"Boundary problems in one dimension," Professor M. Bôcher.

"The dynamics of radiation," Sir J. Larmor.

The lecture by Sir W. H. White will no doubt cause a discussion with followers of Professor John Perry for the speaker preferred "pure mathematics taught by a mathematician to the so-called practical mathematics."

From a social standpoint the members were well taken care of. On Wednesday evening, August 21, they were received in the Combination Room and Hall of St. John's College by Sir George Darwin as president of the Cambridge Philosophical Society, and Mr. R. F. Scott, vice-chancellor of the university. On Friday evening they attended a reception at Fitzwilliam Museum given by Lord Rayleigh, the chancellor of the university. Sunday afternoon was given up to a reception by the committee on organization in the gardens of Christ's College. An organ recital was given in King's College chapel on Sunday night. On Monday night the master and fellows of Trinity College received the members in the college. One afternoon was devoted to an excursion to Ely and its cathedral. An excursion to Oxford was arranged for the day after the breaking up of the congress. On this day many accepted the invitation of the Marquis of Salisbury to visit Hatfield House. Facilities were given for visits to the works of the Cambridge Scientific Instrument Making Company, the visitors being entertained by Mrs. Horace Darwin. Visitors to the university observatory were entertained by Mrs. Newall. Besides these, there were many little gatherings and excursions for the ladies who did not care to attend the mathematical meet-The feature of this congress was the ings. hospitality of the Cambridge colleges. A majority of the members of the congress lived in the colleges and for those of us who were so fortunate, this part of the week's entertainment was one we shall long remember.

On Tuesday a procession was formed and a wreath of laurel and white flowers was carried to and placed on the grave of the Cambridge mathematician, Arthur Cayley, in Millroad Cemetery. Professor S. Dickstein, of

Warsaw, delivered an appreciation of Cayley's work. From the money left over from the subscription for the wreath a memorial of the occasion is to be made in silver and presented to the university.

The congress was well attended, the total number of members registering being 706 from 27 countries. This is somewhat larger than the attendance at Rome in 1904 and much larger than at any other congress. About 85 Americans were present. With the exception of the United Kingdom the United States was represented by the largest number of members, Germany and France coming next in order. At the last meeting the invitation of Professor Mittag-Leffler to hold the next meeting at Stockholm in 1916 was accepted. Invitations to hold the 1920 meeting in Budapesth and in Athens were received, but no action was taken.

A. R. CRATHORNE

## THE NEW ENGLAND GEOLOGICAL EXCURSION

THE twelfth annual Geological Excursion of the New England colleges and universities was held in the vicinity of Meriden, Connecticut, October 18 and 19, under the direction of Professor William North Rice, of Wesleyan University, and was attended by representatives from Amherst, Connecticut Agricultural College, Harvard, Mount Holyoke, Massachusetts Agricultural College, Massachusetts Institute of Technology, Smith, Trinity, Tufts, University of Vermont, Wesleyan, Williams, and Yale, teachers of geography from a number of the high schools of Connecticut, about fifty men and women participating.

After a collation at Fisk Hall in Middletown, given by Wesleyan University, the party listened to an illustrated lecture by Professor Barrell, of Yale University, on "Central Connecticut in the Geologic Past" and a brief statement by Professor Rice on the localities to be studied on the following day. After the meeting the party went to Meriden by trolley, where they spent the night. On Saturday morning the party went by special car on the electric line which follows, in general, the line of the Higby Lamentation fault, stops being made to study points of geological interest. A view from a large drumlin afforded an opportunity to recognize the topography resulting from the faulting of the extensive lava sheets of the region-the anterior. main and posterior. A section in the posterior sheet was shown in which what seemed to be the vesicular surface of one flow was covered by the compact lava of a later flow. It was. however, suggested by Professor A. C. Lane that this vesicular lava may have been formed within the lava sheet as is perhaps indicated by its somewhat coarsely crystalline structure. A remarkable section near Westfield, where three faults with their drag dips are well shown, was visited (Bull. VI., Connecticut Geol. and Nat. His. Sur., Fig. 16, p. 213). From here the party walked to other points where drag dips were to be seen and visited the post-glacial Westfield gorge. On account of the rain in the afternoon only a small number ascended Lamentation Mountain. Lunch was served at the Highland Club near Meriden.

The excursion was a most interesting and instructive one, both because it was carefully planned and also because of Professor Rice's lucid explanation of the topographic effects of the great series of faults and the evidences by which the complicated structure of the region was unravelled. The unavoidable absence of Professor W. M. Davis, to whose insight we owe the first clear conception of the relations of the Connecticut traps and sand stones, was greatly regretted.

HERDMAN F. CLELAND WILLIAMSTOWN, MASS., October 22, 1912

## THE PAGEANT AT MOUNT HOLYOKE COLLEGE

THE festival procession of the liberal arts and sciences presented on October 8 at the seventy-fifth anniversary of Mount Holyoke College was not only a thing of brilliant beauty but to many it was also a dramatic revelation of the round of human knowledge.

Planned by the faculty and presented by over six hundred students, it expressed to the audience of three thousand people in a wonderfully impressive manner the salient points in the history and ideals of the eighteen subjects represented. The procession passed for two hours through a natural amphitheater surrounded by trees glorious with unusually gay autumn foliage.

The science division was marked by boldness and effectiveness of treatment, combined with richness of coloring and fineness of detail. Heralds clad in rose and yellow were followed by the personification of "Mathematics, the golden key of the sciences." A striking group of mathematicians represented the history of mathematics from the fifteenth century B.C. to the seventeenth century A.D.

The story of man's progress toward a knowledge of heaven and earth was told by the departments of physics and astronomy. The fire-worshipers of primitive times, and a Chaldean priest studying the stars were followed by a number of the great thinkers and experimenters from Aristotle to Franklin. The material and intellectual gifts to humanity, such as the principle of the conservation of energy, the aeroplane, astronomical time, the telegraph, the steam engine, spectrum analysis, the telescope, the cathode ray, suggesting new concepts of matter, were symbolized by graceful figures suggestively costumed.

The hint of new concepts of matter was echoed in the chemistry section which dealt with the historical development of the chemical element. An aged alchemist, Boyle, Lavoisier, Priestley, Davy and Dalton ushered in a throng of dancers representing the elements. At first mingling in confused and unrelated groups in the wild strains of a Russian folkdance they fell suddenly into harmony at the bidding of Mendelejeff clad in a Russian robe of black and scarlet. The order of the periodic system and the division of the elements into families was suggested by eight groups of four elements each, the members of each group being dressed in varying shades of one color in the following order, gray, pink, brown, green, yellow, blue, tan and lavender. Then