



7 volumes, bound in 6, including with large chromolithographed map in six sheets (each sheet c700 by 2050mm; approximately 2180 by 2230mm if joined), dissected and mounted on linen. 4 text volumes bound in 3, Large 4to, modern red half-morocco, covers preserved; 3 folio atlases, 176 plates in two parts: plates 1 to 158, drawn and lithographed by N.H. Jacob, for the section on the main fossils of the strata (crustaceans, brachiopods, cephalopods, gastropods, lamellibranchs, and echinoderms); and plates 159 to 176 (i.e., 18 plates) drawn and lithographed by H. Formant and C. Cuisin, for the section on fossil plants of the coal-bearing strata, directed by R. Zeiller. Explanation sheets for the figures next to each red half-morocco, gilt edges, spines numbered "IV"; map dissected and mounted on linen, in a period folder and modern red half-morocco case.

#### Collation:

#### Text

1. Tome premier (Paris, Imprimerie Royale, 1841): xxii, 825 pp., 71 text engravings (mainly profiles), one large, folded chromolithographed geological key map (finished by hand) of France (570 by 540mm, dissected into 15 smaller and mounted on linen).
2. Tome deuxième (Paris, Imprimerie Nationale, 1848): xii, 813 pp., 105 text engravings (mainly views and profiles).
3. Tome troisième. Première partie (by Dufrénoy) (Paris, Imprimerie Nationale, 1873): viii, 231 pp., 18 text engravings (mainly profiles), bound together with Tome quatrième. Seconde partie. Végétaux fossiles du terrain houiller (by Zeiller) (Paris, Imprimerie Nationale, 1879: 185 pp.

#### Atlas

4. Première partie. Fossiles principaux des terrains (by É. Bayle): Title page, half title to first part. 86 lithographed plates with explanatory text leaves, numbered I-LXXXVI
5. Seconde partie. Végétaux fossiles du terrain houiller (by Zeiller): 90 lithographed plates with

explanatory text leaves, numbered LXXXVII-CLXXVI (the last 16 on plants), for a total of 176 plates.

6. Carte géologique de la France, octavo, in six sheets (each sheet c700 by 2050mm; approximately 2180 by 2230mm if joined), dissected and mounted on linen. Labels from the geographer bookseller Ch. Piquet pasted on the front covers: Southwest, Southeast, East, Northeast, Northwest, and North.

## **THE FIRST COMPLETE GEOLOGICAL MAP OF FRANCE**

**Explication de la carte géologique de la France. Volumes I-IV (text and atlas), and two maps. [Complete].**

### **Author**

DUFRENOY, [O.P.A.] and [J.B.A.L.L.] ÉLIE DE BEAUMONT

### **Publication date**

1841-1879.

### **Publisher**

Imprimerie Royale, Imprimerie Nationale,

### **Publication place**

Paris,

### **Physical description**

7 volumes, bound in 6, including with large chromolithographed map in six sheets (each sheet c700 by 2050mm; approximately 2180 by 2230mm if joined), dissected and mounted on linen. 4 text volumes bound in 3, Large 4to, modern red half-morocco, covers preserved; 3 folio atlases, 176 plates in two parts: plates 1 to 158, drawn and lithographed by N.H. Jacob, for the section on the main fossils of the strata (crustaceans, brachiopods, cephalopods, gastropods, lamellibranchs, and echinoderms); and plates 159 to 176 (i.e., 18 plates) drawn and lithographed by H. Formant and C. Cuisin, for the section on fossil plants of the coal-bearing strata, directed by R. Zeiller. Explanation sheets for the figures next to each plate. period red half-morocco, gilt edges, spines numbered "IV"; map dissected and mounted on linen, in a period folder and modern red half-morocco case.

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## **Dimensions**

### **Notes**

The first complete geological map of France (including Corsica), on a scale of 1:500.000, complete with accompanying geological and paleontological text and atlas volumes.

Inspired by Greenough's recently-published Geological map of England and Wales, and acting on the royal decree of 1816, André Brochant de Villiers (1772-1840), Professor at the École des Mines de Paris, began work on an equivalent geological map of France. Two young mining engineers were assigned to him, Armand Dufrénoy (1792-1857) and Léonce Elie de Beaumont (1798-1874), who began by training in England, grasping the principles of Greenough. At that time, the geological constitution of France was indeed poorly understood, and the general features were barely outlined. Upon their return in 1825, geological exploration began, with Élie de Beaumont examining the eastern part of France and Dufrénoy the western part. 80,000 km were covered over almost fifteen years, and the engraving of the map's relief was finally completed in 1840. These geological explorations prompted the writing of numerous descriptive papers. Dufrénoy and Élie de Beaumont published them in the 'Annales des Mines', before compiling them into the 'Mémoires pour servir à une description géologique de la France', whose four volumes were published from 1830 to 1838. A new series, ours, titled 'Explication de la carte géologique de la France', began to appear in 1841:

"Its publication exerted a powerful influence on the whole development of geology in France and secured for the two authors a distinguished place..." (Zittel).

"Cet achèvement était aussi le couronnement posthume de près d'une vingtaine d'années d'engagement d'André Brochant de Villiers, disparu l'année précédente, pour concevoir le projet et en superviser pas à pas la réalisation, si bien que cette carte, considérée le plus souvent comme la carte de Dufrénoy et Élie de Beaumont, qui en furent les artisans émérites, mériterait de porter le nom de leur maître qui en fut le concepteur et l'architecte."

(This completion was also the posthumous crowning of nearly twenty years of commitment by André Brochant de Villiers, who passed away the previous year, to conceive the project and supervise its step-by-step realisation, so much so that this map, most often considered the map of Dufrénoy and Élie de Beaumont, who were its eminent craftsmen, deserves to bear the name of their master who was its designer and architect.) (Gaudant).

Volume III is by Dufrenoy alone; the zoological atlas is by Bayle, and includes plates dealing with molluscs (mainly secondary - Mesozoic - ammonites and bivalves; some belemnites and gastropods, as well as several brachiopods and echinoderms); the botanical volume IV (seconde partie) is by Zeiller, with plates (bound in the rear of the second atlas) depicting fossil plants, principally from Carboniferous deposits. The Bayle and Zeiller Atlases are often lacking and thus very rare. The second part of the third volume ("Tome 3, deuxième partie") was never published. Some regard Bayle's atlas as part 2, but there is no indication of this in this work. Also, the Tome 4, première partie remained unpublished, but similarly, Tome 4's atlas is sometimes regarded as such. In any

event, the present set contains all that was published.

### **Bibliography**

BM(NH) 2, p. 608 (under France-service); Ward and Carozzi, 697-698, 859-860, 2377; Zittel, 299; Gaudant, Jean 'André Brochant de Villiers (1772-1840), concepteur de la Carte géologique de la France, dite de Dufrénoy et Élie de Beaumont (1841)'. Travaux du Comité français d'Histoire de la Géologie, Cofrhigeo, 2009, 3eme série (tome 23), pp. 67-88

### **Provenance**

Provenance

1. The library of the geologist and agronomist Jules Barotte (1824-1878), with his ex-libris stamp affixed inside each volume.
2. The library of the friendly association.

**Price:** £9500

**Inventory reference:** 24062