

principally of gray, arkosic, cross-bedded sands and drab clays of the Patuxent formation, although there is a comparatively thin covering of sands and gravels of the Lafayette capping the hills and mantling down over their slopes.

*Water Resources.*—Over the Coastal Plain portion of the county water for domestic purposes is obtained principally from open dug wells 10 to 60 feet in depth. A few driven wells are in use. The source is in part the sands and gravels of the Lafayette formation, and in part the sands of the underlying Patuxent formation. Springs are abundant, and where convenient to dwellings are used for domestic purposes.

At Pinehurst, previous to 1905, the hotels at that place were furnished with water by means of a steam pumping plant situated near the head of a little valley near the hotel buildings. A group of 16 wells 20 to 45 feet in depth were used, the supply coming from Patuxent beds. Analyses showed that several of these wells had become polluted from surface sources, and it became necessary to look elsewhere for a supply. A deep well was drilled near the plant. An 8-inch pipe was sunk through the Coastal Plain materials (Patuxent formation) to the surface of the basement crystalline rocks at a depth of 197 feet, and drilling was continued in the rock to a depth of 730 feet. An abundant supply of water was obtained which was said to come from a crevice in the rock. It was claimed that no good supply was encountered in the Coastal Plain materials above the rock surface.

At Aberdeen there are a number of wells on the hill slopes ranging in depth from 50 to 70 feet and in the valley ranging from 20 to 30 feet. The supply is amply sufficient for domestic purposes.

A waterworks system was established at Pinebluff in 1901. The source of supply is a spring from which the water is pumped to a 20,000-gallon tank on the top of a 50-foot tower located on a nearby hill. The pump has a capacity of 30 gallons per minute. The plant is owned by R. B. Brown. Wells ranging in depth from 30 to 60 feet are in common use at Pinebluff, and the water is said to be satisfactory. There are many springs in the vicinity, some of which are used.

At Southern Pines there is a waterworks system owned by the town. The supply is obtained from 10 wells, each about 45 feet in depth, located on ground 50 feet lower than the Seaboard Air Line Railway track at the station. The water rises within 17 feet of the surface. It is pumped to a 60,000-gallon tank located on a hill 90 feet above the level at the railway station. The top of the tank is 80 feet above the surface of the ground. A good pressure is thus obtained. The water horizon here is in the Patuxent formation. Wells have been drilled