

$$F\left(x, y, z, \frac{\partial z}{\partial x}, \frac{\partial z}{\partial y}\right) = 0,$$

in which the first member is an analytic function of its five arguments, there exists in general through an analytic curve an analytic surface $z = z(x, y)$ which satisfies the equation. In the paper of Professor Bliss it is shown that a similar theorem is true when the function F is required to have continuous first and second derivatives only. The proof is made with the help of the theory of characteristic curves and the existence theorems for a set of ordinary differential equations

$$\frac{dx_1}{dt} = f_1(x_1, x_2, \dots, x_n), \dots, \frac{dx_n}{dt} = f_n(x_1, x_2, \dots, x_n).$$

The relation between the characteristic curves and integral surfaces is well known when everything is analytic. But in order to work the other way and derive existence theorems from the properties of characteristic curves, it is necessary to use the theorems on the differentiability of solutions of a system of ordinary equations with respect to the constants of integration. These theorems seem to have been overlooked in this connection.

F. N. COLE,
Secretary.

THE DECEMBER MEETING OF THE CHICAGO SECTION.

THE twenty-second regular meeting of the Chicago Section of the AMERICAN MATHEMATICAL SOCIETY was held at the University of Chicago on Monday, Tuesday and Wednesday, December 30–31, 1907, and January 1st, 1908, in connection with the fifty-eighth convocation of the American association for the advancement of science. The great gathering of scientists in other lines doubtless attracted unusual numbers of mathematicians, resulting in a wide representation of members and the largest attendance ever recorded at any meeting of the Society.

Monday afternoon and Tuesday morning were devoted to meetings with Sections A and D of the American association, for discussion of the teaching of mathematics to engineering