REPORT OF PROJECT COMMITTEE ON FILLERS AND CUSHION COURSES FOR BRICK AND BLOCK PAVEMENTS

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It will be recalled that this committee presented a report in 1931 on various fillers and cushion courses to be used in brick pavements That report stated that for mastic cushions a minimum of 7 per cent of bitumen by volume, should be mixed with suitable sand We kept the samples from the investigation, and now we have to report that in the case of asphaltic materials those samples mixed with 6 per cent of asphalt are apparently as good as those with higher percentages. In the case of tars the statement still stands that 7 per cent is needed In the case of the asphalt emulsions our five-year samples show that at least 12 per cent of emulsion must be mixed with the sand, and in every case that emulsified asphalt was used, irrespective of quantity, it was found that the upper surface of the sample was dry and powdery It may be recalled that some of the sand used was Ottowa standard sand and the rest was such product as may ordinarily be encountered on the job (Data are presented in the 1931 report)

The tar-sand samples in which the amount of tar was less than 4 per cent had broken down into dirty looking sand This was also true of the samples mixed with the emulsified asphalt and with some of the cut-back asphalts The tar samples using 5 to 6 per cent were very hard, with a lack of elasticity. The 7 per cent tar-sand samples were in excellent condition The 5 per cent sand-asphalt samples showed a marked difference from the 6 per cent samples, and we could see no practical difference between the 6 per cent, 7 per cent, and 8 per cent samples The samples made with road oil have not set up to any extent whatsoever It would seem that the road-oil-sand mastics do not become firm enough to offer sufficient foundation to the brick We may be wrong in this, and only a practical test would give us the answer