

The only blemish in the English edition is the translation of the Introduction which, if always understandable, is occasionally ungrammatical and employs non-standard terminology. For instance, the well known recurrence relations for parabolic cylinder functions are called recurrent correlations on p. x while they are called recurrent formulae on p. xxi; confluent hypergeometric functions are called degenerate hypergeometric functions (a term commonly used for certain exceptional, rather than limiting, cases of Gauss' hypergeometric series). Apart from these imperfections, the English edition is beautifully produced and does credit to the publishers and their printers.

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Works of J. Willard Gibbs. Dover Publications, New York, 1961.

Dover Publications has republished the complete works of America's most distinguished scientist, J. Willard Gibbs. Available for the first time in paperback editions are The Scientific Papers of J. Willard Gibbs in two volumes (\$2.00 each volume, 434 and 284 pages), Vector Analysis, prepared by Edwin Bidwell Wilson from Gibbs' pioneering lectures (\$2.00, 436 pages), and Gibbs' Elementary Principles in Statistical Mechanics (\$1.45, 207 pages).

J. Willard Gibbs (1839-1903) was the foremost American mathematical physicist of his day. Although he is known primarily for his formulation of the Phase Rule, he made important contributions to dynamics, mathematics, and optics as well as to thermodynamics. The Scientific Papers of J. Willard Gibbs brings together all these contributions in their original form: 30 papers, monographs and abstracts.

Although the Vector Analysis lectures were given nearly 60 years ago, Edwin Bidwell Wilson's textbook remains a first-rate introduction and supplementary text for students of mathematics and physics. This book is elementary enough to be followed by anyone who has had some calculus.

Elementary Principles in Statistical Mechanics is Gibbs' last work. In it, Gibbs undertook what was probably the first independent development of statistical mechanics. Still a fundamental treatise on the subject, it brings together the achievements of Clausius, Maxwell, Boltzmann, and Gibbs himself.

(Publisher's Introduction)