seen in a group of limestones, with Exogyra Couloni, etc., in the lower, and Toxaster complanatus, etc., in the upper beds. Southward the limestones are mostly replaced by marls, and the whole at Grenoble reaches a thickness of more than 1600 feet, resting on the upper Jurassic limestones, with Terebratula diphyoides.

Urgonian.—In the typical district of the lower valley of the Durance, this subdivision consists of massive limestones (1150 feet) with Belemnites latus, B. dilatatus, in the lower part; Toxaster complanatus, Exogyra Couloni, Janira atava, etc., in the central thickest portion; and Toxaster ricordeanus, Ancyloceras, Crioceras, etc., in the upper band. The Caprotina limestone of Orgon (whence the name of the type was taken) is a massive white rock, sometimes 1000 feet thick, marked by the abundance of its hippuritids, Requienia (Caprotina) ammonia, R. Lonsdalei, R. gryphoides, gigantic forms of Nerinæa, and corals. In the northern Cretaceous basin, the Urgonian stage appears as a series of sands and clays which in Haute Marne are from 60 to 80 feet thick, and contain Toxaster ricordeanus, etc.

Aptian.—In the typical district round Apt in Vaucluse, this stage consists of a lower group of blue marls (Marnes de Gargas), with Plicatula placunea, Amm. Nisus, A. Dufrenoyi, followed by a marly limestone with Ancyloceras renauxianus, Ostrea aquila. These beds swell out in the Bedoule to a thickness of 650 feet. One of their most distinctive characters is the prominence of the cephalopods of the Ancyloceras (Crioceras) type. In northern France the Aptian stage is chiefly clay, with Plicatula placunea, P. radiola, hence the name "Argile à Plicatules." Near St. Dizier, the lower beds are characterized by Terebratula sella, Ostrea aquila; the middle by Amm. cornuelianus, Ancyloceras Matheroni; the upper by Amm. Nisus, A. Deshayesi.

Albian.[157]—In the eastern part of the Paris basin, this

[157] See, besides the works already cited, Barrois, Bull. Soc. Geol. France, 2e ser. iii. 707; Ann. Soc. Geol. du Nord. ii. p. 1; Renevier, Bull. Soc. Geol. France, 2e ser. ii. 704.

[1] From the Haute Garonne, where the deposits are typically developed.
[2] Well seen at Maestricht.
[3] From Champagne.
[4] From Santonge.
[5] From Angoulême.
[6] From the basin of the Loire.
[7] From the Charente.
[8] From Rouen (Rothomagus).
[9] From the Department of the Aube.
[10] From Apt in Vaucluse.
[11] From Orgon, near Arles.
[12] From Hauterive, on the Lake of Neuchâtel (see p. 1570).
[13] From the Château de Valengin, near Neuchâtel, Switzerland (see p. 1570).