

would have been much lower if the Rhine had been running in its former bed.

The course of the Aar, which joins the Rhine on the left bank between Schaffhausen and Basle, is interrupted by rapids caused by the uplift of ridges across the course of the river. Below Innertkirchen is a ridge of rock, above which it has been supposed the river once formed a lake in the depression known as "Hasli-im-Grund." There is no direct evidence of this, however, and the river may have formed the famous Aar gorge by cutting through the ridge as it rose. Below Meiringen the river flows through a broad, flat valley, with terraces on each side, which was evidently once much deeper, and formed part of the Lake of Brienz, but has gradually been filled up by the river.

Lake of Brienz is 9 miles in length, by 2 miles in maximum breadth, and covers an area of 11 square miles. It lies 1857 feet above sea-level, has a maximum depth of 856 feet, a mean depth of 577 feet, and is estimated to contain about 182,600 million cubic feet of water. The Lakes of Brienz and Thun were originally one, the level plain upon which Interlaken stands having been formed by the deposits of the River Lütchine, coming from Grindelwald on the south, and of the River Lombach, draining the valley of Habkern on the north. To judge from the depth of the lake, these deposits must be at least 1000 feet in thickness.¹

The Aar follows a winding course on the plain of Interlaken, being first directed to the right by the cone of the Lütchine, and then to the left by that of the Lombach. The lower end of the Lake of Thun is dammed up in part by the deposits of the Simmen and the Kander, but the lower end of the valley has risen relatively.

Lake of Thun lies 1837 feet above sea-level, and covers an area of about 18 square miles. The greatest depth is 712 feet, and the mean depth 443 feet. The volume of water contained in it is estimated at about 229,600 million cubic feet.

The Thièle (Zihl) rises under the *névé* of Orbe in the valley of the Joux, in the Jura, and after flowing for some miles in an underground channel passes through the Lakes of Neuchatel and Bienne to join the Aar. The Jura range consists mainly of calcareous strata, often much fissured, so that the rain sinks into the ground and reappears after a longer or shorter course underground. Thus the River Orbe commences in a closed valley. The upper part, or Vallée de Joux, is double, one branch being without any river, except a little streamlet which flows into the Lake of Ter. The southern valley is traversed by the Upper Orbe, which falls into the Lake of Joux, and its continuation, the Lake of Brenet. Neither of these lakes has any

¹ Lubbock, *op. cit.*, p. 382.