(1862 and 1885) of Stokes and Glazebrook, and the later papers alluded to before, are the natural sources of information for those who wish to go into these matters.

For advanced students in colleges and all who wish to acquire a thorough knowledge of the existing state of the undulatory theory of light, we recommend this admirable The type and illustrations are also models of cleartreatise. ness and elegance and reflect credit upon the publishers as well as the author. JOHN E. DAVIES.

UNIVERSITY OF WISCONSIN Madison, October 12, 1891.

## NOTES.

A REGULAR meeting of the NEW YORK MATHEMATICAL SOCIETY was held Saturday afternoon, November 7, at half-The folpast three o'clock, the vice-president in the chair. lowing persons having been duly nominated, and being recommended by the Council, were elected to membership: Professor Simon Newcomb, Navy Department and Johns Hopkins University; Dr. Oskar Bolza, Clark University; Mr. Charles Riborg Mann, Columbia College; Professor Ludovic Estes, University of North Dakota; Mr. Herbert Armistead Sayre, Montgomery, Alabama; Professor James Harrington Boyd, Macalester College; Dr. Asaph Hall, Jr., U. S. Naval Observatory; Dr. Percy F. Smith, Yale University; Mr. Edwin H. Lockwood, Yale University; Professor Robert Judson Aley, Indiana University; Professor Joseph V. Collins, Miami University; Dr. Charles H. Chapman, Johns Hop-kins University; Professor Albert Munroe Sawin, University of Wyoming; Mr. Frank Gilman, Lowell, Massachusetts; Professor Henry Parker Manning, Brown University; Mr. Charles S. Peirce, Milford, Pennsylvania.

Mr. Charles P. Steinmetz read an original paper entitled "On the curves which are self-reciprocal in a linear nul-system, and their configurations in space."

Dr. Edward L. Stabler made some remarks upon the theory of errors which are equally probable between given limits.

THE nul-system in space, which formed the subject of Mr. Steinmetz's paper, is a one-to-one correspondence between points and planes such that any point lies in its conjugate plane, and conversely. A linear nul-system is one in which all the planes conjugate to the points of any straight line