

if the orbit is assumed to be a parabola, and by solving

$$(2) \quad (z^2 - 2cz + 1)^3(z - m)^3 - m^2 = 0$$

if no assumption is made regarding the orbit. One of the chief aims of Professor Leuschner's short methods for computing an orbit is to shorten the time taken for the calculation. The semi-graphical solution of the above equations used in the short methods contributes largely to this end, as well as to the lessening of tedious computational work; but this method still requires the use of tables. It is to eliminate entirely all computations in the solution of equation (1) above that Professor Leuschner and Mr. Bernstein devised methods of constructing geometrically the curve given by the equation

$$y = \frac{h}{[(z - c)^2 + s^2]^{\frac{1}{2}}},$$

whose intersections with the parabola $y = (z - p')^2$ give the required roots. By finding a geometric construction of the curve

$$z - m = \frac{m}{(z^2 - 2c + 1)^{\frac{1}{2}}},$$

whose intersections with the line $my = x + c - m$ give the roots of equation (2), Mr. Bernstein derived a purely graphical solution of the problem for the general orbit.

T. M. PUTNAM,
Secretary of the Section.

THE CARLSRUHE MEETING OF THE GERMAN MATHEMATICAL SOCIETY.

THE annual meeting of the Deutsche Mathematiker-Vereinigung was held in affiliation with the eighty-third convention of the society of naturalists and physicians at Karlsruhe during the week of September 24-28, under the presidency of Professor F. Schur, of the University of Strassburg. Under the stimulus of the pleasure and profit derived from preceding meetings a new record in attendance was established, over one hundred persons being present. The people of Karlsruhe generously