

The failure to obtain water in the Patuxent formation at Fayetteville is rather surprising. The probable explanation is that the materials here are too compact to permit of the free passage of the water, the spaces between the sand grains being filled with fine arkosic or clayey matter. It is to be expected, however, that coarse gravel or sand beds will be met with immediately above the basement slates, and these should be water-bearing. It is suggested that the failures may have been due to a too rapid sinking of the casing, thus shutting off flows from water-bearing beds.

CUMBERLAND

Number.	Location.	Owner.	Date completed.	Elevation of surface above datum—feet.	Datum.	Depth—feet.	Diameter—inches.	Depth to principal water supply—feet.	Height of water, ± surface—feet.
1	Fayetteville.....	Fayetteville Ice and Manufacturing Co.	1902	about 106.	sea level.	265	8	-----	— 1
2	do.....	J. M. Wright.....	1900	about 100.	sea level.	237	3	236	—16
3	do.....	W. W. Ray.....	1900	about 85.	sea level.	218	4	-----	+ 0
4	Hope Mills.....	Hope Mills Manufacturing Co.	1895	-----	-----	170	-----	-----	+ 20
5	do.....	do.....	1895	-----	-----	120	-----	-----	-----
6	Manchester.....	?.....	1902	172	sea level.	125	1½	-----	— 2

CURRITUCK COUNTY.

Topography.—The surface of the county is low and level, being included entirely within the Pamlico or lowest Pleistocene terrace plain. Except in the case of sand dunes, the elevations do not exceed 25 feet anywhere in the county. A small portion of the Dismal Swamp is included in the northern part of the county. The narrow strip of land along the coast known as the Currituck banks contains many sand dunes, some of which in the vicinity of Kittyhawk attain elevations of 80 to 90 feet. Many small sand dunes occur on the mainland in the southern part of the county.

Geology.—The sands and sandy loams of the Pamlico formation form the surface materials over the entire county, excepting, however, the relatively small areas covered by recent sand-dune materials. Sands, clays, and shell marls, probably of both Pliocene and Pleistocene age, underlie the surficial materials. Shell beds of Pleistocene age have been encountered in artificial diggings in the northern part of the county.

Water Resources.—There are no deep wells within the limits of the county. On the mainland open and shallow driven wells 8 to 20 feet