



FIGURE 32.—Fault damage to the rear exterior wall and roof of a house in Guatemala City. Vertical displacement near the front of the house was 12 cm.

slides occurred along the steeper slopes of the deeply incised drainages in the Guatemalan highlands and at the larger road and railroad cuts and fills. They blocked many transportation routes, interrupted surface communication lines, and in places damaged structures built in their paths (fig. 36).

Some of the larger slump blocks and rotational slumps observed contain several million cubic metres of material. A number of these larger slides (indicated in fig. 33) have formed natural dams behind which lakes are developing (fig. 37). Such lakes are potentially hazardous because, when the dams are overtopped, rapid erosion and relatively sudden breakout could cause catastrophic flooding of inhabited areas and communication routes downstream.

Many highland drainages are choked with landslide debris, particularly those areas of intense landsliding shown by a distinctive pattern in figure 33. This debris could become sufficiently water saturated during the rainy season (June through October) to become mobilized and move as debris flows

either naturally or as a result of aftershock activity. Such flows could pose a major hazard to communities and transportation routes situated downstream.

LANDSPREADING, FISSURING, SUBSIDENCE, AND SAND MOUNDS

Landspreading, involving near-horizontal movement of mobilized or liquefied water-saturated granular deposits toward free faces, occurred at a number of localities in the Motagua Valley, along the Atlantic coast in Guatemala and Honduras, and along some lake shores in the highlands (fig. 33). Extension cracking and subsidence that accompanied the spreading damaged structures in many of these areas.

Throughout the lower Motagua Valley and part of the Chamelecón Valley in Honduras, widespread fissuring and settling of sediments in areas of high water table have caused damage to irrigation facilities, roads, levees, railroads, buildings, and pasture lands. At many localities, the compaction of satu-