

older Pleistocene deposits. Erratic boulders of quartz and crystalline rock occur in the basal beds of the formation along the immediate river borders. These have been especially noted along Roanoke River from Halifax southward to Palmyra. At Big Rocky Bar, about 20 miles below Halifax, one such boulder was observed whose dimensions were, roughly stated, 7 by 2 by 2 feet.

The formation is relatively thin, perhaps averaging 15 or 20 feet. The greatest measured thickness occurs along the west bank of Cape Fear River in the vicinity of Old Brunswick in Brunswick County. Here the bluffs, which range from 15 to 35 feet in height, are made up entirely of Chowan beds, no older strata appearing above tide level.

Fossil remains are rare in the beds of this formation, but both plants and invertebrates have been found at a few places.

Detailed Sections.—Many exposures of the beds of the Chowan formation occur in the bluffs of the streams crossing the belt. Along the western shore of the Cape Fear River estuary between Southport and the ruins of Old Brunswick in Brunswick County, a series of bluffs affords good opportunities for studying the deposits. Two sections presenting features of special interest are included below:

SECTION, CAPE FEAR RIVER, $\frac{1}{4}$ MILE NORTH OF THE RUINS OF OLD BRUNSWICK,
BRUNSWICK COUNTY.

Pleistocene (Chowan formation) :

	FEET.
Sandy, loamy soil.....	1
Fine, loose, light yellow sand.....	6
Hard, yellow, somewhat argillaceous sand, with small, tubular, iron concretions and small sand concretions cemented with iron.	$\frac{1}{2}$
Light drab, somewhat arenaceous, finely micaceous clay, mottled with pink, red and yellow.....	2
Coarse, reddish-brown sand, with lenses of drab clay and lenses of oyster shells. The oysters belong to the living species <i>Ostrea virginica</i> Linné.	
A few specimens of <i>Venericardia tridentata</i> Say, are found associated with the oysters.....	2
Coarse, cross-bedded, yellowish-brown and black sands.....	2

SECTION, CAPE FEAR RIVER, $\frac{1}{4}$ MILE ABOVE THE MOUTH OF PRICE CREEK
AND ABOUT 2 MILES NORTH OF SOUTHPORT, BRUNSWICK COUNTY.

Pleistocene (Chowan formation) :

	FEET.
Light yellow, medium-grained sand.....	$2\frac{1}{2}$
Dark, sandy loam, resembling an old soil.....	$\frac{1}{2}$
Loose, light yellow and gray sands.....	$3\frac{1}{2}$
Loose, yellow, coarse-grained sand.....	3
Light gray, arenaceous clay, mottled with pink and yellow.....	3
Loose, light, slightly micaceous, stratified sand, streaked and mottled with yellow.....	10
Concealed	7