hill. Many articles on this subject have been written* and various theories have been offered to explain the formation of the ice. Local residents have long claimed that the ice formed in summer and disappeared in the winter. Andrews substantiates this belief and offers plausible explanation. He claims that the air that enters the cavities in the winter is below the freezing point and as it emerges during the summer it freezes the percolating water that enters the caverns, especially near the surface.

Although it is not advisable to announce ice caverns in the Lehigh Valley we can say that there are concealed openings that draw in great quantities of cold air in the winter and expel it in the following summer. Perhaps these cold air currents may account for the unduly low temperatures of the waters of some wells and springs in the Valley.

There are no caves of importance in Lehigh County. None is listed in Caves of Pennsylvania by Ralph W. Stone. Nevertheless there are three small ones that many years ago received considerable attention.

**Helfrich Cave.** About 1½ miles north of Allentown, Jordan Creek makes a sharp meander to the north, looping around a prominent hill of limestone. On the east side is located Helfrich Spring, described under Springs. Part of the water comes out of a cavern at the base of the hill. In Gordon’s Gazetteer (1832) is the following:

There is a remarkable limestone cave in North Whitehall t-ship, within 2 or 3 ms. of Allentown, on the bank of the Jordan Creek, near which is a spring equally remarkable, called the Cavern spring. (p. 243.)

The cavern extends into the hill in a westerly direction as a single narrow passage approximately parallel to the strike of the limestone strata. At one time a boardwalk was built and electric lights installed and visitors were conducted into the cavern to a distance of “several hundred feet.” Admission was charged. The boards of the walk have decayed and access is considered dangerous.

At times of high water in Jordan Creek a large stream of water flows from the cave. This is due to part of the creek taking a short-cut through the hill instead of the longer passage around the hill.

**Erdman Cave.** Rupp (1845) in his description of Upper Saucon Township says, “Lately a cave has been discovered called ‘Erdman’s Cave.’ It has been but partially explored. It is said there is a fine stream of water in it.” (p. 138.) No other mention of the cave has been found, so that the location is unknown. The author’s surmise is that it may be the small cave discovered in the limestone quarry at Limeport. This opening at present is small and insignificant. It may formerly have been larger, a portion having been removed in the quarry operations.

**Sigmund Cave.** Two large limestone quarries were once operated a short distance southwest of Sigmund to supply fluxing stone for the Hampton (Sigmund) Furnace. A nearby resident is authority that at one time a cave was discovered there that could be entered to a distance of 65 feet.

* Browne, G. F., Ice-Caves of France and Switzerland, 315 pp., 1865.
Balch, E. S., Glaciers or Freezing Caverns, 337 pp., 1900. Contains an elaborate bibliography.