expansion joints apppear to serve no useful purpose in preventing cracks in concrete.

After frequent observations and discussion it was decided to continue to provide joints because they help in localizing any failure in concrete that might occur from other causes. As a trial, it was decided to construct two long reaches of lining without any joints at all. Two other 1000 ft. long reaches were provided with the two longitudinal joints without any cross joints. Another short reach of about 250 ft. length was laid without any jonts to serve as a reservoir of water for one of the dumps. Complete absence of cracks from the sides of reservoir even with the change of temperature from 80 °F at water edge to 180 °F at the exposed surface indicates that this type of concrete is not effected by variations in temperature. It is still more satisfactory that no cracks were observed on the weaker areas where natural earth joints should be abolished and the cross joints should be made at the end of half or full days work near a bridge or a hydralulic structure. The question of sealing of joints if still under consideration and would be settled after watching the behaviour of concrete during current winter. If no harmful cracks are observed during the cold weather on the long lengths of concrete, it would be safe to simply grout the joints. Otherwise bitumen would have to be used for sealing.