Liberty County are underlain by the Citronelle formation, which is probably covered nearly everywhere by Pleistocene terrace deposits. Sixty-five feet of variegated reddish and yellowish ferruginous sand unconformably overlying the Duplin marl at Alum Bluff, Apalachicola River, is referred to the Citronelle formation. (See section, p. 191.)

Marion County—The sand hills in the eastern part of Marion County are underlain by the Citronelle formation. Exposures of the unweathered material are few, for the surface nearly everywhere is covered by a mantle of loose drab or yellow sand, part of which may be Pleistocene. Red sandy clay generally forms the subsurface.

Okaloosa County—The Citronelle formation underlies much of Okaloosa County but has not been satisfactorily distinguished from the Chipola formation (Miocene), which occupies part of the northeastern corner of the county, nor from the Pleistocene terrace deposits, which cover most of the remainder.

Long, slender oyster shells resembling *Ostrea westi* Mincher, possibly derived from the Citronelle formation, have been found on hillsides above Blackwater River east of Otahite, probably in sec. 3, T. 4 N., R. 25 W. According to the unpublished notes of Frank Burns (1895) the upper 10 or 12 feet of a hill 35 or 40 feet above the river is covered with the oysters, which are interbedded with iron ore and thin laminae of sandstone. The oyster reef lies on reddish-yellow clay, which extends to water level. The oyster bed, which I have not seen, may be of Miocene age. *Ostrea westi* occurs in the Pascagoula clay at Shell Bluff, Chickasawhay River, Mississippi.

Orange County—Further study is needed to distinguish between Pliocene and Pleistocene deposits in Orange County. Fossils found in wells near Orlando and Pinecastle indicate the presence of the Caloosahatchee marl beneath the Pleistocene there. Farther west the Caloosahatchee probably merges into littoral sand of the Citronelle type, which presumably lies directly on the Ocala limestone and the Hawthorn formation. Whether the surface materials in the highlands of the western part of the county are Pliocene or Pleistocene remains to be determined.