center of the N½ SE¼ sec. 21, T. 4 N., R. 13 W. According to Vernon (1942, p. 79):

> An indurated greenish-gray siltstone ledge with mottlings of limonitic silt giving it a checkered appearance is exposed in the center of the NE¼ sec. 28, T. 4 N., R. 13 W. The ledge has the appearance of having been baked and is cemented by siliceous cement, probably derived from the bentonite (?).

Rock Hill is capped by a 2-foot ledge of hard ferruginous sandstone or conglomerate, presumably the base of the Citronelle formation. Beneath it is at least 22 feet of softer yellowish-gray sandstone with clay cement like that characteristic of the Hawthorn formation in Marion County. Near the center of sec. 24, T. 4 N., R. 13 W. on Rock Hill, Vernon (1942, p. 80) found 15.4 feet of light-greenish-gray sand and silt with clay pebbles, hardened by a siliceous cement. He also mentions greenish-gray silt along a road on Orange Hill in the NE¼ sec. 2, T. 3 N., R. 13 W.

Econfina Creek throughout most of its course in Washington County cuts through the Duplin marl into marlstone of various degrees of hardness. Vernon (1942, p. 77) apparently considers the fauna of this rock as a facies of the Chipola, although the evidence seems to be equally strong for a Shoal River age. It is more fully discussed under the Shoal River formation, to which it is here tentatively referred.

Gardner (1926-1944) has listed a large fauna of Chipola mollusks from Boynton Landing, which, according to Vernon (1942, p. 84), is in the SE¼ SE¼ sec. 31, T. 2 N., R. 16 W. Sellards and Gunter (1918, p. 92) describe the section there as having 6 feet of fossiliferous marl overlain by 2 feet of yellow and blue clay with impressions of the leaves of *Sabalites apalachicolensis* Berry and *Fagara apalachicolensis* Berry. The leaf-bearing clay is overlain by 3 feet of limestone. They assigned all three beds to the Alum Bluff, but the two upper beds may represent the Duplin marl. (See section, p. 195.)

At Red Head Still on Choctawhatchee River below the mouth of Holmes Creek, probably in sec. 20, T. 1 N., R. 16 W., Sellards and Gunter (1918, p. 92) report an oyster reef composed chiefly of *Ostrea haitensis* rising 5 feet above low water.

The following section at Dick Peterson's woodyard landing