strongly stated that the plant remains at St. John are numerous and are in a marsh and lagoon deposit. The ecological conditions were different, and so are the plants. The Baie Chaleur beds hold very few species for comparison, and it is not surprising that most are different.

There is no 'isolated Carboniferous molluscan fauna' in the St. John plant beds, and to them therefore Mr. White's argument from this fauna does not apply.

As regards the *Megalopteris* argument, it has to my mind as much force now as before Mr. White's statement in this article that the genus is known to be only as old as the Pottsville. Professor Andrews shows it to have been only twenty or thirty feet above the lower Carboniferous limestone; and it did not spring, like Minerva, ready armed and helmed from the brain of Jove, *i. e.*, it had closely related ancestors of earlier date. And that author described several species, none of which is identical with Hartt's species of the St. John beds.

But, after all, paleontology must bow to stratigraphy, and until it can be shown that the geological structure at St. John has been wholly misunderstood and misinterpreted, this supposed anomaly of plants, generally considered as Carboniferous, occurring in beds as old at least as the Devonian Age, must remain.

G. F. Matthew.

St. John, N. B.,
September 11, 1902.

EVIDENCE OF RECENT ELEVATION OF THE GULF COAST ALONG THE WESTWARD EXTENSION OF FLORIDA.

To the Editor of Science: During the spring of the present year, while doing field work along the Gulf shore south of Tallahassee, Fla., I obtained some facts which seem to show perceptible elevation of the coast in that vicinity within the memory of man. The data upon which the following remarks are based were furnished by Mr. J. L. Oliver, of Wakulla, Florida.

At St. Marks, Wakulla Co., Fla., is an old store or warehouse formerly occupied by a Mr. Harrell. This old house is built on piles, and in the 'fifties' there was an old field with a little pond in it just north of the house. During the 'fifties,' except at neap tide, the water at high tide passed under this house and into the pond. Since that time the pond has been drained, so that now rain water never stands in it, and its present connection with the tides is less obstructed than in the 'fifties,' but, notwithstanding this, the water at spring tide no longer comes under the house or reaches the old site of the pond unless a strong southeast or south wind has been blowing for two or more days.

A neap tide overflows the banks of the St. Marks River only in low places, and an average tide will lack three hundred yards of reaching where the pond was. Brush is taking portions of the marsh, where it had never been known to grow before.

Mr. Oliver's estimate is that the land has been elevated from one foot to eighteen inches since the 'fifties.' At first I thought that filling in with sediment might cause the change of level, but that does not seem probable. Therefore, if this evidence is trustworthy, the Gulf coast in the vicinity of St. Marks, Fla., is rising at the rate of two to three feet per century.

These notes seem interesting, and it is hoped that they may incite others to make observations, or even lead to some attempts by establishing bench marks to measure the rate of change of level.

T. Wayland Vaughan.

Smithsonian Institution,
Washington, D. C.,
September 11, 1902.

THE STRENGTH OF ANTS.

To the Editor of Science: While walking on the university campus the other day, my attention was arrested by what appeared to be a grasshopper moving along the sidewalk without using his hind legs. Upon closer examination, I saw that the grasshopper was dead and was being dragged along by a small ant.

The difference between the size of the little laborer and his load was so extraordinary that I thought it might be of interest to know the exact weight of each. I accordingly weighed