

solved, the other set may be reduced to quadratures. If the axis of moment of momentum is fixed, the complete solution is by quadrature, thus paralleling the gravitational problem.

It also appears that Lagrange's investigations in the problem of three bodies are generally independent of the law of gravitation. For example, those motions in which the triangle of the bodies is always similar to itself require that triangle to be either equilateral or with collinear vertices, and the sides to revolve in a fixed plane through the center of gravity. It is shown here that the angular velocity of the triangle varies inversely as the square of a side and so is constant for rigid configurations. Also that no other solution than the above is possible for constantly collinear bodies whose co-line is not a fixed line.

Lagrange's biquadratic equation for ρ holds also for arbitrary motion, and his differential equation for the same in any gravitational motion has the roots of that biquadratic for particular, and not singular, solutions.

H. E. SLAUGHT,
Secretary of the Section.

JOINT MEETINGS OF MATHEMATICIANS AND ENGINEERS AT THE UNIVERSITY OF CHICAGO.

A SERIES of meetings of mathematicians and engineers was held at the University of Chicago, December 30-31, 1907, under the auspices of the Chicago Section of the AMERICAN MATHEMATICAL SOCIETY and conjointly with Sections A (mathematics and astronomy) and D (mechanical science and engineering) of the American Association for the Advancement of Science.

The invitation to join in the discussion of the teaching of mathematics to students of engineering had been widely distributed among those engaged in the practice of engineering as well as among professors in technical schools. The attendance was large and representative, including one hundred men especially interested on the mathematical side and fifty on the engineering side. Among the institutions represented were the State Universities of Illinois, Indiana, Iowa, Kansas, Minnesota, Missouri, Nebraska, Ohio, Pennsylvania, Vermont,