

UNIVERSITY AND EDUCATIONAL INTELLIGENCE

CAMBRIDGE.—At a Congregation on May 17, the Vice-Chancellor, the Master of Emmanuel, Professors Cayley, Adams, Clerk-Maxwell, Stuart; Messrs. P. Frost, St. John's; J. Todhunter, St. John's; H. W. Besant, St. John's; N. M. Ferrers, Caius; E. J. Routh, St. Peter's; A. Freeman, St. John's; H. H. Taylor, Trinity; W. D. Niven, Trinity; R. T. Wright, Christ's; C. H. Prior, Pembroke; W. Garnett, St. John's; and Lord Raleigh, Trinity, were appointed a Syndicate to consider the higher Mathematical Studies and Examinations of the University.

The Chancellor's gold medal, given annually to a resident undergraduate who shall compose the best English poem, has been adjudged to Edmund Whytehead Howson, Scholar of King's College. The subject of the poem is "The Heroism of Arctic Exploration."

The Moderators and Examiners for the Mathematical Tripos have presented a report of the results of the examination to the Board of Mathematical Studies, from which it appears that 110 candidates were examined. Of that number 36 were classed as Wranglers, 29 as Senior Optimes, 30 as Junior Optimes, one obtained an *Agrotat* degree, and 14 were found to be not worthy of mathematical honours. The full marks were 18,643; the average obtained by the first ten Wranglers was 5,748; of the last ten Wranglers, 1,794; of the first ten Senior Optimes, 1,506; and of the first ten Junior Optimes, 721. The Additional Examiner (Mr. H. W. Watson) reports that the work done by the best men in the higher physics was very satisfactory, and proved the interest and success with which those subjects are now being studied in the University. At the same time there were indications of the tendency of the reading in this part of the course to become too diffuse and unmathematical. This tendency may be kept in check, in the first place, by framing the papers in such a manner—whether by the adoption of alternative questions or otherwise—as shall make too diffuse reading in the higher subjects unprofitable or even impossible; and, in the second place, by providing that every question set in these subjects shall be accompanied by a rider of strictly definite mathematical character, and of a difficulty proportioned to the weight assigned to the bookwork.

The Board for admitting and superintending non-collegiate students give notice that an exhibition of 50*l.* a-year, tenable for three years, granted by the Worshipful Company of Clothworkers for the encouragement of proficiency in physical science, will be awarded by means of the Certificate Examination, to be held next December, under the authority of the Oxford and Cambridge Schools Examination Board. Candidates must be either non-collegiate students in their first term of residence, or persons who have not commenced residence in the University. Full information may be obtained from the Censor of non-collegiate students, the Rev. R. B. Somerset, Cambridge.

GILCHRIST TRUST PRIZES.—The first (in London) presentation of prizes in physiology under the direction of the Gilchrist Trustees was made on Tuesday, last week, at the large room of the Society of Arts. The chair was occupied by the Rev. J. Rodgers, M.A., Vice-Chairman of the London School Board, supported by Dr. Carpenter, C.B., F.R.S., secretary to the Gilchrist Trust Fund, and others. The prizes were awarded to students who, as elementary school teachers, had attended the course of lectures on physiology recently delivered by Dr. B. W. Richardson, at St. Thomas's School, Charterhouse, and who had submitted to the examination with which the course was brought to a close. A large number of students entered into competition, and in the end prizes and certificates were awarded in the following order to four competitors:—John Pillely, George Price, W. R. Cory, and Maria J. Menzies; and certificates to Mary C. Menzies and Messrs. C. E. Marks, C. W. Shreeve, H. Steadman, J. F. Adcock, and G. Garland. In the course of the proceedings Dr. Carpenter gave a very interesting account of the origin of the Gilchrist Trust and of its founder, and the chairman delivered a very earnest and admirable address on the progress of education and on the value of the lectures such as had been delivered, and which he had himself attended.

WORKING MEN AND SCIENCE.—On Saturday afternoon the members of the Working Men's Clubs, under the auspices of the Working Men's Club Union, paid a visit, by permission of the Royal College of Surgeons, to the magnificent museum founded by John Hunter, and attached to the building of the College

in Lincoln's Inn Fields. Prof. Flower, the Curator, received the visitors, who were conducted into the first great hall, where Prof. Flower gave a general description of the Museum. The visitors manifested an unmistakably genuine interest in the collection, and in Prof. Flower's descriptions, and at the conclusion of the visit one of the party, on behalf of his comrades, gave hearty thanks to the Professor and to the Council of the College, for the treat which had been afforded to them, and said it was altogether a mistake to suppose that the working men took no interest in science. The Professor said it afforded him much pleasure to show the museum, and especially so when he found his labours thus appreciated.

SOCIETIES AND ACADEMIES

LONDON

Royal Society, May 3.—"On the Temperature-correction and Induction-coefficients of Magnets," by G. M. Whipple, B.Sc., Superintendent of Kew Observatory. Communicated by Robert H. Scott, F.R.S.

"Distribution of the Radicals of Electrolytes upon an Insulated Metallic Conductor," by Alfred Tribe, Lecturer on Chemistry in Dulwich College. Communicated by Dr. Gladstone, F.R.S.

May 17.—"On Hyperjacobian Surfaces and Curves," by William Spottiswoode, M.A., Treas. R.S.

Royal Astronomical Society, May 11.—Dr. Huggins, F.R.S., president, in the chair.—A gift of 500*l.* was announced from Mr. C. J. Lambert, being part of the sum bequeathed by his late father to scientific societies. The special thanks of the meeting were voted to Mr. Lambert.—The Astronomer-Royal pointed out an inaccuracy in a description of meteors by a certain "J. W. M."—Mr. Penrose read a paper (and explained a diagram) on the correction for the spheroidal figure of the earth.—Lord Lindsay spoke upon the two comets B and C of 1877. Winnecke's showed three bright lines on a weak continuous spectrum which he described. The president made some remarks thereon: there were two distinct spectra shown by comets; one was limited to two particular comets; the carbon spectrum was common to all the rest.—Lord Lindsay described the 4-inch heliometer which he had placed at the disposal of Mr. Gill for his expedition to Ascension to measure the parallax of Mars. The object glass was made by Mertz, and cut and mounted as a heliometer by Repsold; the pillar and equatorial mounting being that provided by Messrs. Cooke and York, for an 8-inch telescope. The halves of the object-glass were moved in circular grooves by means of a handle near the eye-piece, so that they could be separated without putting the object out of focus. Several other details were pointed out, one of them being a movable wire screen adapted to equalise the light of two objects of different brightness under measurement. Mr. De la Rue admired the stability and rigidity of the instrument. The Astronomer-Royal would have had the declination axis and the polar axis twice as large. Mr. Gill vindicated the steadiness of Lord Lindsay's heliometer, and described an accident by which it narrowly escaped being smashed; which accident occurred through the instrument having been represented as an "universal equatorial," whereas it was nothing of the kind; the elevating screw having run out whilst being set to the latitude of ascension, the polar axis was shot out of its collar on to the floor. Mr. Gill then spoke upon the positions of the planets Ariadne, Melpomene, and Iris, and their special merit of having no sensible disc.—Dr. De la Rue again referred to the axes of the heliometer, which he said were eight times as strong as Repsold thought sufficient. The Astronomer-Royal said it was perfectly adapted to the purpose intended.—A note was read from Padre Secchi on an alleged fall of a meteorite in Italy which turned out to be untrue.—Mr. Lecky related how he had made a good artificial horizon by filling a blackened trough with glycerine.—A catalogue of double stars was presented by Messrs. Wilson and Seabroke, of the Temple Observatory, measured with a parallel wire micrometer and a power of 400. Mr. Dunkin said the only fault was the omission of the R.A. and N.P.D., which necessitated the use of two catalogues.—A note was read from Mr. Proctor referring to his chart of 3,976½ stars.—Mr. Green laid before the Society some paper impressed with blank discs to aid observers in drawing the features of Mars, so prepared that lights could be taken out with ease and precision.—Mr. Christie described Prof. Zenger's