Some of the possible types of future roads have also been discussed here. Presently, it is possible to reduce attrition by application of tar which makes a more permanent mortar with dust as compared to water. However further improvements are essential. An evolution from tar spraying through bituminous concrete to cement concrete, is the cement grouting of water-bound macadam. But cement grouting is not much effective because the treatment can at best check attrition in the surface skin into which the grout may penetrate. The concrete road has proved a success in America. It has longer life and is cheaper to maintain. It offers a smooth surface for fast traffic, and can be given gritty finish by belting which gives sufficient foothold for horses. It requires less frequent closures for repairs and needs reduced annual demand for renewal metal. The comparison of water bound macadam roads whose normal life is 3 years, and concrete roads having a life of 15 years has shown that concrete roads are a better financial proposition in addition to other advantages.

Lastly it is stressed that there is a great need for the collaboration of local governments for the framing of specification of roads and mechanical vehicles. The continuous import of military vehicles for commercial use will lead us to destruction. It can be safely stated that there are many openings in Punjab for the mechanical transport provided good, economical and sufficient number of roads can be constructed.

Note :-

Paper No. 65 appeared at pages 101 to 132 of the Proceedings of Punjab Engineering Congress 1920, Vol. VIII. There are 2 Plates and further 10 pages of discussions.