

causes of this state of affairs by means of a study of the minute structure of the wood but gave negative results. Extensive work was done on treatment and a reasonably satisfactory method was finally worked out. Service test in track was not begun as all the ties treated for such test had to be used for study of penetration.

Creosote Treatment of Aspen for Railway Ties. Object:

- (a) To determine the rate of seasoning of aspen ties and to ascertain the length of seasoning period necessary to bring them to "treatable condition".
- (b) To work out a satisfactory method of creosote treatment of this wood for tie purposes.

Large quantities of aspen occur in certain districts of Canada and in parts of Western Canada considerable supplies exist contiguous to railway lines. Little, if any, use is made of this timber. If, however, its natural perishability can be offset by means of a satisfactory creosote treatment, it should become of considerable value as a tie material.

The investigation now reported must be regarded as a preliminary one only as the material, which had been brought from the Peace River District, proved to be insufficient to permit of final conclusions being drawn. Tentative conclusions were, however, reached.

While it will probably not be feasible to undertake further