

2. Observations on the same subject. By John Goodsir, Esq.
3. Note on the Form of the Crystalline Lens. By Professor Forbes. Included in the former Abstract.
4. On the Cause which has produced the Present Form and Condition of the Earth's Surface. By Sir George Mackenzie, Bart.

The author first described, generally, the appearance of the loose materials covering the surface; and referred to some districts in the north of Scotland, especially the central one on the borders of Perth and Inverness shires, as demonstrating the effects of vast currents of water having passed over the surface. He also referred to the valleys of the river Conan and its tributaries, in Ross-shire, as presenting an epitome of all the phenomena which may be supposed to result from a vast flood gradually subsiding, and taking the direction of the valleys. He then shortly alluded to the theories proposed to account for the present condition of the surface, which appear to resolve themselves into the effects of a remote cause.

It being generally admitted that the crust of the earth now appears broken, some portions having been elevated, and some having sunk; and that this breaking up of the strata, causing them to take various positions, the broken portions being inclined at different angles, some being vertical; and that this dislocation of the strata is observed everywhere; it is obvious that a tremendous force must have been exerted to produce these effects. The elevation of the former ocean bottom, and the sinking of much of the former land, would occasion an agitation of the waters such as would have caused the waves to overtop the mountains; and as the waves subsided currents would have been directed with great violence through all the valleys, sufficient to produce all the phenomena we observe, except those which may be fairly attributed to a subsequent gradual rising of the land, and to partial convulsions.

Sir George concluded by observing that, probably, Man had not appeared on the earth previous to the great convulsion by which the order of the strata had been so greatly disturbed; for, besides no human fossil remains having yet been found, man, without such disturbance of the rocks, could not have enjoyed what external nature offers to his senses, nor have discovered the minerals and organic remains which have contributed so much to his wealth and comfort, as well as to the noblest exercise of his mental faculties.