

many, while the Keuper (Marnes irisées) presents a characteristic assemblage of bright red and green mottled argillaceous marls.²²

Scandinavia.²³—Though fragmentary remains of the terrestrial flora that clothed the land which surrounded the German Triassic inland sea not infrequently occur, it is on the north side of the basin that the most abundant traces have been recovered of the vegetation of this period. Above reddish saliferous rocks, presumably Triassic, there come in southern Sweden certain light gray and yellow strata, which, from the occurrence of *Avicula contorta* and other fossils in them, are assigned to the Rhætic stage, though possibly their higher members may be Jurassic. They attain in some places a thickness of 500 to 800 feet, and cover about 250 square miles. They have been divided into a lower fresh-water group, with workable coal-seams, but no marine fossils, and an upper marine group, with only poor coals, but with numerous marine organisms (*Ostrea*, *Pecten*, *Avicula*, etc.). In the coal-bearing strata clay-ironstones occur, and seams of fire-clay underlie the coals. Nathorst and Lundgren have brought to light 150 species of plants from these beds—a larger number than the whole of the Triassic flora of other countries. At Bjuf they include 36 species of ferns, 36 cycads, 15 conifers, and 1 monocotyledon. The subjoined grouping of the Swedish Triassic rocks has been given by Lundgren:

		Arieten-Lias.
		Cardinia Lias.
Younger Rhætic		Zone of <i>Nilssonina polymorpha</i> .
		Pullastra bed.
Rhætic	.	Zone of <i>Thaumatopteris Schenki</i> .
	.	Zone of <i>Equisetum gracile</i> .
	.	Zone of <i>Lepidopteris Ottonis</i> .
Older Rhætic	.	Zone of <i>Camptopteris spiralis</i> .
		Keuper.

Alpine Trias.²⁴—In the western Alps, certain lustrous schists, with gypsum, anhydrite, dolomite and rock-salt, lie

²² Benecke, Abhandl. Specialkarte Elsass-Lothringen, 1877; Lepsius, Z. Deutsch. Geol. Ges. 1875, p. 83.

²³ See Hébert, Ann. Sci. Geol. 1869, No. 1; Bull. Soc. Geol. France (2), xxvii. 1870, p. 366; Memoirs of the Geological Survey of Sweden, especially Nathorst "Om Floran Skånes Kolförande Bildningar," 1878, 1879; E. Erdmann, "Beskrifning till Kartbladet Helsingborg," 1881, p. 42; G. Lindström, op. cit. "Kartbladet Engelholm," 1880; also Nathorst, "Bidrag till Sveriges fossila Flora," K. Vet. Akad. Handl. Stockholm, xiv. xvi.; Lundgren, Geol. Fören. Stockholm Förh. 1880.

²⁴ See F. von. Richthofen, "Geognostische Beschreibung der Umgegend