angular pieces of limestone and shale, besides sand and mud, together with bones, chiefly of the cave-bear. Connected with this main duct, which is from one to two feet in width, are several minor ones, each from one to three inches wide, also extending to the upper country or table-land, and choked up with similar materials. They are inclined at angles of 30° and 40°, their walls being generally coated with stalactite, pieces of which have here and there been broken off and mingled with the contents of the rents, thus helping to explain why we so often meet with detached pieces of that substance in the mud and breccia of the Belgian caves. It is not easy to conceive that a solid horizontal floor of hard stalagmite should, after its formation, be broken up by running water; but when the walls of steep and tortuous rents, serving as feeders to the principal fissures and to inferior vaults and galleries are encrusted with stalagmite, some of the incrustation may readily be torn up when heavy fragments of rock are hurried by a flood through passages inclined at angles of 30° or 40°.

The decay and decomposition of the fossil bones seem to have been arrested in most of the caves by a constant supply of water charged with carbonate of lime, which dripped from the roofs while the caves were becoming gradually filled up. By similar agency the mud, sand, and pebbles were usually consolidated.

The following explanation of this phenomenon has been suggested by the eminent chemist Liebig. On the surface of Franconia, where the limestone abounds in caverns, is a fertile soil in which vegetable matter is continually decaying. This mould or humus, being acted on by moisture and air, evolves carbonic acid, which is dissolved by rain. The rainwater, thus impregnated, permeates the porous limestone, dissolves a portion of it, and afterwards, when the excess of carbonic acid evaporates in the caverns, parts with the