be urged that the native iron described from deep-sea deposits may have been derived from the decomposition of the basaltic lapilli or vesicular pumice, which are widely distributed over the sea-bed. In reply to this objection it may be pointed out that the native iron in eruptive rocks is never circular in form, nor is it surrounded with a black magnetic coating, like the spherules from marine deposits. In the reputed cosmic dusts found in atmospheric precipitations or collected in snow-fields, there are frequently numerous, more or less hollow, spheres, or particles elongated like a bottle, with a cracked, brownish, more or less oxidised, surface. These we have found, from a careful examination, to be extremely numerous in industrial centres as well as in the scoriæ of steamships, and when they are broken down in an agate mortar they will sometimes yield minute particles of native iron. It is true that these particles are carried far and wide by atmospheric currents, and it has been suggested that the spherules of the deep sea have been derived from this source, but our examination shows that the cosmic spherules of deep-sea deposits are markedly different both in form and structure from the products of our furnaces, steam-engines, and materials of combustion. It has been stated that the particles of iron on the floor of the ocean may be due to the reduction of oxides of iron into metal under the influence of organic substances; the consideration, however, of the form, structure, and distribution of the spherules does not in any way warrant this interpretation.

During the past few years we have examined a large number of atmospheric precipitations collected from various parts of the world, for instance, from the Ben Nevis Observatory, from the coral island of Bermuda, and other isolated situations. In all these cases the bulk of the solid materials found in the precipitations was undoubtedly of terrestrial origin, and consisted chiefly of minute mineral particles derived from the rocks of the district from which the collections were obtained. In one instance from Ben Nevis there were two black spherules which approached in character those figured on Pl. XXIII., but they were too minute to admit of any definite opinion being formed, and the same was the case with one or two black spherules and crystalline flakes from the collections at Bermuda, which resembled the magnetic spherules and the plates of the crystalline spherules allied to the chondres, but here too the evidence was inconclusive.

If particles of extra-terrestrial origin be continually attracted to the surface of the earth, which is in all probability the case, we should not expect them to fall more abundantly at one part of the earth's surface than at another. In atmospheric precipitations, and on the surface of the continents, their recognition would necessarily be difficult on account of their small size, the large amount of telluric matter associated with them, and the mechanical actions to which they would be subjected. Those, however, falling upon the ocean would gradually sink to the bottom, and in those areas of the ocean to which little or no detritus from the continents is carried, and in depths from which all carbonate of lime organisms are removed, they would, from these very con