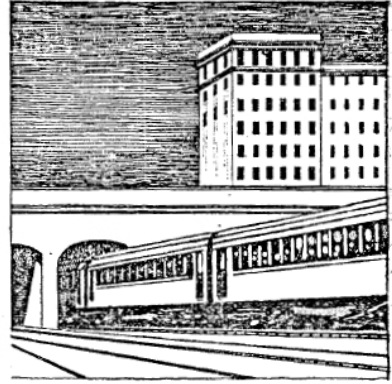
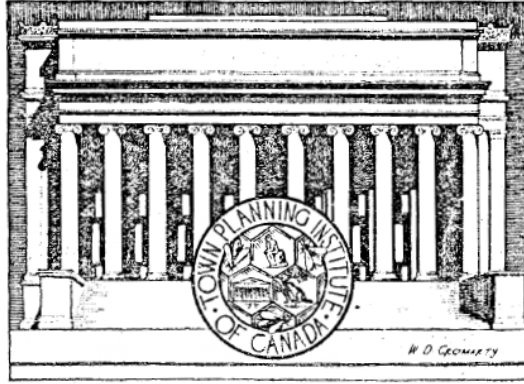


# THE JOURNAL



## TOWN PLANNING INSTITUTE OF CANADA

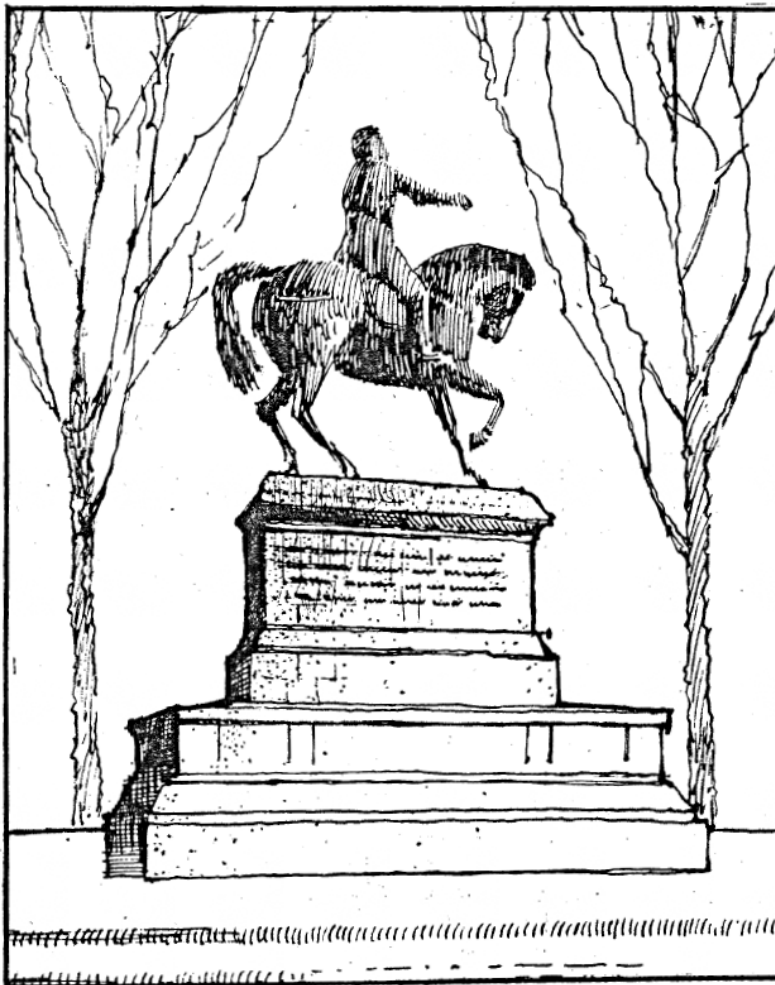
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NO. 2

### PROPOSED MONUMENT TO COLONEL BY

At the annual meeting of the Engineering Institute of Canada, held in Ottawa, January 23rd, 24th, the suggestion was made that the engineers of Canada should take the lead in promoting some form of memorial to Colonel John By, builder of the Rideau canal and founder of the city of Ottawa, which for many years was known as Bytown, in honour of its founder. The work which Colonel By undertook and carried to a successful issue, under extraordinary difficulties, has been freely described as the greatest engineering feat and public work ever executed in Canada up to that time, and it is thought en-



Builder of the Rideau Canal and Founder of the City of Ottawa

tirely fitting that a national organization of engineers should take the leadership in a movement designed to perpetuate the memory of one of the early Royal Engineers who impressed his genius so indelibly upon the life and history of the nation.

From the town planning point of view it is a noteworthy fact, constantly confronting the Town Planning Commission of Ottawa, that the section of the city laid out by Colonel By is the only part which shows adequate foresight of the future needs of the city in the provision of wide main arteries for the basic circulation of traffic, the

only part which is organically sound from a town planning point of view. The work of the commission will consist, to a large extent, in the rectification of the mis-planning of other parts of the city. Had these been constructed on the lines laid down by Colonel By this trouble and cost would have been needless. This re-planning will eventually save the city many times its cost but it is a melancholy fact, none the less, that the lack of proper planning is piling up future municipal costs in needless reconstruction all over Canada.

Other organizations are interested in the movement for honouring the memory of Colonel By and it is possible that concerted action will be taken and a worthy monument erected in Connaught Square, the civic centre of Ottawa, before the centenary of the beginning of his work in 1826 is completed.

The town planner's attitude to Colonel By should be similar to that of the engineers. Colonel By's relation to Ottawa has been compared to that of L'Enfant to Washington, and Haussman to Paris. In all these cases engineers, by the opportunity of their calling and the splendour of their vision, saw the future possibilities of their respective areas and offered to their contemporaries the fruit of their knowledge and genius in forecasting the cities that were to be and in pressing upon the officials of their time the duty of shaping their areas with scientific foresight. As in the case of L'Enfant in Washington and of the famous architect, Christopher Wren, in London, the town planner's advice in Ottawa was largely neglected, at the cost of future disorder and inefficiency.

In the days of Colonel By there were no railroads and all travel was on foot, by horse-driven vehicles or on horseback. There are stories told in Ottawa of the impressive figure of Colonel By, mounted on a great black charger, galloping through the wilderness as he attended to his onerous duties and gave his orders to his men. Possibly this feature will be embodied in any monument that is erected. When the time comes for definite action there should be a national competition among the sculptors of Canada concerning the form of the memorial. Since, however, any suggestion that may be made in the meantime will attract attention to this patriotic endeavour the first sketch of a suggested memorial is offered in this issue of the *Journal of the Town Planning Institute of Canada*.

At the meeting of the engineers Mr. Hamnett P. Hill delivered an admirable and scholarly address outlining the historic incidents and importance of Colonel By's engineering contribution to Canada. He stated that Colonel By not only failed to reap the just rewards of his great work, but was retired from the service without receiving a word of thanks. The canal proved of tremendous value to Western Ontario. Thousands of immigrants passed through it on their way to the interior of the province and the develop-

ment of the whole of Upper Canada was due very largely to its existence. Unfortunately the actual cost of the building of the canal exceeded the first estimates by such a large sum that some one had to be the scapegoat in order to satisfy the consciences of their Lordships of the Imperial treasury. The then provincial authorities of York succeeded in getting the work on the canal started by the Imperial government through sending over a very much too low estimate of the cost.

#### How Estimates Rose

The original estimate, compiled by one Samuel Clowes and forwarded to the war office in 1824 gave the necessary outlay as £169,000. After Colonel By had started the work and had had time to prepare his first estimate, he stated the amount at £485,000. Difficulties arose and he was compelled to notify the government that £580,000 would be required. Litigation arose with the owners of the properties through which the canal was built and in the spring of 1830 Colonel By's estimate had risen to £762,000. At this stage the politicians in the old country showed signs of interest and various parliamentary committees were appointed to investigate the matter.

In February, 1832, Colonel By reported that £715,000 had been spent and that a further £60,000 was required to complete the work. On May 29 the first steamboat "bumper" went through the completed canal, the occasion being marked by a celebration extending from Kingston to Bytown.

#### Colonel By Exonerated

Just four days before that date the Imperial Lords of the Treasury, in their most dignified manner, demanded that the War Office immediately recall Col. By and obtain from him an explanation of the tremendous outlay, which so greatly exceeded the original estimate. The committee of engineers which investigated the matter gave Colonel By and his engineers a clean sheet, but deprecated the methods employed by which a work of such magnitude had been embarked upon without first ascertaining the true conditions. Notwithstanding that the blame was not his, Colonel By was retired and, in place of receiving the expected knighthood which his work so richly deserved, he was virtually reprimanded and spent the remainder of his life in the seclusion of his own estate in Sussex.

Mr. Hill prefaced his address by a tribute to the work of engineers. "The world owes much," he said "to the engineering profession in all its branches. This would be a dreary world but for improvements due to you and to your associates." He continued in a humorous strain: "Noulan Cauchon and I are fast becoming the two village bores of Ottawa. I regularly inflict upon you tales of Ottawa's past history and Noulan Cauchon is equally insistent with visions of the future."

# RURAL PLANNING AND DEVELOPMENT AS AN IMMIGRATION POLICY

BY NOULAN CAUCHON

Chairman and Technical Adviser, Town Planning Commission of Ottawa

## Concentration as a New Policy

There is much need for re-consideration of our Canadian immigration policy. To some of us it seems to have been socially wrong in its tendency to isolation of settlers, and economically wrong, because wasteful, in its scattered development. The need of to-day is a policy of concentration of settlement in the vicinity of towns and cities where much agricultural land is inadequately used and where the services and amenities of civilization are within reach of the settler. A little patriotic thinking and planning could make these areas the bases for incoming home makers and for those of our own people to whom the economic inhospitality of cities has denied a home.

For thirty years or more Canada has been pursuing a speculative policy of immigration, settlement, and development, devoid of humanitarian sentiment and economic foresight. The proofs of the failure of this policy may be found in the abandoned homes and home sites and in the stilled wheels of industry; the arrested energy and waste of man-power all over the country and in its migration from us. It has been a gambling policy fostered by predatory finance and popularly endorsed by the thoughtless and those who still believe that some accident of national development may enable them to catch the traditional fortune offered so freely by immigration agents.

This policy has expressed itself in our transportation system. It has trusted to a fortuitous tide of immigration to fill the vacant spaces and to nourish the lean sinews of communication. But this hope has been continually thwarted by the tying up of land in the interests of private speculators and in the senseless scattering of prospective home makers, and in the west, mainly through the checkerboard alternate distribution of homestead sections with intervening railway subsidy lands.

Various spasmodic attempts have been made to loosen the land and bring it into national use but always the gamblers have proved too powerful and the hectic and uncritical journalism that has followed such movements has gradually, but invariably, drooped into silence. We have allowed an unwise and prodigal wastage through leakage of man-power by scattering its constructive energies too widely and this has left us, in the weakness of our diffusion, an easy prey to the ravages of war-arrested development, facing painful and toilsome rehabilitation.

## Small Holdings

The method of small holdings and intensive cultivation in the vicinity of towns and cities has proved

itself economically sound and socially satisfactory in France, Belgium, Denmark and Holland. In eastern Canada, particularly in Ontario and Quebec, this form of settlement is still untried and yet there are waiting to welcome it all the potent agencies of civilization such as developed waterways, railways, radials, highways, schools, hospitals, etc., and the protection of law. The burden of all these amenities is now a heavy overhead liability of public debt. To intensify population and production on such areas would be to lessen the individual burden by a wider sharing of the liability, while, on the other hand, to send our own surplus and our new population to open up our wilderness and forest requires duplication of the already over-extended equipment of civilization, a process economically unsound and nationally weakening and destructive. Further, there is an insistent social and economic aspect of environment which demands consideration, i.e., the human equation of family efficiency, which is individually personal but collectively, a national property. A wilderness environment is poor in medical care for men, women and children, and for children especially sad, halting in educational progression towards betterment and earning power. Moreover this wilderness environment does not mentally stimulate and energize the settlers.

For many years I have been advocating specific projects for small holdings and intensive cultivation coupled with suggestions of group development, co-partnership housing and rural planning for social amenity and economic efficiency throughout what I have designated as the economic axis of Ontario and Quebec, a 50 mile belt from Windsor to Montreal. I have suggested among others these projects for areas throughout Ontario, around London, the Grand River valley across to Hamilton and spreading over the Niagara peninsula, and also over the land between Hamilton and Toronto, with similar schemes for the vicinity of Ottawa and for the county of Chambly, near Montreal. In all these districts a scientific policy of small holdings and intensive cultivation, with proper attention to the problem of housing and rural planning, enhanced by a system of reclamation and irrigation of land, deserves the most serious consideration.

The co-partnership system, as applied to housing schemes only, or as advocated for adaptation to small holdings projects is optional—not indispensable—but appears to the writer to fulfil the elements of self-contained progress for starting group settlements on their way to success.

### The Ottawa District

To take the Ottawa district as an example, the land for miles east and west of the city could be adapted to small holdings and intensive cultivation and could be irrigated from the waters of the Rideau river watershed. To the south of the Capital the land is irrigable for nearly 50 miles towards the St. Lawrence, within a vast area to the east of the location of the main canal whereby the quickening waters of the Rideau could be turned to agricultural use. This would be many times more profitable than using these waters for the turning of wheels. The agricultural power of water in quickening fertility far exceeds—from 10 to 100 times—its mechanical utility.

It takes comparatively little water to irrigate in this part of the country; there is needed only a small supplementary amount to fill the deficiency during the annual recurring short hot spell and drought.

We have been accustomed throughout the east to estimate the value of water in horsepower, so it may be of interest to compare its value for irrigation on this familiar basis.

### Agricultural Power of Water

A cubic foot per second of water the year round creates about twenty horsepower at the present Niagara plants, an outstanding example of efficient, profitable application to power. This cubic foot per second would, with due allowance for storage, evaporation and transmission, irrigate about five hundred acres of land—two applications of five or six inches each. This irrigation would easily increase intensive cultivation and fruits \$100 per acre, or more. This means about \$50,000 increased production against \$500 in the scale of the same quantity of water for power. In other words, under certain circumstances water used for irrigation purposes may be up to one hundred times as productive as the same water used at low heads for power generation.

### Ontario and Quebec Small Holdings

There is a great opportunity here in the provinces of Ontario and Quebec, for comprehensive group projects of settlement where financing, supervising, constructive co-operation, buying and selling and the adoption of co-partnership homing would be entirely practicable. In 1916 I outlined a plan for soldier settlement based upon the reclamation and irrigation of an area of about 25 square miles south of the Capital and midway between it and the St. Lawrence. In this connection I proposed a large group project of small holdings and intensive cultivation, all of which could have been brought under irrigation to insure the crops against drought, and to insure increase of yield. I proposed that this project should be based upon adaptation of the English co-partnership housing principle, which is a principle of collective tenant ownership and should be fostered by scientific town and rural planning which have such

great potentialities for social organization and the provision of those amenities of life without which work becomes dull and insipid. The offer of the Imperial Government to co-operate with the Government of Canada in assisted selected immigration and the recent utterance of the British Prime Minister, Ramsay MacDonald, in favour of group settlement would seem to justify a reconsideration of such schemes as here outlined.

Aside from any scheme of collective housing, the last word has not yet been said on the important matter of housing for rural districts. It is not necessary that a house should be completed under capital expenditure before it becomes of use to a settler. The main framework of a house could be erected with finished exterior, leaving the interior to be completed by the owner at his own time and according to his leisure.

This is a reversal of the prevailing custom of constructing the frame and finishing the interior at capital outlay whilst awaiting further capital to finish the exterior.

Upon settling, a man immediately needs shelter but his holding also requires immediate and continuous attention which prevents him from building his home himself.

The new method suggested would afford him an opportunity of turning his own labour to capital account by completing the interior himself during his winter and other leisure when his time cannot usually be otherwise profitably occupied.

I wish it to be clearly understood that small holdings with intensive cultivation are recommended on their intrinsic merits, with or without irrigation. No one is more conscious than the writer that the heavy expenditures entailed by irrigation projects are difficult of admission at the present moment.

It would be the part of wisdom, however, for the full endowment of the schemes that initial provision be made in the selection, survey and planning of the lands whereby the irrigation work could be developed progressively as settlement justified. Meanwhile it is sound business to determine as early as possible what is practicable in the way of development through irrigation, which will call for only a very moderate additional expenditure when making the original surveys.

Our problem is the creation of homes—wealth as may be.

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### Vancouver Branch

Election of officers in the Vancouver Branch, for 1924, resulted as follows: Chairman, G. L. Thornton Sharp; Vice-chairman, William H. Powell; Secretary-treasurer, J. Alexander Walker; Directors: E. B. Hermon, W. Brand Young; Ex-officio member of Council, Professor Frank E. Buck.



## THE PLANNING OF STRATFORD-UPON-AVON

Messrs. Patrick Abercrombie and Lascelles Abercrombie undertook an onerous and delicate task in the preparation of a report on the future development of Stratford-upon-Avon. The priceless legacy bestowed upon the town by its Shakespearean associations indicated the most reverent conservation as the leading motive of any plan of future development, yet the obvious amenities of modern life and the practical and economic interests of the citizens had also to be considered. These clearly could not be sacrificed to a mere policy of letting things alone without meeting and rousing the antagonism of social and business interests. The still worse policy of *laissez faire* threatened destruction to the most vital interests of the town.

Some time ago it became obvious to certain anxious onlookers that the so-called "natural development" of Stratford-upon-Avon portended disaster to its historical, aesthetic and even economic interests and the Stratford-upon-Avon Preservation Committee was founded under the chairmanship of Sir Martin Conway, with Sir Henry Lunn as its honorary secretary. This body decided to present the corporation with a report which would attempt a comprehensive view of the question of the planning of Stratford-upon-Avon and Professor Patrick Abercrombie, of Liverpool University and Mr. Lascelles Abercrombie, poet and dramatist of established reputation throughout the English-speaking world, were invited to undertake the work. The report has now been published and the admirable and enlightened spirit of it, its courteous deference to conflicting opinion, its courage in attack upon what is considered inimical to Stratford's real interests and its philosophic pose on "this side of idolatry" will be gathered from the following excerpts:

After having allowed Adam Smith and his Invisible Hand to mould industrial England during the nineteenth century, we have now entered on the more deliberate policy known as Town Planning. It should be the duty of every community to begin the difficult enterprise of directing its own growth by taking a survey of its present condition, setting out the merits and defects of this, and indicating the probable developments and their desirable and, in the long run, most practicable form.

But at Stratford-upon-Avon a more urgent motive was found; an obvious departure from its traditional existence seemed to raise the question of its future very acutely, and provoked some anxious discussion which reverberated far

beyond the town itself. A factory was to be put up; in itself no great affair, since it was placed on Corporation property, easily controlled. But might not this be only a beginning? And if so, what would be the end?

The first duty of any thriving community is its duty to itself. Stratford-upon-Avon, regarding itself merely as a Warwickshire town, might justly claim the right to consider before anything else its own local and practical interests; and these would nowadays be understood to include the obvious amenities. But Stratford-upon-Avon is not merely a Warwickshire town; it is much more than the community of its own inhabitants. It has come to be regarded by the whole English-speaking world as the trustee of ideal interests of extraordinary celebrity, any injury to which would provoke very perceptible resentment. Such a state of affairs, though certainly enviable, might yet seem capable of becoming practically inconvenient. For Stratford is a growing town, and likely to go on growing; and prosperity, here as elsewhere, will find it hard to leave existing things untouched. The practical interests of the local community, therefore, might conceivably find themselves hindered by the duty of considering ideal interests which belong to English culture at large; and the municipal conscience might then consider itself unfairly penalized for scruples it could not ignore. But it appears on examination that this would hardly be the case except in one contingency, which we are bound to regard as very remote. If development as a factory town naturally offered itself, then the local and practical interests would soon come into very real conflict with those which are ideal and national—indeed, international. Some factory development, limited in extent and kind, is not impossible; but to turn Stratford-upon-Avon into a sort of Coventry would not be only a disaster to an ideal loved by half the world, it would also require for the sake of very dubious advantages an activity much more artificially forced than that which would, for the sake of the ideal interests involved, preserve the essentials of the town's character; the character, namely of a market-town on which fortune has settled an incomparable distinction.

Apart from this, however, the unusual and difficult duty imposed upon Stratford-upon-Avon of holding itself in trust for English-speaking culture should not really conflict with the town's best practical development. A town grows because it prospers. The growth of Stratford-upon-Avon makes its future development

\*Stratford-upon-Avon. Report on future development. Prepared at the instance of the Stratford-upon-Avon Preservation Committee by Patrick Abercrombie and Lascelles Abercrombie. The Liverpool University Press, London. Hodder and Stoughton 7/6.

an urgent problem entirely because it is prospering far more than it ever could have done if it had remained a merely respectable market-town. That it has not so remained is due again precisely to the fact that it is the trustee of national ideal interests. The conduct of this trusteeship is therefore seen to be properly the town's dominant interest. Stratford-upon-Avon is not likely to be insensible, in theory at any rate, of the value of its unique prestige. But the problem of the town's development remains; and the problem is, to allow the development to take place without injuring the characteristics which chiefly promote it. They are characteristics which might easily be injured; and if they were, the vitality of the town would suffer. On the other hand, the vitality of the town would equally suffer, if the preservation of these characteristics were allowed to thwart development, or to become spectacular and unreal. It is the object of this report to suggest a policy of enlightened self-interest, which would avoid both inconsiderate development and inconsiderate conservatism; a policy which would make a just regard for local interests serve the interests of national sentiment.

The report is divided into three parts of which the first presents a concise and reasoned survey of the problem in both its conservative and progressive aspects. Under the first of these subdivisions the Shakespearean associations are described, the character and antiquity of the town and its surrounding countryside. The second part discusses methods and degrees of control for future development, both in the town and in the regional area and the third is devoted to special problems such as tourist traffic and accommodation, proposed buildings and other matters that affect from time to time the traditional character of the town.

The volume is beautifully illustrated and contains all essential maps and diagrams to make the report intelligible and cogent.

In surveying the problem, the authors state:

The problem of the future growth of Stratford-upon-Avon may conveniently be regarded under two aspects; the first, conservative, and the second, progressive; for the problem arises from the necessity of making natural progress compatible with historical and aesthetic conservation. The problem would indeed be completely misconceived if the conservative factors in it were regarded as merely repressive. On the contrary, since they are, precisely, the causes of Stratford's celebrity, it is from them that the progressive factors almost wholly arise. It is therein the true interest of its own progress that Stratford should seek to preserve complete and unimpaired the character of its unique prestige. The association with Shakespeare, by attracting

universal attention, gave Stratford also its reputation for picturesque antiquity and beautiful surroundings. This was inevitably followed by residential development, since communications and geographical position were favourable. This development will certainly go forward; and it has recently been followed by another development—into a recreation ground for the urban populations round about; and this, too, will certainly go forward. Uncontrolled exploitation of either of these two factors, which are the direct consequences of the town's character, would end by injuring and perhaps destroying that character; and the misfortune of this would be local and practical as well as national and sentimental. For it must be remembered that Stratford owes its peculiar reputation not only to historical association, which no doubt is indestructible, but also to a complex of qualities which have come to be felt as integrally compounded with that association; and these qualities happen to be very destructible.

The conservative aspect of the problem is thus stated:

But however piously these actual and obviously assignable vestiges were preserved, a large part of the town's more general and massive association with Shakespeare would be lost if its main character underwent any considerable change. It has already been pointed out that the connection of Shakespeare's name brought into prominence the charm of the town itself and the beauty of its position; and both of these evidently furthered its fame. Moreover, it is not enough to say that in addition to being Shakespeare's town, Stratford, by extraordinary good fortune, is also one of the choicest relics of English civic antiquity (with a parish church of unusually exquisite beauty), and is the centre of a countryside absolutely English in its loveliness. What must also be said is that both the appearance of the town itself, and its surrounding country, are peculiarly apt to Shakespeare; it is not only historically Shakespeare's town, but is still to a large degree visibly Shakespeare's town, with Shakespeare's unmistakable country round about it. We cannot find Chaucer round London, or Milton round Horton, as we can find Shakespeare round Stratford. The question of preserving the association with Shakespeare implies, therefore, and becomes merged in the question of preserving the character of the town, in itself and in its surroundings.

Such preservation, as we have already indicated, can never be properly interpreted as an enforced stagnation. Not to maintain, if it would not hamper present prosperity, such beauty and linkage with the past as Stratford can show would be merely barbarous. But in

this case the philosophical view would be that the inheritance is, for Stratford, as much a form of natural wealth as a seam of coal, and to be as carefully managed: with the advantage that it is a form of natural wealth which, properly managed, is inexhaustible.

The section dealing with the surrounding countryside gives one more illustration of the fact that town planning can only be of sectional effectiveness unless it merges into the larger consideration of town planning in relation to the surrounding region. In this case the need for wider reference is of special significance.

It seems to us quite clear that the surrounding country must share in any provision for Stratford's future on two grounds: first, the associations of the countryside emanate from Stratford, and it is therefore natural that the world should (as it certainly does) regard Stratford as the trustee not only of its own character but also of the character of its neighbourhood. Secondly it will be found here as elsewhere, that the practical interests are furthered by, and indeed are fundamentally at one with, the ideal interests: the ideal interests being properly nothing but practical interests which take a long-sighted rather than a short-sighted view of things. In fact, it is not too much to say, that all the efforts Stratford makes to preserve itself unconsciously suppose that its surroundings will remain as they are. It has, unfortunately, no reason for relying on this; but it is a perfectly sound instinct which assumes that serious interference with the neighbourhood would react unfortunately on the town itself. However zealously the town carried out its trusteeship as regards itself, if its surrounding country were freely exploited, it would find itself suffering the very loss it had striven too narrowly to prevent. Injury to the character of the neighbourhood would injure the character of Stratford. It would no longer be the place we know; its power of attraction would be demonished; it would be a town the prestige of which has been lowered.

Dealing with the progressive aspect of the planning of the town the authors point out that in the case of Stratford-upon-Avon the conservation recommended does not mean stagnation in progress because in this case conservation has positive energizing values which affect, and will, as time goes on, affect still more the prosperity of the town. At Stratford-upon-Avon the past does survive as a unique contribution to the present. Among modern contributions to Stratford's present prosperity it is pointed out that festival performances bring an immense influx of visitors and have already made Stratford a theatrical centre which promises to be a real and

vital intellectual force in English-speaking culture. Industrially, a number of artistic crafts have become established and in these the authors find excellent promise of the kind of industry that should be encouraged and developed. To general factory development of the large and aggressive kind they would give no place in Stratford-upon-Avon. These, they argue, would be definitely inimical to the existing interests of the town and, in the long run, destroy its present unique prestige. The character of Stratford-upon-Avon as a market-town should be definitely preserved.

In the second part of the work methods and degrees of control are discussed and the provisions of the British Town Planning Act in relation to the problem of Stratford planning. A definite recommendation is made in favour of the greatest possible extension of civic ownership of land. Stratford, it is stated, is fortunate in that many of the private landowners are in sympathy with a conservative policy but it is pointed out that disastrous mistakes have already been made and that civic ownership of land and town planning law are the chief safeguards for the prosperity of the town.

For obvious reasons the interest in this admirable report will be of much more than local or even national significance. English-speaking people all over the world will surely find gratification in the fact that the problem of the planning of Stratford-upon-Avon is being undertaken with a view to preserving, for all time, in one of the most charming districts of England, the characteristics of the Stratford town and country as Shakespeare knew them and loved them and this with an intelligent appreciation of the needs and interests of the living generation and generations to come. It is difficult to conceive that the work could have been put into abler hands or executed with better judgment, taste and discretion.

One or two points emerge that have more than local application. The first is the belief expressed by the authors that the preservation of priceless national assets is safer under public than private ownership. One parallel to this in Canada is undoubtedly the national parks which are from time to time assailed by private interests with a view to their exploitation for private gain. Messrs. Abercrombie make it abundantly clear, also, that the preservation of the Shakespearean associations of Stratford-upon-Avon will be far more profitable for the town than the development of certain industrial interests which would destroy forever these special assets. It is also manifest that the authors have no antagonism whatever to industrial development, in its proper place. They point out that the loss of such industries as blast furnaces, steel rolling mills, glass works, textile works, chemical works and machinery works need not be a loss to the country as a whole and that these utilities can be just as well accommodated elsewhere.

# ADVANTAGES OF TOWN PLANNING

By PROFESSOR FRANK E. BUCK

University of British Columbia

The town-planning movement already has many achievements to its credit. It is so young, however, that its purposes are more often misunderstood than clearly perceived. In a book written some twenty-five years ago by that eminent scientist and author, Alfred Russell Wallace, the changes of the century just then concluding were fascinatingly and almost dramatically set forth. The book was entitled "The Wonderful Century", and no one could read it without thrilling to the fact that it had been permitted him to have his lot cast in the century of such marvelous achievements — a century in which humanity had reached to high levels, never before dreamed possible. It must be noted, however, that the greatest achievements of that century were not without their distinctive characteristics. They are marked as it were with a peculiar trade mark—a trade mark of industrialism. Mankind has made during that century immense and inconceivably portentous strides. The strides were of a distinctive type; they were towards the mastery of industrial technique. Industrialism had become energized by the new life blood infused by machinery, and the world, as typified in the writings of another great Victorian author, George Eliot, almost expected salvation by way of the "machine". It came not.

Thus it was that although the achievements were notable, they fell far short of bringing about that eagerly expected improvement in our social and economic life. But disillusionment is not always a calamity. It may be the stimulus to actual achievement. And thus it was also that as the light of day broke on the new-born twentieth century men's minds as eagerly turned to the more promising phases of human progress among which the modern town-planning movement has to be numbered.

The town-planning movement has achieved many of its successes owing to the fact that it aims to correct many of the social evils which came in the wake of the industrialism of the last century. To a large extent the "city slum" is an outcome of misguided industrialism, and as "Life in the community is a problem in social biology, it is a function of town-planning to determine the orderly co-ordination of those external physical factors which fulfil environment in relation to the maintenance and enhancement of human life".

## Ancient Town Planning

It is a mistake to imagine that town-planning, in one sense, is a young science. The actual planning of cities is as old as Babylon itself. Jerusalem, Athens and Rome were also cities of old which were planned. But "town-planned" cities as we understand the term, belong to the twentieth century.

This is not a distinction without a difference. The difference is, moreover, really significant, and upon a clear appreciation of this difference will depend our sympathy with, and our support of, modern town-planning schemes. The distinction has to do with the purpose which lies behind the planning. The question may be asked, for instance, what motive prompted the planning of a city of old? What purpose was served? The purpose served in the main was to enclose the city within the boundary of a wall, and to give it an air of great distinction by means of a few gorgeous palaces, squares, entrance gates, and semi-public buildings. The motive for this planning and embellishment is best suggested by the words, "defense" and "aggrandizement." The city had to have limits and a wall so that it could be defended. It must also have gorgeous temples, palaces and squares to mark the kingly residence. The remainder of the city might be a by-word for hovels and insanitary conditions, such conditions disturbed not the minds of those who ruled over these cities of old. The wish or word of king or emperor brought many noble works of art and architecture into being, and we of these later generations must be grateful for them. But the common people of that time had the rather doubtful privilege of paying for them without the slightest opportunity of enjoying them. The cities of old bear many marks which indicate the very antithesis of our present democratic ideals. In our day such elaborateness of architecture, such magnificence of design in respect to a few dominant buildings of a city devoted more or less to the personal use of a few individuals, would be the chief reason for the utter condemnation of a modern town-planning scheme.

## Modern Town Planning

Modern town-planning is fundamentally and all the time a "business proposition". It is well worth while to spend time in endeavouring to make clear this distinction between planned cities of ancient, or even more modern times, and the *purposes* of the present town-planning movement. In the cities of old, citizens were mainly divided into two classes, the "haves" and the "have nots". (These two classes of citizens are possibly still with us to-day in many cases).

The fact is important, however, that town-planning previous to this century was undertaken for the "haves". They commanded it, they enjoyed it, and the common citizen still lived on in his hovel. To-day the ideal is to plan our city as a business proposition, to plan the entire city, and to plan it at the command of the "have nots". Modern town-planning is a modern concept born of democratic



ideals. It is of the people, by the people, and distinctly for the people. It has been defined by Mr. A. W. Brunner, and others, as follows: "The basic principle of city planning is to increase the working efficiency of the city. No far-seeing business man would undertake the construction of a large manufacturing plant without making provision for further expansion, but the building of a city is mostly haphazard without preparation for change or growth. It is the guidance into proper channels of a community's impulses toward larger and broader life. On the face of it it has to do with things physical—the laying out of streets and parks and rapid transit lines. But its real significance is far deeper; a proper city plan has a powerful influence for good upon the mental and moral development of the people; it is the firm basis for the building of a happy and healthy community".

### Some Progress

We have attempted thus far to undertake, by means of the presentation of a background of contrast between the ancient and the modern planned city, to imply that the modern city has many distinct advantages over the ancient. The task is now to go beyond implication and submit proof. The first set of proofs is by means of a rapid survey of the phenomenal progress of the movement during our life time.

In Canada the progress of the movement is somewhat as follows:

1. In May of 1914 the first meeting in Canada devoted specifically to town-planning matters was held in Toronto. The draft of a Town-Planning Act was introduced at that meeting.
2. The movement continued to spread and all of the provinces except two, adopted some form of town-planning legislation during the period between 1914 and 1920.
3. The Town Planning Institute was formed in 1918 and subsequently several branches were organized in the provinces.
4. Progress was still further evidenced by the publication of the first number of *The Journal of the Town Planning Institute* in 1920; also by the activities of various organizations in some of the larger cities to inaugurate civic legislation and town planning schemes; and by public lectures given at various centres.

In the United States satisfactory progress has been recorded during the past ten or fifteen years. In 1917 the American Institute of Architects published a report of 200 pages entitled "City Planning Progress, 1917". In this report, which is profusely illustrated, an attempt was made to record the progress made in respect to town-planning in some 238 cities of the United States. Further interesting figures on town-planning progress in the United States are as follows:

Town-planning schemes have been adopted by all of the first sixteen cities, such as New York, Chicago, Philadelphia.

Of the next 100 cities in respect to size and rank 57 of them are committed to town-planning schemes.

Of the 113 cities mentioned in a recent pamphlet entitled "Municipal Accomplishments in City Planning", 62 have appointed planning commissions.

In 65 cases the move towards a comprehensive replanning of the city was initiated by the civic authorities, and in 25 other cases by citizens' committees representing "Service" clubs, etc.

The town planning movement is by no means peculiar to this continent. It has spread to all parts of the world. The British Parliament in 1919, impressed by the revelations relating to the appalling housing conditions in all parts of the country, passed a Town Planning Act without opposition. This Act makes it obligatory on all towns with a population of 20,000 or more persons to prepare and plan for future development. This plan is to be submitted not later than 1923.

This brief survey of town-planning progress might be extended to take in many other countries. The point which this progress proves is that town-planned cities have many *advantages*. Dr. Addison's statement, that, "In the proper housing of the people lies the health and contentment of every nation, and that whatever the cost of better-housing may be, that cost will be saved in the prevention of ill-health, disease, and social disorder.....", stands out boldly against the background supplied by the following quotation:

At the inquiry of the Royal Commission on Housing Conditions in Scotland a statement made by a medical witness, in language vivid and sympathetic, brought home to the commissioners something of the seriousness of housing conditions among working families.

Let us ask ourselves what life in one room can be, taken at its best.....Consider whether, since the world began, men or angel ever had such a task set before them as this—the creation of the elements of a home, or the conduct of family life within four walls..... You mothers, with your cooks and housemaids, your nurses and general servants, how would you in your own person act all those parts in the one room, where, too, you must eat and sleep and find your lying-in room and make your sick room? You fathers, with your libraries and parlours—your evening hours undisturbed by washing days, your children brought to you when they can amuse you, and far removed when they become troublesome, how long would you continue to be that pattern husband which you are—in one room?

You children, with your nurseries and nurses

.....your space to play in without being trodden upon.....your prattle which does not disturb your sick mamma, your seclusion from contact with the dead, and the still worse familiarity with the living, where would you find your innocence, and how would you preserve the dew and freshness of your infancy—in one room?.....You sick ones, how would you deport yourselves in the racket and thoughtless noise of your nursery, in the heat and smells of your kitchen, in the steam and disturbance of your washing-house, for you would find all these combined in a house of one room?

Cities which, like Topsy, are left simply to grow, will find that the cost of errors and evils into which they fall will be a great deal higher than the cost of any town-planning scheme designed to prevent these evils. The correction of mistakes is not a primary function of town-planning. For this reason, it is not an economy to delay town-planning. To delay it is in all probability an extravagance and a needless waste of money.

Speaking of the Portland city-plan the chairman of the planning commission said:

"This plan, if adhered to, will save thousands of dollars of needlessly overwide street paving..... It will help the small home owner by establishing definitely the minor residence streets, where the burden of paving can be cut in half."

He further pointed out that money would be saved in respect to the following matters:

1. By stabilizing the down-town centres of traffic.
2. By relieving traffic congestion in all parts of the city.
3. By reducing the number of street accidents.
4. By making the most of Portland's scenic attractions, and bringing more tourists to the city.
5. By organizing the recreation facilities and preventing needless duplication.
6. By providing adequate information for those who wish to build homes.

### Elements of a City

Every modern city is a special organism—the health of the whole depending upon the health of each particular part. Each part, or group of parts, of a city has certain definite needs. Some of these needs are common to the whole city, while others are the particular needs of the particular part. As these needs of a city are the needs of the elements out of which it is built, and as the chief elements of a city are the citizens, we may consider the citizens and their needs under four heads:

- A. The citizens as a whole, comprising all social classes, including B. C. and D.
- B. The merchants.
- C. The manufacturers.

D. The residents of the suburbs.

How does town-planning aim to supply as fully as possible the needs of all the elements comprising a modern city? The answer is that it aims to deal with every need of a modern city by grouping all needs and considering them as specific parts of one of the several general problems which every modern city has to face.

For example, there is the street problem and the problem of transportation over the city streets.

We may refer to an example of faulty street-planning as recited in an article by A. G. Dalzell, entitled 'A Contrast in City Planning' in the March, 1923, number of *The Journal of the Town Planning Institute of Canada*:

When a town has excessive street area in proportion to building area, several consequences may result. The most usual one is that street construction is temporary and makeshift, resulting in dirty, dusty roadways and dangerous ditches and sidewalks. If, on the other hand, the citizens are determined to have improved roadways with cement sidewalks, and surface or combined drainage, a burden of taxation may result out of all proportion to the value of the property benefited. In some cities this heavy taxation for street improvements has made it impossible for owners of vacant property to retain their holdings, and the property has been allowed to go to tax sale, with the consequence that the holders of improved property have to carry an increased burden, and educational and social programmes essential to the upbuilding of true citizenship have been crippled because of excessive taxation for what are generally termed "local improvements."

Excessive street area also adds to the cost of building land. If 20 per cent of the total area of land in a subdivision is devoted to streets, 25 per cent must be added to the original price of the land to make up for the loss of land not saleable. With 25 per cent in street area, 33 per cent must be added; with 33 per cent, 50 per cent has to be added; and with 40 per cent in street area 66 per cent. It is quite common to find subdivisions with very wide streets having very narrow frontage lots resulting in lateral overcrowding, which far outweighs any advantage that may result through the separation of buildings by the wide streets.

Another evil often results. To offset the high cost of land and street construction, the character of the building suffers, rooms cramped or the sanitary essentials of a true home sacrificed. It is not uncommon in such cases to find that more has been spent on the land and its development than on the buildings which are placed on the land.

### B. The Merchants

Then there is the problem of civic taxation, meaning that the tax rate, particularly in the city proper, must be as low as possible, consistent with efficiency, in civic administration. And this cost is often determined for future generations by the relative success or failure in dealing with the proper grouping of civic buildings, disposal of city sewerage, adequate water supply, and various matters of sanitation. In these matters the merchants of the city are particularly interested for the reason that these are civic services which the merchants use freely and pay for at a high taxable rate.

Some of our modern cities, in their initial stages, committed grave blunders in these respects, blunders which have subsequently cost the taxpayer millions of needless money.

Some interesting figures are given in the August, 1922, number of *The Town Planning Journal*, showing the actual and estimated growth of population in the large cities. These figures are used in the argument that it is absolutely essential while dealing with the water, sewerage and other sanitation problems of cities to *look well ahead*. As is stated, unless this is done, "One result usually experienced when annexations to the city proper are made is the costly revision of the existing public works, unless by city or regional planning, water and sewerage works are arranged and co-ordinated."

We have a very interesting situation in connection with Vancouver and its various municipalities at the present time. The recent dispute between the city and the municipality of Point Grey is one phase of that situation. The Vancouver and District Joint Sewerage and Drainage Board is referred to in the article, and it is pointed out that it has jurisdiction over about 80 square miles of territory. This "Regional Planning", as it is called, is an outcome of the town-planning movement.

### C. The Manufacturers

The great problem of transportation has interest for all classes of citizens, but for none quite so much as for the manufacturer. He is particularly anxious

for the centralization of transportation facilities. Each additional mile of street or wharf over which he has to transport his goods means for him the additional expense of so many hundreds or thousands of dollars each year. The rail and water transportation facilities of a city like Vancouver, with a great future assured because of these very factors, cannot be given too careful consideration at this stage of its development.

A city which has first-class facilities for handling passengers and for bringing in goods and shipping them out again is certain to attract manufacturers and general business.

In this respect it is important to note that a city, like a growing boy may grow beyond its strength. Any unusual rapid growth of the city's industries necessitates a big increase of employees. This is certain to result in unhealthy crowding in certain parts of the city. Cities with plans and particularly those which have "zoning" by-laws, are ready to meet such contingencies. They may be met in one of two ways, either by providing building-sites suitable for these employees as they seek to obtain houses near to the source of their employment, or by opening up new suburbs and immediately providing rapid-transit transportation to bring them to their work. When this housing accommodation is met the growth may be rapid, but still strong and healthy.

### D. The Residents of the Suburbs

The problem of successfully "zoning" the city and the related problem of supplying adequate parkways, parks and childrens' play-grounds have special interest for those citizens who are property owners in the suburbs. The suburban area is a distinctive feature of the modern city. The type of suburban home will often determine the renown of the city in other parts of the world for beauty and attractiveness. Recreation areas are invaluable, but should be provided on the basis of population and maintenance cost to the citizen.

There are now only two provinces in Canada without town-planning Acts and British Columbia is one of the two.

## NEWS AND NOTES

### Council Meeting

A meeting of the Council of the Town Planning Institute of Canada was held in Ottawa on January 22nd. There were present: Messrs. Cauchon, Ewing, Seymour, Dion, Buckley, Cromarty, Nelles, Kitchen and N. D. Wilson.

On the request of the representatives of the Toronto Branch, Messrs. Seymour and Wilson, the proposed amendments to the by-laws of the Institute were withdrawn for revision, in view of the fact that the Charter of Incorporation with its accompanying By-laws had been secured and approved in the interval between the submission of the former and their discussion at this meeting.

On representations made by Messrs. Wilson and Seymour on behalf of the Toronto Branch an understanding was arrived at whereby Council agreed to the prior consideration of the qualifications of prospective applicants for full membership, the qualifications of which applicants are presumably such that they may be exempted from the examination tests under powers conferred upon Council by Section 5 of the By-laws, before receipt of formal application from the individuals concerned, provided, that such request for prior consideration be received from the Branch of the Institute having jurisdiction over the territory in which the prospective applicant resides, and that this request be accompanied by a statement

setting forth fully the qualifications of the prospective applicant, which statement must be endorsed and vouched for under the signatures of at least five members of the Institute.

It was explained by Mr. Wilson, that the object of the above procedure was to ensure the acceptance by Council of the applications of individuals acknowledged to be at the head of the professions closely allied to and having Town Planning functions, the membership of whom would be a distinct asset to the Institute, and the applications of whom could be secured where reasonable assurance was given that election to membership would result.

The Secretary was instructed to send a copy of this resolution to the Executive of all branches.

*Membership and Transfers:* Moved by Mr. Ewing, seconded by Mr. Cromarty, that the applications of the following gentlemen be approved and that they be elected Associate Members:

A. BEAUGRAND-CHAMPAGNE

WILLIAM BONE GREIG

HARRY LYALL MCPHERSON

Moved by Mr. Dion, seconded by Mr. Seymour, that the applications of the following gentlemen be approved and that they be elected members:

CHARLES BRAKENRIDGE

JOHN MACRAE KITCHEN

HAROLD LAWSON

HENRY WILLIAM MEECH

Moved by Mr. Ewing, seconded by Mr. Cromarty, that the application of the following gentleman be approved and that he be elected Student Member:

JOHN BUTTERFIELD

Moved by Mr. Ewing, seconded by Mr. Cromarty, that the applications for transfer to another class be approved and dealt with as follows:

From Associate to Member: Leonard E. Schlemm, George H. Ferguson, F. H. Marani. From Approved Member to Member: Ernest E. Smith. From Approved Member to Associate Member: Harold Holmes Gibson, Arthur M. Kruse, Murray Alexander Stewart, John Van Nostrand, Archeson T. Ward. From Approved Member to Member: Andrew Stuart Allister, Harry Royden Dowswell, Frederick Alfred Dallyn, Alexander Ferguson, John McIntosh Lyle, A. S. Mathers, Harry Burton Pickings, Thomas Bailey Speight, Arthur Jabez Van Nostrand.

The following resignations were accepted: Lient. Col. C. P. Meredith, Edward Maxwell.

*Letters Patent:* Approval was given to the following procedure in connection with the Charter of Incorporation.

At a meeting held on 12th October, 1923, of the President, Vice-President and Editor, Mr. Cauchon was authorized to proceed with application for Charter of Incorporation, and was empowered to amend

the application to include the names of the members of the Executive Committee resident in Ottawa, and to amend the by-laws by appointing the present Dominion Executive as provincial directors.

This procedure was followed by Mr. Cauchon and Letters Patent and Charter of Incorporation under date of 22nd October, 1923, was received on 25th October, 1923.

*Board of Examiners:* It was resolved that Mr. Cromarty be appointed to the Board of Examiners, replacing Mr. Nobbs resigned.

*Annual Meeting:* It was resolved that the Annual meeting take place during the latter part of April, the business session to be conducted in Ottawa, and adjourned to meet in Toronto on the following day. The Secretary was instructed to communicate with the executive of the various branches with the object of fixing the dates best suited to all parties interested.

*Nomination Committee:* It was resolved that a nomination committee be appointed to consist of the following gentlemen: Messrs. Cauchon, Buckley, Ewing, Kitchen and the Chairman of each local Branch.

*Communications:* Communications received from the following members of Council regarding the agenda for the present meeting: F. E. Buck, A. H. Hawkins, L. C. Charlesworth, W. A. Begg, T. D. le May.

The contents of these communications were considered by Council in the disposal of the business of the meeting, while a communication addressed to Mr. le May, by the Secretary, in answer to inquiries contained in his letter, met with the approval of Council.

*Membership Fees:* The question of the collection of outstanding membership fees was discussed at considerable length and it was resolved that the statements of accounts already prepared by the Secretary be mailed to all members of the Institute. These statements contain full details of each member's indebtedness to the Institute, together with detailed information regarding past remittances received, and each individual's history as to membership. It was decided to request the recipient to check the entries, make any necessary comments and return the statement together with the amount of outstanding fees.

*Journal Accounts:* After full discussion of the outstanding accounts of *Journal* subscribers, it was resolved that statements of accounts be submitted to defaulting subscribers, and that, such statements of accounts failing to bring any response, the delivery of *The Journal* be discontinued.

*New Secretary:* Mr. J. M. Kitchen was appointed Secretary-Treasurer in the place of Mr. Alfred Buckley, resigned.