In Scandinavia the following general order of succession has been established:

Upper Silurian.

Lower Silurian.

Limestones and marls (50-60 ft. in Gothland) with Ludlow fossils.

Limestones and shales (150 ft. in Gothland) with Wenlock fossils

(Monograptus ludensis, M. colonus, Retiolites geinitzianus).

Marls and shales (with Llandovery forms) apparently unconformable on all older rocks.

Brachiopod shales (Trinucleus, Staurocephalus).

Trinucleus shales and limestones.

Middle graptolite shales (Llandeilo species of Didymograptus, Diplograptus, Climacograptus and other genera) which pass laterally into limestone, and are in different districts represented by the Chasmops limestone.

Lower graptolite shales (Arenig species of Phyllograptus, Dichograptus, Didymograptus, and other genera) passing into the Orthoceras limestone, which is recognizable over a large part of southern Scandinavia.

Ceratopyge limestone (Dicellocephalus, Agnostus, Niobe, Amphion, Obolus) and other fossils like those found at the base of the Arenig and in the Tremadoc group.

In Scania, the Silurian series has been subdivided into graptolitic zones as in the subjoined table:07

Upper Silurian.

Lower Silurian,

A. Upper Group-Cardiola shales, with limestone and sandstone.

B. Middle Group, with the following zones in descending order: a, Cyrtograptus Carruthersi; b, C. rigidus; c, C. Murchisoni; d, Monograptus riccartonensis; e, Cyrtog. Lapworthii; f, C. (?) spiralis; g, C. Grayæ.

C. Lower Group, composed of the following zones in descending order: a, Monograptus cometa; b, Gray unfossiliferous shales; c, Cephalograptus cometa; d, Mon. leptotheca; e, M. gregarius; f, M. Cyphus.

D. Upper Group, composed of the following zones in descending order: a, Diplograptus, sp.; b, Phacops mucronata; c, Staurocephalus clavifrons; d, Unfossiliferous marly shales; e, Niobe lata; f, Unfossiliferous shales; g, Diplograptus quadrimucronatus; h, Trinucleus, sp.; i, Calymene dilatata; k, Unfossiliferous shales.

E. Middle Group—Graptolite shales, with zones of a, Climacograptus ragosus; b, C. styloidens; c, Black unfossiliferous shales; d, Limestone band, with Ogygia, sp.; e, Dicranograptus Clingani; f, Climacograptus Vasæ; g, Unfossiliferous shales; h, Cœnograptus gracilis; i, Thin apatitic band; k, Diplograptus putillus; l, Glossograptus; m, Gymnograptus Linnarssoni; n, Glossograptus; o, Didymograptus geminus (Murchisoni).

F. Lower Group, composed of the zones of a, Phyllograptus, sp.; b, Orthoceras limestone; c, Tetragraptus shales (lower graptolite

shales); d, Ceratopyge limestone.

The island of Gothland has long been celebrated for its development of Upper Silurian rocks. According to Lindstrom, ⁹⁸ the following subdivisions are there traceable:

98 Neues Jahrb. 1888, i. p. 147, and F. Schmidt, op. cit. 1890, ii. p. 249.

⁹⁷ S. A. Tullberg, "Skänes Graptoliter," Sverig. Geol. Undersökn. ser. c. No. 50, 1882-83.