through which the interested reader may follow up specific incidents and achievements in the lives of members of the Society.

The author inclines to the view that there was a closer connection between the scientific interests and researches of the Lunar group and their contemporaries and the technology by which many of them made their living than some previous historians have been willing to accept. He notes, indeed, the familiar story that Watt refused to admit that the researches of Joseph Black on the properties of steam (e.g., the latent heat) had any influence on his invention of improvements in the steam engine, in particular the separate condenser. Professor Schofield, however, goes to some pains to emphasize that Watt's inventive work on the steam engine was based to a considerable extent on his own scientific studies of steam. This appears to have been by no means an isolated case among Lunar Society members.

This book is a mine of information about the sociology of science and technology in the 18th-century England. It will be read with interest and profit by all who wish to be fully informed about that era.

**Equations of Mathematical Physics.** By A. N. Tikhonov and A. A. Samarskii. Translated from Russian by A. R. M. Robson and P. Basu. Translation edited by D. M. Brink. 765 pp. (Pergamon, Oxford) Macmillan, New York, 1963. $17.50.
*Reviewed by J. Gillis, Weizmann Institute of Science, Rehovoth, Israel.*

The level of this book would correspond in most good Western universities to that of senior undergraduate or junior graduate students. Since it is by now extremely difficult to say anything new on the subject at this level, we must judge chiefly by what is included or omitted, the clarity of exposition, and the selection of examples.

Briefly, we can say that the book under review passes all three tests with flying colors. The exposition is beautifully lucid and the material covered is extensive. All the main types of second-order linear partial differential equations are discussed, and the various methods of solution are dealt with very fully. The text is studded with exceptionally well-chosen illustrative examples, refreshingly different from the dismally recurrent standard ones, and with a live practical interest. Existence proofs are given in a form which does not obscure their physical content.

Since there is no doubt that there will be further editions, it might be in order to point out a few gaps which could be filled. The first is the complete omission of variational methods. Moreover, although asymptotic methods are used occasionally, the basic ideas and definitions are never formally presented, and systematic methods for obtaining asymptotic estimates are not included.

These are small and easily remedied shortcomings. In the opinion of the reviewer, this is by far the best textbook of its kind available in English.

**The Two-Nucleon Interaction.** By Michael J. Moravcsik. 154 pp. Clarendon Press, Oxford, 1963. Paper $2.90.
*Reviewed by Michael Danos, National Bureau of Standards.*

In the development of a scientific field stages occur every now and then in which a certain consolidation has taken place. At such times it is natural to step back a little and survey the whole field so as to provide a coherent picture, to tie up loose ends, and to define a starting position for the developments to come. Such a moment has been reached just now in the field of the two-nucleon interaction. The data and the theory have been improved to such an extent that for the first time, all the essential features seem to fit together in a consistent semiquantitative manner up to nucleon energies of about 300 MeV, at least for the $p$-$p$ scattering. Moravcsik has undertaken the task of reviewing and consolidating the field, and the result is a gem in clarity, conciseness, and completeness.

Beginning with the definition of all possible invariants of the S-matrix and with the description of the experiments necessary for the complete determination of these quantities, continuing with the analysis of the data;