

THE Council of Mathematical Teachers in New England has recently appointed a special committee on the status and welfare of mathematics in secondary schools, to investigate and report on current criticisms of high school mathematics. The membership of the committee is as follows: Mr. G. W. Evans, Charlestown High School; Professor F. C. Ferry, Williams College; Mr. A. V. Galbraith, Middlesex School; Mr. F. P. Morse, Revere High School; Mr. C. D. Meserve, Newton High School; Professor S. E. Smith, Mount Holyoke College; Miss H. R. Pierce, Worcester High School, and Professor H. W. Tyler, Massachusetts Institute of Technology, *chairman*. Correspondence with persons having special information is invited.

A CONVENTION of Tau Beta Pi, the honorary engineering society, will be held in Ithaca on June 11, 12 and 13. One delegate from each of the twenty-seven chapters and the five alumni chapters will attend. The general program includes business meetings on each of the three days and numerous excursions and social meetings.

As we have already announced there will be held a celebration on July 24 to 27 under the auspices of the Royal Society of Edinburgh, of the tercentenary of the publication of Napier's "*Mirifici Logarithmorum Canonis Descriptio*," the work which embodies the discovery of logarithms. Lord Moulton will deliver the presidential address on July 24; and many distinguished mathematicians, astronomers, actuaries and engineers will make communications on July 25 and 27. An exhibition of calculating machines, apparatus and books, and of objects associated with Napier and the history of mathematics, will be held in connection with the celebration. Immediately following a mathematical colloquium will be held on July 28 to 31, under the auspices of the Edinburgh Mathematical Society. The following courses have been arranged for in connection with the colloquium: Two lectures on Nomography, by M. d'Ocagne, professeur à l'Ecole Polytechnique, Paris; four lectures on Infinity in Geometry, by H.

W. Richmond, King's College, Cambridge; four lectures on Critical Studies of Modern Electric Theories, by E. Cunningham, St. John's College, Cambridge; two lectures on The Solution of Algebraic and Transcendental Equation in the Mathematical Laboratory, by E. T. Whittaker, professor of mathematics in the University of Edinburgh.

UNIVERSITY AND EDUCATIONAL NEWS

AFTER several months' investigation the plan of the presidential commission for national vocational education has been presented in the senate in a bill introduced by Senator Hoke Smith, one of the commissioners. It proposes an expenditure by the federal government of \$1,500,000 next year for the salaries of teachers of agriculture, trade, industrial and home economics. The amount would increase automatically each year until 1924, when the total would reach \$7,000,000. An equal amount must be expended by states. A federal board of vocational education would consist of the postmaster general and the secretaries of interior, agriculture, commerce and labor. State boards of not less than three members each would be provided.

THE Sheffield Scientific School, Yale University, has received a provisional gift from a graduate of \$100,000. This gift is contingent upon the securing of an additional \$100,000; the money to be used for the development of a graduate course of one year, and, if possible, two years, as an addition to the present undergraduate course known as the select course, in preparation for business and business administration.

AT the annual commencement of Gustavus Adolphus College, St. Peter, Minnesota, announcement was made of the completion of an endowment fund of \$250,000. The two largest contributors were James J. Hill, of St. Paul, and C. A. Smith, of Minneapolis, each of whom gave \$50,000. On the same occasion Oscar J. Johnson was formally inducted into office as president of the institution.

It is announced that the Carnegie Foundation for the Advancement of Teaching has undertaken to grant pension allowances to the director and faculty of the Carnegie Institute of Technology and also to the directors of the Carnegie Museum and the Carnegie Department of Fine Arts, and such of their curators as do teaching work, under the rules and regulations of the foundation.

THE School of Physiology, presented to the University of Cambridge by the Drapers' Company was opened by Prince Arthur of Connaught on June 9. The cost of the building, with the contribution made by the company towards its equipment, has amounted to £23,500.

ON June 3 the University of Missouri celebrated the seventy-fifth anniversary of its founding. Addresses were delivered on this occasion by former Governor David Rowland Francis, president of the board of curators, Albert Ross Hill, president of the university, the Hon. William Rock Painter, lieutenant governor of Missouri, the Hon. William Prentiss Evans, state superintendent of public schools, Frederick Aldin Hall, acting chancellor of Washington University, David Francis Houston, secretary of agriculture, Harry Burns Hutchins, president of the University of Michigan, and Cassius Jackson Keyser, professor of mathematics in Columbia University. On the following day, President Lowell, of Harvard University, delivered the commencement address, and the degree of doctor of laws was conferred on President Lowell, Secretary Houston, Professor Keyser and Mr. William Mack.

DR. ARTHUR KENYON ROGERS, professor of philosophy at the University of Missouri, has been called to Yale University to succeed Professor William E. Hocking, who goes to Harvard University.

ASSISTANT PROFESSOR WILLIAM D. HARKINS, of the department of chemistry at the University of Chicago, has been promoted to an associate professorship in chemistry.

DR. C. H. SHATTUCK, head of the department of forestry at the University of Idaho, was re-

cently elected dean of the college of letters and sciences of that institution.

MISS JESSIE Y. CAUN, Ph.D. (Columbia), head of the department of chemistry, Rockford College, Rockford, Ill., has accepted an instructorship in chemistry at the University of Illinois.

DISCUSSION AND CORRESPONDENCE

SOVEREIGNS AND THE SUPPOSED INFLUENCE OF OPPORTUNITY

A SERIOUS criticism has been made of my theory that the high intellectual qualities found in royal families are the results of natural and sexual selection and inherent in differences in the germ-plasm. My belief is that differences of opportunity may have played some rôle, but my contention is that all the evidence we possess points in the opposite direction, and the conclusion is that differences in opportunity have been on the whole of comparatively trivial importance.

One of the eight reasons in support of this theory, which I have given in "The Influence of Monarchs" (New York, 1913), page 258, is that "younger sons of kings are not less eminent than heirs to the throne." By eminent I mean of high intellectual grade. For this statement I drew upon statistics published in "Heredity in Royalty" (New York, 1906), page 285, and again here presented in Table I. below.

TABLE I

Grades.....	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	Total
Total number in each grade.....	7	21	41	49	71	70	68	43	18	7	395
Succession inheritors	5	14	26	31	49	38	45	23	12	4	247
Per cent.....	71	67	63	64	69	54	67	54	67	57	62.5

These 395 persons were the 395 adult males 25 years or over who were graded for intellect in "Heredity in Royalty," pages 20-26. About three fourths of these individuals belong as descendants in the direct male lines of families studied. The other quarter enter the lists as ancestors, usually direct ancestors, in the various maternal lines. As far as one