Street Paving and Material for Roadways.

The City Engineer of Hamilton, Ontario, in his last annual report states as follows respecting paving in that city during 1897 :

The paving with Trinidad Asphalt on a six inch bed of concrete on York street, between James and Mac Nab streets, and on Mac Nab street from King to Merrick street was one of the most important street improvements effected this year. The cost per squarge yard for the former being $2.15, and for the latter $2.08. The price per square yard for similar paving on James and King streets was $2.59.

The gutters were made of concrete, it being observed that the asphalte was most liable to decay next to the curb.

The paving of the above above streets, which form part of the market square, with asphalt, was a much needed improvement as the old worn out cedar block pavement was in a very bad state, and very unsuitable for a market where so many people and horses are congregated. The asphalt paving on King and James streets has only two slight cracks, although it has now been down nearly three years. That part of it between Stuart and Barton streets has not stood very well, large holes appearing which were repaired by the contractors this spring.

The materials chiefly employed in the construction of roads in the cities of Canada and the United States are asphalt, vitrified brick, granite, cedar block, macadam or broken stone, and, as in our city, broken stone mixed with tar. The two former are gaining in popularity, as is clearly shown by the additions which are yearly being made to them, while the reverse is the case with the block paving and granite pavements. The vitrified brick has passed the experimental stage, and the ease with which it can be repaired makes it a close competetor of the asphalt pavement. One of the objections urged against it is the noise it occasions, but it is said that by introducing strips of paving pitch at the curbs and at the centre of the streets and also across the street at intervals of fifty feet, this noise is very much deadened.

I would much like to be allowed to lay a brick or vitrified brick on a concrete foundation.

In the seleetion of a pavement or a material for forming a road too much weight should not be given to first cost. The expense of maintenance and repair, its smoothness and cleanliness should all receive due consideration. Unfortunately we have no exact minute information in Canada as to the cost of repairing and cleaning the different classes of pavement.

I think the traffic is becoming too much concentrated on the asphalt paved streets —James and King—and it would be advisable to have some of the streets close to them and parallel with them made of some material such a brick, or tar macadam, which, by affording superior tractive qualities, would tend to relieve these asphalt streets by diverting the traffic.

It was recommended by the municipal convention lately held at Nashville, Tenn., that the sureties for long period contracts of large amount should be guarantee companies of well-known reputation.

COST OF PAVEMENTS.

The following may be taken as an approximate cost of constructing the different classes of pavements in this city. In Toronto the prices are reported as being very much the same.

	SQ. YARD
Asphalt on 6-inch concrete foundation ..	$2 10
Brick " " " " ...	1 65
Tar asphalt on 6-inch stone foundation ..	1 25
Macadam " " " " ..	50

Estimating stone curbing, laid in concrete, at 50 cents per lineal foot, the cost of an average block 360 feet wide would be as follows :

Asphalt on concrete	$3,720
Brick " "	3,000
Tar asphalt on stone foundation	2,360
Macadam " " "	1,160

The actual cost of brick pavements laid down by the city in place of the cedar block pavement is estimated as follows:

	SQ. YARD
Removing old blocks	$0 03
Excavating bottom foundation	0 03
Concrete (material)	0 33
Concrete (mixing and laying).....	0 10
Unloading and teaming brick	0 06
Cost of brick.....	0 90
Laying brick	0 10
Grouting and sundries.....	0 10
	$1 65

Portland cost $2.08 per 350 pounds ; sand, 45 cents per yard ; broken stone, $3.25 per cord. The cost of cement sidewalks, exclusive of stone curbing, is estimated at 14 cents per square foot.

Relative Merits of Brick and Cement Sidewalks.

In regard to cost, a good brick sidewalk can be laid for from one-third to one-half the cost of a good cement walk. Though the cement walk is practically indistructible, on the ordinary residence street, or even business street, in a small town, a brick pavement can be renewed as often as necessary on the interest of the excess in cost of the cement walk. As to color, the brick walk is more satisfactory to most persons. With a light rain, the bricks absorb the moisture, while on the cement walk a slight film of water forms, making it more likely to wet the dresses and thin shoes of ladies. On the other hand, well-laid cement walk is in place for an indefinite period. If not too white it forms a pleasing contrast to grass, trees and pavement ; if laid with sufficient slope, pools of water do not form on it ; there is no unequal settlement, nor are there loose bricks to make the walk uneven or perhaps dangerous. A cement walk is perhaps more frequently slippery in winter, but the surface is uniform, so that falls are not so frequent. Some consider the effect of cement walks upon trees to be injurious. Careful observation leads to the conclusion that the injury, when there is any, is done by careless treatment of the roots of trees in preparing the ground for the pavement, and that the subsequent effect of the pavement upon the trees is appreciable.

Sidewalk brick may be had from makers of street-paving brick, many of whom make special forms of such brick for sidewalks. Every kiln of first-class building brick has a certain proportion of bricks which are burned hard enough to answer for ordinary brick pavements at less cost than the shale bricks, and with the saving of freight in most cases. Walks with large foot traffic should, however, have the harder paving brick.

Dangerous Municipal Drains Along Highways.

A drainage case which has excited a good deal of heated feeling between the townships concerned was heard by the Drainage Referee, Thos. Hodgins, Esq., at Sarnia recently. The case was an appeal filed by the Township of Euphemia, against the Township of Brooke, from the report, plans, etc., prepared by the Township of Brooke for the construction of a drain, on the townline between the townships of Brooke and Euphemia, and thence south through the township of Euphemia along the highway between the 2nd and 3rd concessions into Martin's creek.

Euphemia objected on the ground of the increased danger to the public which would be caused by the construction of the proposed drain, and also on the ground of its own liability as a township should accident occur. The referee sustained Euphemia's contention and set aside the scheme on the above amongst other grounds.

In giving judgment His Honor, in very emphatic terms laid it down that it was the first duty of a municipality to keep its highways as far as practicable free from danger to the travelling public ; that the right of the public to have the highway maintained in a safe condition was paramount to the right of a section of the community to use the highway for drainage purposes ; and that where the result of the construction of drainage works on the highway would be to create thereon a danger to travel and a probable source of danger to the municipality the drainage scheme should be condemned.

A New Jersey township board of health granted permission to a company to kill horses for food, but not to be used in this country. The question is asked whether the said board can guarantee that some of it will not be reshipped to America as "prime mess beef."