

We have observed also a number of short but useful additions and emendations in the descriptions of various of the bones, so that the present edition exceeds the last by thirty-eight pages. The illustrations also have been increased by the insertion of eight more woodcuts. We wish to give a hearty recommendation to all students of the Mammalia, to use this new edition of a book, written by the anatomist who is admittedly one of the highest authorities on their structure.

Catalogue of the Fossil Mammalia in the British Museum. Part II. Artiodactyla. By Richard Lydekker, B.A. (London: Printed by order of the Trustees, 1885.)

MR. LYDEKKER published in January 1885 the first part of the Catalogue of Fossil Mammals in the British Museum, and in it he recorded the specimens belonging to the Orders Primates, Chiroptera, Insectivora, Carnivora, and Rodentia. He has rapidly followed this up by the preparation of the second part, containing the sub-order Artiodactyla of the great Order Ungulata. The Natural History Department of the British Museum is remarkably rich in specimens of this sub-order, and though in the Catalogue, in the larger number of instances, only the briefest possible description of each specimen is given, yet the volume has reached 324 octavo pages. The collections, in addition to those enumerated in the first part, which have furnished specimens, are the Bowerbank, Layton, Sloane, and Wigham collections. The author points out that he has employed generic terms in a wider sense than is the case with many writers. Thus he does not regard a difference of one or more premolar teeth, or in the number of digits, in allied forms, as a bar to generic unity, and accordingly he includes the genus *Eurytherium* in *Anoplotherium*. The Catalogue has been compiled with the care which distinguishes the catalogues of our great national Museum.

LETTERS TO THE EDITOR

- [The Editor does not hold himself responsible for opinions expressed by his correspondents. Neither can he undertake to return, or to correspond with the writers of, rejected manuscripts. No notice is taken of anonymous communications.]
- [The Editor urgently requests correspondents to keep their letters as short as possible. The pressure on his space is so great that it is impossible otherwise to insure the appearance even of communications containing interesting and novel facts.]

On "Seter," or Parallel Roads

I SEE to my great vexation that in my former letter on parallel roads (NATURE, January 21, p. 268) I have made a rather hideous blunder in my English to the great disadvantage of the clearness of my theory. I have used the French-German-Norwegian term "rest" as signifying *le reste*. My theory is that the last "rest," *i.e.* residue, of the inland ice formed a great dam somewhat seaward from the watershed; I do not refer to any "rests," *i.e.* reposes, in the great ablation.

It is a fact that the glacier-shed in Central Norway was situated as far as 150 kms. to the south or east of the watershed. The direction of the stræ and the boulder-transport renders this indisputable. By the melting of the ice I now suppose that the last remains must have lingered near the glacier-shed. We find the last residue far to the south of the watershed. I cannot find with Mr. Melvin that this idea reverses the order of Nature. The precipitation and temperature in Christiania and in Trondhjem now differ very inconsiderably, and the difference in height between the former glacier-shed and the watershed is not very great, while the distance from this to the sea is five times as great to the south as to the north.

This residue now in all valleys dams up lakes to the cols; in these lakes the terraces of gravel with laminated clay are built up; and on their shores the *seter* or parallel roads are formed. Nothing is simpler.

When I first got this conception I only knew the Österdal (and Lochaber) *seter*, but I concluded that parallel roads and inland terraces were to be expected in all valleys where the stræ proved that the glacier-shed lay seaward to the watershed. I next found some notice of such formations in the neighbouring valleys Gudbrandsdalen in Norway, and Herjedalen in Sweden. Having already finished my paper, I got a dissertation of Högbom in which, as expected, Jemtland was included in my *sete* region. In my letter to NATURE I further inferred that parallel roads must needs exist in Swedish Lappmark. This conclusion has also since proved to be correct. Dr. Svenonius has found a *sete* at Sitasjaur: the correlation of stræ going upwards against the drainage with terraces and parallel roads at a height corresponding with the cols. This is established between 61° 40' and 68° in Scandinavia as well as at Lochaber. Nowhere else are parallel roads known in Europe. This local geographical distribution is perhaps the best argument for my theory of lakes dammed up by the gradually diminishing residue of the inland ice situated at a distance from the watershed, near the former glacier-shed.

Mr. Melvin's theory of lateral moraines was also my original working hypothesis; but it gives no explanation of the great terraces which are connected with the parallel roads, nor of the laminated clay (with Desmidieæ) in the terraces as well as in the *sete* itself. Any one who has walked for kilometres on a *sete*, smooth as a road, without any variation of the aneroid (the greatest difference in Lochaber is 4 metres), will hardly be able to dismiss the idea of a water-level. How Mr. Melvin will account for the alternating shelves *cut in the rock* I cannot see.

ANDR. M. HANSEN

University Library, Christiania

P.S.—Errata in my former letter: p. 268, col. 2, line 11, for "280 kms." read "150 kms."; line 30 from bottom, for "till" read "tell."

Mimicry in a Neuropterous Insect

I HAVE been much struck by a somewhat complex form of mimicry in a neuropterous insect of the genus *Mantispa*, which would not be suspected if only a cabinet specimen were seen, with the wings extended motionless, with its raptorial fore-legs folded in front of the head. The insect, as I observed it, was on the bare whitewashed wall of a house at Delhi, exposed to the afternoon sun. As I then believed it to be a dipterous insect feeding on some substance stuck to the wall, it is probable that its prey, most likely the common house-fly, would be similarly deceived, and, being attracted to the spot in hopes of sharing the food, would fall a victim.

The prothorax is curiously modified, both in colour and shape, so as to resemble a proboscis, while the head and fore-legs are so compactly folded that they look like some solid substance adherent to the wall or stone on which the insect is resting, and not part of the creature itself. The mesothorax has two eye-like spots shaded so as to simulate the reflections of light from the compound eyes of an insect, while the markings of the abdomen, seen through the transparent wings, are very dipterous in character.

The points where the *Mantispa* seems to fail in its likeness to a fly are in the size of the prothorax, which is more massive and thick than the proboscis of any fly; there is a want of prominence in the mesothorax representing the fly's head; the venation of the wings is different; and, lastly, there are apparently only four legs instead of six.

These faulty points are seen at once on a minute inspection; but it may be imagined that it is only necessary to attract the attention of a fly passing at some distance, and convey a certain mental impression, which in the simple mind of a fly may not be effaced till the desired object has been attained, and the victim brought within reach of the *Mantispa's* arms.

The resemblance between the fore-legs of the praying Mantis and the same organs in *Mantispa* is remarkable when it is remembered that the two insects belong to different natural orders. The fore-leg of *Mantispa* is the more specialised, and has great lateral motion, while the edges of the femur are armed with teeth slightly blunt at the tips, so that the captured insect can be shifted if necessary. The joints in the same limb in the Mantis are simple hinges, and both the femur and tibia are fringed with a double row of very sharp spines, which are necessary to pierce and retain a hold on the thin unsubstantial wings