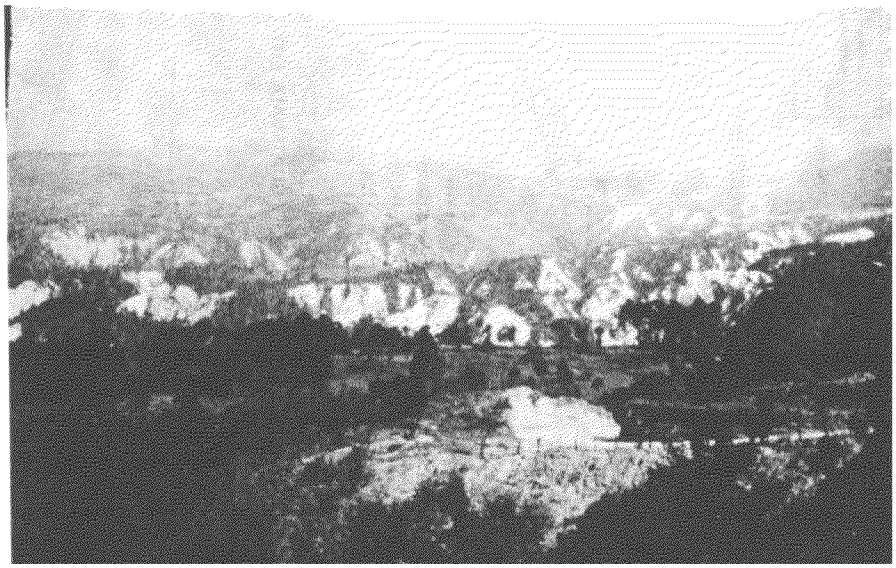

Figure 3.-- View looking SE along junction of Rios Pixcaya and Xaltaya showing high intensity of rockfall and debris slide occurrence typical in steep pumice slopes in this area.

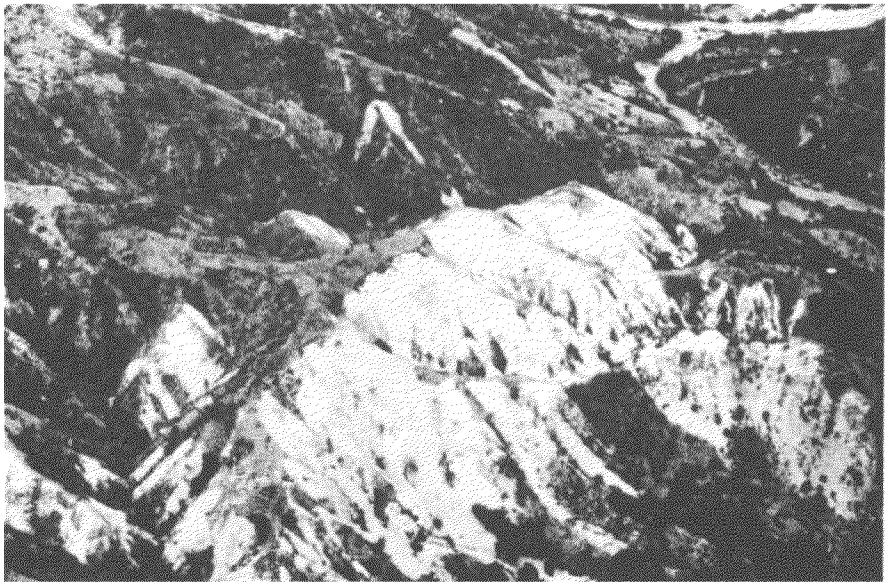

Figure 4.-- View of pumice slopes near Motagua River about 25 km north of Guatemala City which have suffered extensive failure and coalescence of debris slides. Debris slides are shallow, typically less than 1 m in thickness.

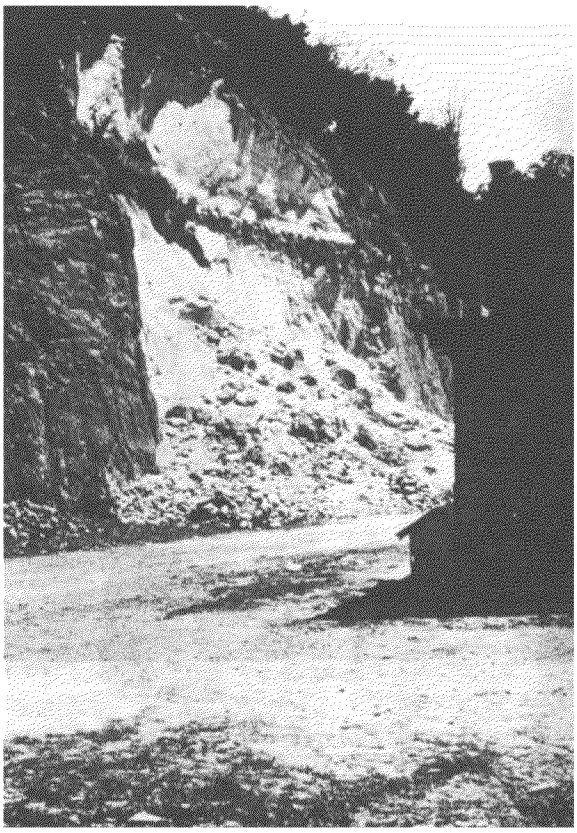

Figure 5.-- Typical seismic-induced rockfall in pumice along canyon margin near Puente Belize in Guatemala City. Failure is no more than 1-2 m in thickness (normal to canyon face) and has overall concave outward shape. Rockfall scarp is unslickensided and has no indication that shear deformation had taken place; evidence suggests that failures such as this were created by tensile spalling possibly resulting from seismic wave reflection at free faces.