



ADVANTAGES OF ASPHALT PAVEMENTS.

The following extracts concerning asphalt pavements are taken from a paper by Clifford Richardson, entitled "Asphalt Pavements; what they are and how to make them":

REPAIRS TO VEHICLES.—In 1880 M. Darcey, then director of public works in Paris, made quite an elaborate calculation of the saving which would be effected in the wear and tear of the 48,000 vehicles in Paris by changing all the rough stone into smooth-surface pavements. The result of the calculation was a saving of \$1,092,000 per annum. M. Barrabant, the chief engineer of Paris in 1884, in citing these estimates, states that "if made to-day they would give without doubt figures more striking." His average saving, it will be noticed, is only \$23 per vehicle, which certainly would seem moderate. In New York, in 1888, there were 20,441 vehicles licensed for public hire; this does not include the trucks, wagons, and carriages owned by individuals, firms or corporations and used for their own business or pleasure. The number of these is not of public record, but it is probably at least double the number of vehicles licensed for hire. If so, the total number of vehicles in New York is about 60,000, and the saving in wear and tear as a result of smooth pavements, according to M. Darcey's figures, would be about \$1,500,000 per annum.

A similar calculation, according to the Philadelphia North American of Oct. 12, 1885, showed that repairs to vehicles necessitated by their use on the old-time cobble-stone pavements of Philadelphia amounted to enough every year to pay the interest on the bonds which it would be necessary to issue for paving the city with Trinidad asphalt, the entire saving to

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owners being determined as over \$100,000 000 annually.

I have been informed by carriage builders that in cities where all the pavements are asphalt, persons buying carriages are much more critical and demand a higher grade of workmanship, as the slightest defects are revealed on the smooth pavements which are concealed by the noise of the rougher kind.

SPRINKLING.—The sprinkling of streets to lay dust should not be tolerated. It is a makeshift, and merely covers up the lack of cleanliness, at least with asphalt pavements. With those forms of pavements having large interstices which cannot be thoroughly cleaned, sprinkling may become a necessity. The only way that water should be used on asphalt pavements is in flushing them from a hydrant, and this is the ideal way of keeping them clean. It may be done with either salt or fresh water without injury to the surface.

HYGIENIC DATA.—The best evidence of the desirability of asphalt surfaces from a hygienic point of view is offered by the death-rate in various cities as compared with the class of pavements which are in use in them and the degree of cleanliness practised. The following list of cities furnishes some interesting data:

Berlin—Almost all asphalt pavements; death rate per thousand inhabitants per year 19.6

Amsterdam—Stone and asphalt, streets washed.....	20
Rome—Streets nicely cleaned, much asphalt, hard climate.....	21.2
Vienna—Little asphalt, much stone and macadam.....	24.3
Dublin—Granite cobble and macadam, fairly cleaned.....	29.3
St. Petersburg—Cobble and macadam, notwithstanding cold climate which kills germs.....	30
New York—1892, with little asphalt	38.37
" " 1894, more asphalt....	30
" " 1896, more asphalt and clean streets, because easily cleaned.....	26

ASPHALT AND GAS.—In addition to the above data it is of interest to note that the death-rate from bowel complaints in New York city decreased from 11.5 in 1892 to 6 in 1896 per 1000. This decrease is directly connected with the pavement of the tenement house district on the east side of New York with asphalt, and also to the increased cleanliness of the streets which was possible with this form of pavement.

(To be continued next week)

BUSINESS NOTE.

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