

sandstones, into the fossiliferous Silurian strata of the district north of Mjösen Lake. It seems therefore that the succession of these groups, in the order of their antiquity, is as follows :—

1. Primitive Gneiss formation.
2. Quartzose group.
3. Micaceous group.
4. Argillaceous and chloritic group.
5. Greywacke slates, sandstones, and limestones.
6. Fossiliferous Silurian strata.

} Primitive Slate  
formation.

It is to be remarked, that besides these stratified groups, various eruptive formations occur, whose age or place in the above list it is difficult to determine. Among these, the gneiss-granite of Vestfjord, and the granite and gneiss-granite in the southern parts of Bratsbergs Amt are the most important. The relations of the latter to the Tellemarken quartzose group, have been minutely investigated by Dahll, and described in his paper "*Om Tellemarkens Geologie.*" He there unequivocally establishes the following succession, commencing with the more modern formations.

1. Syenite with associated granite, rhomboidal porphyry and augite porphyry.
2. The Devonian formation.
3. The Silurian formation.
4. Gneiss-granite and granite.
5. The slate formations of Tellemarken.

The relations of the latter formation to the primitive gneiss are not touched upon in Dahll's paper; but in another "*Om Kongsbergs Erts District,*" by Kjerulf and Dahll, it is asserted that the gneiss and mica schist of Kongsberg, or as they are called, the Kongsberg slates, "are exactly the same as those which in a more unchanged condition, are spread over large areas in Tellemarken," but separated from these by a band of eruptive gneiss-granite. The primitive gneiss formation is declared to have no existence, but to be resolvable into gneiss-granite, which is eruptive, and into slates, whose two principal types are quartz slate and hornblende slate. It is even said that gneiss "as a petrographical term, in its older and more extended meaning, is no longer advantageous to science, but the opposite." The order of succession in these older groups, according to Kjerulf and Dahll, is as follows, commencing with the oldest:

1. Tellemarken slates.
2. Granite and gneiss-granite. (Eruptive.)