of tripsine, by V. Nikolsky.—On the bougry of the Caspian, by A. Zaitseff. They do not have the uniformity of structure supposed by Baer; they often cross one another at angles of 20° to 30°, and some of them follow a north-eastern direction, while others, close by, run west and east; and they contain not only broken mussels, as affirmed by Baer, but also plenty of quite full mussels of Cardium trigonoides, Dreissena polymorpha, rostriformis, and caspia. The theory of Baer altogether is based on an insufficient supply of data, and the structure of the bougry ought to be better explored before pronouncing as to their origin.—On the sulphur ores at Tetushi, on the Volga, by

G. Wilenius.

The fourth volume of the "Collection of Materials for the Description of Caucasus," published by the school-masters of Caucasus, contains, as usual, much valuable in the contains of historical and ethnographical characteristics of historical and ethnographical characteristics. formation, especially of historical and ethnographical cha-M. Hahn contributes a most valuable paper of 250 pages, in which he has compiled all information on the Caucasus he was able to discover in authors since Homer up to the fifth century of our era. The information gathered from Byzantine writers who have much more written about the Caucasus, will be embodied in a second part of the work. The importance of this very careful work, where textual translations are given of passages dealing with the Caucasus and its inhabitants from no less than eighty Greek and Latin authors, will be fully appreciated by all those who have to deal with the geography of the country. A complete index will much facilitate the research. M. Eivazoff gives a description of the Aisores of Koilasar, of their manner of life and customs, followed by an Aisor alphabet; and M. Arkannikoff contributes a detailed description of the town Temruk and of the Temruk mouth of the Kuban River. In the second part of the same collection we find a series of interesting notes on the Tchokh village in Daghestan, on Daghestan legends, and on the life of Abkhazes; a collection of Little Russian songs from Kuban; and two lectures on the beautiful seven-centuries-old Georgian poem of Shota Rustaveli.

SCIENTIFIC SERIALS

The Journal of Physiology for July contains:—Note on the cause of the first sound of the heart, by G. F. Yeo and J. Barrett.—An experimental investigation to ascertain the action of veratria on a cardiac contraction, by S. Ringer (plate 2).—Concerning the action of small quantities of calcium, sodium, and potassium salts upon the vitality and function of contractile tissue and the cuticular cells of fishes, by S. Ringer and D. W. Burton.—A study of the action of the depressor nerve, and a consideration of the effect of blood-pressure upon the heart regarded as a sensory organ, by H. Sewall and D. W. Steiner (plate 3).—On secondary and tertiary degenerations in the spinal cord of the dog, by C. S. Sherrington (plates 4 and 5).—On the structure and rhythm of the heart in fishes, with especial reference to the heart of the eel, by S. A. M'William (plate 6).—The innervation of the heart of the Slider terrapin (Pseudemys rugosa), by J. Wesley Mills.—Note on the sound accompanying the single contraction of skeletal muscle, by E. F. Herroun and G. F. Yeo.

The Journal of Anatomy and Physiology for July contains: Account of some recent experiments on the effects of very low temperatures on the putrefactive process and some vital phenomena, by J. J. Coleman and J. G. McKendrick, M.D.—Accessory lobe to the left lung, by L. Humphry, M.B. (plate 17).—Case of abnormal development of the reproductive organs of the frog, by A. F. S. Kent (plate 18).—Rotation and circumduction, by Thomas Dwight, M.D.—Movements of the ulna in pronation and supination, by C. W. Cathcart, M.B.—Anatomy of a hydro-monocephalous brain, by A. Hill, M.D.—Corpus callosum in the adult human brain, by Dr. J. Hamilton, (plates 21 and 22).—Tumours in animals, by J. B. Sutton (plate 23).—Hyomandibular clefts and pseudobranchs of Lepidosteus and Amia, by R. Ramsay Wright (plate 24).—Anatomy of Spinal bifida, by Prof. Humphry.—Notes on some variations of the shoulder muscles, by W. B. Ransom.—Tarsus and Carpus, by Prof. K. Bardeleben.

The Quarterly Fournal of Microscopical Science for July contains:—On spermatogenesis in the rat, by Herbert H. Brown (plates 22 and 23).—A simplified view of the histology of the

 $^{\rm I}$ · Sbornik materialov dla opisania myestnostei i plemen Kavkaza." Tiflis, 1884.

striped muscular fibre, by B. Melland (plate 24).—On the development of a freshwater macrurous crustacean (Atyephora compressa), by C. Ishikawa (plates 25–28).—On the supposed communication of the vascular system with the exterior in Pleurobranchus, by A. G. Bourne, D.Sc. (plate 29).—Observations on the nervous system of Apus, by P. Pelseneer (plate 30).—Note on the chemical composition of the zoocytium of Ophrydium versatil, by W. D. Halliburton, M.D.—The development of Peripatus capensis, by A. Sedgwick, M.A. (plates 31 and 32).

The Journal of the Royal Microscopical Society for August contains:—The pathogenic history and the history under cultivation of a new bacillus (B. alvi), the cause of a disease of the hive bee hitherto known as foul brood, by F. R. Cheshire and W. Watson Cheyne, M.D. (plates 10 and 11).—Experiments on feeding some insects with the curved or "comma" bacillus, and also with another bacillus (B. subtilis?), by R. L. Maddox, M.D.—On four new species of the genus Floscularia and on five other new species of Rotifera, by C. T. Hudson, LL.D. (plate 12), with the usual summary of current researches.

The American Naturalist for September contains the reputation of the Lantern fly (Fulyore lanternaria), by John C. Brauner. To the bibliographical references made in an editorial note to this paper may be added the spirited discussion on the whole subject in the Entomological Magazine of 1836.—The age of forest trees, by J. T. Campbell.—The relations of min¹ and matter, by C. Morris.—The exhalation of ozone by odorous plants, by J. M. Anders and G. B. M. Miller.—Glacial origin of Presque Isle, Lake Erie, by J. D. Ingersoll.—Recent literature and general notes.

The Proceedings of the Linnean Society of New South Wales, vol. x. Part I (June 4).—The papers in this part are of great interest, and worthily sustain the credit of this most active and energetic Society. Zoology — Dr. R. von Lindenfeld, On Australian sponges, part iv. The Myxospongiæ, with 5 plates. On Amaba farasitica, a new protozoon infesting sheep. On the Phoriospongiæ.—William Macleay, On a new snake from the Barrow Ranges, and On some reptiles from Herbert River.—A. S. Oliff, On some Ceylonese Coleoptera.—J. Brazier, Synonymy of some shells described by Dr. Gray.—W. A. Hasnell, On some Australian Amphipods, with 9 plates.—Captain Hutton, Revision of the Toxoglossate mollusca of New Zealand.—J. Douglas Ogilby, Some rare Port Jackson fishes. Botany—Dr. W. Wools, Australian Proteaceæ. Palæontology—F. Rattle, On a Devonian Australian fossil allied to Worthenia, with a plate; also on the Glacial period in Australia; and on the meteorology of Mount Koskiusko, by Dr. von Lindenfeld, with two plates.

Morpholygisches Jahrbuch, Band II, Heft I, contains:—Contribution to a knowledge of the renal organ of the Prosobranchia, by Dr. B. Haller (plates I-4).—On the morphological significance of the nucleus, by Dr. W. Pfitzner (plate 5).—Short contributions to a knowledge of some marine Rhizopods, by O. Bütschli (plates 6 and 7).—On the significance of the Linea semicircularis Douglassii, by Bernhard Solger.—Notes on Apseudes, by J. E. V. Boas.—Short Notes.

Zeitschrift für wissenschaftliche Zoologie, Band 42, Heft I, July 24, contains:—A biographical sketch of Carl Theodor Ernst von Siebold, one of the founders of the Zeitschrift, by Ehlers (with a photograph).—On the significance of the nucleus from the point of view of evolution, by Prof. A. Kölliker.—Researches on some Flagellates and kindred organisms, by Dr. C. Fisch (plates I to 4).—On the anatomy of the Amphisbeena, by Dr. Carl Smalian (plates 5 and 6).

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Band 42, Heft 2, August 18, contains:—An essay on the history of German slugs, and on their European allies, by Dr. H. Simroth. This monograph is illustrated by five plates, that

of the species being coloured.

SOCIETIES AND ACADEMIES

PARIS

Academy of Sciences, October 5.—M. Bouley, President, in the chair.—Spectral analysis of the elements of the terrestrial atmosphere, by M. J. Janssen. The author describes the special arrangements that have been made at the Meudon