town and Country Planning, where for five days, with morning, noon and night sessions, representatives from every corner of the globe were gathered.

That conference was not only a revelation and an inspiration in itself, but was epochal in its significance and portent.

From far off Australia and New Zealand they came, from China and Japan, India and Egypt, from Austria, Poland and the Balkan States, from Germany and the Scandinavian Countries, from England and France, from Canada, Mexico, the Argentine and Peru.

Thirty-four of the American States sent representatives, and twenty-five other countries, speaking eighteen different languages.

Perhaps a better idea of that great assemblage may be gained from a few of the more striking sidelights than from a detailed account of the proceedings.

One fact worth noting was that amongst all the delegates hailing from countries outside of the United States, more than fifty per cent were Germans. That in itself is remarkable evidence that the Town Planning idea is "no fool thing", but intensely practical and economic.

Moreover, these men did not simply come, they were sent, salaries and expenses were paid by state and civic institutions. Yet Germany is supposed to be a vanquished and bankrupt country which the other nations are helping to get on its feet.

Another outstanding feature was that it was not simply a gathering of professional Town Planners.

There was a strong leavening of hard-headed business men (big business men, if you like,) financiers, manufacturers, legislators, civic authorities, lawyers and journalists, all enthusiastically throwing their ringing testimony and full weight back of the movement.

Men like William J. Wilgus, for instance, formerly Chief Engineer of the New York Central Railway, and directing head of Transport for the American Forces during the war

Some people have been saying that Montreal is entirely too far gone for City Planning, yet Mr. Wilgus drew a wonderful picture of a recreated and rejuvenated New York, with broad main thoroughfares, adequate and efficient transportation arrangements, ample hygienic housing and recreational provision, and with all the public services such as lighting, heating and power operated by electric energy.

Next came Mr. Daniel H. Turner, Chief Engineer of the New York Interurban Railway (the Subway System) who was equally insistent on the immense advantages of City Planning as regards transportation, and who emphasized the point that almost any major reasonable improvement could be made and paid for out of only a portion of the increment in land values resulting from such improvement.

Then the President of the Associate Real Estate Boards of America, who was chairman at one of the meetings, testified that Real Estate owners and operators, while at first somewhat suspicious, were now realising that they had nothing to lose and everything to gain by City Planning and Zoning in the inevitable stabilization and enhancement of property values.

Streets to Fit the Traffic

One of the most remarkable utterances (because it came from a quarter from which it might be least expected) was that of Mr. Alvan J. McAuley, the President of the great Packard Motor Concern of Detroit, who emphatically declared that all this idea of regulation and restriction of traffic, one-way streets and so forth, was nothing more than the merest palliative, and a futile and unnatural endeavour to make the traffic fit the streets, whereas the only radical and permanent solution of the trouble lay in planning so as to make the streets fit and accommodate the automatic flow of traffic.

The City Planning of Later Years

One thing was brought out rather clearly, and that was the evolution of City Planning in later years.

In the older days the Princes planned, they plan-

*Address to the Civic Improvement League, Montreal.

ned for Beauty and Effect,—magnificent palaces, beautiful gardens, spacious tree-lined boulevards and so forth. It was the exaltation of the idea of embellishment, and we have splendid examples of that manner of planning in the great European Capitals, particularly Paris, in Washington and even to some extent in the beginnings of our own City of Montreal.

Then came in England the apotheosis of the idea of the Home, and the promotion of the Garden City and Garden Suburb movement. We were getting down to broader and more democratic lines in the cultivation of health, comfort and amenity in living conditions, especially for the underprivileged classes.

Almost coincident with that was the movement in Germany, planning for Industry and Efficiency, with great schemes for housing and social betterment, as necessary and integral parts in the building up of that mighty machine-like organization that almost succeeded in laying the world at its feet.

In America at first City Planning took the form of an architectural movement, in the creating of civic centres and the grouping of public buildings amid commanding settings. All very fine in its way, but largely in the nature of luxury, and if anything has served to obscure the popular mind as to the real meaning of Town Planning, and breed distrust in its efficacy, it is this idea of mere embellishment.

Out of this, however, has grown the Zoning movement which means "a place for everything and everything in its proper place."

In more recent years, consequent on the tremendous increase of motor cars, the traffic problem in our streets (which never were designed for such) has been forcing itself to the front in a most menacing manner and with a call that is imperative.

Regional Planning

And out of all has evolved the latest phase, in the idea of Regional Planning, which means Prevention by getting down to first causes and rooting out the weeds before they have time to grow up and overwhelm us.

It seems the most sensible of the lot, and that is why a great Regional Plan is being prepared for the Metropolitan District of London and another around Manchester. In New York and for 60 miles around a great Regional Plan is being prepared by the Russell Sage Foundation, also one for the Capitol District including Albany, Schenectady and Rensselaer counties backed by the New York State Government, and many other places, which are well under way.

You will note, therefore, that the entire City Planning movement, together with the existing situation, may be summed up in three phases.—First, the cry for the "City Beautiful", then the demand for the "City Sensible and Convenient"; and now to-day we are coming square up against the hard and stubborn problem of the "City Possible".

And this not only as regards traffic congestion, which, while the most physically obvious, is after all only a fragmentary phase of the much larger question of the healthy and efficient functioning of the city's organic life.

Montreal Moves Uptown

It is an impossibility for any live thing to stand still, and you all must have noticed that the residential, commercial and industrial life of Montreal is moving uptown, and I ask you to note that it is not simply extending uptown, it is shifting, leaving behind the blighted district, the noxious and costly slum area and the derelict abandoned lot.

I wonder if our financial men realize the degree in which their equities in downtown property are being eaten away by this cancerous infection, sometimes almost to the vanishing point, and whether or not they think it time to put a stop to it. Even the factories are seeking fields and pastures new, often away from the city altogether.

It is what might be called a process of forced decentralization caused by morbid and congested conditions, and is to be cured, not by small medicinal potions, but by the city surgeon's knife.

Concentration is a fine thing up to the point of congestion, but beyond that it means atrophy and decay.

It is easy to appreciate, therefore, the remarks of Mr. Chapman, the Secretary of the International Planning Federation, at the Mayor's banquet the other evening, when he told us how a city can and must be bloated, overgrown and inefficient, unless its development is properly planned, regulated and controlled, leaving sufficient open spaces to give it room to breathe.

Good Fellows

Possibly it is too bad to spoil the fine flavor that the delegation of Town Planners which recently visited our city left behind them, when they told us what a wonderful heritage we had, what glorious opportunities were ours, such a strategic situation and how bountifully nature had endowed us. We would do well to remember, however, they were our guests and were nothing if not polite, and they refrained from telling us, publicly, what was doubtless in the backs of their minds, that we are not making the best of that noble heritage, these fine opportunities and that splendid situation, and that unless we awakened from our lethargy and applied ourselves with unrelenting energy to the whole problem of City and Regional Planning, not simply toying with this or that phase of it, we will soon be out of running even amongst other cities far less favourably endowed.

I believe I am expected to give some idea as to how Town Planning principles can be made applicable to our city, and I am supposed to do it in a few minutes when to be at all specific will take months of study with whole-souled application and

the gathering and compiling of much information, data and plans.

I might conjure up a picture of broad main arterial thoroughfares, with special provision for rapid transit, following direct routes by easy grades, and to be of such capacity as to accommodate reasonable traffic requirements with a minimum of congestion and delay; also of secondary main streets to act as feeders linking up the home, the workshop and the trading depot.

And I might paint a picture of residential sections free from the encroachments of business and manufacturing establishments and their baneful effects. Healthful parklike residential sections with comparatively narrow winding streets, discouraging to anything but slow local traffic, and where it should be made safe even for the children to play in the streets.

I might emphasize the importance of open spaces as being as much an essential and integral part of city development as the streets and buildings themselves, and incidentally affording much needed provision for parking of motors.

Also the systematic, equitable and convenient distribution of parks, playgrounds and other recreational facilities, as a prime requisite in the building up of a virile and contented manhood and womanhood, which is the greatest commercial asset a city can have.

Lots of people seem to think that building boulevards is the chief end and aim of town planning, whereas a boulevard may be essentially and radically wrong in its conception and a frightful and inexcusable waste of public money.

Waste of the Widening Process

Others less ambitiously inclined believe all we have to do is to extend or widen streets where the traffic pressure is most acute. We have tried that sort of thing in the past in Montreal and got away with a good many millions in doing so, while the benefits have been transitory and anything but commensurate with the expense.

Indeed one of the least hopeful expedients is the arbitrary widening of highly developed streets, and better results can be obtained with far less outlay in by-passing the more congested street intersections, or by opening up new main parallel or diagonal thoroughfares through least valuable property, thereby increasing land values to an extent that will more than cover the cost.

Piecemeal Planning

For of all the bottomless sinkholes of perfectly good money this piecemeal planning, this tinkering, no matter how well intentioned it may be, is the most illusive and barren of beneficial results.

And the point to which I would wish particularly to direct your attention and get firmly fixed in your minds is that real City Planning is not simply dealing with a series of isolated parts;—it is well

weighed and studied, shaping, mobilizing and marshalling of all the separate elements that go to make up the city's organic life into a System in which each will be helpful and contributory to each other, and to the community welfare, instead of being conflicting and destructive as at present.

As was stated at the New York conference, hitherto most cities have been run on the principle of "individual aggrandizement and collective irresponsibility", bringing about a condition of perpetual grinding warfare, with the inevitable outcome of spent and dissipated effort.

I am not going to be so visionary as to claim that City Planning is going to revolutionize such a condition of affairs, but I will contend it does point out a better practical way of doing things with infinitely greater results, financially and otherwise, not only for the community but for every individual citizen.

Bad Planning is Bad Business

I feel that this thing must be brought home to the individual, to the man in the street, to the big Utility and Transportation Companies, to the Automobile owners and Cartage concerns, to the Banks and Trust Companies, Insurance and Real Estate men, Manufacturers and Merchants, down to the humble day labourer who earns his bread by the sweat of his brow. And they must be made to see that this hap-hazard, conflicting and chaotic condition of things not only deprives them of many benefits they could otherwise enjoy in common, but that is hitting them and hitting them hard in that most vulnerable spot of each one of them,—their pockets.

Traffic Congestion Costs Montreal \$100,000,000 a year

Some time ago I made a rough estimate of the approximate cost to the citizens of Montreal of the loss by reason of traffic congestion and delay in the streets of Montreal and I arrived at the astonishing total of \$270,000 per day or roughly \$100,000,000 per annum. That amount seemed so staggering that I was afraid to give it credence or publicity. Since then however, I have learned that they made a similar and more accurately scientific computation of loss for the same reason in the Metropolitan district of London, and the estimate reached \$1,000,000,000 per year. Moreover, they did the same thing for Greater New York, more recently, and curiously enough, arrived at an almost identical amount. And since Montreal is about a tenth of either of these great cities, and is under similar conditions, it would seem that my estimate was not so far out.

We would, therefore, do well to remember that we are dropping each year, by our negligence, a sum almost equal to the entire City debt, about which we are so constantly grumbling. Also to note that that leakage is not only incessant, year after

year, but that it is cumulative and keeps on pyramiding in ever increasing ratio.

In fact Montreal finds itself in the position of having to pay such a terrible toll on account of bad planning that she is unable to pay for the cost of good planning.

It is not exactly that Montreal is too poor to pay, but that she finds her hands full tackling the more superficially obvious consequences, that she is utterly unable to get down to underlying first causes.

Town Planning as a Science

I hope I shall not find myself in disagreement with any of my colleagues on the Provisional Planning Board who have been giving their valuable services and advice with unselfish zeal, if I say here that the work of planning a great city like Montreal is much too big a job to be undertaken or accomplished, on the side, by men busily engrossed with other duties taking preference. It is hardly a thing that can be disposed of by a bunch of men sitting around a boardroom table. The real planning work must be done over the drawing board itself, by men who have given years of special and intensive study to the question.

And I would further say that if we imagine such a tremendous problem as this can be tackled thoroughly and effectively by men continuing to give their services gratuitously, we are only "kidding ourselves", and playing "make believe".

Why, we can't even have a decent Police Probe here for less than \$100,000 and that is a mere flea-bite compared with a City Planning Probe.

I fancy our friends of the Legal Fraternity must hereafter step down from their lofty pedestal as members of the "Noble Profession", and yield place to the humble Town Planner whose calling is at once a science and an art, who must be Engineer, Landscape Architect, Transportation Expert, Business Man and Sociologist, all rolled into one, and who after years of self sacrificing study and training, and more years of missionary work in trying to

convince the people of what is manifestly to their own advantage, must still go on doing the actual work out of the passion of his heart.

Has Montreal a Civic Soul?

I read in the newspapers the other day that our good friend, Mr. R. L. Calder, was reported to have said in an address he gave in Hamilton that "Montreal had not yet found its Civic Soul". But I cannot altogether agree that Montreal could have been without a soul when we think of the wonderful things that have been done here in laying the foundations of this great commercial Metropolis. It would appear however, that that soul must have become considerably disintegrated in recent years, by racial, sectional and other differences. For unfortunately we have a problem in this city which to say the least of it is rather "difficult" and where we find "East is East and West is West and never the twain shall meet". The Jews have no dealings with the Samaritans, and the Big Fellows who live on the upper reaches of the mountain are out of sympathy and out of touch with the People below the hill. Westmount and Outremont, of course, are thankful to the Deity that "they are not as other men are".

What we want is a little more of the spirit of St. Paul who even in the face of persecution proudly declared "I am a Roman Citizen". In fact I am convinced, after long years of observation, that the main difficulty we have to contend with is the deadly and paralysing, apathetic aloofness of the English speaking citizen, who seems to regard Montreal mainly as a gold mining proposition, a place to live out of, and not to live in and for.

If however we can awaken and inspire them to a proper civic pride and genuine co-operative interest in the affairs of the city (which are really their affairs), then Montreal, by clear vision, proper and thorough planning, and a long pull together, can be made fit and ready to take its place in the front row, and in the full glare of the limelight, amongst modern metropolitan cities.

City Planning as a Permanent Solution of the Traffic Problem

By MORRIS KNOWLES

Consulting Engineer—Chairman, City Planning Commission, Pittsburg, Pa.*

Introduction

The inability to reach a permanent solution of the traffic problem is due primarily to the inability of man to foresee the mode and methods of transportation in the future. Regardless of the fact that city planning is a new science, attempts were made more

than a century ago to solve some of the problems arising out of this troublesome question of traffic. But with the limitations of prevision and regardless of their intentions, the city planners could not foresee the traffic situation of today.

During the past century we have passed through various stages of conveyance, from the horse-drawn vehicles of different kinds to the various types of tramways, horse-drawn, cable and electric; then

*Address delivered before the International Town, City and Regional Planning Conference, New York, April 20, 1925.

subways and elevated railways, and today we are faced with the automobile traffic problem. The permanent solution of this traffic problem, which has resulted from the congestion of different modes of conveyance, is largely in the hands of the city planner. That which may take the place of the automobiles within the next century we are at a loss to say at the present time. Therefore, any attempt at the permanent solution of the traffic problem must be based primarily on the traffic situation forecasted by the conditions as we now find them.

The word permanent, as applied to the traffic situation, is a relative one and has great limitations. We know what the situation is today and we can imagine what it will be, because of the normal increase in concentration and in the number of motor vehicles. We cannot see very far, however, what changes will take place in the various arts and industries which are concerned with transportation. These may include changes in kinds and type of motor vehicles, in rapid transit methods, in kinds and type of business and industrial interests, and in residential and community development. Therefore, permanent, in this sense, is purely a relative term, and any plan to be worked out must be elastic in its future. Such, for example, is provision in a zoning ordinance, which permits both interpretation and variation from a strict enforcement of the ordinance and at the same time provides reasonably for amendment and revision to the organic law.

The Problem

The two underlying factors causing the traffic problem are **first**, the concentration of people by close association of business, commercial and banking enterprises, and **second**, the tremendous increase in the number of motor vehicles.

Accidents

The seriousness of the problem is probably most strongly brought home by consideration of the traffic situation in its relation to safety measures. The total toll during the year 1924 in the United States is estimated to be 88,000 deaths from accidents. The automobile death toll for 1924 was 17,345, or about 15.5 per hundred thousand of total population of the country. Another important safety question that has been raised by traffic conditions is that of getting fire equipment more rapidly to the fires. It has been stated that, due to the parking of automobiles and traffic congestion, the apparatus does not arrive at fires as quickly today as it did 25 or 30 years ago, when dependence was entirely upon horse-drawn vehicles rather than upon the modern motorized equipment.

Increase of Motor Vehicles

The automobile registration has increased from 300 in 1895 to 17,726,507 in 1924. It is estimated

that by 1935 this number will be increased to 25,000,000 or 30,000,000. The enormous and rapid increase in automobile registration is shown in the following table:

TABLE I

Automobile Registration By Five-Year Periods From

Year	1895 to Date	Registration
1895		300
1900		13,824
1905		77,988
1910		468,497
1915		2,445,666
1920		9,231,941
1924		17,726,507

Effect on Business Districts

If it be remembered that, when highway systems were originally laid out, most of the traffic was pedestrian, it can be realized that the carrying capacity of our highways has been increased by the efficiency of the transportation facilities which have been provided rather than generally by good design. This is particularly true of motor facilities. However, a study of the relative carrying capacity per unit of street area, between the automobile and street car, shows that the latter can handle many more passengers per unit of street occupied than can the automobile.

For example in Los Angeles, during the rush hour on busy streets, the average street car carries 77 persons per trip, and at the same time, the average automobile carries 1.67 passengers. Each car takes up as much space as two and one-half automobiles. Therefore, the required space for automobile traffic per passenger is about 18.5 times as great as that of the street car. Likewise, in Chicago, as shown by studies of Major B. E. Kelker, there were 446,000 persons carried outbound through the Loop in twelve hours by 82,170 vehicles. Of these, 10 per cent were street cars and they carried 74 per cent of the passengers, the remaining 90 per cent of the vehicles only cared for 26 per cent of the passengers. In other words, an increase in the number of street cars from 8,200 to 11,000, or about 30 per cent, would have provided for the same number of passengers as was carried by the 82,170 vehicles which passed through the district. Statistics from other cities show that 75 per cent of the traffic is carried by street cars, but that 83 per cent of the traffic occupancy of the street is by private machines.

Relation to Accidents

As previously stated, it is the casualties that have called our attention most forcibly to the traffic situation. Vehicular interference is a recognized cause of accidents, as shown in Table No. II, which gives the total accident death-rate in the United States as compared with the deaths due to automobile accidents from 1917 to 1924, inclusive.

TABLE II.

Total Accident Death Rate in the United States Compared with Deaths Due to Automobile Accidents—1917 to 1923 (Figures Supplied by the U.S. Bureau of Census)

Year	Total Accident Death Rate Per 100,000 in U. S. Registration Area	Automobile Accident Death Rate Per 100,000 in U. S. Registration Area
1917	81.2	9.0
1918	82.5	9.3
1919	72.0	9.4
1920	70.3	10.6
1921	68.7	11.6
1922	71.4	12.8
1923	75.7	14.2
1924	78.0 (Estimated)	15.5

These figures speak for themselves and show that, although the total accident death rate in the United States is gradually decreasing, the automobile accident death rate has increased almost as much as the total death rate has decreased. The decrease in the total rate, as shown from 1917 to 1923, has been due to a reduction in railroad fatalities, from 11.5 to about 6 per 100,000 of population; in the reduction in street car fatalities, from 3 to about 1.6 per 100,000, and in the reduction of accidents due to other miscellaneous causes. This good work, however, has been partly offset by an increase from 9 to 14.2 per 100,000 in the automobile fatalities. At the same time it must be remembered that during this period the number of automobiles has increased from 5,000,000 to almost 18,000,000, and, although the death rate per car has steadily decreased, as is shown in Table No. III.

TABLE III.

Death Rate Per Car in the United States (Figures Supplied by the National Automobile Chamber of Commerce and the U. S. Bureau of Census)

Year	Registration of Cars	No. of Cars Per 1000 Population	Total No. Auto Deaths	Number Auto Deaths Per Car	Auto Deaths Per 1000 Population
1914	1,711,339	17	4,231	.0025	.043
1915	2,445,664	24	5,928	.0024	.059
1916	3,512,996	34	7,397	.0021	.072
1917	4,983,340	48	9,184	.0019	.089
1918	6,146,617	59	9,672	.0016	.092
1919	7,558,848	71	9,827	.0013	.094
1920	9,231,241	88	11,358	.0012	.106
1921	10,465,995	98	12,500	.0012	.116
1922	12,238,375	113	14,500	.0011	.128
1923	15,092,117	137	15,700	.0010	.142
1924	17,726,507	160	17,345	.0009	.155

Remedies to be Applied

The remedies to be applied are of two distinct classes: First, those which deal with the regulation and supervision of traffic, and second, those which deal with physical construction—and the planning of improvements. The former may be considered

as fitting the traffic to the streets and the second as fitting the streets for traffic. The first is merely a palliative, it is only using the tools which we have to the best advantage. To plan is to provide the tools. This paper does not attempt to deal with the question of the regulation of traffic, but only with the city planning features of the problem. These two are distinct from the construction and engineering features, which would deal with the actual design and the determination of grades, cross sections, etc.

Need of Permanent Solution

The permanent solution of the traffic problem involves three questions: First, the replanning of our cities to solve the question of the congested and built-up district; second, the provision of sufficient facilities in the now undeveloped territory, so as to prevent congestion when these districts become more built up, and third, the planning and re-arrangement of an entire region, so as to alleviate the conditions which now exist. These are the problems for the permanent solution of which planners are now seeking light and information.

The need of adequate planning is apparent; it is to anticipate, as far as possible, the conditions which are likely to exist. Some of these will necessarily be corrective. When considering some of the major improvements that have been made and proposed, we realize the cost of delay. The big element of expense in traffic relief frequently is property damages and not the construction of highways or traffic carrying facilities. For example, Boston now proposes an intermediate thoroughfare, at a total cost, including certain related street extensions, of \$32,850,000. The project consists mainly of the widening of streets to 100 feet. Of the total estimated cost, \$25,600,000 is for the main thoroughfare, and of this \$24,450,000 is for the taking of land and buildings. The actual total for construction work is only \$1,150,000.

The great need of permanent solution is realized when we consider the annual cost of traffic congestion. Secretary Hoover estimates an annual cost to the country of \$600,000,000; New York places its figure at \$182,000,000; Chicago at \$60,000,000; Cincinnati at \$35,000,000, and Worcester, Mass., at about \$20,000,000. These amounts show what the traffic problem means in America to-day.

City Planning—Definition

"A City Plan is a program for the future physical development of a city. It represents the joint endeavor of a city and its citizens in preparing for their own future needs and the probable requirements of their commerce and industry." It has been defined as "the development and co-ordination of comprehensive programs for the advancement and betterment or the creation of facilities for every municipal and public activity." Still another definition is that stated by the Town Planning Institute

of Canada, viz.: "The scientific and orderly disposition of land and buildings in use and development, with a view to obviating congestion and securing economic and social efficiency, health and well being."

From these definitions the distinction between regulation and planning is thoroughly evident. What the cities and the urban districts need to-day to properly carry out their traffic problems are more adequate tools rather than more cunning methods of using the inadequate tools with which we are now laboring. It is only by planning comprehensively and by planning as thoroughly as possible with the data at hand that we can look for a relatively permanent solution.

Elements of Importance

When traffic is congested the citizen cries for wider streets. Very often his cry is heeded and streets are widened without first determining the essential data.

Traffic Data

In wise planning it is necessary that a careful examination be made of—the number of vehicles; the possible segregation of traffic; the thoroughfares available; the possibility of improving parking facilities; the observation of proper traffic regulation; the need and opportunity of possible decentralization; the overland highways and their relation to the street system; the volume of through traffic and the possibility of its separation from local traffic. These and all of the other contingent and fundamental data should be considered by the town planner in studying any given problem.

City planning cannot confine itself to the eradication of any one particular sore spot in the traffic situation, but must deal with the whole problem in its big and broader sense.

Public Utilities

Such planning is concerned with the development of transit lines; the arrangement of transportation facilities; provisions for the usual public utilities, such as water, electricity, gas, telephones, sewerage and drainage. It is concerned with provisions for housing, public recreation, and with an orderly arrangement of the industrial, business and residential districts; the latter is accomplished through zoning. Since city planning must consider these things in the broadest sense, the relief of any particular weakness in the traffic situation can come only when considered in its relative importance to the planning problem as a whole.

Zoning

One of the most important features of city planning in its relation to traffic—although perhaps not thoroughly realized—is that of zoning, or "the creation by law of districts in which regulations, differing in different districts, prohibit injurious or unsuitable uses of structures and land." Zoning

attempts to give stability to the general plan. It sanctions where the residents should live and sets forth areas to be devoted to stores and industries.

The traffic needs of a community involve: First, the distribution of traffic within that community; second, the methods of getting traffic to and from the community, and third, around the centre of the congested area without passing into it. Since zoning tends to give permanency to the city's development, it plays an important part in determining the street system. The character of a district determines, to a large extent, the type of streets required to meet the particular traffic need.

The factory districts, for example, will be interested in getting materials delivered to the factory and from the factory to shipping points and transportation centres. Their need is for wide heavy-hauling streets and generally the problem is that of caring for slow-moving traffic.

In the business districts, which are the principal objective points of all inter-city traffic, the question is largely one of arterial distribution within the district, with main exits and entrances. If the principal streets are stabilized as to use and thus as to value, it will more surely fix the improvements and provision for transportation requirements.

In short, to intelligently design a system of streets and to make them relatively permanent and, therefore, as nearly fixed as possible requires zoning, so that the planner may be certain as to the kind and character of the traffic the streets must carry.

Thus zoning enables sensible planning of thoroughfares of sufficient width and of a type to meet the requirements of different kinds of development, so that it will not be necessary to first build, then tear down and rebuild.

Recreation and Traffic

Public playgrounds for children are important so as to avoid the necessity for children playing on the streets. If proper recreation facilities are available, it is necessary to have them located so as to prevent children crossing at dangerous corners.

The general question of traffic and its regulation and the location of recreation facilities is vividly brought to the public mind in the ill-advised location of many such structures as stadiums, ball parks, theatres and amusement halls. Such recreational centres are of vital public interest, and their location often can be such as to fit in with the existing traffic facilities, rather than at such a point as to necessitate the expenditure of large sums to correct an aggravated traffic situation which might have been foreseen and avoided.

Street Widths

As shown, the widening of streets, particularly in the high value business districts, is an expensive proposition and generally the expense is so great that it is practically impossible. The suggested widening of Sixth Avenue in New York at a cost of

\$200,000,000 is an example. It is possible, by proper planning, to anticipate to a certain extent such an improvement as street widening, by providing for set back lines some years in advance of actual construction. This method of looking forward to future street expansion is a valuable means where it can be carried out. To be fairly exercised, however, some limit of time to complete the improvement should be stated.

Where the cost of street widening is excessive and land values are high, many schemes to avoid the actual pushing back of property lines or building lines have been suggested. These have ranged from elevated streets and sidewalks, sub-surface streets and sidewalks, subways, both for rapid transit and for surface cars, up to the great highway, 200 feet in the air, which has been suggested for London, at an estimated cost of 36,000,000 pounds.

However, items of less expense in construction sometimes can be carried out. The arcading of the first floor of buildings, particularly in shopping streets, so as to place the sidewalk wholly under the walls of the building and devote the full street width to vehicles, is a promising method. It is justified as yet in only a few instances in America (such as the Madison Square Garden in New York and the Commercial Trust Building in Philadelphia) but is a common practice in France, Southern Europe and Spanish America.

The Street System

From what has been said, it must be evident that the widening of existing streets frequently is not the solution of the problem. The selection of the right street to widen, the designation and working out of the most effective and direct routes resulting thereby, will frequently bring about the accomplishment of traffic relief. Haphazard development, even widening, is not in harmony with the city planning. Wide streets will be of little value if they lead into extremely narrow ones which will cause a congestion similar to the tie-up in the neck of the bottle.

Where bridges and tunnels are used the provision of sufficient and adequate approaches (in other words exits and entrances from the district) must be just as carefully planned as the location of the bridge itself. What we need is not more streets, nor wider streets, but a better general street system, a street system which will comprehend the divisions between local arterial streets and main through highways.

What Can be Done—Decentralization

The concentration of business activities in a small section of the city will bring about the concentration of automobile and other forms of traffic. Examples of this kind are seen in the downtown triangle of Pittsburgh, the Loop in Chicago, and the shopping and theatre district of New York. Of course, over concentration does tend in time to drive out some kinds of activity, due to the inconvenience of doing business in such a district.

Provision could be made to decentralize, to a cer-

tain extent, these high value business districts. Enlarged adjacent areas, or up-town or suburban districts, with proper replanned facilities for reaching them, will aid in doing this. Care must be exercised that decentralization be not carried on in such a manner as to result in the use of motor cars in making points which otherwise might be covered on foot; as in such cases, and to some extent, the effect would be neutralized.

Provision for Parking

In the regulation of street traffic the prohibition of parking on various streets during different hours has been used as a palliative or temporary expedient. In order to more completely utilize the automobile as a method of transportation, facilities must be provided for storing cars—as a part of permanent planning—if the use of streets for storage is to be limited, as it should be, or entirely prohibited as is necessary in many cases.

This may be done in a number of ways. It may be accomplished by the utilization of open spaces, either publicly or privately controlled; or by the building of multi-story garages, which may be operated on a municipal or a concession or licensed basis. Newspapers now report projects for storing from 500 to 2,000 cars. If a warehouse district is convenient to the congested business district the use of the warehouses for the storage of pleasure cars while the trucks are out or in use during the day might be considered.

Increased Use of Existing Streets

The carrying capacity of existing streets may sometimes be increased by proper development. This development may mean the widening of certain streets; the improvement of grades; the elimination of grade crossings; or the construction of better exits from the district. Such improvements will provide for a more uniform speed of vehicles, and this will have the same effect as increasing the width of the streets.

Through Highways—By-Pass Loops

Probably the most useful method of traffic relief, and perhaps the one which can most economically be carried out in older districts, is to divert the through traffic from the most congested area. Diverting from such area the people and vehicles which would not be there if there was an alternative route, will reserve the streets for that traffic which has actual need to be in the district. It is sometimes possible to by-pass all through traffic, by the construction of thoroughfares encircling the congested area. Such schemes are proposed at Pittsburgh, Detroit and Chicago.

The through highway systems of the United States such as the Lincoln, Yellowstone, National and Dixie Highways were originally located along old existing roads and trails, which connected one city with another. In fact, during the designation of popular highways, certain cities vied with each

other in having these thoroughfares pass through the heart of their business districts. Any attempt to by-pass them was promptly contested. The result is that all these important inter-state and national highways pass through numerous cities, which today are seriously hampered and are now considering by-passes. Pennsylvania and probably other states are making studies of this, for the purpose of relocating such important cross-country highways, so as to avoid passing through the principal cities but still afford good connections to them. Perhaps no state has gone further in this respect than has Delaware with the DuPont Highway, which runs north and south through the state, but avoids the larger cities and central communities.

Roads of this sort are usually expensive undertakings such as, for example, the Connors Highway from Tampa to Palm Beach which passes through the Everglades. Another is an Italian road which connects Milan with the Lake region. Both are for purposes of through travel and nothing else, and indicate to us some of the solutions which we may expect in the future.

Parkways

The use of existing parks in connection with solving the traffic problem is often possible. General driveways through parks lead from nowhere to nowhere. They are made to take one through a scene of beauty and to afford recreation. It is possible to rearrange such drives and use them as thoroughfares without destroying actual beauty as is so true of Riverside Drive in New York. Pittsburg, for example, has reconstructed its principal park driveway through Schenley Park, into a main thoroughfare, leading from a new boulevard to the residential district, which greatly relieves the existing through ways. It in no way injures the park for its purpose as such. The proposed development in New York of a parkway system for the entire Metropolitan area includes not only by-pass routes but also a system of thoroughfares for the purpose of diverting traffic, and carrying it through the exits and entrances of the Metropolitan center.

Conclusions

Traffic control under existing street conditions will not afford a solution to the problem. The method of accomplishing permanent results is in planning for the future and the replanning of things as they exist. Some of these items of importance to be studied and planned are:

1. Improvement of intersections by the rounding of corners.
2. Removal of obstructions to view at intersections, classification of use and limitations of congestion through the use of the power of zoning.
3. Provision for the separation of traffic or grades at important intersections.
4. Removal of pedestrian traffic, at street crossings by use of overhead walks or underpassways.
5. Widening and straightening of streets where feasible and practicable.
6. Cutting through of new streets where the need is such as to justify the cost.
7. Segregation of different kinds of traffic, not only by regulating but principally by the design of appropriate facilities.
8. Building of loops around central business districts.
9. By-passing of through traffic around congested areas by building of appropriate highways in the outskirts of the city.
10. Construction of rapid transit facilities, either overhead or underground, not only for street railway but sometimes for vehicular traffic.
11. Elimination of railway grade crossings.
12. Removal of parked machines from the streets, by providing other facilities, so as to preserve available width for moving traffic.
13. Provision of playgrounds and recreation centres in suitable number and suitably located.

Proper planning in the future, readjustment of existing streets and further development of the traffic regulations can do much toward promotion of safety on the highways, and even more towards speeding up of travel. We suffer from the narrow streets, from the high buildings, in business centres, from the lack of the stabilizing influences of zoning, from poor planning and the inadequacy of arterial highways. It is only by a comprehensive plan, by a continual vigilance in its operation and carrying out, by re-adapting it to changing needs and reasonable future requirements that the traffic problem can be solved and the city kept in its highest state of efficiency.

Town Planning and a Popular Journal

The popular journals of Canada still believe that town planning is an academic subject. *The Survey Graphic*, a popular American journal devoted sixteen articles to the subject in its May issue and "welcomes the opportunity to take its place among the exhibits brought together for the International, Town, City and Regional Planning Conference at New York, April 20-25."

Since the zoning law for New York was passed in October 1916 more than 300 cities have adopted zoning laws and now an unzoned city in the United States is considered in the backwaters of progress and "bad for business" because there is no protection for property value.