SOCIETIES AND ACADEMIES

PHILADELPHIA

Academy of Natural Sciences, April 9.—Prof. E. D. Cope read a paper on "Intelligence in Monkeys." "I have two species of *Cebus* in my study, *C. capucinus* and a half-grown *C. apella*. The former displays the usual traits of monkey ingenuity. He is an admirable catcher, seldom missing anything, from a large brush to a grain, using two hands or one. His cage door is fastened by two hooks, and these are kept in their places by nails driven in behind them. He generally finds means sooner or later to draw out the nails, unhook the hooks, and get free. He then occupies himself in breaking up various objects, and examining their interior appearances, no doubt in search of food. To prevent his escape I fastened him by a leather strap to the slats of the cage, but he soon untied the knot, and then relieved himself of the strap by cutting and drawing out the threads which held the flap for the buckle. He then used the strap in a novel way. He was accustomed to catch his food (bread, potatoes, fruit, &c.) with his hands, when thrown to him. Sometimes the pieces fell short three or four feet. One day he seized his strap and began to throw it at the food, retaining his hold of one end. He took pretty correct aim, and finally drew the pieces to within reach of his hand. This performance he constantly repeats, hooking and pulling the articles to him in turns and loops of the strap. Sometimes he loses his hold of the strap. If the poker is handed to him, he uses that with some skill for the recovery of the strap. When this is drawn in, he secures his food as before. Here is an act of intelligence which must have been originated by some monkey, since no lower or ancestral type of mammals possess the hands necessary for its accomplishment. Whether originated by Jack, or by some ancestor of the forest who used vines for the same purpose, cannot be readily ascertained. After a punishment the animal would only exert himself in this way when watched; as soon as an eye was directed to him he would cease. In this he displayed distrust. He also usually exhibited the disposition to accumulate to be quite superior to hunger. Thus he always appropriated all the food within reach before beginning to eat. When different pieces were offered to him, he transferred the first to his hind feet to make room for more, then filled his mouth and hands, and concealed portions behind him. With a large piece in his hands, he would pick the hand of his master clean before using his own, which he was sure of."

PARIS

Academy of Sciences, October 14.—M. Faye, President. M. Tresca presented to the Academy the resolutions of the International Metrical Commision, which will be found in another column. — M. Yvon Villarceau then read a paper on the constant of aberration and the speed of light, considered in their connection with the absolute movement of translation of the solar system.—M. J. Bertrand presented observations on the last number of the "Journal für die reine und angewandte Mathematik," Berlin (Band 75, Erstes Heft); the observations consisted of a reply to Helmholtz's answer to the objections raised against his electro-dynamic theory.—M. Max Marie then read, "An extension of the Method of Cauchy to the study of Double Integrals, or theory of elementary contours in space."—A note from M. Ch. V. Zenger, on the action of conductors disposed symmetrically around an electroscope, followed. It was referred to the Commission on lightning conductors.—Some new documents from M. Buss relative to his governor for motive power engines were referred to MM. Tresca and Morin. A project for military aërostation, from M. J. Boué, and another for aërial navigation from M. H Georgé, were referred to the Commission on Aërostation.—M. E. Guillier's proposed process for the destruction of *Phylloxera* by the use of a "mixture of the ashes of healthy vine wood, soot, river sand, washing water, essence of turpentine, and ammonia," M. Ajot's proposal for the same purpose, and M. Loarer's* note on the appearance on some exotic plants of certain insects believed to have come from transported *Phylloxera* eggs, were all referred to the *Phylloxera* Commission.—M. F. Massieu's note on the determination of the maximum tensions of vapours was then read, and was followed by a note from M. T. du Moncel on the action of carbon powder rammed down round the negative electrodes of carbon batteries. The author finds that coarse carbon powder thus used greatly diminishes the resistance in the battery.—This paper was followed by one from M.M. Schützenberger and Géradin, on a new process for the estimation of free oxygen.—M. A. Petit's note on "antifermentescible substances" followed. By the above name the author means bodies which prevent fermentation, he finds bichloride and binoxide of mercury the most powerful in this way.—M. E. J. Marey then read a note on the paces of horses studied by the graphic method. The author exhibited a number of traces obtained by an instrument which followed the muscular movements and traced them on paper.—Next came M. A. Sanson's paper entitled "Researches on the Fleeces of precocious Merinos."—M. Stan. Meunier then read a paper on the characters of the crust produced on terrestrial rocks by atmospheric agency, compared with the black outer crust of grey meteorites.—After which M. Chasles made some remarks on presenting a work entitled, "Il S. Offizio, Copernico e Galileo," &c., by M. Govi. He was followed by M. Larrey, who addressed the Academy on presenting the Report of the Director-General of the Medical Department of the English Army, for 1870; and after M. Bouley had made a long and very favourable critique on Mr. Fleming's work on hydrophobia, the session was adjourned.

* In the report of the meeting for the 30th September this author proposed the use of sulphide of arsenic to destroy the *Phylloxera*, and his name was then wrongly given "Louvet."

BOOKS RECEIVED.

ENGLISH.—On the Culture of the Observing Powers of Children (Youmans and Payne: (H. S. King and Co).—The English Elocutionist: C. Hartley (Groombridge).—Human Physiology: J. L. Nichols, M D. (Trübner).

FOREIGN.—Die Sonne: Parts 2 and 3: P. A. Secchi.—Medizinische Jahrbücher: S. Stricker, 1872, Parts 2 and 3.—Bulletin de la Société Impériale des Naturalistes de Moscou, 1872, No. 1.—Bericht über die Senckenbergische Naturforschende Gesellschaft, 1871-1872.

DIARY

FRIDAY, NOVEMBER 1.

GEOLOGISTS' ASSOCIATION, at 8.—On the Influence of Geological Reasoning on other Branches of Knowledge: Dr. Hyde Clarke.

SUNDAY, NOVEMBER 3.

SUNDAY LECTURE SOCIETY, at 4.—On Ancient and Modern Egypt; the Pyramids and the Suez Canal: W. B. Carpenter, M.D., F.R.S.

MONDAY, NOVEMBER 4.

ANTHROPOLOGICAL INSTITUTE, at 8.—Man and Ape; and The Origin of Serpent Worship: C. Staniland Wake.

TUESDAY, NOVEMBER 5.

SOCIETY OF BIBLICAL ARCHÆOLOGY, at 8.30.—Adjourned Discussion upon Israel in Egypt: Rev. D. Haigh, M.A.—On an Assyrian Prayer: Henry Fox Talbot.—On the Religious Beliefs of the Assyrians, No. II.: Henry Fox Talbot.—On the Tomb of Jacob at Shechem: Prof. Donaldson.—A T Conjugation such as exists in Assyrian, shown to be a character of early Shemite speech by its vestiges found in the Hebrew, Phenician, Aramaic, and Arabic Languages: Richard Cull.

ZOOLOGICAL SOCIETY, at 8.30.—Report on additions to the Society's Menagerie: the Secretary.—On *Platybsyllidæ*, a new family of Coleoptera: Dr. G. L. Le Conte.—On Lepidoptera collected by Dr. Van Patten in Costa Rica: Messrs. A. G Butler and H. Druce.

WEDNESDAY, NOVEMBER 6.

MICROSCOPICAL SOCIETY, at 8.—On the Structure of the Valves of *Eupodiscus Argus* and *Isthmia enervis*: H. J. Slack.—Proposal for a standard of comparison of the magnifying powers of Compound Microscopes J. E. Ingpen.

THURSDAY, NOVEMBER 7.

LINNEAN SOCIETY, at 8.—On the "Piopio" of New Zealand (*Keropia crassirostris Gmel*): T. H. Potts.—On the buds developed on leaves of *Malaxis*: George Dickie, M.D.

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ERRATA.—Vol. vi., p. 459, first column, line sixteen from top, for "58·7 − 53·8 = 4°·9," read "58·7 − 53·08 = 5°·62;" and p. 460, first column, line nineteen from top, for "most" read "not."