have flowed for great distances with singularly smooth surfaces. A large area which has been flooded with lava is perhaps the most hideous and appalling scene of desolation anywhere to be found on the surface of the globe.

A lava-stream usually spreads out as it descends from its point of escape, and moves more slowly. Its sides look like huge embankments, or like some of the long mounds of

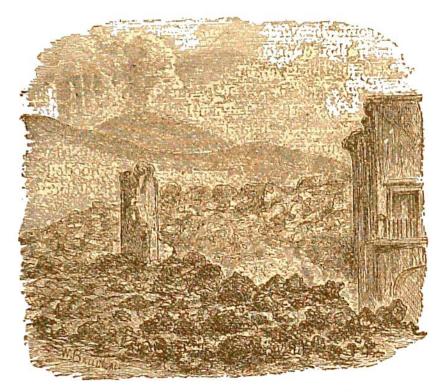


Fig. 47.—View of houses surrounded and partly demolished by the Lava of Vesuvius, 1872.

"clinkers" in a great manufacturing district. The advancing end is often much steeper, creeping onward like a great wall or rampart, down the face of which the rough blocks of hardened lava are ever rattling (Fig. 47).

Outflow of Lava.—This appears to be immediately due to the expansion of the absorbed vapors and gases in the molten rock. Though these vapors may reach the sur-

pahoehoe. Dana, "Characteristics of Volcanoes," p. 9. The same stream of lava may exhibit both these aspects in different parts of its course. Ibid. p. 209 and Mr. Johnston-Lavis' papers on Vesuvius, already cited p. 333.