

differential equation. The paper of Dr. Gillespie shows that if two known integrals, each containing n dependent variables, give through the vanishing of their first variation the same system of differential equations, it is then possible to write immediately an integral of this system of differential equations.

25. The general circulation of the atmosphere has been discussed by Ferrel and Oberbeck. The former made no attempt at a complete solution. The latter assumed that the air was incompressible but satisfied Boyle's law. He also surrounded the atmosphere with a spherical boundary of indefinite height. In Mr. Sharpe's solution it is shown that when there is no inequality of temperature between the equator and the poles the air is in both adiabatic and conductive equilibrium. Consequently when there is an increase of temperature from the pole to the equator the temperature still satisfies Fourier's law of conduction and a circulation exists which vanishes at the upper limit of the atmosphere as well as on the earth's surface. This meridional circulation modifies the east and west motion of the air, which in turn changes the pressure distribution and the circulation.

F. N. COLE,
Secretary.

THE DECEMBER MEETING OF THE CHICAGO SECTION.

THE twentieth regular meeting of the Chicago Section of the AMERICAN MATHEMATICAL SOCIETY was held at the University of Chicago, Chicago, Ill., on Friday, December 28, 1906. The total attendance was thirty-five, including the following twenty-nine members of the Society :

Mr. G. D. Birkhoff, Professor G. A. Bliss, Professor Oskar Bolza, Professor D. R. Curtiss, Professor L. E. Dickson, Dr. Otto Dunkel, Professor T. F. Holgate, Mr. Louis Ingold, Professor O. D. Kellogg, Professor Kurt Laves, Mr. N. J. Lennes, Dr. A. C. Lunn, Mr. W. S. MacMillan, Professor H. Maschke, Professor G. A. Miller, Professor E. H. Moore, Dr. J. C. Morehead, Professor F. R. Moulton, Dr. L. I. Neikirk, Professor H. L. Rietz, Professor N. C. Riggs, Mr. W. J. Risley, Mr. A. R. Schweitzer, Professor J. B. Shaw, Dr. C. H.