

College) on June 16, in presenting for the honorary degree of Doctor in Science Sir Archibald Geikie, F.R.S., Director-General of the Geological Survey of Great Britain and Ireland; Mr. W. H. Flower, C.B., F.R.S., Director of the Natural History Museum; and Dr. Elias Metschnikoff, *Chef de Service* of the Institut Pasteur, Paris.

Salutamus deinceps virum et scientiarum et litterarum laude illustrem, in Academia Edinensi quondam Geologiae Professore, Britanniae et Hiberniae explorationi geologicae praepositum, societatis Regiae socium, societatis geologicae praesidem, societatis denique Britannicae scientiarum terminis prorogandis praesidem designatum. Geologiae et geographiae studiosorum in manibus sunt scripta eius plurima, scientiis illis aut docendis aut illustrandis destinata. Etiam aliis loquuntur libri eius elegantissime conscripti, quorum in uno Caledoniae montes vallesque per immensam saeculorum seriem causis quotidianis minutatim exculptas fuisse demonstrat; in altero vitam et res gestas geologi magni, quem Siluriae regem nominaverim, ea quae par est dignitate describit. Viri talis laboribus non modo geologiae fines latius indies propagantur, sed etiam populo universo studia illa praeclara commendantur.

Duco ad vos geologum illustrem, ab ipsa Regina nuper novo honore ornatum, ARCHIBALDUM GEIKIE.

Quod e sapientibus septem unus dixisse fertur, ἀρχὴ ἄνδρα δεῖλει, de hoc certe viro, per honorum cursum satis longum probato, verum esse constat. Regio Chirurgorum in Collegio, primum Museo conservando praepositus, deinde physiologiam et comparativam quae dicitur anatomiam professus, deinceps Musei Britannici aedificio novo rerum naturae studiis dedicato praefectus est. Idem societatis et zoologicae, et anthropologicae, et Britannicae, maxima cum laude praefuit. In Museis autem ordinandis quam perspicax; in scientiarum studiis populo toti commendandis quam disertus; hominum in diversis generibus capitis mensura inter sese distinguendis quam subtilis; maris denique in monstris immensis describendis quam minutus. Ergo, velut alter Neptunus, intra regni sui fines etiam "immania cete" suo sibi iure vindicat: idem, anthropologiae quoque in studiis versatus, ne barbaras quidem gentes contempsit, sed, velut alter Chremes, homo est; humani nil a se alienum putat.

Duco ad vos Regiae societatis socium, virum honoribus plurimis merito cumulatum, WILHELMUM HENRICUM FLOWER.

Sequitur deinceps vir, qui scientiarum in provinciis duabus, et in zoologia et in bacteriologia quae dicitur, famam insignem est adeptus. Primum Ponti Euxini in litore septentrionali zoologiam professus, multa de morphologia animalium, quae invertebrata nominantur, accuratissime disseruit. Deinde Parisiis rerum naturae investigatori celeberrimo adiutor datus, eis potissimum causis perscrutandis operam dedit, per quas genere ab humano morborum impetus hostiles possent propulsari. Nam, velut hominum in mentibus virtutes et vitia inter sese configunt, non aliter animantium in corporibus contra pestium exercitus copiae quaedam sanitatis et salutis ministrae concertare perhibentur. Mentis quidem certamen olim in carmine heroico, Psychomachia nominato, Prudentius narravit. Inter eos autem qui corporis certamen experimentis exquisitis nuper explicaverunt, locum insignem sibi vindicat vir quidam summa morum modestia praediis, qui, velut vates sacer, proelium illud sibi sumpsit celebrandum, in quo tot cellulae vagantes, quasi milites procurantes, morborum semina maligna corripunt, correpta comprimunt, compressa extinguunt. Talium virorum auxilio febrium cohortes paulatim profligantur, et generis humani saluti novum indies affertur incrementum.

Merito igitur titulo nostro hodie coronatur e salutis humanae ministris unus, ELIAS METSCHNIKOFF.

At the annual election at St. John's College on June 22 the following awards in Natural Science were made:—Foundation Scholarships, continued or increased: P. Horton-Smith, Hewitt, Blackman, Woods, MacBride, Whipple. Foundation Scholarship awarded: Villy. Exhibitions: Purvis, Trotman. Hughes Prize: MacBride. Wright's Prize: Villy. In the Natural Sciences Tripos, Part II., Capstick, of Trinity, has been awarded "special distinction" in two subjects, Chemistry and Physics. It is many years since this last occurred. MacBride, of St. John's (Zoology, Botany), and Krishnan, of Christ's (Chemistry, Botany), have gained first classes in two subjects. Of the women candidates, Miss Elliot, of Newnham (Zoology), and Miss Tebb, of Girton (Physiology), have gained first class honours.

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SCIENTIFIC SERIALS.

American Journal of Science, June.—The study of the earth's figure by means of the pendulum, by E. D. Preston. The author first deals with the history of the subject, then states the quantities involved, and supports the method of study in which the figure of the earth is considered separately from its size as determined by measurement of arcs of meridian. The general results of pendulum work are discussed, and the effect of continental attraction and variations in latitude referred to. The best methods of determining the duration of a pendulum oscillation at a given temperature and pressure are also considered.—On the post-glacial history of the Hudson River valley, by Frederick J. H. Merrill. The result of the action of waves upon a shore depends upon the state of rest or movement of the shore. If the land is subject to alternate periods of rest and elevation, a series of terraces will be formed; if the land is slowly rising or subsiding with respect to sea-level, an inclined plane of erosion may be produced. Arguing from this and other facts, the author states provisionally that, after the retreat of the continental glacier from the Hudson River valley, the land stood for a long time at a lower level than at present. A gradual elevation and extensive erosion of the Champlain estuary deposits in the river valley then occurred, and was followed by a depression amounting to about 100 feet at New York, and which is apparently continuing at the present day.—On alunite and diaspore from the Rosita Hills, Colorado, by Whitman Cross.—Diaspore crystals, by W. H. Melville.—Combustion of gas jets under pressure, by R. W. Wood. Anyone who has watched a burning jet of ether vapour will have noticed that, as the pressure increases, the flame gradually retreats from the orifice and eventually goes out if the pressure is carried beyond a certain point. The author has investigated these phenomena, using various gases. A burning jet of coal gas was extinguished when the pressure was equal to 23 centimetres of mercury—that is, when the velocity of the issuing gas exceeded the speed of combustion for the mixture of gas and air.—Allotropic silver: Part iii., blue silver, soluble and insoluble forms, by M. Carey Lea. From the results given in this and preceding papers, the author is led to believe that allotropic and even soluble silver may be formed in numerous ways. The reducing agents may be either a ferrous or a stannous salt, or any one of a variety of organic substances of very different constitutions. From the solubility and activity of this substance, and the parallelism which many of its reactions show to those of silver in combination, it appears probable that silver in solution, like silver in combination, exists in the atomic form.—Note on the submarine channel of the Hudson River, and other evidences of post-glacial subsidence of the middle Atlantic coast region, by A. Lindenkohl.—Are there glacial records in the Newark system?, by Israel C. Russell. Facts are adduced in support of the negative view.—A reply to Prof. Nipher on the theory of the solar corona, by F. H. Bigelow.—On the recent eruption of Kilauea, by W. T. Brigham. This is a report of the changes that took place in the crater of Kilauea during March of this year.—Turquoise in south-western New Mexico, by Charles H. Snow.

SOCIETIES AND ACADEMIES.

LONDON.

Royal Society, June 18.—"Results of Hemisection of the Spinal Cord in Monkeys." By Frederick W. Mott, M.D., B.S., M.R.C.P. Communicated by Prof. Schäfer, F.R.S.

While engaged in studying experimentally the connections of the cells of Clarke's column with the ascending tracts of the spinal cord in the monkey, I was surprised to find that after hemisection in the lower dorsal region the sensory disturbances produced in no way corresponded with those already obtained by eminent observers.

I was therefore led to continue my experiments, and, by the kind permission of Prof. Schäfer, I carried them out in the Physiological Laboratory of University College. My thanks are also due to him for much valuable advice and assistance.

The subject is one of great importance from a scientific, as well as from a clinical, point of view. Some years ago, a case occurred in my practice which tended to shake my faith in the absolute truth of the doctrine of complete and immediate decus-