

Testudo sulcata

Miller, 1779

T A B U L A XXV.

- Fig. 1. *BRUCEA antidyfenterica*. LIN. Spec. Plan. Classis XXII. Ordo IV. Spec. Habitat in Africa.
 2. Flos masculus. 3. Idem auctus. 4. Calyx. 5. Idem auctus. 6. Stamina magnitudine aucta. 7. Stamen singulum auctum.
 8. Nectarium magnitudine auctum. 9. Flos femineus. 10. Idem auctus. 11. Calyx. 12. Idem auctus. 13. Germen cum
 styli magnitudine auctum. 14. Nectarium magnitudine auctum.

T A B U L A XXVI.

- Fig. A. *TESTUDO fulcata*. LIN. Syft. Nat. Classis III. Ordo I. Genus CXIX. Spec. Habitat in India occidentali.
 B. Pars inferior. C. Caput magnitudine naturali.

T A B U L A XXVII.

- Fig. A. *HOMO* Lar. LIN. Syft. Nat. Classis I. Genus I. Spec. Habitat in China.
 B. Caput magnitudine naturali.

T A B U L A XXVIII.

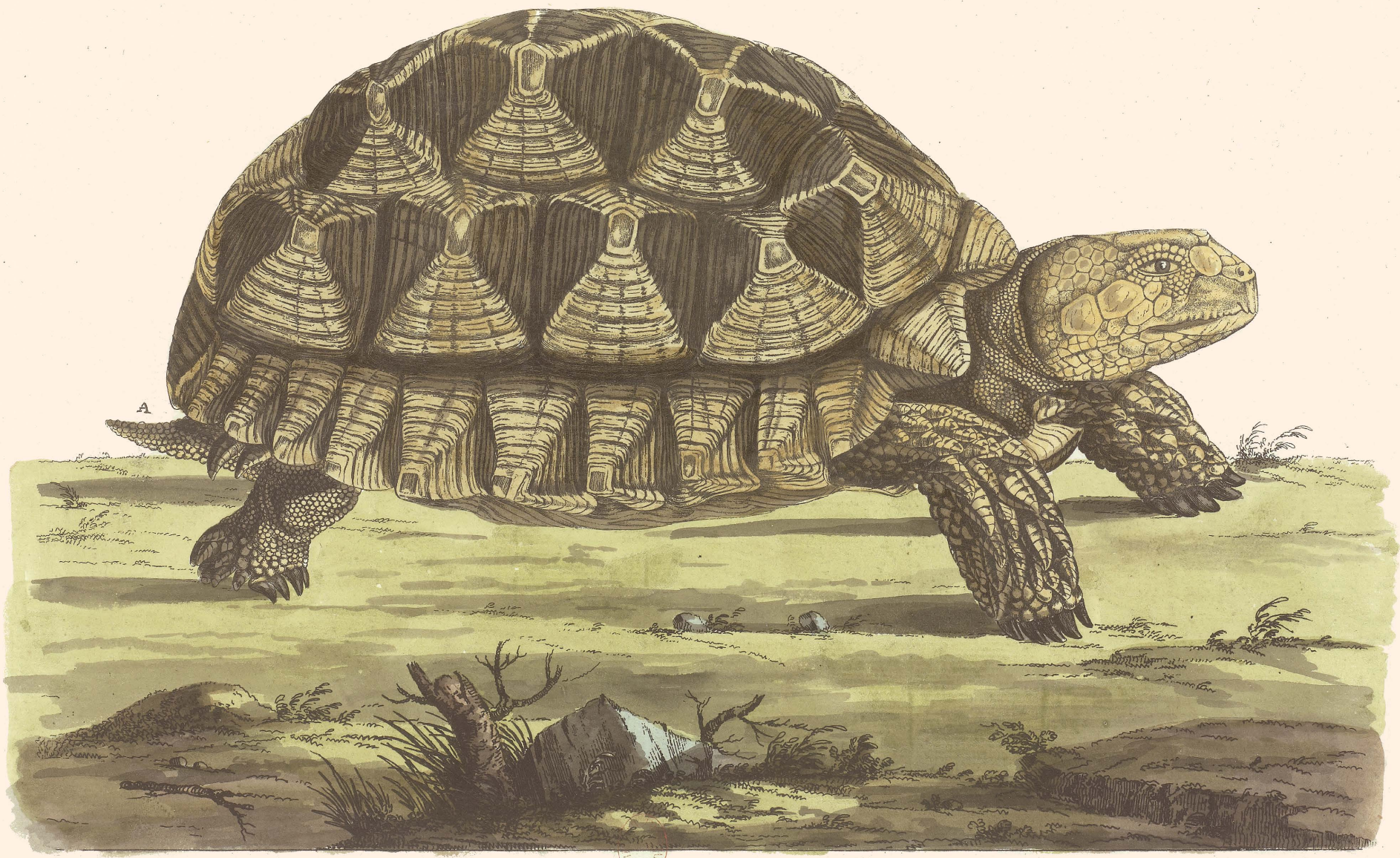
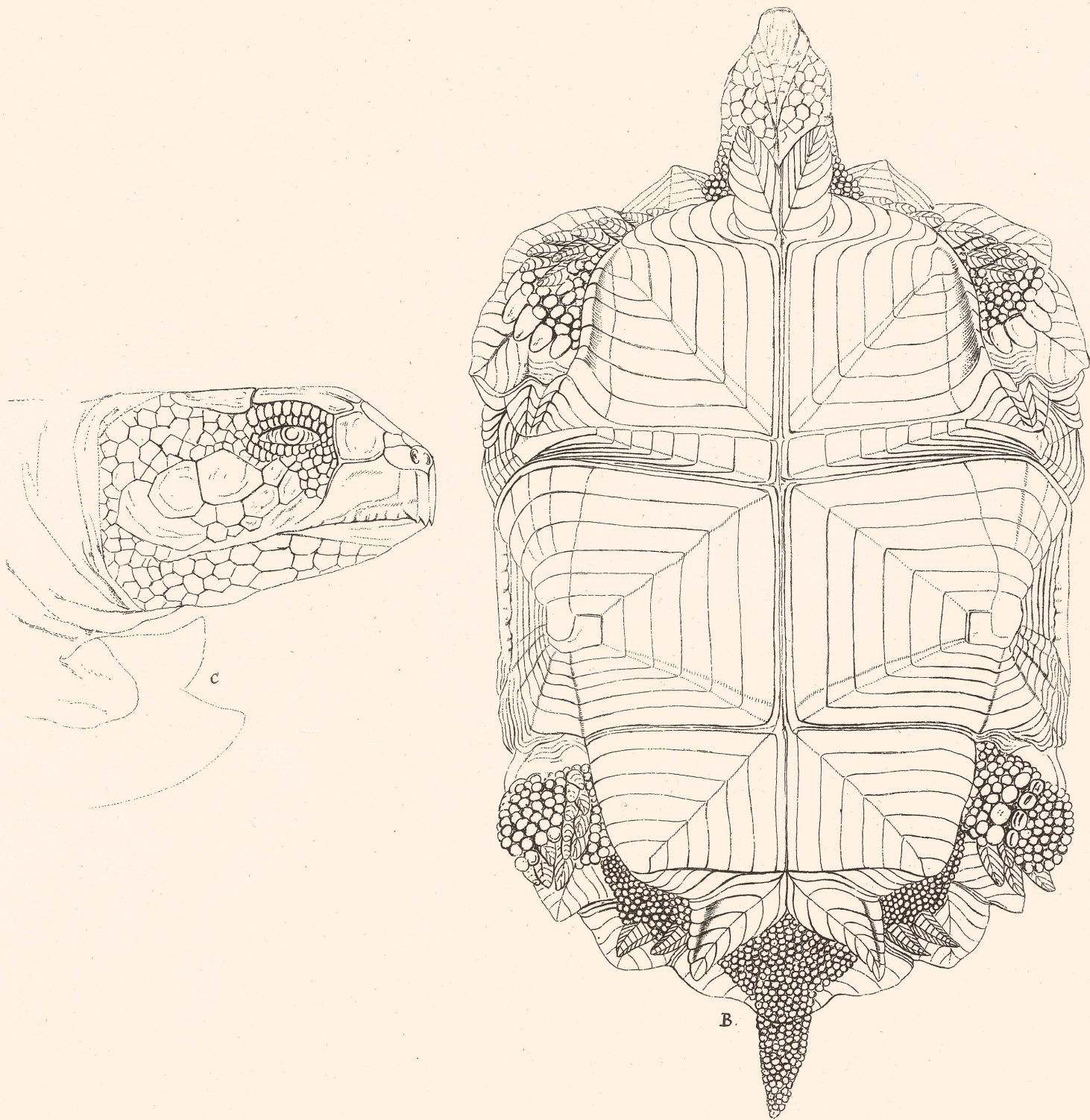
- Fig. A. *FALCO serpentarius*. LIN. Syft. Nat. Classis II. Ordo I. Genus XLIV. Spec. 1. Habitat Cap. B. Spei.
 B. Caput magnitudine naturali.

T A B U L A XXIX.

- Fig. A. *PSATTACUS guineensis*. LIN. Syft. Nat. Classis II. Ordo II. Genus XLV. Spec. Habitat in Guinea.

T A B U L A XXX.

- Fig. A. *TROCHILUS gularis*. LIN. Syft. Nat. Classis II. Ordo II. Genus LXVI. Spec. Habitat in India orientali.
 B. *FRINGILLA torquata*. LIN. Syft. Nat. Classis II. Ordo VI. Genus CXII. Spec. Ibid.
 C. *MOTACILLA gularis*. LIN. Syft. Nat. Classis II. Ordo VI. Genus CXIV. Spec. Habitat in America meridionali.



CIMELIA PHYSICA.

FIGURES

OF

RARE AND CURIOUS

QUADRUPEDS, BIRDS, &c.

TOGETHER WITH

SEVERAL OF THE MOST ELEGANT

PLANTS.

ENGRAVED AND COLOURED FROM THE SUBJECTS THEMSELVES

BY

JOHN FREDERICK MILLER.

WITH

DESCRIPTIONS

BY

GEORGE SHAW, M.D. F.R.S.

&c. &c. &c.

LONDON:

PRINTED BY T. BENSLY,

FOR BENJAMIN AND JOHN WHITE,

HORACE'S HEAD, FLEET-STREET,

AND JOHN SEWELL, CORNHILL.

1796.

T A B. XXVI.

TESTUDO SULCATA.

CHARACTER GENERICUS.

Corpus tetrapodum, caudatum; testa obtectum.

Os mandibulis nudis, edentulis. LIN. SYST. NAT. p. 350.

CHARACTER SPECIFICUS.

T. caudata, pedibus digitatis, testa gibba: scutellis lineatis fulco circumscriptis.

GMEL. SYST. NAT. p. 1045.

GENERIC CHARACTER.

Body four-footed, tailed, covered with a shell.

Mouth furnished with naked mandibles without teeth.

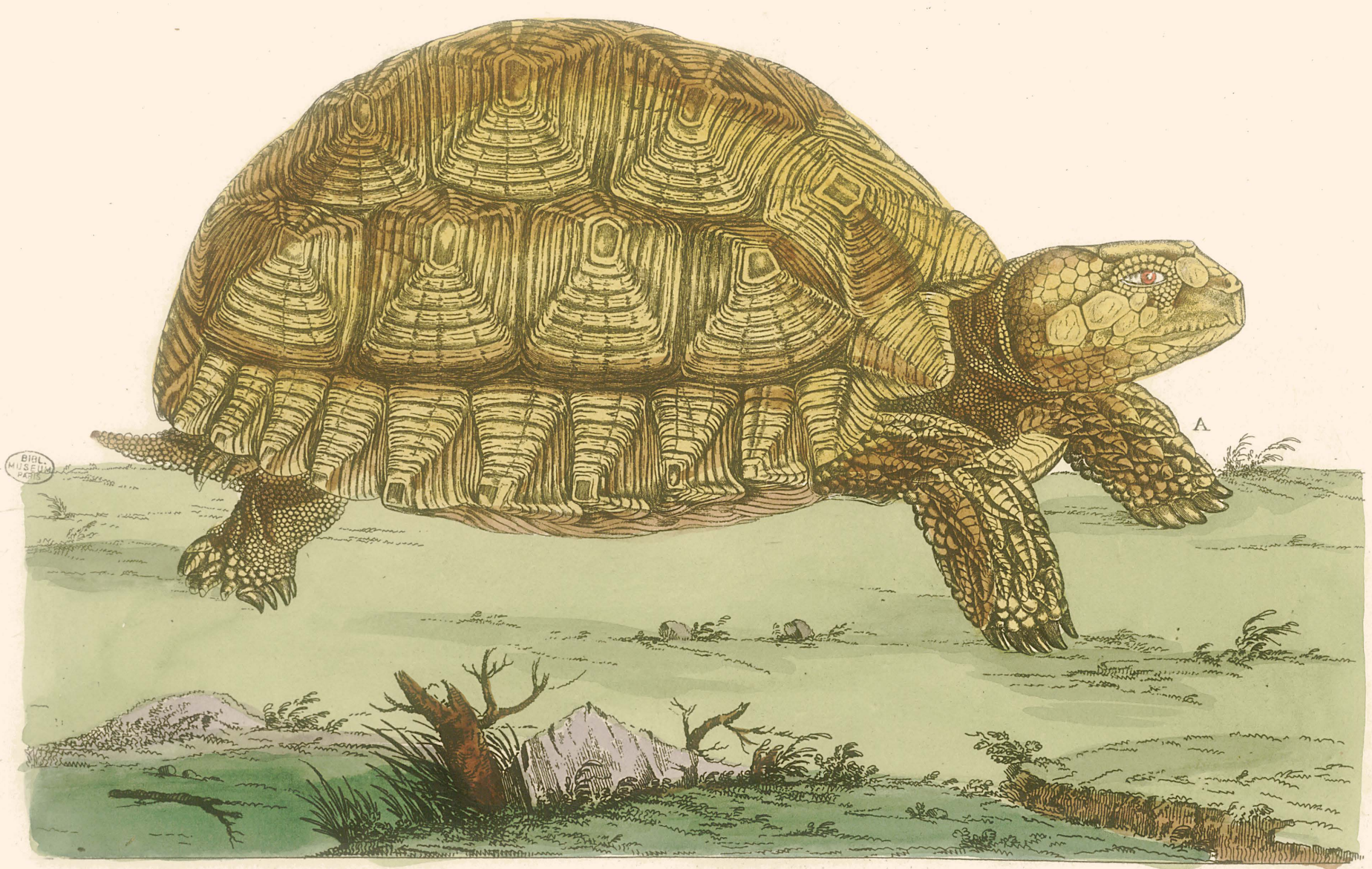
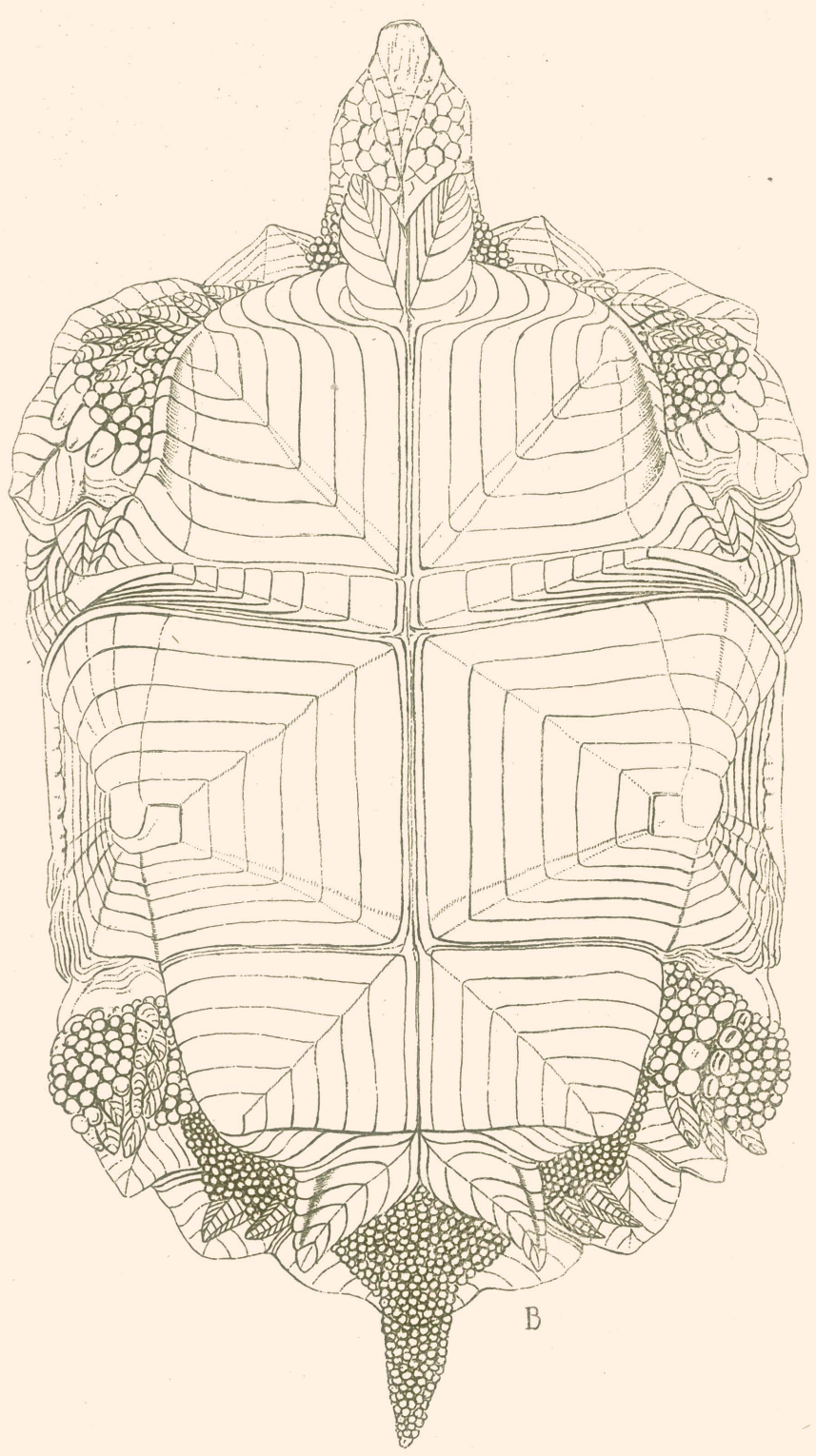
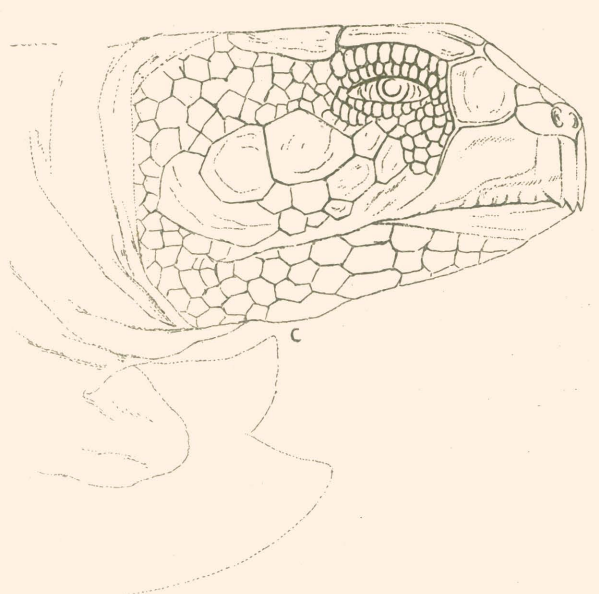
SPECIFIC CHARACTER.

Tailed Tortoise, with the divisions or pieces of the shield lineated and circumscribed by a furrow.

THE natural slowness and apparent habitual dulness of the animals of this genus have passed into a proverb; and most of the species in great measure justify the observation: yet as most general rules admit of exceptions, it is remarkable that one particular species is known, which seems to possess a degree of spirit and ferocity unknown to the rest of the genus, and springs forwards when disturbed, with some degree of activity, to attack the invader.* The genus *Testudo* is pretty numerous, and so great is the general similarity between some species, that they are with difficulty distinguished. Those species which inhabit the waters are often furnished with pinnated feet, or feet of such a structure as to resemble fins; being very broad, and not divided into separate toes as in the land tortoises, but merely armed with two or three claws

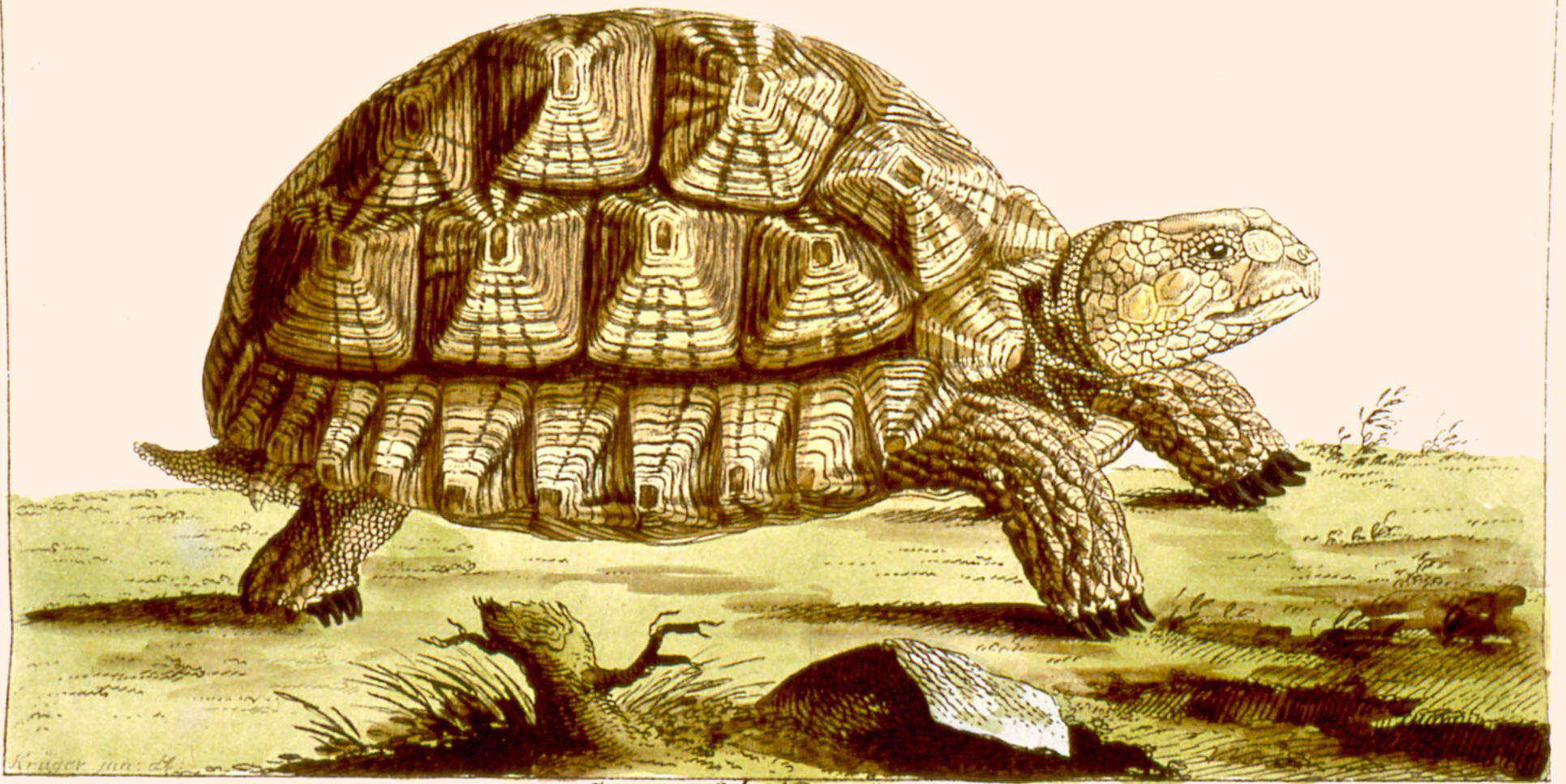
* *Testudo ferox*. Schneider. *Testudo cartilaginea*. Boddart. Phil. Transf. 1771. vol. 61.

at their extremities. Of the aquatic species some inhabit the sea, and others fresh waters: the *Testudo Mydas* and *Caretta* are in frequent use as a food, in the West Indies, and are from thence imported into Europe as a luxurious article of diet. The use of the shells, principally those of the marine species, and especially of the *Testudo imbricata* of Linnæus, is too well known to be particularly mentioned: they are used in innumerable works of art. All the animals of this genus are oviparous; and the aquatic species deposit their eggs in the sand; from whence the young, as soon as hatched, betake themselves to the waters. Tortoises are remarkably tenacious of the principle of life, and the several parts will continue to move long after separation from each other, and a Tortoise has been known to live many days though deprived of its head: they feed principally on vegetable substances. The age to which land tortoises sometimes arrive is very great. A Tortoise was kept in the last century in the garden of the Archbishop of Canterbury at Lambeth, which lived to be upwards of one hundred and twenty years old; having been introduced into the garden in the year 1633, in the time of Archbishop Laud, and continuing there till the year 1753, when it perished, not through any infirmities of advanced life, but by the accidental negligence of the gardener: and Mr. White, in his History of Selburne, gives an account of a Tortoise in a neighbouring village, which was by tradition supposed to be one hundred years old. The anatomy of the Tortoise is very curious: the lungs in particular afford a curious spectacle, and consist of very large air-cells, interspersed with blood-vessels, and convey a very clear idea of the structure of those organs in amphibious animals. The particular species of Tortoise figured on this Plate is a land species, and has been named *fulcata*, or furrowed, from the depth of the striae or marks of division on the lamellæ of its shell. It is an inhabitant of the West Indies.—Fig. B represents a view of the lower surface. Fig. C shews the head of its natural size.

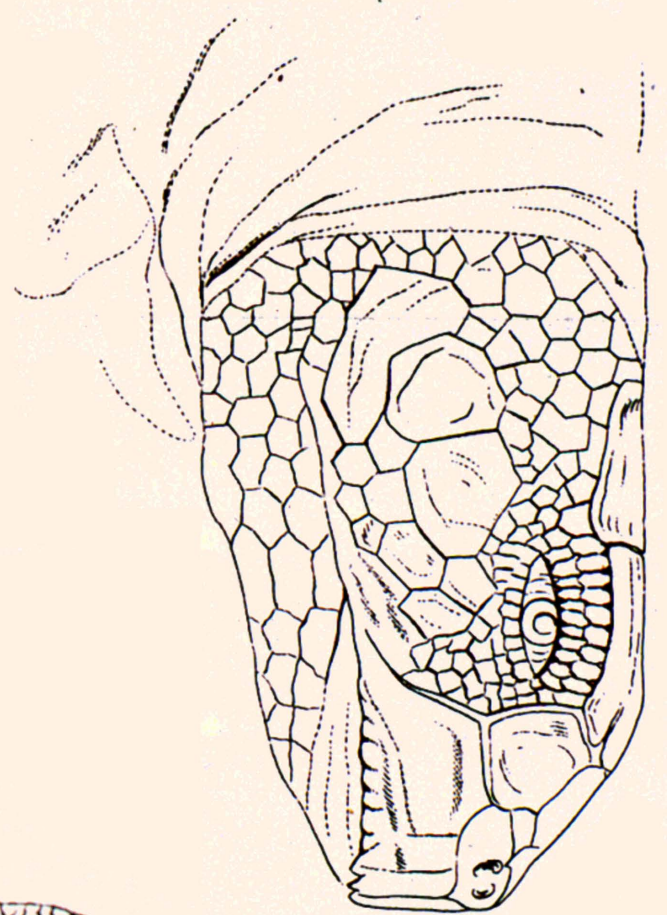
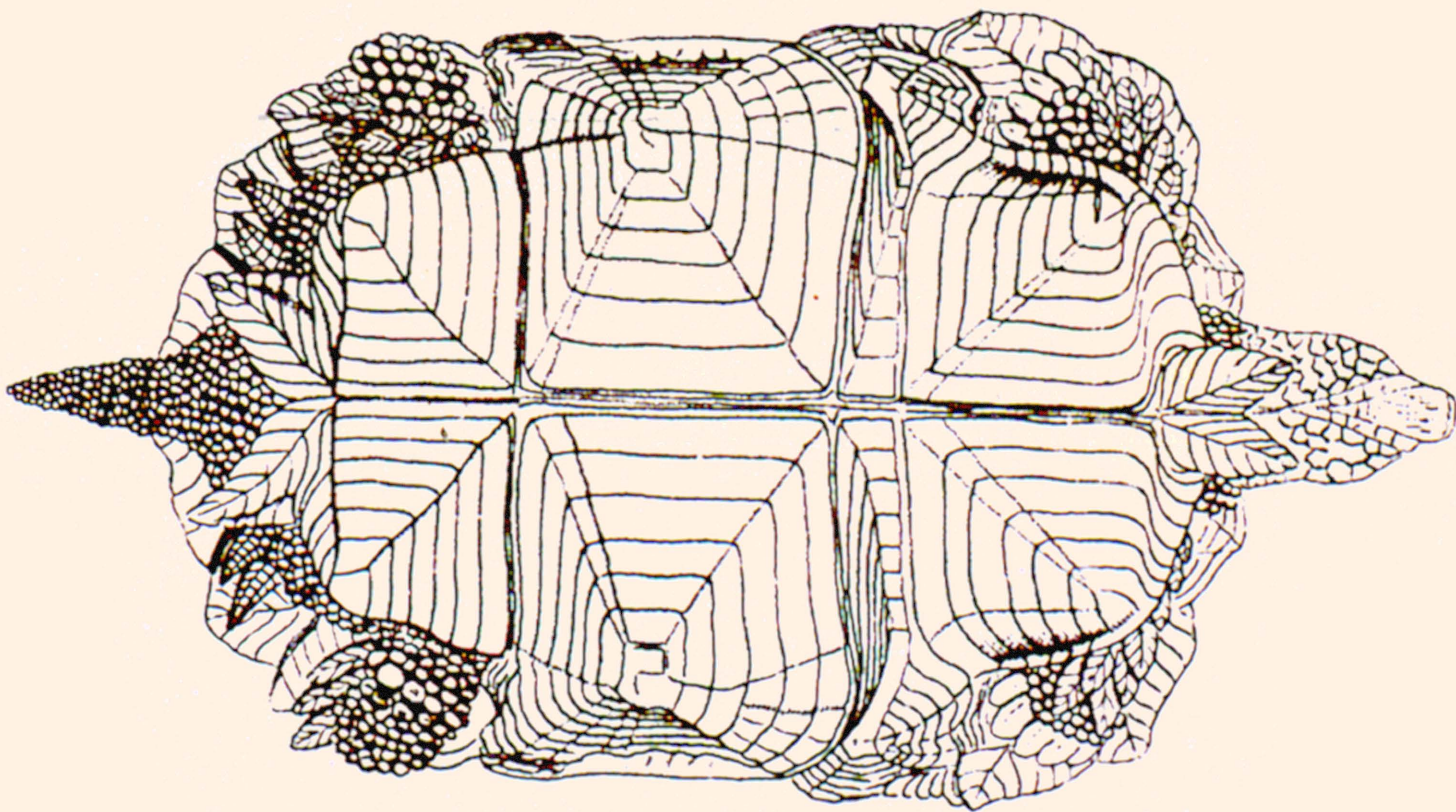


Testudo, fulcata,

Testudo calcarata.



SpornschilDKröte.



Testudo sulcata Miller, 1779

The name *Testudo sulcata* appeared in the separate caption (Fig. 1) of a plate “*painted engraved and printed by J. F. Miller*”, plate XXVI in a set of 60 (Fig. 2), which when bound together represent a work variously known as *Icones animalium et plantarum*, or *Various subjects of natural history, wherein are delineated birds, animals, and many curious plants; with the parts of fructification of each plant, all of which are drawn and coloured from nature*, or *Miscellaneous plates of quadrupeds, birds, &c*, although it has no actual title.

These plates were delivered in 10 parts of 6; plate XXVI was included in part V. Sherborn & Iredale (1921) published the most complete data about this work, which is a primary reference for a good number of species, i.e., 4 mammals and 35 sauropsids according to AnimalBase,

[http://www.animalbase.uni-](http://www.animalbase.uni-goettingen.de/zooweb/servlet/AnimalBase/home/reference?id=4953)

[goettingen.de/zooweb/servlet/AnimalBase/home/reference?id=4953](http://www.animalbase.uni-goettingen.de/zooweb/servlet/AnimalBase/home/reference?id=4953). Walters (2009) noted: “*J. F. Miller’s Icones animalium (1785) is a very rare book; only two copies (both incomplete) are known to survive*”, and AnimalBase editors also outline that only two original copies of the work are known to them. AnimalBase gives Natural History Museum London and SUDOC as references, and SUDOC refers to Strasbourg (Bibliothèque Blaise Pascal), but their copy of Miller, from Jean Hermann’s library, only includes 7 botanical plates (Nicole Heyd, comm. pers., June 2013). As far as one knows two libraries certainly own an incomplete set of plates, in London (Natural History Museum; 54 plates), and in Paris (BNF, National Library; 48 plates). Digitized copies of the London NHM set are available upon request through a good number of university libraries.

The same engravings were later published in a work entitled *Cimelia physica*, dated 1796 (Fig. 3), with descriptions by George Shaw (Fig. 4–5). Hand-applied colouring of the plates differs, from one to the other edition, but also between different copies of the same plate within an edition, and Sherborn & Iredale (1921) noted that in *Cimelia physica* “*the plates are not so well coloured, and in case of doubt reference to the original edition should be made.*” Some details also differ on the engraving itself, for instance the position of letters A, B and C. Sherborn & Iredale added “*All the plates in the Cimelia Physica are lettered, while in the original edition [Icones] this is not so*”, and about *Testudo sulcata*, “*Plate neither named nor dated*”, but both remarks do not apply to the *Icones* plate XXVI in the BNF, which is lettered and displays at the bottom Miller’s name and a date, the full sentence being “*Painted Engraved and Printed by J. F. Miller, according to the Act’ 1781*”. On the digitized copies of the NMH set of *Icones* (from the Joseph Banks library), the letters and the manuscript line are also present, with 1779 as date. Gmelin (1789) noticed too the letters A, B and C on the original illustration. A facsimile of the *Icones* plate XXVI from a copy of *Cimelia physica* is sold by <http://www.rhsprints.co.uk/> and <http://www.allposters.co.uk/>. Contrary to the MNHN plate of *Cimelia physica*, (Fig. 6) it bears the numbering in Roman figures (XXVI vs. 26) and the full manuscript line about author name and date.

Sherborn & Iredale (1921) gave 1779 or 1780 as date for the part V which included the plate XXVI of the *Icones* edition. The Paris copy bears a date, 1781. Mertens & Wermuth (1955) gave 1779 whereas Loveridge & Williams (1957) gave 1780 for the original year of publication of the species. 1779 is the date currently accepted; at this date John Frederick Miller was only 20 years old. A few years later after Miller's publication, Schneider (1784) described and figured *Testudo calcarata*, which is entirely based on Miller's plate of *Testudo sulcata*; the engraving was new, with slight modifications. It is included here for comparison (Fig. 7).

Illustrations

- 1 – Captions of plates in Miller's *Icones* (ca. 1779) including *Testudo sulcata*.
- 2 – Plate XXVI, *Testudo sulcata*, in Paris copy of Miller. Dated 1781. © BNF.
- 3, 4, 5 – Title page of *Cimelia physica* and description of *Testudo sulcata* by Shaw (1796).
- 6 – Plate XXVI, *Testudo sulcata*, in *Cimelia physica*, 1796. © MNHN.
- 7 – *Testudo calcarata*, in Schneider (1784).

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