The Boreal shells of Banffshire (which occur at Gamrie in a finely stratified sand, two hundred and thirty feet over the sea, and at Castleton King-Edward in a similar deposit of very considerable elevation, and at least six miles inland), lie deep, — though exposed laterally in sections,— in the Pleistocene deposit. At Castleton I found the shells within a few feet of the underlying Grauwacke rock, and an immense deposit of beds of sand and clay, and over all a thick bed of partially consolidated ferruginous gravel lying above them. At Gamrie, though, from the great slope of the ground, the fact is less certain, they also seem to lie low; and further, both from their littoral aspect, and the circumstance that we find no trace of a littoral terrace where they occur, I cannot avoid the conclusion that they mark the line where a *shore* of the country existed for a time, when the country was in a state of subsidence, and ere yet the higher lying boulder clay was formed. The only peculiarity of the shells themselves, viewed in the group, is their intensely boreal character. The sole species of Astarte which I have yet found at either Gamrie or Castleton King-Edward,— and I have now visited these deposits five several times,— is the Greenland shell, *Astarte Arctica; Natica clausa*, — a shell of Spitzbergen and the North Cape,— is the prevailing Natica; and the most abundant shell, of at least the Gamrie deposit, is a bivalve not yet found living in our seas, but common ten degrees further to the north, *Tellina proxima*. Even the great size to which the latter shell attained in this locality is not without its bearing on the question. "The few specimens which have been dredged [dead] in Britain," says the late Professor Forbes, in his admirable history of the British Mollusca, "are much smaller than the exotic ones, none which we have seen exceeding three-quarters of an inch in length, and about half an inch in breadth." The mollusc is one of those which attain to their fullest development amid the