

rolling away northward. But the morning being fresh and cool, even at the risk of a good drenching we persevered. The road, like all the French military highways, excellently made and well kept, passes through endless vineyards, many of which lie among the broken ruins of lava-flows that have descended from the heights to the westward. At one point it has even been cut through a part of one of these lavas.

The hill of Gergovia is famous in history as the site of a town long and successfully defended by the Arverni (people of Auvergne) against Cæsar's legions. Some interesting antiquarian remains had been found shortly before our visit, and we learnt that excavations were about to be renewed in search of more. But the hill is not less interesting to the geologist than to the antiquary. Seen from the east, it looks like a broad truncated cone ; but it differs altogether in appearance and origin from the true volcanic cones of the Puys. It consists, in fact, of horizontal strata of marl and limestone ; about two-thirds of the way up lies a bed of basalt, which forms a marked feature along the hillside ; some calcareous and ashy strata next occur, while the summit is formed by a capping of basalt. These marls and limestones are of lacustrine origin, as is shown by their fresh-water shells, and by the caddis-worm cases which they contain. Forming parts of the deposits of the old lake of the Limagne, they attain in this hill a thickness of probably not less than 1200 or 1500 feet. Ascending one of the ravines which deeply furrow the east side of the hill, we passed over these thinly-laminated strata, piled over each other in successive layers, and crumbling away like chalk. Every yard of the steep ascent deepened the impression of the exceedingly slow rate at which these sediments must have been formed, and therefore of the prodigious lapse of time which their entire thickness represents. The morning,