http://www.geology.19thcenturyscience.org/books/1901-Zittel-HistGeol/README.htm

fossiliferous Gault and unfossiliferous Lower Greensand. D'Archiac's admirable work, *Description géologique du Département de l'Aisne*, provided supplementary information about the Cretaceous deposits in this part of France. The Upper or White Chalk and the Greensand formations were shown to be well developed, the lower horizons of the Cretaceous to be absent.

No less important was another work by the same author on the middle group of the Cretaceous system (1839). D'Archiac gave in this work a lucid exposition not only of the Middle division but also of the whole Cretaceous series in the marginal areas of the Paris basin, in Belgium, and the neighbourhood of Aix. He compared the sequence of deposits with the succession in England, Switzerland, and Germany, and finally sub-divided the system as follows :—

- Upper Group.
  - Upper horizons of Chalk (Maestricht, Sweden).
  - White Chalk.
  - Chalk Marl.
- Middle Group.
  - Upper Greensand.
  - Blue Marl (Gault).
  - Lower Greensand.
- Lower Group.
  - Neocomian (Marine facies).
  - Wealden (Fresh-water facies).
    - Weald clay.
    - Hastings sand.
    - Purbeck strata.

While the greatest enthusiasm prevailed among French geologists to elucidate the Cretaceous system, Germany had fallen rather behind in this work. Friedrich Roemer and Hans Geinitz were the leading contributors to the knowledge of the German Cretaceous deposits. In 1836, Roemer had described a marine deposit in the Hils basin under the name of "Hils Clay," but had relegated the Hils clay, along with the Wealden formation, to the Upper Jurassic horizon. In 1839, however, he demonstrated that the Hils clay was younger than the Wealden formation, and possibly represented the Speeton clay of England. The careful investigation of the fossils in the Hils clay showed, according to Roemer, distinct affinities both to Upper Jurassic and Cretaceous faunas. Two years later Roemer published his important monograph of the *Fossils*