Lake Vener, the third largest lake in Europe, with a length of 112 miles, a breadth of 56 miles, and an area of 2149 square miles, is situated towards the west of the depression, and drains to the Kattegat through the Göta; the Klar, the greatest Scandinavian river, flows into the lake. Lake Vener lies at an elevation of 144 feet above sea-level; the maximum depth is 292 feet, the mean depth 108 feet, and the volume of water contained in the lake is estimated at about 6,357,600 million cubic feet. It is connected with Lake Vetter by canal.

Lake Vetter lies at an elevation of 289 feet above sea-level, has a length of 80 miles, an average width of about 18 miles, and has an area of 733 square miles. The maximum depth is 413 feet, the mean depth 128 feet, and it is estimated to contain about 2,543,000 million cubic feet of water. It receives short streams from the plateau of Southern Sweden, and discharges eastwards by the large Motala River to the Baltic. By the eastern branch of the Göta Canal it has navigable communication with Lake Vener.

Lake Mälar also drains to the Baltic. It lies at an elevation of only 1½ feet above sea-level, and covers an area of 450 square miles. The maximum depth is 210 feet, the mean depth 26 feet, and the volume is estimated at about 353,200 million cubic feet.

Lake Hjelmar lies about 70 feet above sea-level, and covers an area of 185 square miles. The greatest depth is 65 feet, and the outflow of the lake is to the Baltic.

Reference may here be made to the remarkable temperature conditions recorded in a small lake in the island of Tysnös, off the coast of Norway, the depth of which does not exceed 15 feet.[1] When visited in 1888 the temperature at the surface was 54°·7 F. (12°·6 C.), but at one foot below the surface it rose to 60° F. (15°·56 C.), at four feet down it was 69°·2 F. (20°·67 C.), at seven feet down it was 73°·0 F. (22°·78 C.), the maximum temperature of 74°·0 F. (23°·33 C.) being reached at ten feet below the surface; further down the temperature fell distinctly, being only 72°·0 F. (22°·22 C.) at the bottom. On 30th June 1888 the maximum temperature was no less than 81°·3 F. (27°·4 C.) at about seven feet beneath the surface, and fell to 78°·8 F. (26°·0 C.) by July 21, being then between nine and ten feet below the surface, and to 73°·9 F. (23°·28 C.) by 11th August at about eleven feet beneath the surface. Careful search had been made for a hot spring, but nothing of the kind could be found, and the conclusion was that these phenomenal temperatures were due to solar radiation; this is supported by the fact that the specific gravity *in situ* of the intermediate and hottest layer lies between that of the surface and bottom

[1] See Gibson, *Seventh Annual Report of the Fishery Board for Scotland*, Part III. p. 433, 1889.