Die beschriebenen Organe der Orthopteren stehen in enger Beziehung zu den im Kopfe befindlichen Theilen des Eingeweidenervensystems.

Erstens ist der Rand der Aortamündung nebst ihrer oberen, nach vorn verlängerten Lamelle bei allen untersuchten Orthopteren theilweise eng mit der bindegewebigen Hülle der vorderen paarigen Eingeweideganglien verwachsen, so daß weder Aorta, noch Ganglien unverletzt von einander isoliert werden können. Zweitens wird, bei den Blattiden und Locustiden wenigstens, der Hauptmuskel der accessorischen Circulationsorgane vom Ganglion frontale aus innerviert. Die vollständigste und richtigste Beschreibung des Ganglion frontale bei *Periplaneta orientalis*, wie auch der aus ihm austretenden Nerven, nebst sehr guten Zeichnungen giebt Hofer[3]; dennoch ist ihm der zu dem genannten Muskelstrange verlaufende Nerv entgangen. Dieser Nerv entspringt oben aus der hinteren etwas vorspringenden Ecke des dreieckigen Nervenknotens, genau über der Austrittsstelle des dicken unpaaren Nerven (Nervus reccurrens). Er verläuft nach oben zu, der Stirnfläche fast parallel, und endigt in einer kleinen flachen Zellenanhäufung, welche der vorderen Oberfläche des Muskelstranges genau in dessen Mitte eng anliegt. Zu dieser Zellenanhäufung tritt außerdem mitten aus der Vorderfläche des Gehirns ein kleiner unpaarer sehr kurzer Nerv, welcher auf eine zweite Impulsquelle für die Muskelcontractionen deutet. Beide Nerven finden sich auch bei *Locusta* vor.

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II. Mittheilungen aus Museen, Instituten etc.

1. Zoological Society of London.

20th November, 1894. (Schluß.) The presence of intercentra was also drawn attention to. The muscles in the main bore out the remarks already published by the author in his paper on »The Myology of the Sciuromorphine and Hystricomorphine Rodents«. The liver agreed with that of *Hystrix cristata* and *H. javanica* in having the left central lobe divided into two. There was no gall-bladder. The lungs were specially remarkable for being divided up into a large number of lobes, there being 34 lobes on the left side and over 40 on the right. — A communication from Mr. J. T. Cunningham treated of the significance of diagnostic characters in the Pleuronectidae. In this paper the specific and generic characters of the so-called Top-knot (*Zeugopterus*) were first considered. The principal generic cha-

[3] B. Hofer, Untersuchungen über den Bau der Speicheldrüsen und des dazu gehörenden Nervenapparates von Blatta. Nova Acta Acad. Leop. Carol. Band 51. No. 6.

racters were the perforation of the gill-septum, found also in *Arnoglossus megastoma*, and the prolongation of the dorsal and ventral fins on to the right side at the base of the tail. The marked peculiarity of habit was that of adhering to vertical surfaces. It was shown that this was independent of either of the characters mentioned, and was due to the pumping-action of the longitudinal fins and their muscles posteriorly, the enlargement of these parts being also a generic character. No evidence of the utility of the specific characters could be discovered. The characters of other Pleuronectidae were similarly examined, and the conclusion reached was that there are two kinds of characters, the adaptive and the morphological. — Mr. A. Smith Woodward read a description of the so-called Salmonoid fishes of the English Chalk, dealing with the osteology of *Osmeroides lewesiensis*, *Elopopsis crassus*, and *Aulolepis typus*. He directed special attention to three features in the head of the genera to which these species are referred, namely: (1) the exclusion of the supraoccipital from the cranial roof by the union of the parietal bones in the median line, (2) the overlapping of the arched maxilla by two large supramaxillary bones, and (3) the presence of a large gular plate. All these characters separated the fishes in question from the typical Salmonidae, while the first and third distinguished them from typical Clupeidae. All three genera should be associated with the existing *Elops*, *Megalops*, and their allies. — Mr. W. Garstang, F.Z.S., read a paper on the Gastropod *Colpodaspis pusilla* of Michael Sars. Mr. Garstang described a specimen of this rare Mollusk found by him at Plymouth in the early part of the year. The anterior part of the foot was not really bifid, as stated by Sars, but possessed a pair of large prolongations of its antero-lateral angles, analogous to the anterior pedal cornua of many Aeolids. In this case, however, they were probably to be regarded as homologous with the pleuropodial expansions of the Tectibranchia. The bulloid shell, the radula, and the posterior appendage of the mantle pointed to the close affinity of *Colpodaspis* with the Cephalaspidea; but the great extent of the mantle, the small head, and the grooved tentacles were important and primitive characters which it shared with the Notaspidea. Whether *Colpodaspis* was an immature stage of some *Philine*-like genus or not, it furnished an indubitable connecting-link between these two great subdivisions of the Tectibranchia. — A communication from Mr. A. D. Bartlett gave an account of the recent occurrence in the Society's Menagerie of a case of one Boa swallowing another of nearly equal size. — A communication from Prof. R. Collett, F.M.Z.S., contained a description of a new Agonoid fish from Kamtschatka proposed to be called *Agonus Gilberti*. — P. L. Sclater, Secretary.

2. Linnean Society of New South Wales.

October 31st, 1894. — 1) Notes of a Visit to the Island of Erromanga, New Hebrides, in May, 1894. By Sutherland Sinclair. — 2) Preliminary Communication on the Cerebral Commissures of the Mammalia, with special reference to Monotremata and Marsupialia. By G. Elliott Smith, M.B. From an examination of the brain in *Platypus*, *Echidna*, *Perameles*, kangaroo, wallaby, kangaroo rat, *Dasyurus* and *Phalangista*, the superior commissure of the cerebrum is shown to be homologous with the psalterium of Placentalia, and not with the corpus callosum, since it is wholly derived, as shown by Weigert-Pal and Golgi staining, from cells of the fascia dentata and from