

in many important features with that in the floetz-trap. Thus, basalt is frequently porphyritic, and sometimes amygdaloidal, which latter, however, is but a rare occurrence in porphyry. Further, the columnar, globular, and tabular structure is nearly the same in both. It contains very little mechanical deposition, and when it does occur, it is almost entirely composed of masses of rocks; never any petrification, which was to be expected, because this formation was formed at a far earlier period than the newest floetz-trap, when the level of the water was incomparably higher, and when no animals or vegetables existed. This formation also contains little or no carbonaceous matter, which we found to be so abundant in the newest floetz-trap formation.

These observations are sufficient to shew us how nearly these two formations are allied, and how admirably their structure corresponds, and is illustrative of their mode of formation.

*Investigation of the Contents of the Water of the Globe, at different Periods.*

46. This subject is highly interesting. It points out to us in legible characters the alterations which the ocean experienced during its gradual diminution, and affords a very interesting picture of the internal structure and surface of the earth during the different periods of its formation.

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