2) In welcher Weise ist eine einheitliche Nomenclatur in der russischen anatomischen Litteratur durchzuführen?

3) Ist die Polydactylie als eine Spaltbildung oder als Atavismus aufzufassen?

4) Die Homologie der oberen und unteren Extremität.

Section für Histologie.

1) Vergleichende Kritik der verschiedenen Theorien und Hypothesen über den Bau des Protoplasmas im Allgemeinen.

2) Die Bedeutung der Blastomeren bei der Segmentation der Eier. Postregeneration. Die Entwicklung der Cuticular- und Zwischensubstanzen.

3) Die Bedeutung der Centrosomen, Sphären und der Nebenkerne in verschiedenen Zellen. Die Bedeutung der directen oder amitotischen Theilung.

4) Die gegenseitige Beziehung der Nervenzellen in den Nervencentren und Sinnesorganen.

5) Innervation der Drüsen.

Section für Anthropologie.

1) Was für Maßregeln sind zu ergreifen, um möglichst genaue Thatsachen über die anthropologischen Typen der russischen Bevölkerung Rußlands zu gewinnen?

2) Was sind die vorzüglichsten characteristischen Eigenthümlichkeiten des Mongolenschädels und bei welchen Volksstämmen sind diese Eigenthümlichkeiten am häufigsten zu finden und am deutlichsten zu erkennen?

3) In wie weit unterscheiden sich die Schädeltypen der gegenwärtigen Bevölkerung Mittel-Rußlands von den Schädeltypen der Kurganbevölkerung? Wie ist die etwaige Veränderung der Typen zu erklären?

4) Die Schädeltypen des Prof. Sergi und ihre Bedeutung für die Classification der Schädelformen.

5) Die Anomalien des Skelets und der äußeren Bedeckungen. Haben einige von ihnen die Bedeutung von Rassenmerkmalen oder können einige von ihnen als atavistische Bildungen gelten?

Gleichzeitig werden die Herren Fachgenossen gebeten, so bald wie möglich die Themata mittheilen zu wollen, über welche sie auf dem Congreß in den Sectionssitzungen Vorträge halten oder Mittheilungen machen wollen.

Zur Entgegennahme jeglicher Mittheilung und zur Übermittelung an die Sectionsvorstände in Moskau ist bereit

Dr. L. Stieda, Geheimer Medicinalrath,
o. Professor der Anatomie an der Universität zu Königsberg i. Pr.

2. Zoological Society of London.

5th May, 1896. — The Secretary read a report on the additions that had been made to the Society's Menagerie during the month of April, and called special attention to a young male Indian Elephant (*Elephas indicus*) from Burmah, obtained by purchase. — Mr. W. E. Hoyle exhibited a Röntgen-ray photograph of a Snake in the act of swallowing a Mouse. — Mr. G. A. Boulenger, F.R.S., read a paper on some little-known Batrachians from the Caucasus, based chiefly on specimens recently transmitted to the British Museum by Dr. Radde, of Tiflis, C.M.Z.S. Among these was an example of

the new Frog of the genus *Pelodytes*, for which he had proposed the name *P. caucasicus*. Altogether ten species of Batrachians were now known from the Caucasus. — Mr. F. E. Beddard, F.R.S., read the second of his contributions to the Anatomy of Picarian Birds. The present communication related to the pterylosis of the *Capitonidae*. — Mr. M. F. Woodward read a paper on the Dentition of certain Insectivores, and pointed out that there was strong evidence to show that the milk-dentition was undergoing reduction in this group as a whole, some of the milk-teeth in *Erinaceus* and *Gymnura* being present as small calcified tooth-vestiges only, while in *Sorex* there were apparently no calcified milk-teeth, but only vestigial milk-enamel organs. He concluded that $\frac{i.3}{}$ and $\frac{pm.1}{pm.1}$ were tending to be suppressed, and that the latter when present was a persistent milk-tooth, that d.pm.4 was probably a true but precociously developed molar, p.pm.4 being a retarded milk-premolar. From a consideration of the ontogeny of the molar-cusps, he concluded that the true primary cone in the upper molars was Osborn's »paracone«, its homologue in the lower jaw being the protoconid. From palaeontological evidence Mr. Woodward pointed out that there was not sufficient proof to justify the tritubercular theory as applied to the upper molars. — A communication from Mr. A. D. Bartlett contained some notes on the breeding of the Surinam Toad (*Pipa americana*), as recently observed in the Society's Gardens. It had been observed that the eggs when issued from the cloaca of the female, which was protruded into a bladder-like process during their production, were arranged on the back of the female by the action of the male.

May 19th, 1896. — Mr. Sclater exhibited a Daguerreotype portrait of what was believed to be the first Gorilla that was ever brought alive to Europe. It was living in Wombwell's Menagerie in 1855. This portrait had been lent to Mr. C. Bartlett by Mr. Fairgrieve, formerly associated with Mr. Wombwell, who had sent with it an account of the animal and its habits. — A communication was read from Mr. G. E. H. Barrett-Hamilton, F.Z.S., on a variation in the pattern of the teeth of a specimen of the Common Field-Vole (*Microtus agrestis*), in which the first upper molars on both sides had a small but well-developed extra enamel fold, giving three angles on the outer side and four on the inner side of each tooth and six cement spaces. — A second communication from Mr. Barrett-Hamilton contained remarks on the existence in Europe of two geographical races or subspecies of the Common Field-Vole. Mr. Barrett-Hamilton considered the Field-Voles of England, Belgium, and the North of France, and possibly of a large part of the Continent, as distinct from the Scandinavian animals, which would remain the typical *Microtus agrestis*, while the British and western continental form should be called *Microtus agrestis neglectus*, Jenyns. This view agreed with that of De Selys-Longchamps in 1847. — Mr. F. E. Beddard, F.R.S., read the third of his contributions to the anatomy of Picarian Birds. The present paper related to the variations in pterylosis and in anatomy of the *Alcedinidae*, of which he had examined specimens. Although this family was so uniform in external structure, it presented considerable differences when the pterylosis and anatomy were examined. — Mr. de Winton described a new Rodent of the genus *Lophuromys* from British E. Africa, which he named *L. Ansorgei*. Its nearest ally was *L. sikapusi*, Temm.;

but it differed externally in its larger size and in being of a smooth dark chocolate-colour on all its upper parts, and, as regards the skull, in having a longer facial portion in comparison to the cranium. — P. L. Sclater, Secretary.

3. Linnean Society of New South Wales.

April 29th, 1896. — (1) Theoretical Explanations of the Distribution of Southern Faunas. By Captain F. W. Hutton, F.R.S., Hon. Member. After reviewing the various theories which have been offered to explain the difficult and intricate problem of the distribution of southern faunas, the author points out that the supposition that the ancestors of certain groups migrated from the northern into the southern hemisphere by the present continents, and have since then become extinct in the north, explains a good deal, but fails to give a full and satisfactory explanation of the whole of the facts. Moreover the members of the fauna unaccounted for are old forms and consequently the means of communication which served them must long ago have been destroyed. To the authour a fatal objection to the theory of migration by way of an Antarctic Continent is offered by the following consideration. Aplacental Mammals — both Multituberculata and Polyprotodontia — existed in Europe and N. America in the Triassic and Jurassic periods, and these Polyprotodontia were, no doubt, the ancestors of the living Polyprotodontia of Australia. In the Eocene strata of Patagonia remains of a large number of Polyprotodontia have been found which are far more closely related to the Polyprotodontia of Australia than to the Mesosoic forms of Europe and N. America; consequently a direct land communication must have existed between these two southern countries. Now there is strong geological and palaeontological evidence that no land ridge existed between N. and S. America during the Mesozoic and early Cainozoic eras; consequently we must assume that the southern forms migrated through the Malay Archipelago; and, if they went to Patagonia by means of an Antarctic continent, they must have passed throug Australia. But mingled with the Eocene Marsupials of Patagonia there are a number of Eutheria of typically South American character — *Edentata*, *Toxodontia*, *Typotheria*, *Perissodactyla*, *Rodentia*, and even *Platyrrhine* monkeys — without any northern forms of *Artiodaetyla*, *Carnivora*, or *Insectivora*; and it is hardly possible that these should have passed through Australia without leaving any record behind. The theory of the former existence of a South Pacific Mesozoic Continent, first suggested by Huxley, seems to be the only theory left. It not only explains the origin of the Australian and S. American marsupials, but also the almost simultaneous appearance of different Eutherian mammals in North and South America. We must suppose thas this continent threw off first New Zealand, then Australia, then Chili, and finally disappeared under the waves. At a later date, New Zealand must have formed part of a large island joined to New Caledonia, but not to Australia. The objections to this theory are geological rather than biological, involving the doctrine of the persistence of continental and oceanic areas upon which geologists are not agreed; and such objections are equally applicable to the theory of an Antarctic Continent. — 2) Report on a Bone Breccia Deposit near the Wombeyan Caves, New South Wales: with Descriptions of some new Species of Marsupials. By R. Broom, M.D., B.Sc. A detailed examination of this de-