

mouth of the Altamaha river, in proof of a former subsidence ; but a stranger is in great danger of being deceived, because the common pine, called the loblolly (*Pinus taeda*), has tap-roots as large as the trunk, which run down vertically for seven or eight feet, without any sensible diminution in size. At the depth of about ten feet below the surface this root sends off numerous smaller ones horizontally, and when the sea has advanced and swept away the enveloping sand from such tap-roots, they remain erect, and become covered with barnacles and oysters. When so circumstanced, they have exactly the appearance of a submarine forest, caused by the sinking down of land. A geologist, who is on his guard against being deceived by the undermining of a cliff, and the consequent sliding down and submergence of land covered with trees which remain vertical, may yet be misled by finding these large tap-roots standing upright under water.

As the alligators are very abundant in the swamps near the mouth of the Savannah, I heard much of their habits, and was surprised to learn that pebbles are often met with in their stomachs, which they have swallowed to aid their digestion, as birds eat sand and gravel to assist the mechanical action of the gizzard. The peculiar conformation of the alligator's stomach confirms this view. On the site of some of the old Indian villages whole baskets full of flint arrow-heads have been picked up, and some of these, much worn and rubbed, have been taken out of the stomachs of these reptiles.

The extraordinary tenacity of life manifested by the alligator when seriously mutilated, led Dr. Le Conte to make a series of experiments, with a view of throwing light on the philosophy of the nervous system in man as compared to the lower animals. A young alligator was decapitated at the point where the neck or atlas articulates with the occiput. Not more than two ounces of blood flowed from the wound. The jaws of the detached head still snapped at any thing which touched the tongue or lining membrane of the mouth. After the convulsions produced by decapitation had subsided, the trunk of the animal remained in a state of torpor resembling profound sleep. But when pricked or pinched on the sides, the creature would scratch the spot, some-