Conclusions adopted at the Nineteenth Session of the International Railway Congress Association (Paris, 1966).

SECTION I.

QUESTION 1.

Present trends in the methods of maintenance and renewal of the permanent way, with particular reference to:

- a) the influence of track design thereon having regard to the demand for higher speeds;
- b) organisation of the employment of labour and of mechanical equipment;
- c) costs;
- d) safety measures for staff and trains and their effect on operational requirements.

CONCLUSIONS.

- « 1) The high speeds up to now
 « achieved (160 km/h or 100 m.p.h.)
 « only necessitate an excellent quality
 « and accuracy in track maintenance,
 « which in the long run is profitable.
 « As in many cases there are compara« tively few high speed trains services
 « it results therefrom that high speed
 « on trunk lines is not a costly item for
 « the maintenance departments.
- « 2) On the contrary, axle loads and « more particularly the overall tonnage « carried are determining factors in de-« teriorating the permanent way, this « deterioration being made quicker by « the fact that heavy goods trains are « running at ever increased average « speeds; it is the operation of these « trains which requires heavy mainten-« ance costs and makes it necessary to « use stronger track components, in par-« ticular by replacing the 40 to 50 kg/m « (80 to 100 lb/yd) rails at present in « use by new 60 kg/m (120 lb/yd)« rails, and the former number of less « than 1 500 sleepers per km by about « 1 800 (2 900 instead of 2 400 sleepers « per mile).
- « 3) The conclusions of item 1) above
 « can possibly be modified for speeds
 « of, say, 200 km/h (125 m.p.h.) and
 « more, because maintenance methods
 « may appear to be more expensive than
 « they are at the present time following
 « the research already under way. As
 « a matter of fact, defective surfacing
 « and aligning on certain limited spots
 « are to be avoided since they always