The spring, pouring its sparkling tide from out its bed of magnesian limestone, near the banks of the "Menagassi," is today, and has been ever since the Moravian Brethren, in March of 1741, made them an humble home in the trackless forests, the source of water supply for Bethlehem. Situated at the foot of the hill, upon the declivity of which the first log cabin was erected by the zealous missionary pioneers, it doubtless determined to a great extent the location of the slowly growing settlement. Until 1754-55 the water for the use of the community was distributed by water carriers or haulers, formally delegated for the purpose; from among the names of these Aquarili, a faithful chronicler of old time events* has preserved the following: Godfrey Haberecht, who first filled the office and who was appointed in July of 1742; Schnall, of whom it is recorded that in the discharge of his duties he had the misfortune to upset his cart and fracture his arm; Peter Peterson whom from Staten Island; Robert Hussey, in 1748, and after him Matthias Wittke, the last of the incumbents.

In September of 1751, we find the name of Hans Christopher Christiansen upon the list of newly arrived settlers.

This man, subsequently proving to be so valuable an addition to the colony, was born near Hadersleben, in Holstein, then under Danish rule, was by profession a millwright and by nature a mechanical genius. To the inventive ability of this ingenious Dane it was left to devise a method of supplying the community with water from the spring, by means otherwise than distributing it by water carriers. In the Spring of 1754 Christiansen commenced the erection of the first water works. The machinery was placed in a frame building 19 by 22, a few yards east of the oil and bark mill, whither the spring water was led by a conduit into a cistern. The pump was made of lignum vitae, the cylinder being five inches in diameter. The water was forced through wooden pipes, up the hill into a wooden reservoir or distributing tank, built within the "little square"—the place now occupied by the Moravian church—being a perpendicular height of 70 feet. These pipes were bored hemlock logs which had been floated down the "west branch of ye delaware," as the old accounts here term the Lehigh, from Gnadenhuetten, on the Mahoning, an Indian mission, near the site of Lehighton, in Carbon County.

The arrangements were sufficiently advanced by June 20th of the same year to admit of a trial, and on that evening the water was thrown in a jet "as high as the adjoining houses." The event created great gratification in the little community, and the novelty of the enterprise invariably excited the wonder and admiration of visitors.

It is to be deplored that a more specific account of these first water works is not to be obtained, yet so much can be inferred from the succinct statements of the chroniclers above referred to, that many interruptions and disappointments were caused by the bursting of the wooden mains. There was subsequently made, but with no better result, an attempt to substitute 1½-inch lead pipes, which were made of sheet metal, soldered along the edges and imbedded in a cement of pitch and brick dust, laid in a gutter of hard burnt brick.

Being convinced of the incompleteness of his work and the possibility of improving upon this, his first attempt, Christiansen commenced, in 1751, the construction of more powerful machinery, such as might meet the wants of the now evidently growing settlement, and this, moreover, in pursuance of a plan perfected by himself, John Arbo and Marshall.

A two-story building 22 by 30 was erected for the reception of the works, a little to the south of the frame building. This house, well preserved, is still standing and bears evident traces upon its door posts and window frames of the fire which, on the 18th of November, 1763, destroyed the original oil mill, a wooden structure across the way.

* The late Rev. Wm. C. Reichel, to whose patient researches many of the following facts and figures are gratefully credited.

† According to the specific statement of Charles David Bishop, whose father, John David Bishop, was apprenticed to the Danish millwright, Hans Christopher Christiansen, and who subsequently, as well as his son David, and later, his grandson, Gilbert Bishop, had the care of the water works intrusted to him. To the kindness of Mr. Gilbert Bishop are due many important data herein stated.