

of the rocks around him, he saw the records of a series of changes which the earth had once undergone. These changes were conceived by him to have been of no abnormal kind, but to have resembled those which might quite possibly occur now, for, in his opinion, our planet had always presented phenomena similar to those of the present time. He saw that the existing dry land was in large measure formed of strata that had once been laid down on the floor of the sea, like the sandstones, marls and limestones with which he was familiar. Rising from underneath these strata, the older and inclined rocks of the mountains appeared to him as the relics of a more ancient continent, which had in like manner been built up of marine sediments. He believed that the tilted, highly-inclined positions of these rocks were due to their having tumbled down into the hollow interior of the earth.

Füchsel, with much sagacity, not only interpreted the origin of individual strata, but divined that a continuous series of strata of the same composition constitutes a formation, or the record of a certain epoch in the history of the globe, thus anticipating a doctrine which afterwards took a prominent place in the system of Werner. All these sediments were originally deposited horizontally. Where they have been placed in inclined positions, the alteration was, in his opinion, to be attributed to some subsequent disturbance, such as the effects of earthquakes or oscillations of the ground. To earthquakes also he assigned the production of the rents which, being filled from above, now form veins in the rocks. It was his opinion