

calcareous matter and forms stalactite. So long as water flows, even occasionally, through a suite of caverns, no layer of pure stalagmite can be produced; hence the formation of such a layer is generally an event posterior in date to the cessation of the old system of drainage, an event which might be brought about by an earthquake causing new fissures, or by the river wearing its way down to a lower level, and thenceforth running in a new channel.

In all the subterranean cavities, more than forty in number, explored by Schmerling, he only observed one cave, namely that of Chokier, where there were two regular layers of stalagmite, divided by fossiliferous cave-mud. In this instance, we may suppose that the stream, after flowing for a long period at one level, cut its way down to an inferior suite of caverns, and, flowing through them for centuries, choked them up with debris; after which it rose once more to its original higher level: just as in the mountain limestone district of Yorkshire some rivers, habitually absorbed by a 'swallow hole,' are occasionally unable to discharge all their water through it; in which case they rise and rush through a higher subterranean passage, which was at some former period in the regular line of drainage, as is often attested by the fluviatile gravel still contained in it.

There are now in the basin of the Meuse, not far from Liége, several examples of engulfed brooks and rivers: some of them, like that of St. Hadelin, east of Chaudefontaine, which reappears after an underground course of a mile or two; others, like the Vesdre, which is lost near Goffontaine, and after a time re-emerges; some, again, like the torrent near Magnée, which, after entering a cave, never again comes to the day. In the season of floods such streams are turbid at their entrance, but clear as a mountain-spring where they issue again; so that they must be slowly filling up cavities in the interior with mud, sand, pebbles, snail-shells, and