No. I.] [Price 10s.

ILLUSTRATIONS

OF THE

ZOOLOGY OF SOUTH AFRICA;

CONSISTING CHIEFLY OF

FIGURES AND DESCRIPTIONS OF THE OBJECTS OF NATURAL HISTORY

COLLECTED DURING

AN EXPEDITION INTO THE INTERIOR OF SOUTH AFRICA,

IN THE YEARS 1834, 1835, AND 1836;

FITTED OUT BY

"THE CAPE OF GOOD HOPE ASSOCIATION FOR EXPLORING CENTRAL AFRICA:"

TOGETHER WITH

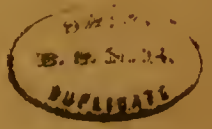
A SUMMARY OF AFRICAN ZOOLOGY,

AND AN INQUIRY INTO THE GEOGRAPHICAL RANGES OF SPECIES
IN THAT QUARTER OF THE GLOBE.

BY ANDREW SMITH, M.D.,

SURGEON TO THE FORCES, AND DIRECTOR OF THE EXPEDITION.

Published under the Authority of the Lords Commissioners of Her Majesty's Treasury.



LONDON:

SMITH, ELDER AND CO. CORNHILL.

MDCCCXXXVIII.

STEWART AND MURRAY, OLD DAILEY.

[*Temporary Title.*

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Prospectus of

"THE ZOOLOGY OF SOUTH AFRICA."

The Cape of Good Hope is now acknowledged to be one of the greatest avenues as yet opened for the researches of the Naturalist. Our Colony in that part of Southern Africa is the key to a large portion of an extensive continent which is still but very partially explored; and the field to which it admits the scientific traveller is rich to exuberance in the variety and novelty, both of animal and vegetable life.

Stimulated by the prospect of Discovery in a quarter so fertile in interest, "*The Cape of Good Hope Association for Exploring Central Africa*" was established in 1833; and in 1836, an Expedition fitted out by that body, consisting of thirty-four persons, and directed by Dr. Smith, after an absence of nineteen months, and penetrating as far as 23° 28′ South latitude, returned to Cape Town laden with a variety of curious and important specimens in Natural History, &c.

Previously to this period little information has been furnished, in a shape calculated to enable the public to form accurate ideas of the various animated beings by which these regions are inhabited. The splendid publication of Le Vaillant, no doubt, should be mentioned as forming an exception, *pro tanto;* but this includes only a portion of the Birds of the most southern extremity of the country, and a work therefore extensive enough to comprehend the various departments of Zoology is still a desideratum.

The Members of *The Cape of Good Hope Association for Exploring Central Africa* found themselves, on the return of the recent Expedition, in a situation to supply at least some portion of the existing deficiencies; but their funds, even if it had been possible to divert them to such an object, were altogether inadequate to defray the expense of laying the result of their labours before the world. Under such circumstances, it was decided that Dr. Smith, the director of the Expedition, should be authorised, on his arrival in England, to wait upon Lord Glenelg, for the purpose of making him acquainted with the position and views of the Society, in the hope that Government might be induced to assist in the publication of their materials.

This hope has not been disappointed. At the recommendation of the Secretary of State for the Colonial Department, the Lords Commissioners of Her Majesty's Treasury have been pleased, by a pecuniary grant, to enable the Society to publish the result of its labours, without infringing upon the funds raised solely for the purposes of discovery; and in a form which, while it places the work within reach of most of the friends and promoters of science, will not, it is hoped, be found inconsistent with the interest and importance of the subject.

The materials for the work now offered, under such patronage, to the public, will consist of pictorial illustrations of between three and four hundred subjects of the animal kingdom, all of which have been collected to the south of 23° 28′ South latitude; and will comprise,

First, and principally, unknown animals;

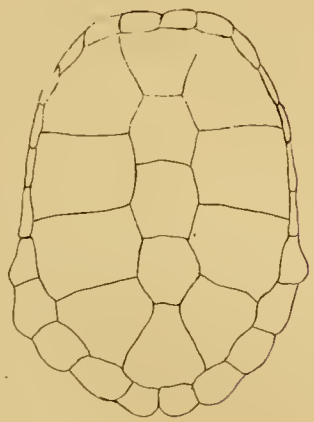
Secondly, animals known, but not yet figured; and

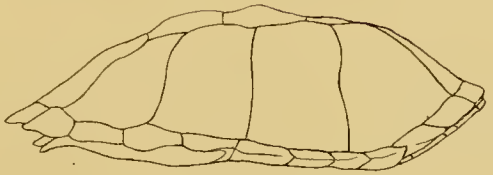
Lastly, such as have been imperfectly figured; but of which the Society is in possession of accurate drawings.

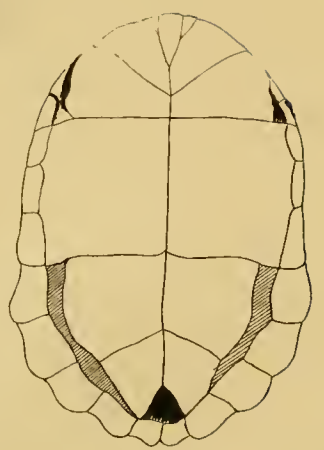
The Entomological portion of the work will be from the pen of W. S. Macleay, Esq., who has kindly undertaken that department. The rest of the descriptions will be furnished by Dr. Smith, who will add a summary of African Zoology, and an inquiry into the Geographical ranges of species in that quarter of the Globe.

Conditions of Publication.

The Work will appear in periodical parts, price ten shillings each; and it is estimated that it will be completed in about thirty-four parts. As it will be necessary that the plates be published promiscuously, they will be arranged in five divisions, viz. Mammalia, Aves, Pisces, Reptilia, and Invertebratæ. The plates of each of these divisions will be numbered independently, and the letter-press descriptions left unpaged, so that on the work being completed, they may be arranged either agreeably to the general classified order which will accompany the last number, or according to the particular views of the purchasers.







STERNOTHERUS SINUATUS.

Reptilia.—Plate 1.

Day & Haghe Lith^rs to the Queen

STERNOTHERUS SINUATUS.—Smith.

Reptilia.—Plate I. (Male.)

S. capite pallidè straminco-brunneo marmorato; capitis lateribus viridi-flavis; collo livido-brunneo pedibus stramineis maculis brunneis variegatis; testâ suprà viridi-brunneâ, subtus aurantiâ, rubri-brunneo marginatâ; unguibus rubri-brunneis; mandibulâ superiori apice emarginato; inferiori apice acuminato, sursum productâ.

Colour.—Head above pale straw-yellow, finely marbled with brown lines; sides of head and lower jaw, greenish-yellow; neck livid brown; legs intermediate between wine and straw-yellow; nails reddish brown, occasionally inclined to yellow. Shell above dark greenish brown, the colour deepest towards the margin; the vertebral and the upper extremities of the costal plates tinted with livid grey; sternum, pale orange, variegated towards its edges with deep reddish brown, the latter colour most abundant upon the gular, the intergular, the anal, and the lateral parts of the abdominal plates; outer sides of upper and under jaws dark brown, with fine reddish brown vertical lines. Eyes straw-yellow.

Form, &c.—Shell oblong, convex, and rather high; margin ovate, and broadest behind, where it is more or less sinuated. The second and third vertebral plates nearly horizontal and six-sided, the anterior edge of each narrower than the posterior; the fourth somewhat six-sided, the anterior edge broader than the posterior; the first somewhat four-sided, the anterior edge much broader than the posterior, and each of its angles sometimes produced so as to form on each side a triangular projection between the first costal and the anterior marginal plates; near the centre of the anterior edge of this plate is another triangular projection which enters between the two foremost marginal plates; the posterior dorsal plate somewhat of the same form as the anterior one, only narrower; the third and fourth plates with a central elevation towards their hinder margins. Costal plates higher than broad, four-sided, the first of these where it is in contact with the marginal plates very wide, which gives it a somewhat triangular appearance. Marginal plates twenty-four: the first, second, third, fourth, ninth, tenth, eleventh, and twelfth, four-sided, the fifth, sixth, seventh, and eighth, more or less five-sided, and on the anterior side of each at the very margin of the shell is a small triangular process, which is received into a corresponding cavity in the hinder edge of the scale immediately in front of it; margin between the fore and hinder legs obtuse, elsewhere thin and sharp. Sternum semicircular in front, deeply emarginate behind; a transverse joint between pectoral and abdominal plates; gular plates small and triangular;

intergular plate five-sided; brachial plates rhomboidal; pectoral plates at their commissure with each other narrow, the posterior edges straight, the anterior oblique, owing to which circumstance the outer sides are much wider than the inner; anal plates triangular. Head broad and depressed; nose short and rounded; the fronto-nasal plates forming a portion of the hinder edges of the orbits; the frontal plate very large and inclined to six-sided; the parietal plates oblong, and broadest in front; the post-orbital plate small and oval. The apex of upper mandible emarginate with an obtuse tooth-like process on each side of the emargination; the tip of the lower mandible produced and directed upwards; under the chin two minute barbels. Neck and legs sparingly covered by small scales; the hinder edge of each fore leg towards the toes with a broad fringe of thin delicate plates; the toes short and armed with strong claws nearly straight and slightly concave below. The posterior edges of the hinder feet also with a continuous fringe of thin scales, the outermost toe rudimentary, the second and innermost nearly of equal length, and shorter than the third and fourth. Tail rather long, pointed and somewhat cylindrical.

DIMENSIONS.

	Inches.	Lines.
Length from nose to hinder margin of shell	19	0
of head and neck	5	6
of shell	14	5
Height of shell	5	3
Breadth of shell across femoral plates	9	3
Length of tail	2	5
of sternum from anterior to hinder edge	13	3

The colours in the *female* are nearly similar to those of the male. In both sexes the head, neck, and anterior extremities, when retracted, are completely protected by the anterior portion of the sternum, which by means of the joint in front of the abdominal plates is closely applied to the anterior margin of the upper shell. The principal differences between this species and *Sternotherus ater* and *S. castaneus* will be found in the general form of the shell, the shape of the plates, and the structure of the tip of the upper mandible.

The first specimens of this tortoise were discovered in rivers to the north of 25° south latitude, and in situations only where the water was very deep. They were usually observed during the heat of the day lying upon rocks which projected above the surface of the water, and were so vigilant that it was almost impossible to approach them within a moderate distance, before they vanished. Many of them were struck by musket balls, yet no wounds which were thus inflicted ever appeared to impede their movements. At last, by means of hooks baited with flesh we succeeded in obtaining a few specimens, though against such means they were also guarded; for even where individuals existed in abundance, perhaps not one could be secured by four or five fishermen, after spending many hours in the pursuit. Between 24° and 25° they occurred in greatest abundance, probably from the circumstance that between those parallels the pools were deepest; to the north of the former parallel they appeared to be scarce, owing no doubt to the channels of the streams being there loaded with gravel and sand.