

is thus advantageously situated, usually builds a warehouse, not only for storing up for embarkation the produce of his own land, but large enough to take in the cotton of his neighbors. A long and steeply-inclined plane is cut in the high bank, down which one heavy bale after another is made to slide. The negroes show great dexterity in guiding these heavy packages; but occasionally they turn over and over before reaching the deck of the boat, and sometimes, though rarely, run off the course and plunge into the river, where they float till recovered. Had I not been engaged in geological inquiries, I should probably have had my patience severely tried by such repeated stoppings at every river cliff; but it so happened that the captain always wanted to tarry at the precise points where alone any sections of the cretaceous and tertiary strata were visible, and was often obliged to wait long enough to enable me to make a tolerably extensive collection of the most characteristic fossils. In the present instance—and I shall have by-and-by to mention other similar ones—Captain Bragdon was not only courteous, but perfectly understood, and entered into my pursuits, and had himself collected organic remains for a friend in the college of Louisville, Kentucky; so that while the cotton or wood were taking on board, he would often assist me in my labors. Were it not for one serious drawback, a cruise in a cotton steamer would be the paradise of geologists. Unfortunately, in the season when the water is high, and when the facilities of locomotion are greatest, the base of every bluff is many feet, and sometimes fathoms, under water, and the lower portion of a series of horizontal strata is thus entirely concealed from view. The bluffs which I first examined consisted of a marlite divided into horizontal layers as regular as those of the lias of Europe, and which might have been taken for lias but for the included fossils, which prove them to belong to the cretaceous formation. At Centerport these unctuous marls or calcareous clays are called by the people soap-stone, and form cliffs 150 feet in perpendicular height, in which, as well as at Selma, I collected the large *Gryphæa costata* and the *Ostrea falcata*, more than one species of *Inoceramus*, and other characteristic fossil shells. At White Bluff, where the blue marlite whitens