particles belonging to the ancient or continental rocks in the residue after the removal of the carbonate of lime. In like manner, when glauconite is found in a Red Clay or Diatom Ooze, traces of continental debris can always be detected during the microscopical examination of the mineral constituents. The Red Clays, for instance, off the west coast of Africa and the coast of Australia, and towards the polar regions, contain apparently wind-borne or ice-borne particles of quartz, orthoclase, white mica, epidote, zircon, and fragments of gneissic and granitic rocks; and it may be urged either that the glauconite has been transported to these deposits at the same time or has been formed in consequence of the association with the above minerals. The view that it has been formed *in situ* is probably the correct one, for we have seen that it is thus formed in shallower water deposits like the Green Sands, where its associations are much more distinctly marked and its progressive development more easily traced. Finally, we may again point out that glauconite is now being formed in those marine deposits in more or less close proximity to continental shores, where the debris of ancient rocks makes up a large part of the deposit, and especially in those regions where this debris has been for a long time exposed to the action of sea-water, and has consequently undergone profound alteration.

When describing the Red Muds off the coast of Brazil, it was stated that glauconite and glauconitic casts appear to be completely absent from these deposits. These Red Muds differ from the vast majority of terrigenous deposits in the large quantity of ochreous materials borne to these regions by the rivers of South America. In the deposits in the Yellow Sea glauconite would also seem to be absent from similar Red Muds. In these positions all the conditions for the formation of glauconite are, so far as we can judge, present, with the exception that the iron is all in a higher state of oxidation than in the Green and Blue Muds; but in what way this can prevent the formation of glauconite is difficult to explain satisfactorily.

*Geological Distribution.*—The geographical and bathymetrical distribution, as well as the mineralogical associations of glauconite above pointed out, become especially interesting and instructive when we recall the analogies which they present to what has taken place in past geological times. It has already been stated that glauconite is one of the minerals most widely distributed in sedimentary rocks. It is found in the primary formations of Russia and Sweden among sands and gravels, in the Cambrian sandstone of North America, in the Quebec group of Canada, and in the coarse Silurian sands of Bohemia. In the secondary formations its presence is more pronounced—for example, in the Lias, and especially in the middle and upper layers of the Jurassic system in Russia, in Franconia, in Suabia, and in England. It has a still greater development in the sands, marls, and chalks of the Cretaceous formation; it will suffice to recall the glauconitic rocks of the Neocomian, of the Gault, and of the Cenomanian in various regions, such as the glauconitic marls of France, Germany, England, and several parts of