practical application of the proposed zoning ordinance, occasion a great deal of discussion and call for a great deal of careful consideration and careful and patient explanation and educational work.

The word "zoning" is doubtless somewhat misleading. I have already observed that in Canada some people think of it as some sort of procedure for controlling the growth of the environs of growing cities. I wish its application might be extended to cover such a purpose in American cities, but I think that more progress is likely to be made in that direction in Canada than in the United States. This use of the word originated in Germany, where districting efforts gradually assumed the character of zones, the care of which often proved to be the area within the original walled town. A glance at any zoning map in the United States would give little indication of "zoning" in the German sense, but our "zones" are merely districts varying widely in area and location.

Despite the effort of professional city planners to popularize the more accurate word "districting," the people where districting work has been carried on persist in using the word "zoning," so let the people rule. "Zoning" it shall be.

## Dependence of Zoning on City Planning

It is worth recalling that the Niagara Falls zoning ordinance was prepared as an integral part of a city plan for Niagara Fals. Unfortunately, this is not true of all other cities. I do not believe that it is true of any Canadian city, with the possible exception of Halifax, or of most American cities. You will be interested to know, I am sure, that in America, Nova Scotia was first to provide for the districting of towns and cities—as early as 1904. In 1909, Los Angeles passed an ordinance controlling the use of lands, making the ordinance retroactive. That ordinance has been declared constitutional, not only by the Supreme Court of California, but also by the Supreme Court of the United States, as a proper exercise of the police power. Of course, many municipalities had long ago created fire and building districts in the interests of public safety, but the extension of districting to include health and general welfare has been of this recent origin.

When Berkeley, Cal., adopted an ordinance in 1913, it provided for an optional districting plan. The ordinance provided for a large number of residence districts and permitted the citizens to petition for restrictions. . An Ontario law for cities of over 100,000 provides for the establishment of residence districts on petition from which apartments, industries, etc., are excluded. More recent state laws and city ordinances provide for the zoning of the whole town

Now, it is evident that petition ordinances and laws, such as exist in Ontario, do not anticipate any ordered planning of a city. Districting done under such laws is purely spontaneous, undirected and sporadic. It may be actually unwise and undesirable, as experience in Berkeley has actually proven. Home-owning petitioners seem prone to ask too little for the protection of their neighborhoods, though some have been known to ask too much. The difficulty in both cases is that the petitions were not based on a considered and sound interpretation of town planning fundamentals.

# Topographical Knowledge is Basic

Basic in any town-planning work is a knowledge of the topographical background on the basis of which the main lines of transportation are likely to be determined. The availability of water transportation is very likely to determine the location of industry, especially heavy industry. Industry seems to naturally seek low-lying lands and waterfronts. Residences seek higher and dry areas. Topographical conditions are certain to affect the direction of prevailing winds by which smoke and fumes are carried. Mountains and hills, lakes and rivers are likely to determine, in part, the location of parks and public recreation grounds. All of these factors, especially the location of railroads and industry, affect very definitely the use to which lands are likely to be put.

It is scarcely necessary to argue, therefore, that zoning is an integral part of city planning, and that if zoning does not happen to grow out of town planning, the preparation for zoning should be so intensive as to relate the work to every other phase of city building and particularly those phases which are affected directly by topographical features.

### Zoning as Basis of Intensive Town Planning

But there are many phases of town planning that are of secondary importance and very dependent upon the character and intensity of the use to which lands are to be put. If we could tell in advance just how all the land in and about Hamilton will be used 5, 10 or 25 years hence, how much easier it would be to plan properly for parks and open spaces, school grounds and play grounds, sewers and water and gas mains, arterial streets and parkways, quiet residence streets, street car lines and industrial switching tracks and belt lines, as well as public buildings.

Presuming that having once determined on the main principles of a plan for the city, based on topographical and other natural conditions, it is possible to determine also with reasonable certainty, the likely economical use of all lands in the city, let us consider in detail a few advantages to be gained.

Consider for a moment the interrelation of all these uses. Having once determined the proper general location for heavy industries, it is then possible to plan for adequate water terminals and, possibly, industrial canals; for railway sidings, terminals and belt lines; for street ways properly paved and wide enough for heavy, slow-moving trucks; for sewers designed to carry off the refuse of industry; for water mains possibly carrying raw rather than filtered water.

### Industrial Houses

But modern industry, despite so many labor-saving devices, still calls for labor. Industrial housing areas should be reasonably close to the industrial areas, so that workmen may walk to work, yet far enough away and in such direction that the evils of "nuisance" industry may be minimized. Residence sections determine the location, number and even character of schools and their grounds. Schools in industrial housing areas should most certainly be planned as community centres, and there is an especial need for adequate playground space surrounding them. Incidentally, it would be an excellent improvement if some sort of park might be interposed between industrial housing areas and the nearby industries where employment is found.

#### Streets

In turn, to preface the planning of streets by zoning the city, will result in important economies. Most cities have shown little or no discretion in the planning of streets. The humble owner of a home in a section largely occupied by working men must pay for pavement on a street as wide as that used by his motor-driving employer. It is a question whether streets in industrial housing areas should be paved at all. Indeed, it has been suggested that there should be no public traffic ways in front of working men's houses, but merely pathways for pedestrians and play space for children, while traffic to the street should be served only by a paved alley for delivery purposes.

#### Lots and Blocks

Along with uniformity of street widths and street improvement should go uniformity of the depth of lots and size of blocks. Industry frequently is handicapped by the smallness of blocks. Sometimes, they get round the difficulty by securing the privilege of blocking or closing streets which should be left open. In fairness to both, industry and the public interest should not come into conflict in such a fashion. The conflict should be anticipated by zoning. Industry has a right to know where it can expand economically without coming into conflict with public opinion or public rights.

Workmen in turn should not be required to buy lots that are unnecessarily deep and viciously narrow. Lots that are too deep represent an unnecessary expense to the indus-