

Scandinavian chains on the opposite side of the great gulf occupied by the Baltic, is a well known instance of the same kind.

It is true indeed that in these two cases partial solutions of the problem have been attempted, by supposing that these blocks may have been drifted across on ice-bergs; yet even with regard to the case of the shores of the Baltic we see nothing similar occurring in the actual order of things, and with regard to that presented by the Jura the hypothesis seems to destroy itself; for if the surface of the ocean were there raised to the level at which these blocks are found (although under present circumstances ice-bergs might exist in a river flowing at that level), yet with the general rise of the ocean's surface, the body of the atmosphere, and the lines of temperature would of necessity rise also, and ice-bergs could not exist in an ocean under that latitude.

But in truth this phenomenon is one of very common occurrence, and is exhibited, though on a less striking scale, on almost every chain of hills throughout England, under circumstances which admit of no escape from the obvious inferences first stated. The chain of the middle oolites in Oxfordshire, for instance, is extensively covered through Bagley wood with debris from almost every class of rocks from the transition series to chalk, and among them many blocks of great size and weight occur. Farey's list of the insulated hills in Derbyshire, having gravel scattered over their surface, affords many similar instances. The downs surrounding Bath, (Hampton Down for example), through abruptly scarped and surrounded by vallies more than 600 feet deep, have yet on their very summits flints transported from the distant chalk hills; but it is unnecessary to multiply examples farther. The simplest explanation of the fact will be, that these fragments were transported by the first action of the currents, before they had effected the excavation of the vallies now cutting off all communication with the native rocks whence they were derived. In some instances also it may appear that these transported masses have not accomplished their whole journey at once, but may have been detached by some of those earlier convulsions to which the conglomerate beds, associated with so many of the formations, must be ascribed; and having reposed in these strata for a time, have been washed out afresh and moved forwards to a new destination.

The organic remains of land animals dispersed through this diluvial gravel have been already mentioned: they must with the highest probability be referred to the races extinguished by the great convulsion which formed that gravel; many of them are of species still inhabiting the countries where they