of the above subjects if the examiners think it expedient. Intending candidates should communicate with the Master of Balliol before November 12. There will also be offered two exhibitions worth 40*l.* a year, the examination for which will comprise the elements of Physics, Chemistry, or Physiology, as well as Classics and Mathematics.

CAMBRIDGE.—Dr. Michael Foster will lecture on elementary physiology ; Mr. Langley will lecture to the advanced class on general physiology twice a week ; Mr. Lea physiological chemistry ; and Dr. Gaskell the physiology of the circulation.

Mr. VENN will lecture during the next two terms on scientific method.

MR. FREEMAN of St. John's College is to lecture as deputy for Prof. Challis, owing to his infirm health.

DR. REGINALD THOMPSON of Trinity College is to be one of the Examiners for 3rd M.B., and Dr. Cheadle to be Assessor to the Regius Professor of Physic.

THE list of lecturers at Newnham College this term includes the names of Miss Crofts (English History and Literature), Miss Merrifield (Greek), Miss Harland (Algebra), and Miss Scott (Analytical Conics). The lectures are now delivered at the College, and not in Alexandra Hall.

AT St. Thomas's Hospital Medical School Mr. Robert Lawson has obtained the Entrance Scholarship in Natural Science, of the value of 100*l.*, and Mr. Herbert Lankester that of 60*l.*

AT the meeting of the Council of the College of Physical Science, Newcastle-on-Tyne, on October 11, it was decided without opposition that a lady candidate, Miss Isabel M. Aldis, should be allowed to hold an exhibition in the College. This decision completes the opening of the advantages of the College to lady students. They were previously admitted to all the lectures, but this is the first time that a lady has been a candidate for an exhibition.

SOCIETIES AND ACADEMIES
PARIS

Academy of Sciences, October 11.—M. Wurtz in the chair. The following papers were read :—On the *rôle* of time in the formation of salts, by M. Berthelot. Experiments with several hundred saline mixtures prove that the period of change in saline reactions, comprised between the moment when the system has become physically homogeneous and that when it attains its chemical equilibrium, is excessively short, and wholly included in the short duration of the calorimetric experiment. The same period in ethene reactions, on the other hand, is incomparably longer. The instantaneity in the former case is proved by an application of the author's theorem of slow actions.—On pellagra in Italy, by M. Faye. In the past year there have been 40,000 well-marked cases of the disease in Lombardy, and 30,000 in Venetia, the richest and most productive provinces in Italy. It is unknown in Naples, Sicily, and Sardinia (so poverty and bad hygiene do not seem to be the causes). Wherever pellagra appears in the endemic state *polenta* or *cruchade* are eaten, *i.e.*, varieties of unfermented bread (made from maize and millet), and M. Faye thinks the substitution of fermented bread would prove salutary.—On the photophonic experiments of Prof. Bell and Mr. Sumner Tainter, by M. Breguet.—On algebraic equations, by Mr. West.—Earthquakes at Smyrna on July 29, by Dr. Charpentin. The ravages and phenomena of this earthquake were limited to the Sipyle chain and the adjoining plains in a perimeter of only a few leagues ; but the *contre-coup* was felt at great distances (Broussa, Rhodes, &c.). Chronometers at Athens were stopped. More than 3,000 years ago there seems to have been a volcano under Sipyle, and this point has been the centre of earthquakes in that region. The approximate coincidence (in time) of this last Smyrna earthquake with earthquakes at Manilla, the Azores, and Naples, is remarkable.—On the effects produced by cultivation of absinthe as insectifuge, and on its preventive application against phylloxera, by M. Poirot. Among the absinthe plants covering large tracts in North America the author has never seen flies, ants, worms, or any insects, nor yet scorpions, tarantulas, nor rattlesnakes. Land manured with absinthe might be fatal to the metamorphoses of phylloxera.—Ephemerides of comet *b* 1880 (continued), by M. Bigourdan.—Observations of comet *d* 1880 (discovered by Dr. Hartwig at Strassburg) at the Paris Observatory, by M. Bigourdan.—On the resolvent function of the equation $x^m + px + q = 0$, by M. Pujet.—On a property of Poisson's function, and on the integration of equations with partial derivatives of the first order, by M. Gilbert.—On a very extensive class of linear differential equations with rational coefficients, whose solution depends on the quadrature of an irrational algebraic product, by M. Dillner.—Principle of an algebraic calculus which contains as particular species the calculus of imaginary quantities and quaternions, by M. Lipschitz.—On the partition of numbers, by M. David.—On the mechanical actions of light, theoretical considerations capable of serving in interpretation of Prof. Bell's experiments, by M. Cros. In 1872 M. Cros presented a memoir to the Academy, in which, guided by theoretical considerations, he affirmed *à priori* the results of experiments which he thinks have a notable similarity to Prof. Bell's. In one experiment a ray of light interrupted *n* times a second was to be sent into a tube resonating with a note of *n* vibrations. The alternate rarefaction and condensation of the gaseous medium might make the tube speak.—Study of the distribution of light in the solar spectrum, by MM. Macé and Nicati. The maximum intensity is in the yellow, very near D. The perception of blue and violet diminishes much more slowly with diminished illumination than that of less refrangible colours. From the extreme red to green of about 0·5 *μ* wave-length, the law of distribution of intensity is the same whatever the illumination. Between eyes equally capable of discerning colour, there are very sensible differences.—Vibratory forms of circular pellicles of saposaccharic liquid, by M. Decharme. With a given diameter of pellicle the numbers of nodals are inversely proportional to the corresponding lengths of the vibrating rod (which produces the waves).—On the place which boron occupies in the series of simple bodies, by M. Etard. He places boron in the family of vanadium, very near that of phosphorus.—On propylacetal and isobutylacetal, by M. de Girard.

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