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ART. XXIV—On the Origin of Eruptive and Primary Rocks; by THOMAS MACFARLANE. Part II.

(Presented to the Natural History Society.)

II. THE ERUPTIVE FORMATIONS.

In referring to these formations, it will be impossible altogether to avoid mentioning many matters, which are very generally known regarding them. Still the connection of eruptive rocks on the one hand with the constitution of the interior of the earth as adverted to in the last chapter, and on the other hand with certain slaty modifications of themselves, will be kept in view as much as possible. The rocks of these eruptive formations possess, as is well known, characters which distinguish them sharply from rocks of sedimentary origin. While the latter have been made up of the debris of rocks pre-existing on the earth's surface, the eruptive formations have derived their material from beneath the earth's crust. Hence they have been respectively termed by Humboldt exogenous and endogenous rocks. The cruptive rocks are more or less crystalline, generally but not always unstratified. The sedimentary rocks possess opposite characters. Each eruptive rock is in a high degree homogeneous and shows nearly the same characters and composition throughout its whole mass. This is much less the case with sedimentary rocks. The eruptive rocks occur in very irregular forms, as enormous irregular masses, (typhonische stöcke) covers or caps (Kuppen or Decken), veins, streams and

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