

Meissner's corpuscle, and of the rapidly accumulated evidence of the same condition in that of the Pacinian, Herbstian, and even the Grandryian type. This discovery, which we owe to Dogiel and his pupils, with Timofeew and Sala, imparts a new character to the tactile body in all its forms; and it marks one of the most welcome and important advances in recent histological work, demanding the attention of even the elementary student. If only it had been made in Cambridge!

OUR BOOK SHELF.

A Catalogue of the Lepidoptera of Ireland. By W. F. De Vismes Kane. With a coloured plate. Pp. xviii + 166. (London: West, Newman and Co., 1901.) Price 10s.

THE earliest catalogues of Irish Lepidoptera were published by the Rev. Joseph Greene and the Rev. A. R. Hogan in 1854 and 1855 in the first two volumes of the *Natural History Review*, but were merely tentative, not only being very incomplete, but including many species on the evidence of collections without history, or else taken in localities where they were almost certainly introduced. These authors enumerated 636 species as Irish. The late Edwin Birchall's list, published in the *Entomologist's Monthly Magazine* from 1866 to 1868, was a much more valuable work. Mr. Birchall enumerated 974 species, though several included in the former lists were very properly omitted. The list now before us, which was originally published in the *Entomologist* from 1893 to 1900, is carefully compiled, chiefly from original sources, and brings down the subject to the present time; but the species are not numbered, and no comparison is made, as should have been done, with the number given in Mr. Birchall's catalogue.

Mr. De Vismes Kane's book will be very useful to entomologists visiting Ireland, or to those anxious to study the character of the Irish fauna from a Lepidopterous point of view. This is discussed by the author in his introduction, in which he refers not only to the comparative poverty of the fauna, both as regards number of species and of individuals, even in comparison with England, but states that the climate has been so unfavourable to insects of late years that they have become still scarcer than before, while some species, formerly common in certain localities, have apparently disappeared entirely. On p. xviii. the author alludes to his having assisted Colonel Cooper in 1885, 1886 and 1887 in the attempt to introduce various Continental species into Sligo, experiments which, happily, failed. He adds: "The attempted acclimatisation of such exotics as the above I consider wholly unobjectionable, since if it were successful, none of the species could have been mistaken for natives." Among these "unobjectionable species" was *Porthetria* (or *Liparis*) *dispar*, the gipsy moth, the introduction of which might have been one of the most grievous calamities that has befallen Ireland for many years; and this gives us the opportunity of suggesting that the Government should absolutely prohibit the rearing of any species in the open which are known to be destructive abroad, notwithstanding their being rare or unknown in the British Islands; while a specially heavy penalty should be attached to the introduction of living specimens in any stage or for any purpose of such species as *Liparis dispar*, as in the case of the not more destructive Colorado potato beetle. What would Colonel Cooper have thought if in a few years he had found that the whole of his forests were being stripped of their leaves by the larvae of *Liparis dispar*, as might easily have been the case had the climate and conditions proved favourable to the insect?

An Atlas of the Medulla and Midbrain. By Florence R. Sabin. Pp. 123; 7 coloured plates, one black plate and 52 figures. (Baltimore, Md., U.S.A.: The Friedenwald Company, 1901.) Price 175 dollars.

THIS book consists of a detailed account of a model of the medulla oblongata, pons Varolii and mesencephalon, which was made in the anatomical laboratory of the Johns Hopkins University by a reconstruction in wax of every alternate slice of a series of horizontal sections of the brain-stem of a new-born babe. The sections had been stained by the method of Weigert, so as to differentiate clearly the various nerve tracts, which are so distinct, the one from another, at the time of birth.

In the reconstruction only the important nerve tracts and the compact masses of grey matter have been represented, so that a glance at the model reveals the exact shape and relations of the peculiarly-contorted grey-masses and intertwining fibre-tracts, and enables the student to form an accurate mental picture of the most complicated and difficult region of the brain, such as no other method of study can convey.

Miss Sabin has carried out the arduous and laborious task of building the reconstruction in a manner so careful and patently successful that for the first time an accurate and trustworthy model is provided of a region which so many people have hitherto attempted to represent graphically by less tedious and correspondingly more inaccurate means.

The series of drawings representing the wax reconstruction has been so happily executed by Mr. Max Brödel that the model itself is hardly necessary.

Miss Sabin's description is full and complete and is illustrated by a large number of drawings both of the horizontal sections, from which the model was built up, as well as a "control series" of transverse sections of another brain-stem of the same age.

The view obtained of familiar structures is so novel, and one's attention so riveted in the mental accommodation, that the reader hardly looks for new observations. Nevertheless, the author has not only critically summarised the current literature of the structure of the medulla, pons and midbrain, but has also added to our knowledge of these regions.

The bibliography, which is intended for students, attains the happy mean of being sufficient without being bewildering.

In a work which is so happily conceived and so admirably executed there is little call for criticism. In perusing the work we noticed only one misprint. One of the figures (Fig. 50) has been misplaced; and it would be of considerable advantage to the student if Plate viii. were inverted so that the parts might be placed as they are in the body (and in Plate iii.).

This book and the model which it describes must convince anyone, who has carefully studied the structure of the brain-stem by means of the examination of sections, of the inadequacy of the conception of this complex region which he can acquire by such means; and it will be an invaluable aid for conveying to students an accurate understanding of this important part of the brain, which could not otherwise be acquired even by months of careful study.

G. E. S.

Les Variations de Longueur des Glaciers. By Charles Rabot. Pp. 250. (Geneva: Georg and Co., 1900.)

THE study of the variations in the lengths of glaciers is one that has formed the object of investigation of many workers, and as the subject, besides being of considerable interest, is one in which exact information is very difficult to secure, various opinions may be formed as to the lengths of the periods of variations deduced.

What is therefore wanted to render deductions more exact is a great number of observations, spread over a considerable interval of time, and the more the observa-