

The Evolution of a Business Street

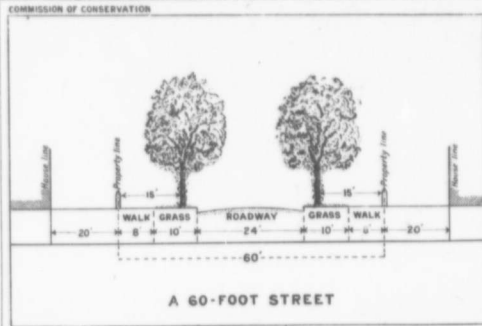
Evil Effects of Lack of Foresight
How a Municipality may
Acquire Land for Widening
at Minimum Cost

Criticize the congested main street of a town as being too narrow, and a resident will probably tell you: "Yes, that is all right, we realize that now, but, when that street was laid out, no one ever thought it was going to be a busy thoroughfare. Why, I remember the time when all this portion of the street where we are standing was lined with private houses." We can all of us think of dozens of examples of this sort of thing. The problem is to so plan residential roadways that they may be gradually transformed into business streets at a minimum of expense. One way in which this may be done may be understood by a glance at the accompanying illustrations.

The upper diagram shows a street 60 feet wide and suitable for a residential section. The roadway is of moderate width, sufficient to accommodate the light traffic of delivery wagons, carriages, etc., that serve the houses on either side. A boulevard and trees give it a pleasant appearance, and also, the houses are set back 20 feet from the property line, with gardens or lawns between them and the side-walk.

If commercial interests should invade this region, property owners would, under ordinary circumstances, build forward to the sidewalk, partly to use the extra space, but chiefly to bring store windows flush up to the causeway. A portion of the street in process of transformation presents a very ragged appearance, due to the lack of a uniform building line. When the process is complete, the once beautiful residential street has become a congested business thoroughfare with narrow walks and a 44-foot roadway. To widen it would necessitate the tearing down of valuable buildings and would be a heavy expense to the taxpayers.

Foresight would obviate this undesirable development. All that is necessary is to establish a restriction prohibiting the use of land for building beyond an established line. Legally, of course this involves compensating the property owners, but the damages can be distributed over a long period in a simple way. No property rights need be acquired by the municipality until application is made for a building permit on an obstructive site, and then the restriction can be imposed and paid for. In this way the public thoroughfare is gradually widened at exactly the same rate as the growing commercial interests require. At no time is it necessary



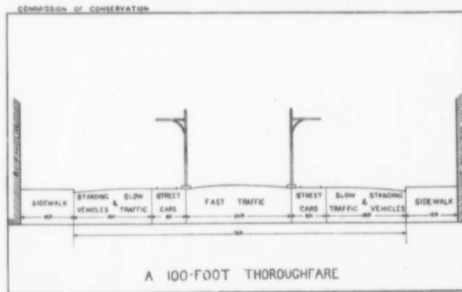
(Cut No. 66)

to pull down buildings. When any considerable number of property owners require it, the walk may be moved over to the building line and the roadway widened. The trees should be left as long as possible, and, unless a street railway is constructed, should be a permanent feature.

The lower diagram shows the ultimate development of the 60-foot street into a 100-foot thoroughfare. Safety for pedestrians crossing the wide roadway is provided by "islands" at the base of each pole holding the electric wires. Motor-cars may run up and down the middle unimpeded by slow-moving wagons and drays, while the latter have ample room to pass between the street car tracks and standing

vehicles by the sidewalk.—P. M. B.

In connection with the above it is interesting to compare the following extract from a recent address by Mr. Raymond Unwin, F.R.I.B.A., before the Victoria League Imperial Health Conference in London: "There are certain requirements of town planning which are fairly obvious and generally applicable, such as the prevention of the overcrowding of dwellings, and the fixing of such a building line on all the main highways radiating out of the town into the country, as will prevent buildings being erected so near to these roads that future widening can only take place at excessive cost after demolition of the buildings."



(Cut No. 67)

PARIS HOUSING SCHEME

During the next eighteen months, cheap and hygienic dwellings will be erected in Paris (a city of high rents) for no fewer than 60,000 persons who are at present living in unsanitary houses. The Municipality of Paris has borrowed \$4,000,000 from the National Pensions Office at 4.2 per cent and has already purchased 36 acres of building land for \$2,165,000, an average cost of \$1.35 per square foot. At a cost of \$13,000,000 it will be possible to build 11,000 lodgings, each capable of accommodating at least five persons. These dwellings will, it is hoped, be ready for occupation in June, 1915.

This action on the part of the

municipality gives effect to a Bill dealing with the housing problem passed by the National Assembly last year, which empowered the Paris Municipality to incur a direct expenditure of \$30,000,000 in improving housing conditions, and authorized it to make advances to the philanthropic and building societies which are trying to solve the housing problem. The Council has decided to spend the remaining half of this authorized expenditure in the construction of dwellings on the site of the dismantled fortifications of Paris when the grand scheme which will give Paris yet another ring of boulevards becomes a reality.—*The Journal of State Medicine.*

Enormous Waste of Coal

Ordinary Methods use Only 5 per
Cent of Energy Locked up in
Coal Areas—Advantages of
By-product Coke Ovens

"Perhaps the most serious waste which is taking place in the Dominion at the present time in connection with its mineral resources is presented by the mining and utilization of coal. In the first place, in mining a coal seam, from 50 to 90 per cent of the coal is left in the workings for the purpose of supporting the roof. Of the coal which is taken out and burned under boilers in the usual manner, only about 12 per cent of the total energy is developed. That is to say, we secure for useful purposes only about 5 per cent of the total energy contained in the coal contained in the area. If the coal is burned in gas producers and the gas so obtained used in internal combustion engines, these, having a higher efficiency, develop about 30 per cent of the energy in the coal actually mined, or about 12 per cent of the energy locked up in the coal of the whole area. This is an improvement, but still represents an enormous waste.

"On the other hand, the coal may be mined for the production of coke for metallurgical purposes. About three-fourths of the coke produced for this purpose in North America and all the coke made in Western Canada is manufactured in beehive furnaces, which yield a relatively low percentage of coke, while the other products of the coal—gas, tar, ammonia, benzol, etc.—go to waste. All these products may be saved by making the coke in by-product ovens, representing in localities where the surplus gas can be sold at a reasonable rate, a gain which is estimated by Mr. F. E. Lucas, manager of the coke ovens of the Dominion Coal Company, at \$1.98 per ton of coke made. This figure will, of course, vary with the locality in which the coke is produced, but it emphasizes the great saving which may be effected by the use of the modern by-product oven. The tar and ammonia obtained by this process, moreover, meet with a ready market. The former is already being used extensively in the Dominion for a variety of purposes—among them as a binding material in the manufacture of briquettes from slack coal, thus enabling this waste product to be successfully utilized—while the ammonia is a fertilizer of the greatest value, for which there is great demand abroad and for which an ever-increasing demand will arise in Canada as the necessity of employing improved methods of agriculture is brought home to our farmers."—*Dr. F. I. Adams, before the Royal Society of Canada.*