June 1934. Government of India Publications, Nos. 1, 2 and 3 of 1934-35.

"Medico-Surgical Suggestions," Vol. 3, Nos. 7 and 8.

"Journal of the Indian Mathematical Society," Jubilee Commemoration Volume 20.

"Nature," Nos. 3376-3381 and Index to Vol. 133 Jan.—June 1934.

"Journal of Nutrition," Vol. 8, Nos. 1 and 2.

"The Journal of Chemical Physics," Vol. 2, No. 7.

"Journal de Chemie Physique," Tome 31, Nos. 6 and 7.

"Indian Journal of Physics," Vol. 8, Pts. 5 and 6.

"Review of the Scientific Instruments," Vol. 5, No. 7.

"The Indian Trade Journal," Vol. CXIV, Nos. 1466-1472.

Forthcoming Events.

Society of Biological Chemists, India.—The following papers will be presented during September and October:-(1) 28-9-1934. Mr. R. H. Ramachandra Rao, M.Sc., "The Influence of Aeration in the Diastatic Activity of Steeped Barley" at the *Indian Institute of Science, Bangalore.* (2) 5-10-1934. Mr. B. H. Krishna, M.Sc., A.I.C., "Colloidal Medicaments" at the *Central College, Bangalore.*

Reviews.

"THE SILVER JUBILEE COMMEMORATION VOLUME" of the Indian Mathematical Society.

The Indian Mathematical Society celebrated its Silver Jubilee in December 1932 at Bombay. The twentieth volume of the *Journal of the Society* is published as the Commemoration Volume. The volume contains a report on the progress of the Society during these twenty-five years. It also contains a number of interesting papers contributed by Indian scholars and well-wishers of the Society, on various subjects in Mathematics.

Prof. Watson contributes a paper on the proofs of certain identities in combinatory analysis which are connected with the famous Roger-Ramanujan identities in combinatory analysis. The author uses Ramanujan's notations in the course of the proof. S. S. Pillay has determined the true order of the sum-function of the number of prime factors of n and another allied function with and without the Riemannian hypothesis. E. H. Neville contributes a big paper on "*Iteratine interpolation*". E. T. Bell has contributed a paper on an algebra of numerical compositions. S. M. Shaw has determined upper and lower bounds of $\frac{A(n)}{n}$ in a closer manner than Behrend where $A(n)$ denotes the number of abundant numbers less than n. G. A. Miller has constructed an infinite system of groups possessing certain given properties and has shown every group possessing certain properties can be extended to a group belonging to the infinite system. K. Ananda Rao has studied some more properties of the elliptic modular function in the neighbourhood of its line of singularities. C. N. Sreenivasaiengar has contributed a paper on the singular solutions of ordinary differential equations of second order. K. Venkatachaliengar has given a simple general method of constructing series whose terms and sum-functions are continuous in an interval and which converges non-uniformly in every sub-interval. S. Chowla has obtained the orders of certain expressions which occur in connection with Waring-Hilbert theorem.

C. V. H. Rao has given a purely projective definition of the ϕ-Conic. T. Hayashi has solved an ancient Japanese mathematical problem. W. Blaschke has proved that a hexagonal 4-web of surfaces is except for topological transformations uniquely determined by three functions each of one variable. D. D. Kosambi has contributed an interesting paper on "*The Problem of* Differential Invariants". B. Ramamoorti has given a "Covariant specification of the simplex inscribed in a rational norm curve in a space of odd dimensions and circumscribed to a conic inpolar to the Curve". S. Krishnamoorty Rao has studied how quadrics and subregions in a space of degree n are transformed by a given point collineation. A. A. Krishnaswamy Iyengar has contributed some results in connection with oriented circles. Ram Behari has obtained the condition that the osculating quadric of a skew ruled surface be equilateral and has also obtained a new geometrical meaning for the Laguerre function. G. P. Rao has given a method computing Gravity Anomalies. M. Raziuddin Siddiqi has proved the existence and uniqueness of the solution

of some differential equation which occurs in connection with the equation of heat conduction in wave mechanics. K. Nagabhushanam has contributed a paper on the Transformation Theory of Dynamics in the Manifold of states and time. K. K. Mukherjee has a paper on the Normalisation in Wave Statistics.

The editors should certainly be congratulated on the excellent printing and appearance of the volume.

K. V. I.

SM QUELQUES PROPERTIES DES POLYNOMES. By J. Dieudonne. (Hermann & Co., Paris. 24 pp.) 6 francs.

This short monograph deals with the applications of the theory of bounded functions to the properties of polynominals all of whose roots are situated within the unit circle. The connection between them was pointed by I. Schur in connection with his solution of the famous coefficient problem of bounded functions. This book is devoted to the study of less profound relations between them which are capable of easy applications to other problems particularly to those concerning the successive derivatives of these polynominals. The author studies various properties of certain polynominals such as the value of their minimum radius of convexity, etc. The constants obtained are the best possible. Some applications of these are indicated at the end of the book.

K. V. I.

L' ARITHMETIQUE DE L' INFINI. By Maurice Frechet. (Hermann & Co., Paris. 38 pp.) 10 francs.

This book aptly forms the first among the series of books on General Mathematical Analysis which are to be published under the editorial direction of the author. The first thing that one has to study in order to get a complete grasp of analysis is the logical foundation of Infinity. The author has set forth in very lucid terms the definitions of various notions introduced by Cantor, *viz.*, cardinal and ordinal numbers, transfinite numbers. A short account of operations of point sets and the theory of measure are also treated in the book. The author's treatment of the subject is very succinct and brilliant. One great relieving feature about the book is that it does not make use of complicated symbols which are very common in advanced books on real analysis. It is really remarkable that the author has treated the whole subject within a short space of 38 pages. A select bibliography of recent literature on the subject is appended at the end of the book.

K. V. I.

ELEMENTARY MECHANICS, including Hydrostatics and Pneumatics. By Sir Oliver J. Lodge, D.SC., LL.D., F.R.S. (Chambers Limited, Edinburgh, pp. 308. New Edition. Revised and enlarged). Price 4*s*. 6*d*.

This authoritative and highly useful book on Mechanics was first issued by the author in 1896. It is since revised and enlarged. The present one is a copiously illustrated, new edition of the book.

The author who is the well-known scientist and writer, Sir Oliver Lodge, has designed this book to be a really useful hand-book of Mechanics for students. The following are some of the special features of the book :— (1) It is written in a manner so as to be understood by the student who has not specialised in mathematics and even by the layman, without, at the same time, sacrificing accuracy and precision; (2) The subject-matter is treated in such a way that the Laws of Physics have been deduced from first principles and familiar experience rather than from special experiments; and (3) Finally, it is meant to be an easy introduction to a more thorough study of the subject and at the same time a philosophical work.

The subject-matter is treated in a logical and vivid manner and is intelligible even to the student preparing for various examinations by private study. A large number of graded examples have been added and a number of question papers appended.

The Indian student preparing for the various University Examinations will find this book highly useful. It should be indispensable to all libraries.

The printing and the attractive get-up add to the high quality of the book.

B. V. SASTRY.

1350-34.—Printed at The Bangalore Press, Bangalore City, by T. Subramania Aiyar, Superintendent, and Published by B. N. Sastri, M.Sc., A.I.C., A.I.I.Sc., for the "Current Science" Board of Editors, Indian Institute of Science, Hebbal Post, Bangalore.