

1413y

THE
EDUCATION REVIEW

1926

Vol. XXII

No. 10

CLC
T112, N7

Nov. 22-1926
124-252

THE EDUCATIONAL REVIEW

A Monthly Record for India.

VOL. XXXII.]

OCTOBER 1926.

[No. 10.]

CONTENTS.

	PAGE
AN ADDRESS TO TEACHERS — Delivered at the Annual Re-union of the Teachers' Training College, Benares, by Prof. P. SUBRAHMANIAM, M.A., L.T., The Benares Hindu University ...	585
"EDUCATIONAL REFORM IN THE LIGHT OF SCOUTING." By Mr. G. RAMAMIRTHAM AIYER, B.A., L.T., Papanasam ...	593
ON EUCLIDEAN CONSTRUCTIONS WITH A FINITE RULER AND PAIR OF COMPASSES. By Mr. A. A. KRISHNASWAMI AYYANGAR, M.A., L.T., Maharajah's Collegiate High School, Mysore ...	601
RURAL EDUCATION. By Mr. N. SIMHADRI, Dy. Inspector of Schools, Giddalore, Kurnool ...	604
SALVATION OF INDIA. By Mr. S. K. VERMA, B.A., L.T., Asst. Master. and Scout Master, High School, Balaghat ...	606
"CAREER FOR THE UNEMPLOYED." By Mr. J. L. BOSE, F.I.C.A., Vice- Principal, India School of Accountancy, Calcutta ...	614
IMPEDIMENTS TO EDUCATIONAL EFFICIENCY UNDER PRESENT- DAY INDIAN CONDITIONS—A paper	

read by Mr. N.A. DORAISWAMY IYENGAR before a meeting of the H. T. H. S. L. S. & P. Dept. Teachers' Association, Madras. 615	
WORLD FEDERATION OF EDUCA- TIONAL ASSOCIATIONS, EDIN- BURGH, 1925. By Mr. J. P. BULKELEY, M.A., I. E. S., Rangoon— <i>The Calcutta Review</i> , Oct. 1926 ...	619
REVIEWS AND NOTICES ...	628
The Changing School, by Philip Boswood Ballard; Home-craft and Mother-craft in India, by C. E. Parsons.	
MADRAS UNIVERSITY LIBRARY— RECENT ADDITIONS ...	629
LIST OF LATEST ADDITIONS TO THE CONNEMARA PUBLIC LIBRARY, EGMORE ...	632
THE FIRST INDIAN WOMEN'S EDU- CATIONAL CONFERENCE — Presi- dential Address delivered by Srimati R. S. SUBBU LAKSHMI AMMAL, B.A., L.T., Headmistress, Model Section, Lady Willingdon Training College, Madras ...	633
EDITORIALS ...	635
Education in India (1924-25); Indian Military College, Dehra Dun; The Hyderabad Budget; The Andhra Univer- sity; Prof. Bertrand Russell on Educa- tion; The Empire Universities' Congress; The All-India Teachers' Federation.	

Annual subscription inclusive
of Postage, Rs. 5.
Half-yearly Subscription,

MADRAS:
SRINIVASA VARADACHARI & CO.
[All Rights Reserved]

Foreign Subscription inclusive
of Postage, Rs. 6.

MADRAS TUTORIAL COLLEGE.

15 & 16, ANGAPPA NAIK STREET, G. T., MADRAS

TEL. ADDRESS:—"TUTORIAL."

(Established 1919).

College Re-opens on 1st of November 1926
for Intermediate and B. A. Students of
Madras and Andhra Universities.

*Special Concession will be given to bona-fide
teachers to appear privately for Intermediate and
B. A. Examinations.*

Foreign Examinations:
Cambridge Senior, 1927 December.

Admissions close on 30th Oct. '26
Oxford Senior, 1928 July

Classes commence from 7th Feb. '27

Record Results year after year

Convenient Hostel

The Premier Institution of its kind in South India

Apply for Prospectus with one anna stamp to :—

M. K. RANGACHARI,
Director.

Oct. 1926.]

ADVERTISEMENTS.

The Wembley Exhibition (Tamil).

By T. A. RAJARATHNAM PILLAI.

Price, As. 10.

For Use as a Text-book for Non-detailed Study in the Upper Forms.

With a Preface written by Dewan Bahadur Sivagnanam Pillai, Minister of Development, Madras Govt.

The book gives, with the help of many Half-tone Illustrations, a detailed account of the Exhibition, dealing particularly with the Indian Section of it. A Translation of the Speech of H. M. The King-Emperor at the Opening of the Exhibition is also given.

Literature on the Wembley Exhibition is very scanty in India, and this is the first book published on it in Tamil.

The book shows how the different parts of the British Empire are inter-dependent economically and what the Exhibition means for the Empire and the World. Hence, **Students of Form IV and, particularly students of Forms V and VI, having to study the Historical Geography of the British Empire, will get from it an impressive idea** of the remarkable variety of people and the resources of the British Empire. They will also know of the wonderful achievements of Modern Science and Art as demonstrated in some of the marvellous Exhibits connected with Travel, Transport, Communication, Manufactures, etc.

Approved by the Text-Book Committee.

Extract from a Review :

'A detailed account with special attention to the Indian Exhibits of the Wembley Exhibition. Incidentally there is a good deal of information about the commercial products of many parts of the British Empire.'

INDIAN HISTORY.

A History of India for High Schools and Colleges. By E. W. Thompson, M.A. Ninth Edition. Revised and brought up to 1920. Profusely illustrated with Maps, Sketch-maps and Pictures. 446 pp. Rs. 2-4.

A comprehensive text-book, with judiciously proportioned details, showing, with remarkable clearness, the development of the very complex history of India and rousing in students a scientific spirit in the examination of facts and the drawing of conclusions.

Approved by the Directors of Public Instruction of different Provinces. Has an All-Indian Appreciation.

A Junior School History of India. By E. W. Thompson, M.A. With numerous Maps, Sketch-maps and Pictures. English. Ninth Edition. Cr. 8vo. 232 pp. Re. 1. Revised and brought up to 1920.

The language of the Junior Book is simple, and the Maps and the Picture Illustrations are very helpful. It gives just that much of detail that is needed to make the pupil see the swell of the main stream of history. It is carefully modelled to be preparatory to the use of the Senior Book, which takes the student to a closer examination of cause and effect and prepares him for a scientific study of Indian History.

Approved by the Department of Education in different parts of India.

Readings from Indian History. By Ethel R. Sykes. Part I. From the Vedic Times to the Coming of the English. 79 Illustrations and Maps. 256 pp. Cloth, Re. 1-14. Part II. From the Coming of the English to the Present Time. 68 Illustrations and Maps. 240 pp. Cloth, Re. 1-14. Suitable Companions to Text-Books of Indian History.

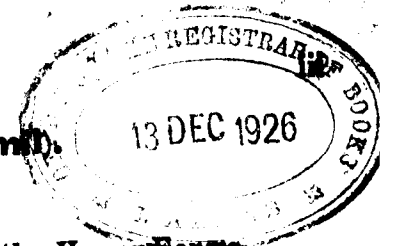
A survey of absorbing interest in the light of extracts from historical documents and other original sources of historical information. With rare Pictures and Maps.

Approved for School Reading by the Text-Book Committee, Madras.

Approved for Use as Texts in History and as Library or Prize Books, by the Director of Public Instruction, Central Provinces and Berar.

Approved for Library Use by the Text-Book Committee, Mysore State.

THE CHRISTIAN LITERATURE SOCIETY FOR INDIA, P. B. 501, PARK TOWN, MADRAS



Approved as a suitable Text-book for School use.—Fort St. George Gazette, 24th July 1923, page 671.

A NEW INDIAN ALGEBRA,

BY MR. B. KRISHNAMACHARI, M.A.,

University Prizeman in Mathematics, and sometime Assistant in Mathematics
in the Pachaiyappa's College, Madras.

Volume II

Contents of Vol. II.—Part II.—Chap. XXV. Harder Simple Equations; XXVI. Simple Equations Harder Problems; XXVII. Simultaneous Equations; XXVIII. Graphical Solution of Simultaneous Equations; XXIX. Applications of Graphs; XXX. Simultaneous Equations, Three Unknowns; XXXI. Graphs of Statistics; XXXII. Substitution in Formulae, and Illustration by Graphs; XXXIII. Simultaneous Equations—Problems Test Papers—Second Series. **Part III.**—Chap. XXXIV. The Laws of Algebra; XXXV. Homogeneity and Symmetry; XXXVI. Factors; XXXVII. Highest Common Factor and Lowest Common Multiple; XXXVIII. Fractions; XXXIX. Identities; XL. Literal Equations; XLI. Quadratic Equations; XLII. Involution; XLIII. Evolution; XLIV. Theory of Positive Integral Indices; XLV. Theory of Divisors; XLVI. Surds; XLVII. Application to Geometry; XLVIII. Easy Graphs; XLIX. Arithmetic and Geometric Series; L. Miscellaneous Theorems and Examples; Test Papers—Third Series; Answers.

D, Cr. 16 mo., 534 pp. Price—Re. 1-8-0.

RUDIMENTS OF ALGEBRA

With a Chapter on Graphs

by the late S. SRINIVASA IYER,

Author of "Problems in Arithmetic"

Revised by B. HANUMANTHA RAU, B.A.,
Professor of Mathematics, College of Engineering, Madras.

Sixth Edition.—Price Re. 1.

13th Edition—(1925)

A Manual of Arithmetic

By the late MR. S. RADHAKRISHNA AIYAR, B.A.,

Principal, Maharajah's College, Pudukotah.

Approved as a Text-book for all Classes and Forms.

Vide Fort St. George Gazette, 24th Jan. 1907.

Very useful for School-Leaving Certificate Examination.

Price—Rs. 2.

SRINIVASA VARADACHARI & CO., 4, Mount Road, Madras.

Approved as a suitable Text-book for School use.

(Fort St. George Gazette, 24th July 1923, page 668).

TAMIL EDITION

OF

A TEXT-BOOK OF ARITHMETIC

FOR LOWER SECONDARY OR MIDDLE SCHOOLS

BY

The late S. RADHAKRISHNA AIYAR, B.A.

Principal, Maharaja's College, Pudukotah,

AND

K. VAIDYANATHASWAMI AIYAR, B.A.

Retired Headmaster, Board (now Govt.) High School, Tiruvalur.

Prepared on the lines indicated by the syllabus in Elementary Mathematics recently prescribed
by the Director of Public Instruction, Madras, for Form I.

Part I-A—(Pages 240 + xvi). Price 12 as. 6 pies

Both the Parts in one volume Re. 1-10-0.

Contents.

அத்யாயம் I. எண்மானமும் எண்ருறிப்பும் (முழுஎண்கள்); II. ஸாலிட்கள்: பரப்புடன்: கோடுகள்: புள்ளிகள்; III. அளவைகளின் வாய்பாடுகள்; IV. ஓரினக்கூட்டல்; V. மேற்கோடு; VI. ஓரினக்கூட்டல்; VII. மேற்கோடு (தொடர்ச்சி); VIII. ரோமன் இலக்கங்கள்; IX. உத்திகளும் அவற்றின் அக்கங்களும்; X. கோணங்களும் கோணங்களை உருவங்களும்; XI. அடைப்புக்குறிகள்; XII. x ஐ உபயோகித்துக் கணக்குப் பார்த்தல்; XIII. வட்டம் (முதல் பாகம்); XIV. காந்தம் மடித்தல்: காந்தம் வெட்டல்; XV. எண்மானமும் எண்ருறிப்பும் (பின்னங்கள்); XVI. கால், அரை, முக்கால் கட்டலும் கழித்தலும்; XVII. $\frac{1}{2}$, $\frac{1}{3}$ and $\frac{1}{4}$ ஆகிய பின்னங்கள்; XVIII. அளவு நாடாவால் அளத்தல்; XIX. தசாம்சங்களின் கட்டலும் கழித்தலும்; XX. அளவு கோலால் அளத்தல்; XXI. ஓரினப்பெருக்கல் (முதல் பாகம்); XXII. ரெக்டாங்கிள்களும் ரெக்டாங்குலர் ஸாலிட்களும்; XXIII. ஓரினப்பெருக்கல் (இரண்டாம் பாகம்); XXIV. காந்தஅட்டையால் மாட்கள் செய்தல் (முதல் பாகம்); XXV. ஓரினவகுத்தல் (முதல் பாகம்); XXVI. கால், அரை, முக்காலும், தசாம்சங்களும்; XXVII. எட்டி அடிவகுத்தல்; XXVIII. ஓரினவகுத்தல் (இரண்டாம் பாகம்); XXIX. சட்டப்பலகையும் மேற்கோடும்.

XXX. ஓரினவகுத்தல் (மூன்றாம் பாகம்); XXXI. ஸாலி; XXXII. வலாசத்தாலும் அளவு சட்டத்தாலும் அளத்தல்; XXXIII. பெருக்கல் குறியை விட்டுவிடுதல்; XXXIV. அக்கங்கள் அடக்கிய உத்திகள்; XXXV. யோஜனைக் கணக்குகள் (முதல் பாகம்); XXXVI. வேண்டிய அளவுள்ள கோடுகளைக் கிழித்தல்; XXXVII. ஒற்றைப்படை எண்களும் இரட்டைப்படை எண்களும் தொடர்ச்சியான எண்களும்; XXXVIII. காரண எண்கள்: பகாசீலை எண்களும் பகுசீலை எண்களும்; XXXIX. காரண எண்களால் பெருக்கலும் வகுத்தலும்; XL. ஓரினப்பெருக்கல் (சுருக்கமான வழிகள்); XLI. ஓரின வகுத்தல் (சுருக்கமான வழிகள்); XLII. இனமாற்ற; XLIII. பலவினவெண் கூட்டல்; XLIV. பலவினவெண் கழித்தல்; XLV. பலவினவெண் பெருக்கல்; XLVI. பலவினவெண் வகுத்தல்; XLVII. யோஜனைக் கணக்குகள் (இரண்டாம் பாகம்); XLVIII. புள்ளிகள்: கோடுகள்: பரப்புடன்: ஸாலிட்கள்; XLIX. கடைக்கணக்குகளும் வாடிக்கைக் கணக்குகளும்; L. வட்டம் (இரண்டாம் பாகம்); LI. தசாம்ச பின்னங்கள்; LII. மெட்ரிக் அல்லது F ரென்சு ரீட்டலவைகள்; LIII. மேற்கோடுகளும் கோணங்களும்; LIV. கோணங்களும் அவைகளை அளத்தலும்; LV. அடுக்கும் அடுக்கு குறியும்; LVI. அளவுகளும் மடக்குகளும்; LVII. கோணங்கள் வரைதல்; LVIII. அபல் கோணங்கள், எதிர் கோணங்கள் முதலியவை; LIX. உத்தம் பொது அளவு; LX. அத்தம் பொது மடக்கு; LXI. சதுரங்களையும் நீண்ட சதுரங்களையும் வரைதல்; LXII. பரப்பளவும் கண அளவும்; LXIII. பளான் வரைதல்; LXIV. சாதாரண பின்னங்கள்; LXV. பொருட் கட்டு சாதாரண பின்னங்கள்; LXVI. சமச்சர எண்களும் திசை அட்டும் குறி; LXVII. Latitude and Longitude; LXVIII. ஒற்றை தழுவிய முறை—பரிசுஷ கேள்விகள்.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

Approved for use in ALL Schools

(Both under Private and Public Management.)

PART I—22nd Edition—Just Ready. Price As. 12.**A TEXT-BOOK OF ARITHMETIC**

for Lower Secondary or Middle Schools

BY

S. RADHAKRISHNA AIYAR, B.A.

AND

K. VAIDYANATHASWAMI AIYAR, B.A.

This book which had long been recognised for use in Schools under private management and has passed through 20 big editions in about 24 years, is now recognised for use in Schools under public management also.

2. It has now been thoroughly revised and brought into line with the *Syllabus in Elementary Mathematics* recommended by the Director of Public Instruction, Madras, for Forms I, II and III of Secondary Schools, and will be found to be a most suitable and satisfactory Text-Book of **Elementary Mathematics** for Forms I, II and III of all Secondary Schools both in the Madras Presidency and in the Native States of Mysore, Travancore, Cochin, Hyderabad and Pudukota.

3. It will be issued in the present 21st edition and in all succeeding editions in two complete and independent parts written on the *Concentric System*, Part I being intended for Form I, and Part II for Forms II and III.

Contents of Part I.

Chapter I. Numeration and Notation. II. Arithmetical Tables. III. Lines: Right Angles Rectangles: Squares. IV. Graphic Representation of Numbers. V. The Fractions $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and tenths. VI. Simple Addition. VII. Simple Subtraction. VIII. Measuring with the Tape. IX. Simple Multiplication. X. Simple Division. XI. Use of Brackets. XII. Expressions and Terms. XIII. Use of the Scale and Dividers. XIV. Averages. XV. Shortened Methods of Multiplication and Division. XVI. Problems on the Simple Rules. XVII. Use of the Set Square. XVIII. Areas of Rectangles and Squares. XIX. Cuboid and Cube. XX. Volumes of Rectangular Solids. XXI. Reduction. XXII. Compound Addition. XXIII. Compound Subtraction. XXIV. Compound Multiplication. XXV. Compound Division. XXVI. Problems on the Compound Rules. XXVII. Practice and Bazaar Transactions. XXVIII. Card-Board Modelling. XXIX. Odd, Even and Consecutive Numbers. XXX. Common Factors. XXXI. Division by Cancellation. XXXII. Use of Letters for Numbers. XXXIII. Unitary Method. XXXIV. Use of the Compasses. XXXV. Index Notation. XXXVI. Decimal Fractions. XXXVII. Straight Lines and Angles. XXXVIII. Metric Measures of Length. XXXIX. Use of the Protractor. XL. Resolution into Prime Factors. XLI. Measures and Multiples. XLII. Some Related Angles—(1) *Adjacent Angles*, (2) *Angles at a point*, (3) *Supplementary and Complementary Angles*. XLIII. Greatest Common Measure. XLIV. Least Common Multiple. XLV. Solids: Surfaces: Lines: Points. XLVI. Vulgar Fractions. XLVII. Drawing to Scale. XLVIII. Multiplication and Division of Compound Quantities by Fractions. XLIX. Reduction of Concrete Vulgar Fractions. L. Bisection of Lines and Angles. LI. Problems. LII. The Mariner's Compass. REVISION EXAMPLES.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

PART II.—22nd Edition—Price As. 12.**Contents of Part II.****II FORM.**

Chapter I. Numeration and Notation (including *Roman Notation*). II. Revision of the Simple Rules:—1. *Proof of Addition by casting out nines*. 2. *Detailed Verification of Multiplication*. 3. *Multiplication by 11*. 4. *Combined Multiplication and Addition*. 5. *Subtraction by Complementary Addition*. 6. *Combined Multiplication and Subtraction*. 7. *Square root and Cube root*. 8. *Easy approximations (Integers)*. 9. *Rough estimate of results*. III. Reduction and the Compound Rules. IV. Decimals:—1. *Multiplication of Decimals by Decimals*. 2. *Division of Decimals by Decimals*. 3. *Multiplication of Decimals by Decimals (continued)*. 4. *Multiplication and Division of Decimals by a Decimal of the Standard Form*. V. Bisection of Straight Lines, Angles and Arcs. VI. Vulgar Fractions:—1. *Compound Vulgar Fractions*. 2. *The signs $\div$, $\times$, of, $+$, $-$* . 3. *Complex Vulgar Fractions*. VII. Interconversion of Decimals and Fractions. VIII. Reductions of Concrete Fractions. IX. Reduction of Concrete Decimals. X. Triangles: Their Classification and Properties (including the shortest distance from a point to a straight line). XI. Simple Practice. XII. Unitary Method. XIII. Use of Letters for Numbers (including symbolical representation and solution of Problems by using x). XIV. Ratio. XV. Proportion and Rule of Three. XVI. Square Measure. XVII. Drawing to Scale. XVIII. Cubic Measure. XIX. Averages. XX. Latitude and Longitude. XXI. Construction of Triangles including Intersecting Circles. XXII. Problems:—1. *Division of Property*. 2. *Groups and Multiples*. 3. *Time and Work*. 4. *Fractional Parts*. 5. *Income-tax*. 6. *Exchange and Barter*. 7. *Profit and Loss*. 8. *Revolution of Wheels*. 9. *The Clock and the Calendar*. 10. *Time and Distance*. REVISION EXAMPLES.

III FORM.

Chapter XXIII. Decimals—(continued):—1. *Simplification of Complex Decimal Fractions*. 2. *Approximation of Decimals*. 3. *Statistics*. 4. *Related Examples*. 5. *Remainder after Division by Decimals*. XXIV. Vulgar Fractions—(continued). XXIV-A. Complex Fractions involving Decimals. XXV. Construction of Triangles—(continued). XXVI. Reduction of Concrete Fractions—(continued). XXVII. Reduction of Concrete Decimals—(continued). XXVIII. Circumference of Circles and Cylinders. XXIX. Congruence of Triangles and Circles (including *similar Triangles*). XXX. Compound Practice. XXXI. Parallel Straight Lines and Parallelograms. XXXII. Compound Rule of Three. XXXIII. Some Regular Rectilinear Figures. XXXIV. Square Measure—(continued). XXXV. Cubic Measure—(continued). XXXVI. Symmetrical Figures. XXXVII. Simple Interest. XXXVIII. Pyramid: Tetrahedron: Prism. XXXIX. Percentages. XL. Positive and Negative Quantities. XLI. Simple and Compound Rule of Three. XLII. Angles of Elevation and Depression. XLIII. Problems:—1. *Division of Property*. 2. *Groups and Multiples*. 3. *Time and Work*. 4. *Fractional Parts*. 5. *Income-Tax and Expenses*. 6. *Exchange and Barter*. 7. *Profit and Loss*. 8. *The Calendar*. 9. *Time and Distance*. 10. *Longitude and Time*. XLIV. Removal and Insertion of Brackets. XLV. Equations and Equational Problems. REVISION EXAMPLES including *Mysore Lower Secondary Examination Papers. Answers*.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

"ELEMENTARY MATHEMATICS"

Prepared in accordance with the Course of Study prescribed for Secondary School-Leaving Certificates

By **P. V. SESHU AIYAR, B.A., L.T.**
Professor of Mathematical Physics, Presidency College, Madras

AND

V. VENKATASUBBAYYA, B.A., L.T.
Head Master, High School Department, Pachaiyappa's College, Madras.

WITH A PREFACE

By THE HON'BLE **E. W. MIDDLEMAST, M.A.**
Professor of Mathematics and Principal, Presidency College, Madras

PART I. Seventh Edition.

Price Re. 1-12-0.

Approved as a Text-book for Secondary Schools (Fort St. George Gazette, 4th June 1912 (page 37))
and (The Ooshin Government Gazette, 15th June 1912.)

Also for Schools under Public management. Fort St. George Gazette, December 1913.

BY THE SAME AUTHORS.

PART II. Sixth and Entirely Revised Edition—1924.

ELEMENTARY MATHEMATICS

Prepared in accordance with the Course of Study prescribed for Secondary School-Leaving Certificates.

Price Rs. 2.

Approved as a Text-book for Secondary Schools (Fort St. George Gazette, June 1915)

Also for Schools under Public management. (Fort St. George Gazette, July 1917.)

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS

AMRUTANJAN



Cures All aches & pains

Price 10 Annas a Pot

Sold Everywhere

AMRUTANJAN DEPOT,

MADRAS

&

BOMBAY.

University Tutorial Press.

NEW BOOKS AND NEW EDITIONS.

FIRST STUDIES IN DRAMATIC ART

By Enid Rose, Royal Academy of Dramatic Art. 5s. 6d.

An introductory handbook for dramatic students, dealing with the concrete presentation of works of dramatic art, and in particular with gesture and physical expression and the underlying principles by which these are governed. The book is illustrated by twenty-one interesting plates.

THE MATRICULATION SHAKESPEARE: HAMLET

Edited by G. E. Hollingworth, M.A. 2s. 3d.

In addition to the notes on characterisation, the Introduction contains a short note on Shakespeare's life, and deals with the sources, historical setting, and the construction of the play concluding with notes on diction and metre.

PALGRAVE—GOLDEN TREASURY, BOOK II

By D. J. Donovan, B.A. 2s. 6d.

The introduction deals with the literary features of the period represented by Book II., information as to the several authors being given at the head of the notes on the several poems. The Notes explain linguistic difficulties and allusions.

A TEXT-BOOK OF GEOGRAPHY

By G. C. Fry, M.Sc. Sixth Edition, Revised to 1926. 6s. 6d.

For the middle and upper forms of schools. Stress is laid on the interconnection of Physical Geography and Political Geography. In the Sixth Edition many small alterations and additions have been made in the light of recent changes and developments. The statistics and political information have been brought up to date, and three new maps have been added.

THE GOVERNMENT OF GREAT BRITAIN AND THE DOMINION BEYOND THE SEAS

By A. E. Hogan, LL.D., B.A., and I. G. Powell, M.A. (Formerly entitled "The Government of Great Britain, Its Colonies and Dependencies.") Seventh Edition. 4s. 6d.

A clear and concise account of the various organs of central and local government analysing the essential principles underlying the theory and practice of our Constitution.

AN INTRODUCTION TO EXPERIMENTAL PSYCHOLOGY

By O. W. Valentine, D.Phil., M.A., Professor of Education in the University of Birmingham. Second Edition. 4s.

An introductory course in experimental psychology as applied to education for the use of teachers, students in training colleges, and private students. In the new edition the book has been considerably enlarged, and completely revised in the light of recent investigations. Important new sections and additional experiments are included.

A FIRST COURSE IN WIRELESS

By R. W. Hutchinson, M.Sc., A.M.I.E.E. 3s. 6d.

A scientific introduction to "Wireless" specially intended for the use of Technical Students, Wireless Experimenters and Constructors. The book deals with the essential apparatus employed in transmitting stations, the propagation of the waves, and various types of crystal, valve, and multi-valve receiving circuits.

CHEMISTRY FOR AGRICULTURAL STUDENTS

By R. H. Adie, M.A., B.Sc. Lecturer in Chemistry, St. John's College, Cambridge. 5s. 6d.

An elementary course in Chemistry specially adapted to the requirements of agricultural students and of pupils who are taking agricultural science as part of their school course.

A FIRST COURSE IN HYGIENE

By R. A. Lyster, M.D., Ch.B., B.Sc., D.P.H. Seventh Edition, Revised and Enlarged. 4s.

A useful course for beginners in this subject containing a short account of the elements of Human Physiology. In the Seventh Edition the book has been thoroughly brought up to date, and new chapters on the Construction of Dwellings and on Infectious Diseases have been added.

A Complete Catalogue of Educational Publications, Post Free, on application.

University Tutorial Press, Ltd., High St., New Oxford St., London.
The Publications of the University Tutorial Press may be obtained from the principal booksellers in India.

The Educational Review

A Monthly Record for India.

VOL. XXXII.]

OCTOBER 1926.

[No. 10.]

All literary contributions, books for review, newspapers, or magazines, sent in exchange, &c., should be addressed to the Editor, No. 4, Mount Road, Madras. Articles and communications intended for publication in the succeeding issue should, as far as possible, reach the Editor not later than the 20th of the month. The Editor solicits contributions on all subjects of educational interest. Stamps should accompany the MS., if the writer wishes it returned, in case of non-acceptance. The Editor can in no case hold himself responsible for accidental loss.

All remittances and communications regarding advertisements, &c., should be forwarded to the Publishers, EDUCATIONAL REVIEW, Office, No. 4, Mount Road, Madras.

The Publishers request that Subscribers to the EDUCATIONAL REVIEW, who do not receive the REVIEW in time, will kindly bring the fact to their notice immediately.

AN ADDRESS TO TEACHERS.*

By Prof. P. SUBRAHMANYAM, M.A., L.T.,
The Benares Hindu University.

THERE was a time, not long ago, when every pupil-teacher, on finishing his training, could be sure of a job, either Government or private. Those were days when a trained teacher was regarded as an acquisition by any institution, when special grants were allotted to institutions in proportion to the strength of trained hands on the staff, and private institutions set a premium on the trained teacher, and when as yet the Government had not fixed a definite scale and a grade. Now the tables are completely turned; the trained teacher is no more regarded as an acquisition; the special grants have been discontinued; the private institutions are holding the trained teacher at a discount.

Fortunately, the Government has fixed a scale and a grade and has practically closed the door for fresh recruitment.

What are the reasons for these changes? Is it a simple case of lesser demand and a greater supply? If so, why do the State and the private agencies vie with one another in starting and maintaining these Training institutions? Is it, after all, only a short-sighted policy? It may appear to be a simple economic problem of a lesser demand and a greater supply on the surface. But that is not so. A country, where the percentage of literacy is 7.3, can hardly congratulate itself on the educational progress therein. So long as every boy and girl of school-going age is not put to school, so long as every one in the country cannot read and write, there is ample scope for educational expansion. Moreover with over 90% in a state of illiteracy, and with so much of scope for educational expansion, it will be hardly correct to say that there

* Delivered at the Annual Re-union of the Teachers' Training College, Benares Hindu University.

is no demand for teachers. And if there is demand for teachers, the need for such of them as know their work well, is all the greater; and hence the trained teacher is not a superfluity.

It is probable that when so much is said, the original contention of a greater supply still holds good, at least so far as the present circumstances are concerned. Schools have not been growing apace with the multiplication of the training institutions and trained teachers. Whose is the fault? Let us leave that for wiser heads to discover. And even then, if it is found out that everything is due to this too rapid rate of multiplication, why not put a stop to this rate? We have three training colleges for post-graduates, and two for under-graduates in these Provinces. One post-graduate institution and two under-graduate institutions are managed by the Government, while the two other institutions are under the management of the two All-India Universities. If these be too numerous for the demand, we have to curtail their number; and there is every reason to believe that the idea is engaging the serious attention of the authorities. There are two courses open. We may curtail the two institutions run by the Universities, affording a little temporary relief to their finances, or we may close the Government institutions and save them half the amount which will be a permanent saving to the tax-payer, the other half being divided equitably between the institutions run by the Universities, according to the Government policy of "A rupee for a rupee." It is probable that the queer logic of an All-India institution, not being a provincial one may be more favourably considered, when a saving could be effected as a result. All that is for the politician and the publicist to do,

In this connection, a passing mention might be made of the attempts of certain prejudiced people who want to close down the training colleges by running them down. They want to give the dog a bad name and hang it. Their arguments would not hold water, but since they are high-placed and in a position to make their voices heard, they never miss an opportunity of carrying on their propaganda. They would call the trained teacher a good-for-nothing and costly substitute for a born teacher, would abuse his technique, and go the length of calling the whole process a humbug. Their argument would seem to be that the world had got on splendidly well for centuries, without the trained-teachers, and hence they are superfluous. Well, we should not quarrel with those who want to close an institution because of "economic reasons"; but we should most respectfully but emphatically protest against this mischievous policy of giving the dog a bad name before hanging it. To say that Mr. A is a good teacher, even without being trained, is absolutely no argument against Mr. A's being a still better teacher with a certain amount of training.

This takes us to another point, *viz*, the reasons for this kind of prejudiced mentality against the trained teachers. It is partly due to an erroneous notion that training is only good for teachers up to the High School stage. If it is good for the Primary and Secondary stages, there is no reason why it should not be good for the higher stages also. Fortunately for us, some of us who have had the benefit of undergoing a training, can still recollect instances from among our worthy college professors and lecturers, who with all their higher talents and merits failed to teach their subjects so well as they might

have been expected to do. Have we any doubt that a certain amount of training in the principles and practice of education under expert guidance would have made their work far more valuable? It is this mischievous idea of training being of use to a certain section of teachers that is responsible for this irresponsible criticism of the futility of the training institutions. It is a patent fact that every one who undergoes a course of training does take something abiding with him into the profession; but for which he would have been so much the poorer. There is no doubt that the amount of good varies with the individual's stock-in-trade and with the kind of expert guidance that he gets at these institutions.

It would be presumptuous to suppose that the institutions as they are to-day are perfect or infallible and have no scope for improvement. But that is not what we contend. The only contention is that if training be good for the Primary and the Secondary stages, it is equally good for the higher stages as well; and hence the futility of the training institutions cannot be established. However desirable it be to make changes here and there, no case could be made out for dispensing with them altogether in the best interests of education. The best judges of the value of training would be those who having worked for a time as untrained hands have undergone a course of training subsequently; and there seems to be a consensus of opinion among such that they have improved considerably by their training.

Then what is this prejudice due to? It seems that it is the result of a hasty generalisation based on imperfect observation; and it is partly due to the conservatism of the day. Probably an over-enthusiastic trained teacher,

on getting into a new institution, affects a little air of superiority. He finds fault with the existing order of things, methods, management, and what not, until he becomes a veritable bully; or there is the other type, who slight the experienced teacher without waiting for an opportunity to show him the excellence in the trained teacher. Both are at the root of the prejudice against the trained teacher. Both forget that conservatism rules the world everywhere. There be others who abuse their licence by shirking work and cooking results. However, young trained teachers should be cautious in not drawing the wrath of aged and experienced teachers either by their conduct or work. They would do well to think twice before pitting themselves indiscriminately against the forces of conservatism in the profession. They should remember that all winning over is necessarily slow, and they might well keep in mind that theirs is not the last word on the subject. A little more discretion and honest work would go a long way in setting things right. Gentlemen, here may retort by saying: "That is all right when one is in the profession, but what to do till then?" Young friends, that is a very difficult question for me to answer; and any attempt that I may make that way is only likely to give you poor consolation. The period of unemployment after your taking the degrees may be short or long; and it is nothing peculiar. In all branches of technical education, such a period is inevitable. You might remember how in the initial stages of all technical education there are various temptations to attract young men to the profession by way of prospective scholarships and guaranteed posts. When things have settled down fairly, and as larger and larger numbers begin to come in, these temptations vanish one by one. So yours is not a peculiar case.

The only question is : "How to utilise that period?" Take the analogy of a young lawyer or a medical man. The young lawyer does not necessarily get a brief the next day of taking his degree, nor does the doctor necessarily get a paying patient so soon. Both have to be in the waiting for a time, and to serve a period of apprenticeship under some more capable men in the profession understanding the technique and studying more of the details. You need not be apprentices exactly in that sense of learning the trade, but you can study in greater detail many things you could not ordinarily have done so well in the few months of your stay at the college. Some of the important things that you might profitably study are :—The Education Code, the curricula of the different provinces in the country, the history of the British, the Scottish, the Prussian, the Japanese and the American systems of the present-day education in greater details, and the Kindergarten, the Montessori and the Dalton-Plan methods. You might contribute to educational organs and journals your thoughts on these, and their adaptability to the Indian schools and systems. All that would be very useful to you as individuals, and to the profession as a whole. Some may take up the translation work, which the changed medium of instruction necessitates. A few may go in for a higher course in certain special subjects in which they may be interested; others may have to resort to private tuitions to keep the wolf off their doors. But even there, they could get plenty of opportunities for carrying on educational experiments. One of the best opportunities for carrying on experiments in the Dalton-Plan is afforded to the private tutor. Some of the sterner stuff may put their heads together to

start educational societies, like the Deccan Educational Society, or the D. A. V. Educational Society. These are some of the ways in which you may utilise this period. But you cannot be in the waiting list long. You are sure to find a permanent footing somewhere, sooner or later, and you will thrive there.

But once you are in the profession, you are likely to become conservative in your ideals and methods unless you keep yourselves in constant touch with the modern methods and experiments in education. As to the necessity of maintaining a high sense of duty and always doing your level best, it is not necessary for me to expatiate here at any great length. One word of caution may be permissible. The young teacher placed in a big school often finds himself in the midst of a number of activities, which appear to him to be of equal value. Besides teaching 4 to 5 periods on an average with the Kindly's to boot, there is the Scouting, the Athletic Association, the Debating Society, the Dramatic Club and a hundred and one useful institutions which claim his attention. Unless he uses his discretion cautiously, he finds his energies limited and the calls too numerous. Sometimes these calls clash so hopelessly that he has to sacrifice, one thing or another, if he does not want to sacrifice his health. Often the young enthusiast sacrifices his health in the vain attempt of placating all. That is the surest way of losing all, and the health to boot. That is hardly desirable. You should early draw a line of demarcation between things, for not doing which your conscience would prick you, and those for not doing which it would not; but for doing which you may receive a modicum of praise from others. Things falling under the first

category should always receive your attention prior to those of the second category. If you don't mind you might call the first as the Primary and the second as the Secondary category of duties, and you must always see that whenever there is a clash between the Primary and Secondary, you allow the triumph to go to the Primary. In its detailed application the teacher's primary duty is teaching and any other scholastic activity is only secondary. Not that the secondary has to be neglected; but that it may be neglected, if it clashes with the primary ones. So young men, getting into the profession, you will zealously build your reputation as teachers first and then jealously guard it from deteriorating. And as you advance in your experience, when you have fairly established your reputation as a teacher, you may conveniently divide your energies into other channels. But that does not mean you should not take part in the other activities, but only that you should refrain from taking up responsibilities therein, in the first few years of service, which may interfere with your normal work as teachers. Many a good teacher has come to grief by mistaking the primary for the secondary and *vice versa* and hence this note of warning.

When you are fairly settled down in your profession, you might address yourselves to some of the improvements to be effected in the present educational methods and policies. Hitherto, the school-masters as a body had no separate entity. They were content to carry out the orders of a benevolent and omniscient department. The curriculum was prescribed; the courses were laid down; and the rules were framed by certain experts, and all that the school-master had to do was to finish the course, and to carry out the orders

faithfully without demur. The teachers had no voice either in the shaping or the moulding of the policies. But fortunately, things are changing slowly though surely. The teacher has been able to make his voice heard through an organised effort. In these Provinces, we have two associations of the teachers which meet from year to year to discuss educational problems and reforms. They can claim to their credit some of the reforms that have been introduced in the system. We may observe in this connection that most of these organisations owe their inception to the trained graduates to a very large extent in all the provinces. A problem of some serious magnitude to tackle with is the demand for a better type of secondary education. There seems to be a universal cry for that, and a dispassionate view reveals much of the unpleasant truth in the existing type. The school-masters also feel it, but are often content to leave things as they are without bothering themselves much to set matters right. They at best find out many plausible reasons for this deterioration, and stop there. Some are struck dumb with the magnitude of the problem, and think that it is not one man's business; a few others think that it is inevitable in this stage of transition in the medium; still others attribute it to an overcrowded curriculum; yet others would point out to the wholly unsuitable intellectual *pabulum* upon which our pupils are brought up in the schools; a few cynics would attribute this to the frittering away of the pupils' energies on the side-shows of education. While there may be an element of truth in all these, it is not the whole of it. The teachers as a body also have a share, however small it be. It is often true that individuals are not to be blamed at all; but there is an absence of co-ordinated efforts.

I am tempted to illustrate this important point a little practically. At the very outset, let me make it clear that I am only taking a hypothetical instance which exists only in my imagination. The teachers of the highest classes, say XI or XII or IX or X as the case may be, are rightly or wrongly held responsible for the quality of their results. When they are asked the why of it—and may I add that they are only troubled when things go wrong—they say: “We get such poor stuff from the IX and X or XI that you cannot ordinarily expect us to make swans of crows in a year or two.” The same story is repeated, at each stage until it reaches the junior-most classes, where it takes a somersault. For if we were to ask the teachers of these junior-most classes, the reason for this state of affairs, we find this ready response: “If you want us to do all that strenuous work, when these boys have been hardly a year or two at school, what will our learned colleagues, who take the senior classes and draw fatter salaries do in the highest classes?” I think I have not overdrawn the picture. Let me tell you that there are very honourable exceptions who waste their sweet fragrance in the desert air for want of a better co-ordination. Unfortunately, this state of affairs does not stop with the school. If that be the state of affairs and that the spirit of co-operation, the teachers as a body cannot escape their share of responsibility for the same. I think it possible to achieve a better result if each teacher were to do his level best with the material in hand at the stage at which he takes charge. He can leave a better legacy to his successors and in less than a quinquennium, the improvements would be perceptible. One thing important in this connection is to give continuous classes to the same teacher for

as long a period as possible, say entrust the same teacher with the English of VII, VIII, IX, and X, so that the self-same teacher who taught the VII class, takes the self-same set of pupils right up to X class. That would give the teacher a greater sense of responsibility, too. Another thing is to make the teacher not responsible for more than two subjects at the most. The business of co-ordination has to be left to the heads of the institutions. The side-shows of education have to be kept within proper bounds; and the schools have to be guarded against from getting unwieldy.

Then again, something has to be done to relieve the burden of an over-crowded curriculum. Whatever be the reasons for introducing so many subjects in the school curriculum, there is absolutely no reason for examining them at all stages in all these subjects. Examinations are killing things; and hence have to be reduced to a minimum if they cannot be entirely dispensed with. We don't question the educative values of different subjects in the curriculum. The subjects may be divided into Primary and Secondary groups according to their relative utility. For instance, Science may be very necessary for students who mean studying for the engineering or the medical profession. It would not be necessary for one who is not going in for either. Under these circumstances, why should all who read Science sit for an examination in Science? Similarly with other subjects. Hence while these subjects may be there in the school curriculum, in so far as they aid in a liberal education, there is absolutely no need of the candidates being examined in all these subjects. And if we eliminate the examination, the crushing weight of the subjects is taken away, and

thus the curriculum no more remains so heavily overcrowded. As a practical suggestion, we may venture the following:—

A good knowledge of one's own mother-tongue, or the provincial language and a certain amount of proficiency in English which has come to stay, and which will be a very necessary accomplishment in any walk of life, together with a working knowledge of practical mathematics, may be made compulsory at the close of the high school stage, although there is no harm in the pupils being taught History and Geography, Science or Classics and acquiring skill and proficiency in these independently of an examination. When they have got through these three papers, they may be eligible for admission to the college, workshop or profession. We may leave these latter to allot a time and conduct a preliminary examination in such subjects other than those already examined, as may be of some special departmental value. That would not require so much of wasting of energies, cramming of notes and killing of souls. For it is only those who have a special aptitude for these subjects that would go in for these examinations. Another alternative is to dispose of the practical subjects by the opinion of teachers who teach such subjects upon a judgment formed from their day-to-day work in the laboratory or the class-room. These are some of the directions towards which your earnest thoughts and considered opinions might be diverted. You will find the organs of the educational associations of great use in this respect; and I am sure they will value your considered opinion properly, even though they may not be able to pay you in return.

The school-masters have always a standing complaint against society, *viz.*, that they do not get the same amount of recognition and respect from the society that they are entitled to. There is a good deal of truth in this observation. What is it due to? The school-masters, from their habitual contact with those who are intellectually their juniors soon develop a tendency to be dogmatic. Always exacting, and always commanding implicit obedience, and wielding unquestioned authority in their class-rooms, they come to regard these as their prerogatives. And whenever their authority is questioned, their opinions are contradicted, or they are ruffled, they take that as a wanton piece of insult offered to them, and as such find themselves not respected by others. As against this, the young lawyer or the doctor coming in his professional career in contact with men of all shades and temperaments learns to respect the differences of opinion in others and takes the world easy, without reading between the lines and attributing motives; and all these due to their moving on terms of equality with the other members of society. Hence in order to find himself in his own element, the teacher would do well to move with members of other professions on terms of equality by joining clubs or societies of a catholic nature. And secondly, he has to prove to the hilt his serviceableness to the society in more striking ways than that of playing the school-master. As a school-master, he is only able to impress his worth upon his young charges. But as a young man with a certain amount of leisure, he can be of greater use to society in a number of ways.

The Seva Samiti where one exists, and the Scout movement afford ample oppor-

ities for the teacher's service to his fellow-men. Another very important social service at the teacher could render to society the carrying on of a vigorous propaganda for improving the existing conditions of sanitation and hygiene, especially in the country-side. One has only to be told the sphere to realise what immense scope this offers for any number of young men to lead a life of social service of the utmost utility. The night-school, adult education, helping in the starting and running of co-operative stores, and credit societies, conducting religious Kathas and Kirtans, circulating libraries, physical culture propaganda and so many other useful but non-controversial spheres are always open avenues for the teacher's spare time and energy to render such social service as may entitle him to a legitimate claim to their abiding gratitude. school, what take the se do in the one may not be able to take to all not over nor is it necessary; but each one that there is a special aptitude for some one who waste and by finding that aptitude and air for g steadfastly on that line, taking fortune; stage of his influence upon his pupils to begin with, and by organising the activities on a well-considered basis, preferably in the country-side, the teacher would have slowly, yet steadily, built up a reputation for social service, which, however, unostentatious it be, would be of sterling value. This would give him that much needed leavening of the benefits of coming in contact with the various strata of society.

Gentlemen, I have detained you sufficiently, and bored you over too much. Let me only tell you in conclusion that if each one of you

could make yourself a radiating centre of light and culture, bringing by your very presence so much of sunshine and cheer to those around you, if you could keep your knowledge from rusting by constantly trimming and brushing it up, if you could only do what you do to the best of your capacity, and with the best of your intentions, there would be nothing more which this college could expect of you. Gentlemen, I have sufficiently whetted your appetite for the treats in store for you, and I have only to thank you once more for the indulgence and patience with which you have listened to me.

TALISMANS AND CHARMS	
For those People to Avoid all Sorts of Misfortunes and Enter the Gates of Successful Life	
	RS. A.
For Success in Spiritual and Religious life ...	10-0
For Honour, Riches, Learning and Greatness ...	7-8
For Health, Physical Strength, &c. ...	7-8
For Power, Eloquence, Speeches, &c. ...	8-0
For Success of any Undertaking or Litigation, &c. ...	10-8
For Success in Sport, Racing, Cards, Games of Chance, &c. ...	7-8
For Success in Trade, and Business ...	10-0
For Men's Love to Women ...	7-8
For Women's Love to Men ...	10-0
For Love of Opposite Sex attractive power ...	7-8
For Agricultural Prosperity, Farming, Good Crops, etc. ...	7-8
For Success in Mining Plumbago, &c. ...	100-0
Rabbi Solomon's Special Talisman for every success ...	15-0
Specially valued and worn by every successful Hebrew, 2nd quality ...	21-0
1st quality ...	30-0

NOTE.—A Money Order or Indian G.C. Notes will bring the Talisman to your door. Always the full amount should be remitted in advance. No V. P. P.

Extensive Life Readings, one ... Rs. 15
Two Rs. 25, Three Rs. 30 or more at Rs. 10 per Reading.

D. A. RAM DUTH,
ASTROLOGER,
No. 30 & 55, (E. R.) Cheku Street,
COLOMBO (CEYLON.)

"EDUCATIONAL REFORM IN THE LIGHT OF SCOUTING."

By Mr. G. RAMAMIRTHAM AIVER, B.A., L.T.,
Papanasam.

AT the outset I wish to draw your attention to certain glaring defects which you also would have had occasion to notice in the present system of education. What do we mean to prepare the boys for? What do we mean to do with them and what are we doing? While in the Training College, all of us have learnt many definitions for the term 'education.' We are only too familiar with what Prof. James says: "Education consists in the organisation of the resources in the human being, of powers of conduct, which will fit him to the social and the physical world." Herbert Spencer is of the opinion that the true function of education is to prepare for complete living. Can the programme of education we have in our schools be said to approach that aim? Are we at all preparing them for life, not to speak of complete living? "To create capacity and culture, to develop skill for the hand and sight for the soul, to open to the individual the means of honourable living, and to reveal to him the full meaning of life, is the noble duty of the educator," so said Sir Asutosh Mukerji. Judged by these standards, our system of education falls far short of the ideal.

At best we can only be said to give instruction in the place of education. Through the curricula of studies in the various subjects, we only aim at imparting information and giving instruction in the acquisition of certain languages. We do nothing towards the organisation and proper cultivation of the boy's resources. He is not a blank slate or an empty bottle. He is endowed with

certain innate characteristics and tendencies. The purpose of education is to recognise them and develop the good, and inhibit the objectionable. In the present programme of education we are not in a position to find out the bent and bias of each and every individual and help him in training that which he is most naturally fitted for.

When we have to deal with 40 and more boys in a class and that during the most inconvenient part of the day, for only a limited number of hours, individual study and attention become well nigh impracticable. Besides the unwieldy nature of the class, the craze for passing the S. S. L. C. Examination has taken deep possession of the boys as well as the parents. Examinations have their own place in so far as they serve as a help to the teacher to judge the progress of the pupil. But to make it the sole end and aim of education is to give too much importance to it and thereby narrow the vision of the educator and the educated alike. If the Government and the Managers and the parents are going to judge of a teacher's worth and capacity only by the number of eligibles he produces, there is sufficient excuse for some of us teachers beginning to din into the ears of boys whenever opportunities occur even from the V Form, how to answer the various questions which are usually given in the several papers of the S. S. L. C. Examination.

The Minister in charge of Education wants to have a vocational side also introduced into the school. Considering the present economic condition of our country, and the large number of unemployed and unemployable educated young men, everyone concerned begins to think of some such provision to be made in the school curriculum. How far

this aspect of reform is going to find favour with the Managers of Schools who, being faced with the increasing deficit in the schools on the one hand and the illiberal system of Grant-in-Aid of the Government on the other, are really at their wits' end, remains to be seen. This much is clear, that our system of education has neglected the practical side and does not provide for a sufficient training of the hand and the eye of the pupil.

The want of attention, and lack of intelligent following of the lessons in class on the part of the boys, are too well-known to require detailing. Even the best of teachers have succeeded, during certain odd moments only, to enlist the active co-operation of the pupil in following their lesson. This is because we have not yet seriously thought of a way of making the boys themselves take a real interest in what we put before them.

The so-called dull boy in the class is only dull to the extent of his not responding as we expect him to, in the class in certain subjects. But it seems to be a curious coincidence that most of them become roaring successes in life. The Bishop of Liverpool, a former Headmaster of Rugby, is reported to have said that everyone has a claim to grow in power of mind and spirit, as of body. If that claim remains unsatisfied, then his failure is the failure of the school. The boy who is no good at anything does not exist. As Sir R.B. Powell says, every boy is born with some gift in him, with 5% at least of good and useful tendencies and the business of the educator consists in finding out this and developing it to 80 or 90% basis. As at present we have very little opportunity to do this within the four walls of the class-room.

Excuse me, if I have dwelt at some length on this aspect of the question. But as members of the sacred profession of teachers, as people in responsible charge of moulding the mind and character of the young, we have to take stock of things, go into frequent moods of introspection, and shape our method and programme so as to achieve the desired results. In fact it was the consciousness of these very difficulties that made us seriously think of the ways and means of remedying the defects as far as possible. All of us will agree, therefore, that some kind of effective reform is urgently needed if we really wish to prepare our boys for efficient citizenship and make them the true builders of tomorrow. The Montessori Method and the Dalton Plan and such other methods are costly devices of doubtful benefit to us. Can we then turn to Scouting for our help?

Scouting is an organisation of recent growth concerned also with the training of the young. In the opinion of Dr. Montessori herself the Scout Movement comes in due sequence for the training of boys of over 7 years of age. It aims at developing character, providing for hobbies and handicrafts, looking to the boys' health and bodily development, and trying to root out the cult of narrow selfishness in the boy and implant instead the ideal of sacrifice and service. It trains in citizenship through games, and therefore is complementary to the more scholastic training in schools. From the boys' point of view Scouting puts them into friendly groups and fraternity gangs whether for games or for study. "It appeals to their imagination and romance and engages them in an active open-air life. From the parents' point of view it gives physical health and development, it teaches him energy, re-

sourcefulness and handicrafts; it puts into the lad discipline, pluck, chivalry and patriotism; in a word it develops character which is the more essential thing to make one's way in life." Thus it seems to be the ideal sort of training to the boys, and as B. P. himself predicts, this is going to take the place of the present system of education and training of boys in due time.

So the best thing for us to do would be to anticipate this state, and at once enter the movement and bring our boys also under it. But the ideal of every boy being a Scout is far from the actual, and as a compromise, we can think of getting acquainted with all its good features and adapt our course of studies and work in the schools, to them. Of course a study of the more important at least of the books of Scouting literature will have to be made by every one of us, and I may assure you that "Aids to Scoutmastership," "the Wolf-Cub Handbook," "Scouting for Boys," "Rovering to Success" and the "Patrol System" are some of the best which are not only interesting study but also immensely thought-provoking.

The elements that we have taken from Scouting and introduced in our work are the following:—

1. Open-air life, by arranging for outings.
2. The Patrol System and the Court of Honour in class work.
3. Handicrafts.
4. Class games.

1. *Outing.* This is the camping out of the whole class for a day, once in a school session at least, in some shady grove. The journey may be performed by walk as far as possible and the boys may be asked to carry their own provisions for their food during their stay in

the camp. They may be divided into convenient groups for purposes of cooking. The programme may be made to contain physical exercise, games, debates, and entertaining items.

2. *Patrol System.* As soon as the class is formed for the year it is divided into convenient groups, or Patrols as they are called in Scouting, each consisting of six or seven of such of the boys as naturally take to each other. It will be found convenient also to put boys coming from one particular village or living very near to each other, together in one group. It is better to mix in each group boys of more than the average with the comparatively backward ones. Each group forms one unit for the class and its members choose one amongst themselves as their leader who is responsible for the carrying out of whatever is expected of his group. He is to arrange for periodical (weekly, if possible) meetings of the members of his group and discuss matters concerning their work and progress in the class. The more advanced of them may pay special attention to the backward among them and also be of use to those who had missed some of the lessons by their absence. Regular comparisons between the groups are made in the matter of regular attendance, efficient preparation for the class, their performance in the class; neatness, etc.

Court of Honour. This is formed by all the leaders of the several groups with the teachers. They frequently meet (1) to discuss programme of work, (2) to consider the several issues that might be raised by the leaders, and (3) to deal with any cases of delinquency, misbehaviour, etc.

Handicrafts. To insist upon each and every one of the pupils making some article or

other, of quality, whether in wood or clay or metal or card-board or to produce some work of art once in every session. An exhibition is arranged and the quality of the articles is judged and certificates are awarded. This is also taken into consideration to judge of the efficiency of the groups. The cost of materials is to be borne by boys and they should provide themselves with the necessary tools for such work.

5. *Class Games.* Organising games, in which all the members could take part, and holding them at least thrice a week if not daily, to be limited to a fixed time, at the most one hour. Sports, items, team races, and team matches in Foot-ball and such other games may be frequently arranged.

Having given a sketch of the above items, let me give some of our experience in adopting these. I have arranged class camps or outings for the V Form of my school. Each time the camp lasted for one day. The suggestion to camp was eagerly taken up by the boys and great interest and enthusiasm was evinced. The aim of such camping was the enjoyment of life in the open-air. Each boy should contribute something or other to make it enjoyable. I found the boys freely giving themselves out without the reserve and shyness too common in the class-room. Such a life set them observing and thinking. It roused their self-activity. They felt they had something or other to do throughout the time. Besides these, I was able to study better and at closer quarters, each one of them individually. There were great surprises from the boys, in that those who produced no impression of either intelligence or interest in the class had really gift for some way of entertaining the others. Thus this enlists the

active co-operation of the boys and makes them display their talents. Especially, the camp fire item, *i.e.*, the entertainment portion was very interesting, for boys vied with each other in displaying their powers of music, speech, story acting, etc.

The Patrol System. This has been tried in almost all the classes of our school. This is what the teacher of the 4th class has to say regarding his working of it: "As far as possible children who are just above average are chosen as leaders and children of average attainments are made the seconds to begin with. Each leader is responsible for any good or bad work that the Patrol does. Prize or punishment is awarded not to the individual but the Patrol as a whole. What each one of the groups works for is to get the leadership of the whole class, the token of which is the possession of the class duster and records. Every day points are given to the Patrols in different subjects and the totem-pole of the class that is the duster, records, etc., is given away to that Patrol which scores up the highest number of points for the day."

"In English where accurate pronunciation and correct and quick answering are required, this is very helpful. It makes all the rest answer and pronounce correctly, for the leader does it in the right way. Children who feel shy and who are accustomed to be terribly afraid of the teacher talk freely because they answer in chorus by Patrols. In Arithmetic this serves as a help to the teacher in going through the exercise of all the boys, for the leaders and seconds who are a little more advanced, help the teacher in this work. In story-telling and in dramatising the incidents, in reading, singing, or reciting small poems the Patrols enter with

zest, and vie with each other in scoring up points. Every member of the Patrol has got his own part to play and nobody is left free to remain idle. To sum up, the Patrol system is an excellent right move in the direction of teaching the young."

The teacher of the III Form who has also tried this system has also the following to say out of his experience:—"The Patrol system gives a fillip for routine work in class. The boy sees a purpose in preparing lessons at home with some assiduity. He is interested in making his patrol march ahead of others in class. Thus it furnishes an immediate interest for the boy in the class. The moral effect is more important. He does not go to school unprepared, hoping to be missed by his master in that crowd of 40 boys in the class. There is the additional incentive, namely, that of the enjoyment of the good opinion of the other members of the Patrol who look to him for the advance of the patrol. This system encourages self-effort on the part of the boys in a spirit of *esprit-de-corps* and it develops leadership in many boys in the class. The most important point is that the backward boy has friends to buck him up and to take interest in his progress. This form of healthy rivalry between patrols in class raises the tone of the class in its attitude towards work and in the spirit with which it is done. Boys acquire briskness and shed off shyness owing to frequent competitive exercise of their powers. I found it most useful in Oral Composition lessons and General English lessons. That is just where boys required some incentive to put in work of themselves and in which the efforts of the teacher were of no avail unless the boy mastered the steps themselves. If, for example, we take a composition correction

lesson, we can make the class most lively and interested and useful to boys themselves, by some such device as the following:—

"Numbers 1, 2, 3, 4, 5, of each patrol are deputed to be each responsible for one of the following issues: sequence of tenses, agreement of subject and predicate, agreement of pronouns, spelling, correct ideas, etc. As notebook after notebook is taken for correction sentence by sentence is read out. The competition in each of the above issues is among as many boys as there are patrols. That patrol carries a point which comes foremost in pointing out the mistakes. Boys hold out hands to show detection. Of course the first boy whose answer is correct earns the point for his patrol. Thus during the hour every boy is on the alert for recognising the several kinds of errors—which is the first essential to avoiding them—and thus has plenty of exercise so that his knowledge gets thorough. The same arrangement may serve for oral composition lesson also."

This kind of competition of patrols was demonstrated before the District Educational Officer during his visit last year and he appreciated the effect very much. The several uses to which this patrol system can be put as an aid for efficient class-work will suggest themselves to those who try it. I only wanted to show that it is practicable and can be adopted with advantage.

In the same way class games have been organised with the result that all boys took part and had some brisk exercise all along. Indigenous games and a number of Scouting games are given and they are numerous enough to have sufficient variety. As for handi-crafts, an exhibition was arranged in our school the year before last, and the variety and

quality of articles made by the boys were not only deserving of praise but were an eye-opener to the innate capacities of boys for this kind of work. It clearly showed us that there was a fund of skill for practical work and it only remained for us to provide the occasion for the display of the same. By making our programme in the school merely one of book-learning, we are actually making talents for such work get atrophied. At first, it requires insistence, on our part, of each boy furnishing some kind of article made by himself.

From the above, it becomes abundantly clear that all the suggestions for reform here made are easily practicable and can with advantage be taken in our present programme of school course. It does not cost us much either in money or in involving additional labour and it is worth trying because thereby we derive the following advantages. Outing, for instance, gives the opportunity for the boys as well as the teacher to breathe the pure air and live in a free atmosphere. It provides the opportunity for us teachers to study individual talents and think of the ways by which we could encourage them. It makes the boys themselves active and take real interest in their work, and thus the problem of attention and their active participation is solved. The occasional camp provides the open and breezy atmosphere, the comradeship of continued association in the field and round the camp fire, breathes the very best of spirit among the boys and gives the teacher a far better opportunity of getting hold of these boys and of impressing his personality on them—so says an eminent educator. Alexander Dumas has written thus: "If I were King of France I would not allow any child of under 12 years to come into a town. Till then

the youngsters would have to live in the open, out in the sun, in the fields, in the woods, in company with dogs and horses, face to face with nature, which strengthens the bodies, lends intelligence to the understanding, gives poetry to the soul, and rouses in them a curiosity which is more valuable to education than all the grammar books in the world." Shakespeare has said that there are books in the running brooks, sermons in stones, etc. Contact with nature opens out the imagination of the boy and unfolds to the young mind the several beauties and wonders of nature. When once appreciation of beauty is given a place in the mind it grows automatically and brings joy even in the gloomiest of surroundings. A love of nature leads to the love of God and this is better religion. An account of our class-camp of the 14th inst. has appeared in the 'New India' of the 19th.

By means of the Patrol system we put real responsibility in the boy with a view to developing his character. If the teacher gives his Patrol leader real power, expects a great deal from him and leaves him a free-hand in carrying out his work, he will have done more for that boy's character expansion than any amount of school training could ever do. Each boy can be given a chance to lead, and thus all learn to lead and to obey, for only he who knows to obey is fit to command. The lack of attention and absence of interest will no longer worry us, once we put this system into force and get the boys to undertake this responsibility. Healthy rivalry between the groups rouses the spirit of emulation and thus contributes to the efficiency of the entire class. The Court of Honour provides the opportunity for the boys to use their sense of proportion and also to exercise their sense of balanced judgment. It would be interesting

to find at first that boys are worse tyrants and more bitter critics of their own brethren of the class. In course of time they will get the proper perspective with regard to punishment, etc., and they of themselves will appeal to the good sense of their fellows, and the public opinion thus created among themselves will be very often found helpful in dealing with their own irregularities, delinquencies, etc.

Through handicrafts we can pave the way for the boys finding out their hobbies. Through these, the boy learns to use his fingers and his brain and to take a pleasure in work. Sometimes these may lead to real craftsmanship, which may give the boy a career. In any case, he is not likely to become a waster or loafer in the street. Hobbies are an antidote to Satan's little games. Incidentally it helps the teacher to discover the natural bent and aptitude of the boy which may be later on developed. It has got the great advantage of developing imagination, forming tastes, and employing the practical skill of construction in the boy. The general mass of boys are not taught to like work and thus they do not realise the dignity of labour. This removes such a defect.

It is good open-air games and healthy feeding coupled with adequate rest which bring to the boy health and strength in a natural way. Games have physical as well as moral values. Drill lasting an hour a week cannot be hoped to develop the boy's physical strength. Drill of some sort is necessary but natural games and plenty of fresh air are more conducive to develop the health of boys than any amount of physical or military drill.

To sum up....."The child," an excellent paper thus summarises the aim of education, "No man can be called educated who has not

a willingness and a desire as well as a trained ability to do his part in the world's work." To achieve this it should be our endeavour to modify our work in some such way as to not only aim at the erudition of the boy, but also to train him in resourcefulness, self-help, and a capacity for work, and an ability to make himself happy in his work. Self-determination is in the air both for the individual and for the State. Therefore I am inclined to think that the cultivation of the habit of self-reliance, unselfish outlook, and balanced freedom and self-expression should perhaps be the most important point in our training, as it is the most practical preparation for sane democracy. If we wish to produce God-fearing, healthy, prosperous, and therefore happy citizens, our first attention should be upon character training. By character, is meant personal initiative, self-control, sense of honour and duty, responsibility, self-reliance, observation and deduction. A famous educator once declared: "If ten bachelors of arts were wrecked in mid-ocean, they could not build a panton to save their lives. They would be equally helpless in any critical emergency, where practical knowledge of the ordinary things round us was imperatively necessary." A training of a right sort in our schools and colleges will certainly remove the hopelessness and helplessness which they feel when they are confronted with any situation demanding tact, intelligence, and self-possession. And much lies after all in the teacher who handles the younger generations at the most impressionable and important period of their life. The first requisite of a successful teacher is knowledge of the nature of the boy. The boy or the girl is not a small edition of a man or woman. But every child has its own peculia

curiosity, its inexperience, a normal mysterious frame of mind which needs to be tactfully helped, encouraged, and moulded or modified or even suppressed. The inculcation of the right ideals is the highest duty of the educator. Learning would be debased if it were pursued solely for individual gain, and had not attached to it a higher ideal, the ideal of service for one's fellowmen. The importance of the ideal of good-will and service was of equal value with the study of any such subject as mathematics, or history or the classical languages ... so says B. P. Lord Eustace Percy, the President of the Board of Education, England, once said: "The Boy Scouts are a great educational force in this country and one on which, any one who like myself, is responsible for education, must rely to a very great extent. The Scout training does for the boys what the educational system is powerless to do. While everybody talks of education being the development of the natural attributes of the young, the Scout movement has pre-eminently achieved that work."

All this is due to my enthusiasm for the work as a teacher and the concern for the welfare and the proper training of the future citizens of our country. If as a Scouter and one who is actively engaged in running a troop I were to appeal to you, I should only ask you to join the movement at once and get your boys also into it. But here I have forgotten for the moment that aspect of my work, and considered myself only as one of the large number of teachers who are not yet in the movement and who are at the same time interested in the proper training of the boys. Therefore I do not hereby make any appeal in favour of the Scout movement itself...that has been done

on more than one occasion by greater men... but I only request you to acquaint yourselves with the spirit and essence of this system of training just as you learn of other systems and methods of training the youths, not only in the Training College, but subsequently also, and adapt such of the features as have been pointed above, in solving the so many problems which I mentioned at the outset. I do not speak of our own achievement or the large measure of success which we have had, but I have taken pains to point out to you somewhat in the spirit of Pevril of the Peak, for whom it does not matter much whether we actually achieve our highest ideals or not, provided they are high always. "To travel hopefully is a better thing than to arrive and true success is labour," so says R. L. Stevenson.

THE SCHOOL ARITHMETIC

BEING SOLUTIONS OF THE QUESTION PAPERS SET FOR THE LOWER SECONDARY EXAMINATION FOR THE YEARS 1880 TO 1904

CHIEFLY INTENDED FOR THE USE OF PUPILS
OF THE 1ST, 2ND & 3RD FORMS

BY

H. CHENNAKESAVA AIYANGAR

Price—8 As.

SRINIVASA VARADACHARI & CO.,
4, Mount Road, Madras.

ON EUCLIDEAN CONSTRUCTIONS WITH A FINITE RULER AND PAIR OF COMPASSES.

By

Mr. A.A. KRISHNASWAMI AYYANGAR, M.A., LL.T.,
Maharajah's Collegiate High School, Mysore.

THIS note is intended to solve a practical difficulty felt by pupils when they cannot join two points which are too far apart for their ruler, nor get a point as the intersection of a straight line and a circle or of two circles, when the circles are too large to be drawn with their compasses. It may be noticed here that if the above fundamental problems on which all the constructions of Euclidean Geometry* depend be made possible, it follows that all Euclidean constructions are possible with ruler and compasses of finite dimensions.

Lemma 1. Through a given point, to draw a straight line parallel to a given straight line.

This is quite possible with our finite instruments, for, we can reach the required parallel straight line by a series of parallel straight lines, the distance between any two consecutive parallel straight lines being within the instrumental limits.

N.B. This Lemma plays a prominent part in the following constructions.

Lemma 2. To transfer distances.

Let AB be a finite straight line to be transferred to a point C. Join AC, if possible, directly or by a series of broken straight lines, $AB_1, B_1B_2, \dots, B_nC$ where these lengths fall within instrumental limits. Transfer the distance AB successively to $B_1, B_2, \dots, B_n$ and finally to C by the method of completing the parallelograms.

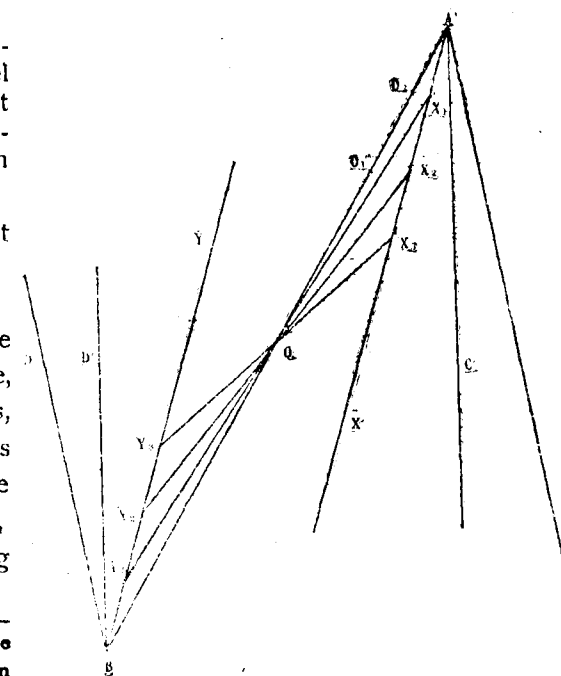
* The problem of finding the intersection of one straight line and another straight line is included in the problem of joining two points.

XXXII—78

CONSTRUCTION I.

To join two points A, B when the distance AB is greater than the length of the given ruler.

By Lemma 1, draw through A and B two parallel straight lines AC, BD towards each other as in the figure. If the distance between them be not within the instrumental limits, draw another pair of parallel straight lines AC', BD' as in the figure, making an angle with AC and BD so as to be nearer to each other, and continue this process until you get a pair of parallel straight lines AX, BY such that the distance between them is within the instrumental limits. On AX set off r equal lengths $AX_1, X_1X_2, X_2X_3, \dots, X_{r-1}X_r$ and on BY also r equal lengths $BY_1, Y_1Y_2, \dots, Y_{r-1}Y_r$ such that $AX_1 = BY_1$. Choose r so that X_r, Y_r and X_{r-1}, Y_{r-1} may be within the instrumental limits. Join X_r, Y_r and X_{r-1}, Y_{r-1} and let them intersect at O. It is evident that O is the middle point of AB.



Similarly, we can find O_1 the middle-point of AO , O_2 the middle point of AO_1 and so on until we get two points O_k, O_{k+1} which are within the instrumental limits and can be joined. This line produced will pass through A and B .

N.B. The above construction suggests an obvious modification to solve the problem of finding the point dividing internally in a given ratio a straight line whose extremities alone are given in position and are too distant from each other to be joined directly by means of the finite ruler.

CONSTRUCTION II.

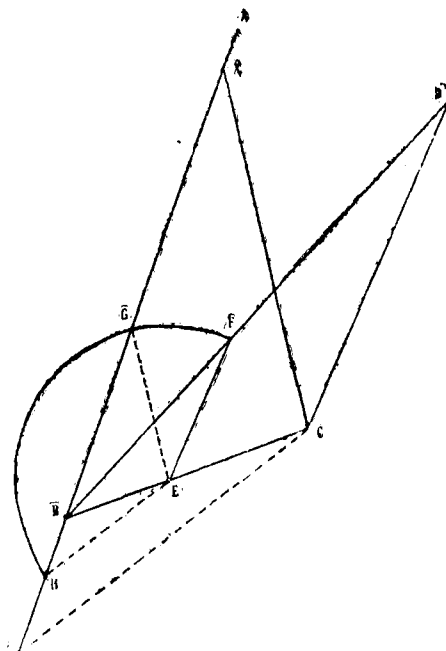
To find the points of intersection (if any) of a straight line (whose extremities are given) and a circle when both of them cannot be drawn with the given instruments.

Let A, B be the extremities to be joined by a straight line, C the centre of the circle to be drawn through a given point D .

Join AB, BC, BD by Construction I.

Take a convenient point E in BC and draw EF parallel to CD by Lemma I, to meet BD at F . With centre E and radius EF (E being so chosen that EF may be within the instrumental limits), draw an arc to cut AB at G and H . If the arc does not cut AB , the circle in question does not also cut AB .

Join EG, EH and through C draw parallels to them to meet AB in X and Y . Then X and Y are the required points; for, from similar triangles $CX = CY = CD$.

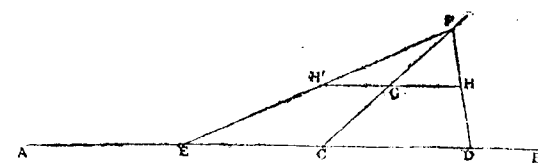


N.B. The above construction fails if any three of the points, say, B, C, D be collinear. But the construction may be effected with the help of the fourth point A in the place of B , provided A, B, C, D are not collinear.

If, however, A, B, C, D be collinear, D itself is one of the points of intersection, and the points A, B may be joined by Construction I. Now split up CD into small lengths within the instrumental limits and set them successively on the other side of C by Lemma 2 and thus set off $CE = CD$. But this method involves transferring of distances which is not permitted in Euclidean Geometry. Hence the following alternative construction is proposed:—

Through C, D draw straight lines CF, DF to cut at F . Draw GH parallel to CD to cut CF, DF at G, H respectively so that GH may be within instrumental limits. Produce HG to H' making $GH' = GH$. Join FH' and

produce it to cut AB at E . Then E is the required point.

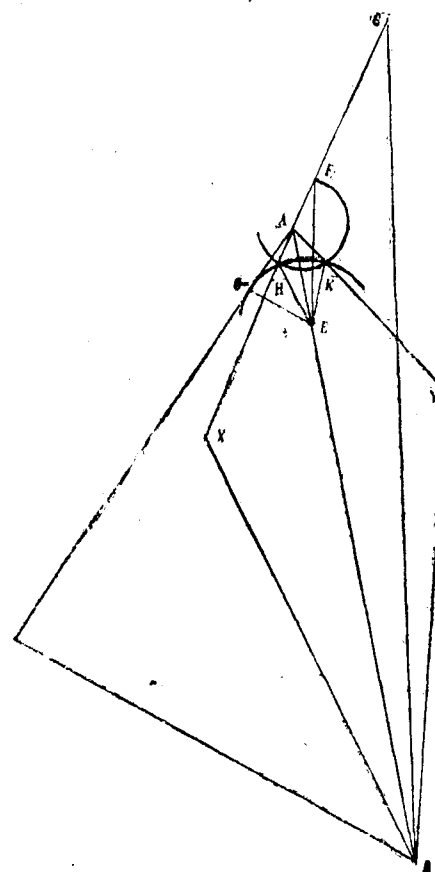


CONSTRUCTION III.

To find the points of intersection, if any, of two circles.

Let A, B be the centres of the two circles, C, D points on their circumference.

Join AC, AD, AB, BD by Construction I. Take a suitable point E in AB .*

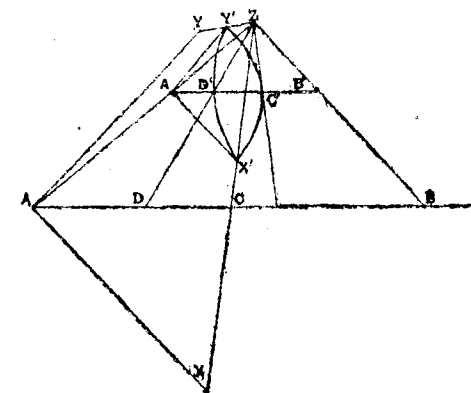


Through E draw EF, EG parallel to BC, BD to meet AC, AD at F and G respectively.

* The point E should be so chosen that the constructions to find H and K are possible with the given instruments.

With centres A and E and radii equal to AF, EG respectively, draw arcs to cut at H, K . Join AH, AK and through B draw BX, BY parallel to EH, EK to meet AH, AK at X and Y respectively. Then X and Y are the required points; for, from similar triangles, $AC = AX = AY$; $BD = BX = BY$.

N.B. If any three of the four points are collinear, the construction may be effected with the help of the fourth point. But a modified construction is necessary when all the four points are collinear. In this case, we have to use an arbitrary fifth point, say Z , and effect the construction as before thus: Join ZA, ZB, ZC, ZD and through a suitable point A' † in ZA draw a parallel to AB to cut ZB, ZC, ZD in B', C', D' respectively. Let the circle with centre A' and radius $A'C'$ cut the circle with the centre B' and radius $B'D'$ at X', Y' . Join ZX' and ZY' and let them meet the parallels through A to $A'X'$ and $A'Y'$ at X and Y respectively. Then X, Y are the points of intersection of the circles, centres A, B , and radii AC, BD respectively.



Observation: In the above constructions, the principle of the centre of similitude has been employed to reduce the given configuration to instrumental limits, to find the necessary points in the reduced figure and then the corresponding points in the given configuration. It is hoped that this note will stimulate students and teachers of Euclidean Geometry to devise more elegant and simple constructions than those presented here.

† A' is so chosen that $A'C', B'D'$ are within instrumental limits.

RURAL EDUCATION

By Mr. N. SIMHADRI,

Dy. Inspector of Schools, Giddalore, Kurnool.

THE present is a particularly critical time for rural education. Under the Elementary Education Act great impetus is given for the expansion of schools in rural areas and developments have already taken place which are likely to have a permanent influence on its organisation and character. Attempts are made to give a really "rural bias" to the courses of study prescribed for schools and an education which tends to debar children from having general education based on environment will divest them from rural occupations. It would be a misfortune if the "country children" are given the training that would make them definitely anti-rural in their outlook. Rural education is no doubt in its infancy, but it is a happy sign of the times that it is growing vigorously. In a country largely agricultural and where prospects for the general development of industries are few and far between, one has to think twice before spreading the "stunt" of vocational education. The question of giving a vocational bias to rural education has become a "rage" with many and the few sporadic attempts made by some enthusiasts have been failures. It should not be supposed that a scheme of vocational education does not fit in well with rural education; but in the absence of suitable teachers, the proper agency to work it and above all the money needed for its proper upkeep the undertaking must be left as an unprofitable affair. Poverty is the back-bone of the country and nearly 80 per cent. of the land-holders are heavily indebted to the exacting money-lenders. Excessive thrift and a very low standard of living have enabled the average land-holder

to eke out bare sustenance and to have minimum personal comforts. Life in a village is a dull "spinning" with nothing to retrieve its monotony. To such an unsophisticated villager everything is an "extra" and therefore an expense. Boys who pass out of rural schools with a knowledge of drawing, carpentry and the like are unlikely to benefit themselves by their experience as any attempt means at least a small outlay. Customs die hard in India and it is no wonder that to the conservative villager, any departure from his hereditary calling is something heretical. Further our "village republics" are self-sufficient entities which from their very constitution afford no scope for a cosmopolitan outlook. The village artisans cater for the needs of the village in all respects that there is little need to go about knowing who is who. When the diverse activities of a village are so well-determined the necessity for a Kapu's children to learn weaving, or a merchant's sons to know carpentry or for the matter of that a cobbler's boys to run a grocer's shop does not become apparent. Vocational instruction becomes therefore superfluous in such circumstances and at best such an equipment in a boy from the rural area will be a theoretical knowledge.

It will not be odious to say that such a training will be of avail to the extent to which physical science will be useful in a graduate-clerk in a Government office. To breathe so much liberality in rural education is to dislocate the beautiful village organisations, the solidarity of which has been tested by hundreds of years of political vicissitudes. If in India there have not been social upheavals of the kind which have disfigured modern history, credit must be given to the great intellectual genius who constituted these

tiny village communities on sound economic considerations. Rural education should therefore envisage everything pertaining to "country-life and pursuits." It is almost a recognised fact "that environment should freely be drawn upon to lend reality to the teaching and arouse interest in country life and pursuits. Elementary science including natural history, setting up of aquaria or vivaria, school-gardening, manual instruction with particular reference to articles in common use in the garden or on the farm, personal

hygiene, geography, history are the essentials in a good programme of rural education which it is worth while teaching with the help of properly-paid teachers. To pay a teacher as much as you would pay a footman is pettifogging economy and no useful work can be expected of him. Vocational education in the sense in which a layman discusses it is inapplicable to rural conditions and will not be of much consequence even if it is persisted in.

COMMERCIAL ARITHMETIC

FOR

SECONDARY AND COMMERCIAL SCHOOLS

Prepared in accordance with the S. S. L. C. Syllabus

By T. V. SUBRAMANIA AIYAR,

Commercial Instructor, Govt. Muhammadan College, Madras;

Author of

Commercial Correspondence, Book-keeping for Beginners, Graded Exercises in Typewriting, etc.

CONTENTS.

CHAP. I. Some short cuts and artifices; II. Signs, tables and vocabulary; III. Averages and Percentages; IV. Insurance, Commission, Brokerage, Tradesmen's Discount, Rates and Taxes, Bankruptcy; V. Bills and Invoices; VI. Profit and Loss; VII. Alligation. VIII. Partnership; IX. Interest—Simple and Compound; X. Present Worth and Discount; XI. Equation of Payments; XII. Shares and Stocks; XIII. The Metric System; XIV. Foreign Monies and Exchange; XV. Miscellaneous Examples; XVI. Madras S. S. L. C. Question Papers; APPENDIX—Answers.

OPINION.

Mercantile Miscellany, April 1926:—The enterprising firm of Messrs. Srinivasa Varadachari and Co., Mount Road, Madras, have sent us a copy of *Commercial Arithmetic* for S. S. L. C. students which they have published. The book is a very useful addition to the existing literature on the subject and bids fair to be regarded as a Standard Text-book on the subject on this side. Needless to add that the book being written with a Commercial bias it should prove invaluable to all youths aspiring after commercial or business career. We congratulate the author, Mr. T. V. Subramania Iyer, and the Publishers, for the neatly got-up little volume before us.

D. Cr. 8vo. about 200 pp. Price Re. 1-4-0.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

SALVATION OF INDIA

By Mr. S. K. VERMA, B.A., L.T.,

Asst. Master, and Scout Master, High School,
Balaghat.

WALK where you may, walk where you will, your ears are surely to be assailed by the shrill cries of those who prescribe salvation to India and claim to possess the sovereign remedies for all the ills that have brought India to her knees. On the one side, you will find the religious propagandists engaged in preaching their propaganda and assuring salvation to those who will come in the fold, and under the banner of their particular religion. They disclaim outrightly the other rival religions they do not belong to, forgetting in their zeal the essential fact that God stands above and away from all religions and ensures salvation to those who are good and do good, and do not soil their tongues with all this vilification. To me diverse religions seem but different ways to our Eternal Home. It is reached only by those who do not lose their ways in the mist of religious controversies but push on their ways by doing right and by living in love.

On the other side, you are sure to find different political propagandists preaching from different platforms their own dogmas of political salvation. They claim to show the shortest paths to gain liberty and Swaraj, ignoring the essential fact that unity and united action are the prime things for any political liberty. These parties have so different and divergent views and are so eagerly inimical that one is at a loss to understand which and how to follow. They have so discredited themselves that instead of enlisting the sympathies of, and convincing their hearers, they have estranged and disgusted the public. The illusion of winning Swaraj

in one year and of wrecking the Councils from within has been disillusioned. There is disunion in the Swaraj camp, there is counter-marching and some of the leaders have retreated and there are visible signs of abandoning their professed tactics. The time is not far off when they will have to openly acknowledge that the way to Self-Government is long and weary and not short and easy.

In short, you will find in every town and city an army of reformers in various phases of life making their frantic appeals, but to me their words are but platitudes and jejune, for none of them suggests the remedy for the evil which stares from every face and which makes the hearers quite unfit to help in the uplift of the society. There are plenty of religious and political reformers, but very few of them tackle the problem of the social reformation to render the youths of the country a deserving element of the society.

In every bazaar, in every street, in every school, and in every place, the man and the young that come in your view present an awful spectacle of physical wreckage. Their faces pale, the eyes deeply sunk in, the bodies thin and feeble, compel every observer acquainted with the ancient history of India to shudder and spill a tear of sympathy when he finds the children of the illustrious ancestors physically weak, morally depraved and quite unfit to shoulder the responsibilities. "Rama, the prototype of duty and obedience, Krishna of love devout," Bhishm, of physical strength, and Kalidas, of excellence in poetry, all remind us of the golden olden India, and tell us that we have an effulgent history at our back, of which every one of us should be proud. This physical wreckage has brought about mental and moral wreckage in its train; for the health of the body as a whole depends

upon physical health. To ensure mental and moral development of the proper nature, we must, first of all, make our bodies healthy. The weak body is easily affected not only by exertion and continued work but by vicious habits as well.

THE CAUSES OF PHYSICAL WRECKAGE:—One of the salient causes that has effected this physical wreckage is our system of education. Our education since the time of foreign influence over, and occupation of, India, aimed to develop the brain only, in which it has deplorably failed. I cannot express this system better than to quote a few paragraphs from an article of mine on "The Object of Education and How to Achieve It," from the *Madras Educational Review*, May 1923: "The object of education is to produce in the words of Aristotle, 'a sound mind in a sound body.' But, hitherto, the object of education in India has been and still is to develop the brain only, in which it has deplorably failed, because it wanted to develop the one at the expense of the other. How can a part of an object be developed without developing its other component parts? A school up to very recent days was regarded to be a seat of study and nothing else. A game, a play, or some other physical activities were considered to militate against its efficiency and was repugnant both to the educators and the parents of the children at school.

"The effect of such a system has been very pernicious and ruinous not only to the individuals concerned, but to the nation at large. It really makes me sad when I think of the so-called pillars of the coming generation physically diseased, morally depraved, and quite unfit to bear the burden which the society wants them to do. They either become a burden to the society, which the latter is

obliged to drag or are hurled into the lightless pit prematurely.

"If we dip into the ancient history of India, we shall find that the object of education of our ancestors was quite different from what the modern educators have tried to achieve. Our ancestors were not only paragons of intellectual power but of physical power as well * * * but sorry to say that the race of giants has been dwarfed and belittled in every respect. Where are those intellectual stars whose brilliance was sufficient to dazzle the world? Where are those men whose physical feats sent a thrill into the bodily frame of the spectators and became proverbial achievements that stand even up-to now at the lips of the world? India was then an oasis amidst the desert.

"The true object of education should be to train a man as a whole. Mind is not the whole thing that makes a man. 'He is a compound of many ingredients of which the intellect indeed is an important one.' It is, therefore, the training of all these ingredients that should be the aim of education, so that the whole may be harmonious and complete. What we want is the proportional development of, and the keeping of the balance in, the different component parts. A savage may be a fine fellow physically, and another physically deformed may possess a fine intellect but neither of them is a truly developed member of the society, because both of them lack balance. Taking for granted, that the training of mind should be the only object which an educator should keep in view, I fail to see how the mind can be developed when the other members of the body are allowed to rust. It may be that here and there we find men physically weak and feeble, in possession of brilliant brains. But such are only exceptions, meant by Nature to be such and are bound to be intellectual giants even if

placed in most unfavourable circumstances. I assert that their mental faculties would have been still more highly developed had they been physically better. Moreover, such men fall an easy prey to death, thus leaving the nations which would have otherwise been benefited greatly, bankrupt and in a sad plight. Thus according to those who hold the view that the aim of education should be to produce men socially efficient schools would prove a failure."

The second great defect in our present educational system is that it is theoretical through and through. The children's brains are stuffed with bookish matter and that is all; they are not taught any hand-work, such as sewing, carpentry, and so forth.

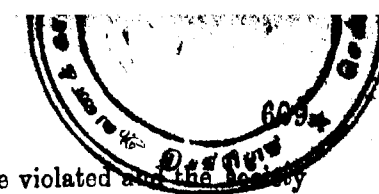
If education means a preparation for life, I fail to see where the preparation is. Are they fit to earn their livelihood with their own hands even after they have passed their B.A., when they reach the age of 25, when they have spent their precious years at school? The poor parents spend all they have upon the education of their children, nay, most of them go into debt, and when their hopes finish their school career, they hunt for a job here and there; if they fail to get any, not able to turn their hands to any business, partly owing to their ignorance of it and partly to their bankruptcy, they plunge themselves and their parents into a sad and miserable plight. They have already lost the vigour of body and brain, have fallen into the clutches of fatal diseases. In short, bankruptcy of body, brain and wealth becomes their sad lot, which they have to rue throughout life. This too much importance attached to books and divorce of physical development and manual work from our edu-

cation has been the bane of youths, nay, of the whole nation. Our education turns out clerks and clerks only and not the efficient citizens, hale in body and sane in mind, and expert in some manual work. The unemployment of the uneducated youths is becoming serious daily, is fraught with danger, which demands immediate solution. A part of this solution lies in overhauling the whole educational system.

The second cause of the physical degeneration is the pernicious systems—Purda system and early marriage—that are prevalent in our society and are eating into the vitals of it.

Purda system has no redeeming point and the draw-backs are so numerous that they are of beggar description. Women who are imprisoned within the four walls of the house are deprived of the fresh air so important for a vigorous health. Their health is shattered in no time, their rosy blooming faces tinged with red and white become pale and gloomy. The absence of the bracing air which would have otherwise made them stout and energetic takes away every initiation from them and renders them nervous and unfit for any work at all. It is a poison which they are forced to sip. The flush in their cheeks flies away. They become no less than a pale morose figure carved on a stone. Diverse diseases and maladies attack and besiege them from all sides so powerfully that they become motionless and are forced to yield all their sinews of war, I mean, the power of resistance; reinforcements are invited, but they prove helpless, so much so that they have to submit to the call of death in their fresh blooming years and die prematurely.

The injuries are not limited to the female sex only but are reflected upon their children



as well. Weak and lean as they become, the children born to them must be feeble and diseased. Loss of physical health is followed by the loss of mental faculties. Drowsy dreaming influence of the house makes them dull and unimaginative, dreaming dreams only, and doing nothing. It is a sheer injustice to the female sex. God has placed both the sexes on equal footing, then, why should men place a bar in the way of the other's enjoyment? They are deprived of enjoying natural beauty. In this case they are worse than prisoners. Prisoners are set at liberty sooner or later but the poor and helpless sex is immured throughout its life; it takes its birth within the house and dies within it, while Nature remains a book closed to it.

Early marriage is a curse to the society, which has sapped up its life-blood. Indian boys become fathers even at the age of 18 and girls become mothers when they hardly reach puberty. In the prime of life they find themselves entangled in the cares and anxieties of home-life whose buffets are remorseless and relentless. Their careers are cut short at a time when they ought to have prepared for the married life by learning useful arts.

Many of these married children succumb to fatal diseases, thus leaving a host of widows whose lot becomes miserable indeed. Hindu Shastras condemn them to a lifelong mourning, a life of singleness, and a life of misery. They cannot re-marry, they must live a wretched life upon coarse food and shedding a bumper of tears.

The carnal passion is a second nature to whose call even the Rishis have yielded, even the wise lose their sense. They fall an easy prey into the hands of the wicked. Murders are committed in the womb, the

rules of morality are violated and the society is on the verge of ruin.

Those who are happy to survive the fatal diseases that characterise the childhood, produce children that must be feeble and weak. The multiplicity of these nerveless children year after year has filled India with degenerated and emasculated children devoid of manly qualities.

The third cause of this degeneration is the poverty of India. How can you expect a country to be strong and healthy when the monthly income is Rs. 2 per head? The children who attend schools are mostly the sons of poor parents. They are ill-fed, badly clad, and miserably housed. The strain of working for six hours at school coupled with the drudgery that they are called upon to do at home both day and night makes their lot sad indeed. Those who have surveyed these children at school cannot fail to shed tears when they find the ghost-like faces dreaming dreams and incapable of undertaking their business seriously and zealously. Dr. R.C. Roy, who examined the various schools of Bengal, "was horrified to find that a Bengal youth of 16, age for age, was physically inferior in every respect to a British boy or an American girl." Sixty per cent. of the students of Bengal suffer from one disease or another.

What is true of Bengal is true of the rest of India. This is really an appalling picture of the wreckage of the future Indian manhood. This is due to bad nutrition and mostly to the absence of any healthy system of education. The so-called citizens are sent out into the larger school of life to sink or swim. Most of them sink and are hurled from the height of their sunny life into the dark and dreary pit of death. Those who survive swell the ranks of

the unemployed; for their bankruptcy of health chokes up and destroys the power of initiative, their dash and courage, which is the nectar, the happiness and the zest of life.

Another shocking thing that we find in the colleges is the fashionable life that the students lead. The life has become so extravagant and dear that there is a constant run on the purse of the poor parents, who in the hope of getting a rich reward and return in the future are easily duped. Once the Right Hon'ble Mr. Sastry, when addressing the collegians at the Punjab University Hall, sadly remarked that he saw before him an army of the Indian princes, so gaudily they were dressed.

The life, indeed, has become so effeminate that to convey a bundle weighing five seers of things they have purchased from the bazaar to the hostel, they have to employ a coolie or to hire a tonga, lest they should be decried and mocked at by their fellow-students. What a miserable life! What an effeminate life! They take pride in putting up appearances to look more tender. India, at present, is sick of such a life. She wants not a race of fashionable gentlemen, but a race of honest workers and labourers.

THE CURES:—The cures naturally lie in the removal of the defects that have been pointed out in our educational and social systems. Our educational system needs overhauling, needs a system that would aim at the development, both mental and physical, and provide withal a training in some vocation that would enable the young to earn an honourable living.

A healthy and strong body keeps the brain fresh, provides a reservoir of energy to fall back upon when need there be. It gives a

healthy mind, purifies thought, and is an antidote against evil ones. In short, it increases the power of resistance in general. Immorality is decreased, sins are diminished and mentality improved.

Many people think that physical development brings about mental deterioration. This view is chimerical and false, and seems to have been based upon the conclusions drawn from observing the mental faculties of the professional wrestlers. Most of these wrestlers are uneducated and have only one-sided development like a man who is a giant intellectually but diseased physically. What we want is proportional development and do not want to make the Indians a race of wrestlers but men endowed with "a sound mind and a sound body."

To confute the popular view, I must cite the names of some persons, who though physically giants, have been endowed with no mean brains. I should not take these names from the old India which was full of excellent men, both in physical and mental culture, but from the modern world familiar to us all. Prof. Ram Murti astounded the world by supporting on his chest a weight of 3 tons and performing other physical feats; Babu Sham Sunder Goswami of Bengal claims to be the world's champion in weight supporting. He has also 'supported on his throat a weight of 15 mds., and has therefore beaten all world record.' The lamented Sadow attained a world-wide reputation. The famous American wrestler, Dr. Roller, is an M. Sc. and an M.B. These are but a few names and are men of no mean intellectual calibre. The lamented Sir Surendranath "became a first-rate orator exclusively by virtue of his regular physical exercises. Babu Sham Sunder says: "The object of education and culture is man-

making which can be made neither by developing a gorilla type manhood nor by producing a top heavy unbalanced type of manhood, but by developing a new type with mind of high thinking backed by the higher sentiments and concentrated will, together with the muscularly perfect body backed by both external and internal strength."

In our schools at present, the physical instruction is controlled by illiterate and ignorant men who have only a smattering of a few exercises in drill, but are quite ignorant of the theory of physical culture. They do not know what particular physical defects can be cured by special appropriate physical exercises. They possess no knowledge of the working of the different parts of the body.

The world has begun to realise that many of the bodily and mental diseases can be cured by proper physical exercises and there are sufficient instances to prove that men who suffered in their boyhood from physical weakness have been cured and have got muscular bodies exclusively through physical exercises. I was once suffering from acute shooting pain near the lower part of the abdomen, which defied medical treatment, but was cured by breathing exercises taken regularly for a month, for 20 minutes daily.

In India, there is a dearth, a sad dearth, of men properly trained in physical culture. There is an apathy all around regarding this. The Indian young graduates and other literates should throw off this apathy, should realise its importance, get themselves trained in physical education, and enter into the wild field, ready for service to save the children of the soil from this deterioration and degeneration, nay, the motherland herself, from the verge of ruin and

destruction. This would be the greatest service, a service greater than any other, for the precious children of God who are at present deformed and ghost-like shall attain their proper form: an ideal difficult of consummation, yet an essential consummation, without which India cannot hold its position among the category of the civilised world.

Our physical culture in schools, therefore, should be controlled by graduates trained in the physical aspect of education, assisted by literates and properly-trained instructors. In our schools and colleges there are juvenile crimes that are eating up their life and blood. These are required to be decimated but can only be driven out by strict supervision, and turning their attention to another direction. They should be made to realise of what importance their physical health is, and how they can regain it by keeping up their bodies hale and healthy through this culture.

Let me again quote a few paragraphs concerning this necessity from the same article on "The Object of Education and How to Achieve It":—

"Another thing is that games and plays though unconsciously yet indelibly impress upon, and infuse in, the mind certain lessons and qualities of untold worth which perhaps cannot be achieved from any amount of preaching and lecturing. They instil in us perseverance, co-operation, fellow-feeling, respect for fairness, and the necessity of impartial justice, and teach us to keep cool under adverse circumstances; never to relax effort, never to be angry, never to despair. Who can deny the unselfish service to fellow-beings, that is being administered in continual doses, by Scouting which after a short time changes the whole mental attitude of the Scouts,

transforming them into altogether different beings, capable of bearing any hardship smilingly and undauntedly? The actions they do, though appear trivial and insignificant, prepare the doors to perform great and meritorious deeds in years to come. For, 'Repetition of action crystallises into habit and habits make up character.'

"This will require the services of some of the best men of the soil. But how sadly schools lack in this, is known to all.

"To me it seems that even the existing staff would become much better if they are sufficiently paid. How can they devote after-school periods to games and other activities when their presence is required at home to do small duties which can well be done by servants? But they are so poorly paid that they live from hand to mouth and have little to have refreshment to recoup their energies or to employ a servant.

"The scanty salary itself is the chief cause of the degeneration of this profession. It is so degraded in the eyes of the public that the teachers are being looked down upon and have no social position. The world desires appearances but they have no means to put on such.

"Some critic is sure to say that those who join this department should be patriotic and full of missionary spirit and that they should work zealously for the common cause. No doubt the profession is noble and requires inherent love for the profession, but I must say that all such criticism is merely a platitude and would mean nothing for empty stomachs. The teacher is a human being and as such is endowed with hunger and thirst, which must, first of all, be satisfied and quenched for self-preservation, before any such lecture can

appeal to him. What an army of men, though dying of hunger, yet working for the common weal, has such a critic seen? Moreover, he has to look not only after himself but also the members of his family.

"As long as we desire to make teaching cheap and do not equip schools with efficient staff well-paid and wedded to the interests of the institutions and the taught, impelled by a desire to train the man as a whole, we cannot expect good products, and the schools are bound to fail and are failing. No one has made a greater contribution towards the civilisation and progress of the world than the teacher. Yet his profession is the most neglected one. Unless these defects are removed, to me education all a farce appears."

The question of poverty is a standing evil, which cannot be solved unless our economic, industrial and social systems undergo a modification, which, of course, must be slow. The poor cannot afford to send their children to schools. It is the duty of the society and the State to take up that question. The students should be properly fed to build up their bodies, which is out of the reach of the poor. Let the parents cease to clothe their children in expensive clothings, thus saving a little, spend it to feed their children properly. Let the philanthropic and the rich men open the strings of their heavy purses to help the growth of the nation.

The Government also should do better in making larger provision in the budget towards education by slight cuts in the provisions of other departments to help the sons of the poor and to raise the status of the teachers. Thus and thus alone can they ameliorate the backbone of other departments. The Education Department is the nation's

builder, nay, the life and blood of the nation. Any stringency shown towards it goes to affect the nation as a whole, and to check its growth.

AWAKENING:—There has been awakening throughout the world. India has begun to see its light also. The modern civilisation has broken the isolation of India, so much so, that the views are exchanged freely, the old ideas are given up, and the Indians have begun to feel the necessity of divorcing the injurious and harmful systems. The changes and improvements in other countries that once swept away unobserved by her have filled the minds of young India with enthusiasm and active habits, so much so, that some of the harmful systems have been divorced away. Sati system has been divorced for good, the early marriage has begun to disappear, and the Purdah system has been relaxed. Its days are numbered, it has reached its meridian height from which its fall is but essential and natural. There is awakening to raise the children of the soil from their degeneration, physical culture which has been hither-

to thrown in the cold shades of negligence, has come out into the warm sun of approval and zeal, several physical societies are being formed, different provinces have begun to cry up to make the physical education compulsory, many educational reforms are in the air, a school for turning out Physical Directors has been started at Madras by the Y.M.C.A., to crown all, the Scouting Movement is gaining ground daily and steadily. All these are signs of hope, signs to rejuvenate the old and stale India, signs to revive the dead, and the day is not far off when India will be regarded as the component, nay, the worthy component member of the Empire whose equal none has been and none will be.

Finally, I with palms uplifted and fervent heart, pray to God that may He Who helps those who help themselves, give unto us a heart to work unremittingly and unflinchingly for the good of those in whose hands lie the destiny and reputation of the Motherland. The race to produce efficient citizens has been begun, and it devolves upon the young to run it with a will and heart.

INDIAN HISTORICAL PICTURES SELECTED FOR USE IN SCHOOLS

Cr. Quarto (7½ × 10 inches). Pages 270. PRICE, Rs. 3-8 only.

OPINION.

"We have great pleasure in acknowledging this delightful volume of Indian Historical Pictures from the enterprising publishers, Messrs. Cooper, Bombay. The value of historical pictures in the teaching of Indian History can never be over-estimated. For various reasons, publishers of text-books on Indian History are finding it increasingly difficult to prepare blocks of pictures illustrating the various phases of Indian History. Messrs. Cooper, Bombay, have supplied a real need in coming out with this volume of pictures. There are 261 superb half-tone pictures printed on art-paper. The thirty-five pictures connected with the Buddha and relics of Buddhism are highly inspiring and no student of Indian History should fail to look into them. The lofty temples of South India and the famous buildings of the Great Mogals are all very well represented here. The familiar pictures of the 'Makers of the British Empire,' from Clive to Curzon, are faithfully reproduced. We do not know if pictures of sieges and battles such as the one printed on page 220 are easily obtainable. If so, an attempt should be made to include a few of them in the next edition. History is certainly better taught with the help of such pictures and the effect produced is more permanent. We will also urge the necessity of adding a short explanatory note to each picture."

"This book, we have no hesitation to say, should be in the hands of every student and teacher of Indian History."—*The Educational Review*, Madras, September 1926.

COOPER—PUBLISHERS—BOMBAY.

"CAREER FOR THE UNEMPLOYED"

By Mr. J. L. ROSE, F.I.C.A.,

*Vice-Principal, India School of Accountancy,
Calcutta.*

UNEMPLOYMENT here, unemployment there, and unemployment on all sides. It remains to be seen only whether it exists in reality, or it is only a pivot for agitation. It is indeed a very acute question, and rendered more and more unsoluble by the several schemes already proposed in this connection. Who are unemployed? The off-hand answer is about 40 % of the adult population of almost every country. There are many qualified people who do not like any kind of job, even when they are hurled at them. If we go further into this question, we will notice the number of this kind of unemployed is by no means negligible. Many of them have become easy-going by habit and nature, and they do not like any work at all; when their educational attainments are any inducements to employment, they are prepared even to abandon those pass-ports. This class goes to swell the number of unemployed and we do not know what to do with them.

There are many people among the labouring classes who for the slightest cause, withdraw themselves from work, and depend upon their relatives. When they are pushed on, they will again work, they are idlers, and by nature scamps. The general tendency on their part is to live on public charity. The number of loafers is on the increase everywhere, but whether it is due to want of work, or due to their aversion for work, remains to be analysed. Our sympathy for this class of unemployed will only be misused.

There are then many of the qualified men, and at the same time energetic, who are not doing anything for want of work. Work to them means office work, judicial or ministerial. Office works are already overcrowded, and according to the economic principles of Supply and Demand, no new openings are left for the new aspirants. They are disappointed in not getting a job they seek, and still they do not give up the chasing. Every day disappointment awaits

them, wherever they go for work. To work for others is a slave mentality, and therefore they may be said to have been affected with this epidemic. They cannot do anything else. Neither can they divert from this congested line of desk-work. Desk work has some charms for the University trained people, and as the University is turning out more and more graduates, the office desk is getting overcrowded. Those who have any originality of their own ought to leave this line of employment and go for the other. They ought not to wait for any suggestion or ideas from others. We have on record careers of many rich people who rose by picking torn papers and rags from the street, by hawking phials and bottles, by selling old news-papers and many other business involving physical labour.

There reigns unemployment because of our mental condition and unwillingness for manual labour. Education fails in its purpose, if it can not instil original ideas and plans into the head of those recipients. Unlettered people get rich quick, because they do not shrink from the manual labour. Those who prefer office work, I would advise them to be trained properly. "First deserve, then desire." If those unemployed take commercial education, shaking off their lethargy, they may solve the acute question of unemployment. People who like to go for business, complain of the want of capital. This is however not a question to the willing worker. "Where there is a will, there is a way." It is the will-force only then that can find new careers for the unemployed. The richest man in the world is said to be Rockefeller. He began as an office worker. So you may learn those of the commercial subjects, knowledge of which has opened out chances for many. Trade is the royal road to success, manufacture is the king's road to riches, agriculture is the next, service comes fourth in order of merit, and begging has been described as the worst kind of manner of life in the Laws of Manu. We have no system of training apprentices in business, still those who have been magnates in this line did not wait for any schooling or the capital. Try to cultivate the habit of selfness and individuality if you want to keep you employed.

IMPEDIMENTS TO EDUCATIONAL EFFICIENCY UNDER PRESENT-DAY INDIAN CONDITIONS.*

IN the first place I should refer to the Government policy with regard to education. The amount it spends under this head is ridiculously small as even a Tyro in Indian Politics knows. What it would not give itself, it expects the people to make up by means of local effort which may be the donations of the managers or the general public or the fee-income from the parent and guardian class. It is impossible in a poor country like India for the over-taxed people to make adequate contributions to educational needs by princely endowments or by exorbitant rates of school-fees. Education must be a State charge, and the first charge upon the State Treasury. It is at least as important and as much a primary duty as national defence. The policy of doles, therefore, should go, and the vicious system of proportionate grants must be abolished. The old system of Government patronage and royal grants to education, if revived even now, will give an impetus to educational advancement in every village and pave the way for the establishment of countless centres of learning all over the land, each paying attention to the special needs of the locality, based on the occupations of the different village communities. Ninety per cent. of the schools would be agricultural institutions with craft-sheds attached to turn out the artisans who, together with the peasants, form the bulk of our rural population. Indian education should be agricultural and industrial first, and literary or otherwise only

* A paper read by Mr. N. A. Doraiswamy Iyengar before a meeting of the H. T. H. S. L. S. & P. Dept. Teachers' Association, Madras.

afterwards. So long as most schools are not made bread-winning or vocational, they have no chance of relating themselves to the real life of the nation. The trades and the professions are over-crowded, and a purely ornamental sort of training youth in schools will no longer attract the shrewd parent. Unless the nation wakes up betimes and demands a new orientation in education, insisting on sane methods of preparing its future citizens for the battle of life, degreed young men, who have learnt to use no other tool than the pen, will be in the sorry predicament of solely looking to their fathers-in-law for their support. Not a few lawyers and doctors are such already. It is the Hindu tradition to lay the source of all national ills at the feet of the king and I have followed the customary procedure without any violence to conscience, especially because in this respect it is acknowledged on all hands that the accusation is well-deserved, for no other civilised Government in the world spends less on the education of its budding citizens than the Indian Government does for India's children.

Let us now pass on to some grave defects of school organisation, i.e., from what might have been and might yet be to what actually is, and have a look round. The precious soul entrusted to our guidance is usually one among forty pupils in the lower and higher secondary grades. Any teaching adopted in class is directed to the class in the main and rarely to an individual. No conscientious teacher, however able, can claim to do justice to the full regulation maximum. Imagine at once the attendant circumstances too often prevailing—the wrong classification of pupils due to faulty admissions and unearned promotions, the ambitious if not impossible courses of studies which must be covered in a

given short time, the methods in vogue to measure the quantity and not the quality of a teacher's work—imagine all this to understand why class-teaching now-a-days tends more and more to become merely mechanical, so much so that, as is generally said, a gramophone may easily replace a teacher, effecting considerable retrenchment in school expenditure! Here lies one great justification for the giving of private teaching to pupils. Most parents instinctively feel the inadequacy of school attention bestowed upon their children and wisely employ home-tutors to coach them up in defective subjects. The well-to-do parent's need is the poor teacher's opportunity, and, if the system of private tuitions is intrinsically wrong, do not blame the parent or the teacher, for they are mutual benefactors incidentally benefiting the school as well, but question rather the wisdom of herding forty growing young people at a time under a person called upon to regulate a lesson by the clock and cover a portion by the calendar. As for the abuse of private teaching, well, it will stop when abuses in all walks of life will stop by some new miracle. Dishonesty here as elsewhere will soon be detected and discarded as surely as the honest worker is known and encouraged everywhere. Again, if more than one lawyer's services may be retained in a law-suit, or if several physicians may be called in at once to cure a patient, why should not a home-teacher be employed to supplement the work of the school-teacher? The labourer is surely worthy of his hire. It is all a question of demand for and supply of skilled labour with an open or tacit understanding between the contracting parties as regards payment and result. Even granting for argument's sake that a pupil has no special defects to overcome, what guarantee is

there that he has kept pace with the school lessons while the teacher has run over them with one eye on the concrete allotment for the term and the other on the abstract assemblage before him? The fact is, and I say it at the risk of being misunderstood by unsympathetic and unimaginative people, private teaching will continue, even though teachers should be amply paid, so long as the cruel maximum of forty pupils to a class is not reduced to twenty only. Efficiency and economy cannot well go together in this matter. One cannot eat the cake and have it, as the proverb says.

Having laid the greater portion of the blame at the doors of Government for its meagre financing of the nation's education, and for keeping the maximum class strength at such a high figure as forty, it now behoves us to look for faults nearer home. As their number is legion, and as they cannot be fully dealt with in a short paper like this, I shall content myself with merely cataloguing the many avoidable sins of omission and commission for which the public and the parents as well as the managers and teachers are largely responsible. Unsuitable buildings and furniture produce in no small measure the ills afflicting teachers and taught in the classroom. In towns, the former need either to be disposed of by public auction to godown-keepers or to be razed to the ground to make room for less ugly and more tolerable structures. All furniture should be swept off the premises of school-houses, or at least, the less they are allowed to hamper work the better for the pupils in all ways, for ungainly benches and unwieldy desks retard free movements, harbour ancient dust, sorely offend the eye, and uselessly consume school money. Add to these the torments of an

unnatural dress, which is at once anaesthetic and unhygienic, and the picture of misery is complete. In South India, during the four hot months, the maximum clothing required by a child or an adult is just one piece of loin cloth, and in the next four months of warm weather, an additional cloth thrown over the shoulders ought to be a luxury, if worn at all, while, even in the cold or rainy season, the second cloth appears to have been discarded in days of yore, as judged by the Shastric injunction relating to a Brahmachari's dress—a wise rule that must have worked well, making for hardiness of frame and longevity of life as for daily health and comfort. The disgusting irksomeness of unscientific sartorial equipment in ill-built class-rooms during oppressive weather is a piece of easily avoidable cruelty requiring to be brought under the operation of humane laws enacted for the protection of children or for the prevention of cruelty to them. A little power of imagination to understand the handicaps indicated herein and a little courage to destroy the tyranny of custom by one bold stroke are alone necessary to create facilities for more congenial surroundings.

Holidays and hours of instruction need to be revised in the light of common sense and actual experience, setting stupid modern custom at defiance and following with pride, pleasure and profit the age-old, time-tested practices of our country in these respects. In the ancient Gurukulas, the Vidyarthi knew no summer vacation or other seasonal holidays. They shared the life of the Guru, and their home-life and school-life being all one, holidays were unthought of. If a home was the school in the past, the school ought to become a home in the present, and long holidays as such must be abolished. The work

of the school world must go on irrespective of the meteorological changes in the locality, as it went on in the days before the British advent. Saturday and Sunday holidays are Jewish and Christian innovations utterly meaningless in a country mostly composed of Hindus and Musalmans. One would think Friday holidays might answer the purpose better, seeing that that day is sacred to Hindu and Musalman alike, if indeed any one day of the week can be called, in these enlightened times, more sacred than any other. Leaving sentimental considerations apart, the new psychology and the recent science of keeping fit, teach that rest is not only not necessary but positively injurious. Rest, as ordinarily understood, means rust, whereas it ought to mean a change of occupation. The temporary disuse of the faculties during periodic holidays at intervals impairs efficiency in several ways. It demoralises people, making them love idleness and ease, it destroys the principle of continuity of growth and it prolongs the period of a youth's education. Night-time ought to be the only time for rest and repair. In this connection the desirability of changing the hours of instruction to mornings and evenings will naturally suggest itself. In these matters we are not wiser than our forefathers, and, if we adopt their hoary usages, we will stand to gain all-round in health and strength, and long life and happiness, not to speak of the increased efficiency which the absence of physical discomforts and inconveniences will bring in its train.

Other impediments to efficiency are wrong text-books, over-crowded curricula of studies, frequent acting work and the consequent overworking of already overworked teachers, the knocking out of all initiative in the teach-

by an iron system, annoying interruptions in the shape of never-ending circulars and communications which necessitate too much clerical work, the evils of examinations, the lack of provision for special subjects or teachers, etc. With regard to the last, it must be said that subjects like languages, mathematics and general knowledge require the aid of a large number of appliances for study, and therefore the pupils should go to the teacher's place and not the teacher to the pupils' rooms. Every class or subject should have a library set apart for it. The list of draw-backs mentioned here is indeed a formidable one, though it is by no means exhaustive. Each of these will require a whole evening, if it is to be thoroughly thrashed out, and so a bare mention of them ought to suffice here.

Last, but not least, the unprogressive nature of many teachers exposes them to the just criticism of outsiders. After a certain time, either false pride or overweening confidence, or the want of facilities or time or means tends to make a large number of teachers vegetate and fossilize, for they do not care to have their old and worn-out notions of things revised in the light of modern changes. For example, the methods of teaching languages have undergone violent modifications, certain scientific theories have been exploded or differently stated, recent historical research has thrown light on obscure events of the past, the map of the world has been altered since the last European war, and the old order of things has changed, yielding place to new. Unless teachers put themselves in constant touch with the changing world, they may be presenting knowledge at variance with proved facts or recent dis-

coveries. Where there is a desire to progress no amount of poverty or overwork can be a sufficient excuse for not moving abreast of the times. It has now-a-days become the fashion for some people to vilify teachers as a class and to hold them very cheap, often undeservedly. They must unite as a body, and even become members of a trade union, for teaching is both a profession and a trade, the noblest as the one but the sorriest as the other. This they must do not only for self-improvement but also to prove to the world that they will not take insults lying down. They have been called unfits and misfits in their avocation and even described as the refuse of other walks of life. Let them unite and give by their organised life the lie direct to such rash and baseless accusations.

In conclusion, I now await friendly bombardment from the public for some of the startling or revolutionary suggestions I have ventured to throw out in the course of my remarks.

CHEMICAL PROBLEMS AND THEORIES

FIRST PART

BY

HRIDAYA KRISHNA DE, M.A.,

Professor of Chemistry, Vidyasagar College;
late Professor, Victoria College, Cooch-Behar

Bengal National College, Calcutta;

Victoria College, Comilla, etc.

Price Re 1. Postage extra.

SRINIVASA VARADACHARI & CO.,
4, Mount Road, Madras.

WORLD FEDERATION OF EDUCATIONAL ASSOCIATIONS, EDINBURGH, 1925.

By Mr. J. P. BULKELEY, M.A., I.E.S.,
Rangoon.

I ATTENDED in July, 1925, at Edinburgh, the second biennial Conference of the World Federation of Educational Associations. I was one of 1,222 persons interested in Education, 511 from Scotland, 91 from England, Wales and Ireland, 435 from U.S.A. and Canada, 8 from Central and South America, 89 from the Continent of Europe, and 88 from Africa and Asia. India ranked fourth in numbers among the countries represented, coming next to England.

I have chosen the Conference for my subject because I think people in India and Burma should know about the W.F.E.A., and because it offers opportunities for reflection on a number of educational problems in which we are interested. The World Federation of Educational Associations was founded and held its first Conference in 1923 at San Francisco. Its object is to promote international good-will and peace through international co-operation in education. It was decided in 1923 to hold Conferences biennially. Other resolutions in 1923 were connected with interchange of teachers and students between different countries, the unification of scientific terminology, the dissemination of educational information, a universal Library bureau, and international University, reform of text-books and courses likely to perpetuate national prejudices, systems of character training, the universal observance of "Good-will day," international co-operation against illiteracy, and removal of educational disabilities of women and children in rural and impoverished areas.

The method of the 1925 Conference, which lasted a week was to form sections to discuss pre-School, Elementary, Secondary, Adolescent, and University education, Teacher Training, Character Training, Health, Illiteracy and International relations. Most of these sections forwarded resolu-

tions to a Committee which revised or abridged them for the approval of a final plenary meeting. Besides the work of the sections, there were a number of public luncheons and meetings at which specially distinguished speakers delivered addresses, and representatives from various countries were invited to give "messages," either directly in English or through interpreters. I shall first describe certain general impressions which the Conference left on me; then the public speeches which interested me most; then the work of the sections; lastly, I shall attempt to estimate the importance of the Federation and its future possibilities.

Though I had learnt from experience in Burma how men of good-will can be balked of their common aim by racial, sectional and linguistic misunderstandings, my first impressions of the Conference were coloured by disappointment at the same hindrances. Never have I felt more keenly the tragedy of the tower of Babel and the obstruction caused by useless repetition, by failure to keep to the point, and by the grinding of individual axes. That was, I think, inevitable under the circumstances, and a common impression with all of us who had the objects of the Conference deeply at heart. But after listening for a week to Americans, English, Scotch, Belgians, Chinese, Japanese, Bohemians, Italians, Hungarians, Poles, Chileans, Danes, Swedes, Finns, Siamese, Burmans and Indians, I retained happier, truer, and more permanent impressions of the power of common interests to bring men together and of the readiness with which so many nations had combined for a common aim; of the hearty hospitality and practical idealism of Scotch teachers and educationists; of "the immense reservoirs of good-will and friendliness that exist among the nations;" and of the similarity of educational problems throughout the world. The last was perhaps my strongest impression. The irrelevant discourses which so often interrupted discussion during the deliberations of the sections, were mostly due to

linguistic difficulties. Delegates with an imperfect knowledge of English brought written speeches too often containing statistical statements of educational institutions in their respective countries, and insisted on reading them aloud without any regard to the trend of the debate. When reminded by the Chairman that they were exceeding their allotted five minutes, they often bowed to him blandly but proceeded unperurbed to the bitter end of their carefully prepared "Messages."

We heard far too often that Edinburgh was "the Mecca of Education," and "the Modern Athens." At one public meeting where the "Modern Athens" had appeared so often as to become a joke, the last speaker, an Athenian, who spoke through an interpreter and had not understood the earlier speeches, ended by informing us that he was proud to greet Edinburgh as the Modern Athens. He sat down intrigued and slightly ruffled at the amusement caused by his graceful and serious peroration.

The sections all tended in varying degrees to become immersed in common problems not always definitely connected with the objects of the Conference, and two of them failed to submit any resolutions for the plenary meeting. I did not regret this tendency, the main object of bringing us all together to discuss matters of common interest was successfully achieved, and the wide range of our discussions made them all the more interesting and profitable.

I saw and heard many great educationists with whose names and achievements I had long been familiar, amongst them Sir Michael Sadler, Professor J. J. Findlay, Sir Robert Blair, Dr. P. J. Hartog, Professor Patrick Geddes, Professor Charles Sarnica, Dr. Georg Kerchensteiner. The names of many other delegates must be as well-known in their own countries as the above names have long been in England. Many of the most important speeches were made to the sections and I will deal with them later. I will mention

here what specially interested me in the public speeches.

Mr. A. O. Thomas, President of the Association and Commissioner of Education for the State of Maine, was the most ubiquitous figure of the Conference. He spoke frequently, and always sanely and to the point, but what impressed me most was his burning zeal for brotherhood, his inexhaustible suavity, and success in pouring oil on waters which threatened to be troubled. He told us one evening that he wished he could go on hearing the "messages" of delegates till next morning, and I believe that was literally the truth.

Professor Patterson, Dean of the Faculty of Theology in Edinburgh University and ex-Moderator of the Church of Scotland, boldly claimed that Edinburgh had better Secondary Schools than any city in the world, and after long experience of American students warned America that she needed better Secondary Schools. He whimsically criticised a rule (which sometimes proved impossible of observance) that neither religion nor politics were to be discussed at the Conference. "You are not to talk religion, you are not to talk politics, and one of the things you are profoundly interested in is the formation of character. It looks as if you were to have a Conference on military affairs and you were not to touch on the cavalry arm or on the question of explosives."

Sir J. Alfred Ewing, Principal of Edinburgh University, warned us to have faith in education, but not to expect too much of it. "It cannot be trusted even to make the present world safe for democracy or democracy safe for the world." Speaking of higher education he advocated freedom of opportunity, for all really worthy, but warned us that higher education could not and should not be general. To try making it so would be futile. "Attempts to make intellectual mediocrity keep pace with distinction fail dismally and expensively; they keep back those who should help to forge ahead and are a disservice to those who should be left behind."

A paper sent by Mr. Y. P. Tsai, Chancellor of the National University of Peking, was read to us. He gave an interesting account of the ancient Chinese curriculum and its limitations, and described modern educational movements in China, including those for mass education and libraries. He stated, to justify his misgivings at the activities of Christian Mission Schools and Colleges (between five and six hundred thousand Chinese students now attend them), that Chinese educators are "almost wholly against the teaching of religion to young children; if we respected the rights of our children we should educate them in such a way as to give them the knowledge and mental habits required for forming an independent opinion." There is food for thought in that argument. He had equally interesting things to say about the significance and treatment of political unrest among students in China.

China was strongly represented at the Conference and Dr. P. W. Kuo, President of the South-Eastern University at Nanking, and a Vice-President of the W. F. E. A., told a public meeting about the campaign against illiteracy in China. The two best stories were about recent illiteracy campaigns, one in China, the other the "Moonlight School" movement in Kentucky, connected with the name of Mrs. Cora Wilson Stewart who spoke at a public meeting. I shall refer again to these stories when dealing with the section on illiteracy.

Mr. G. K. Chesterton was beguiled into attending a public luncheon at which he got only lemonade to drink. I wish they had given him beer, for to judge by his speech, he was not very happy in our company. He posed as a solitary Englishman to educate whom it had been found necessary to convene all the nations of the world. He pleaded that some small remnant of him be left, "a kind of remnant of that original individual love of liberty which is not, I think, altogether valueless in the world."

Mr. W. F. Russell, Professor of Education, Teachers' College, Columbia University, gave at a public meeting what I found by far the most interesting speech of the Conference. His subject was "Who shall mould the mind of America?" He dealt with the growing tendency of State authorities to dictate what is to be taught in Schools and Colleges. The danger was well expressed by another speaker in the University Section who complained that the men who paid the piper were no longer content to call the tune but expected to be allowed to compose it as well.

Mr. Russell sketched the history of curriculum control by external authorities in his country, and traced the development of two principles on which they have acted, one negative, the other positive: not to teach anything about which people seriously disagree; to teach propaganda of any kind loudly demanded by public opinion. At first parents and churches, then small local Education Committees, often controlling no more than one school, decided what was to be taught. Then came a steady trend towards State control which for a long time did not interfere with the curriculum beyond requiring the approved school subjects. By 1904, however, two important prescriptions were common: no sectarian religious teaching was allowed, and the bad effect of alcohol must be taught. Thus were established that "prohibition of religion, and religion of prohibition," which are distinctive features of American education. The State had begun to apply the two principles of excluding the controversial, and of including propaganda demanded by public sentiment. They have continued to apply them with increasing frequency, till schools are bewildered, and the world recently laughed aloud at the tragic farce of Deighton, Tennessee. As positive prescriptions due to aroused public feeling we find the teaching of "safety-first," fire prevention, thrift and kindness to animals; insistence on English as the medium of instruction; teaching the American constitution, and other devices for "Americanisation" such as the recent attempt to force all children into public schools in Oregon. Among exclusions of the controversial we find the German language expelled from all

curricula, other foreign languages expelled from the elementary school, and finally the strict prohibition of modern science teaching in all its schools and colleges by the State of Tennessee. Here we have the common principle pushed to absurdity. Can it go even further? Mr. Russell fears it may. He points to Europe where partisan politicians are everywhere using school curricula for partisan ends. In Italy, for instance, the Ministry of Education has prescribed a curriculum where Fascist propaganda obtrudes itself in every subject. The prospect of State control for children and teachers is alarming. For this reason, Mr. Russell prefers local control with all its disadvantages. The problem in America and many European countries is how to secure for children a training free from the prejudices of the narrow teacher, the ignorant parent or the aggressive nationalist, and from the wiles of the political agitator. In England, we have partially solved this problem (Mr. Russell did not mention this) by giving schools nominal freedom as regards curricula, though actually they are coerced to an undesirable extent by Universities. In Burma we are by no means so free from the danger as to be justified in ignoring it. Our Vernacular School curriculum is prescribed by the State, our Secondary School curricula were until the other day prescribed rigidly and may be so again, nor can we feel assured that State control will be influenced by purely educational considerations. It has usually been so in the past. But during the war an Imperial Idea Committee revised curricula with avowedly propagandist objects, and under the Reforms there may be a movement for political and nationalist propaganda in schools. We seem moving at present towards the English solution of nominal freedom, and thereby risking even stronger indirect University control over schools than exists in England.

Mr. Russell could offer no solution for the problem in America but hoped much from the influence of voluntary Teachers' Associations. He offered them a useful word of warning. "Some Teachers' Associations have for their primary aim the welfare of children. Teachers' Associations grow strong in proportion as this end is approach-

ed." I wish our recently-formed Teachers' Associations would take this warning to heart, and fight not only for improved professional status but for freedom and stability of curriculum, in order that we may know what we have to teach, be free from the nightmare of having to teach what cannot or should not be taught, and in a position to make secure plans for present work and future progress.

I shall now deal briefly with the work of some of the sections. Each session began with a ten minutes' address by a well-known authority after which a five minutes' time-limit was set. Most sections were provided with lists of topics suggested for discussion which were generally but not closely followed. Even when speakers ignored the special aims of the Conference, they were nearly always interesting.

THE PRE-SCHOOL SECTION.

Its resolutions were reduced by the Resolutions Committee to two:—

"In view of the supreme educational importance of the first years of childhood, provision should be made in every educational system for a type of education suited to the needs of that period. Such education, whether given in the home or in special groups, should include the formation of desirable physical habits, mental attitudes and character traits in an environment conducive to freedom, health and joy of living."

"Such pre-school education should be in charge of persons specially trained for the purpose in both mental and physical ways, and should be carried on in special groups in close co-operation with parents. Public funds should be available for such education and every encouragement should be given to research in this field. Speaker after speaker testified to the benefit of expert pre-school training between the ages of two and five years.

"What," asked Miss Frodsham, Inspector of Nursery and Infant Schools, Manchester, "may be said of the little child of five years of age who has had a pre-school training course? A normal child who has had a three years' course of Nursery

Education from the age of two to five years leaves it well-equipped for the work that follows. His body is healthy, with well grown straight limbs; he is alert and vigorous; he holds his head upright, breathes through his nose, balances his weight correctly, walks and runs gracefully. He is reasonably obedient and has acquired a large number of good habits, and is, therefore, to some extent, already master of himself.

He takes an intelligent interest in his surroundings, loves work, and has a growing power of concentration and ability to go on steadily with a piece of work when left to himself. He is learning to be self-reliant, and his persistent cry of "Let me do it myself," leads him to gain many and valuable experiences.

He is developing some control of his emotions, and may be expected no longer either to be a "cry-baby" or to exhibit temper when he cannot have his own way. He can share toys, and play without quarrelling. His attitude to others is friendly and trustful. Through his awakened love of pretty things he is able to take care of flowers, to treat toys properly, and finger a picture-book carefully. His speech is fluent and distinct. He is growing in consideration for others, and his very early impulse of "me first" is beginning to give place to "others also," and on rare occasions to "others first." He is now ready for the infant and junior school course.

Our children can only have their early years of childhood once. The pre-school period is of incalculable value if rightly used."

It was, I am glad to say, admitted that it need not be institutional even for children from poor homes if they have plenty of air and space to play in and interesting things at home. It is for the children in crowded areas that Nursery Schools are urgently needed all over the world. More than one speaker recommended learning to read before the age of five. I think the change of expert opinion on this subject during recent years is a wise change,

Here in Rangoon, we have far too few intelligently-conducted Kindergarten Departments even in our Anglo-Vernacular and English Schools, and none in our Vernacular Schools. I know from personal experience that where such a department exists, it incalculably improves within a few years the level of intelligence of a whole school. Teachers specially trained in Burma for Anglo-Vernacular Kindergarten work are nearly always used for work in higher primary classes and rarely for the work they should undertake. The youngest children in all our Vernacular Schools, and in 90 % of our Anglo-Vernacular and English Schools, are subjected to old-fashioned school discipline, sit at desks for hours daily, and are denied the physical and mental activities and training essential for their healthy development. The evidence of speakers at the Conference shows that parental opposition is often the chief obstacle to reform of these conditions. Parental opposition will certainly be an obstacle here, and that is why I am glad of an opportunity to mention in public the urgent need of reform in our methods for educating children in the lowest classes of schools in Burma.

THE ELEMENTARY EDUCATION SECTION.

The Plenary Session passed resolutions based on the recommendations of this section (1) in favour of general observance of Good-will Day; it also decided to consult affiliated and other Associations on the most suitable date for its general observance. The 1923 Conference decided on May 18th, the anniversary of the Hague Tribunal, and Good-will Day has been for the past three years observed on that date in certain countries. It is not suitable for India because of the hot-weather holidays.

(2) In favour of teaching geography, history and training in citizenship not only from a national point of view, but also from a modern sociological and international point of view.

(3) In favour of exchange between countries of school children's letters, school-work, and of children of suitable ages. (The Resolutions Com-

mittee had removed the 'suitable' from the recommendations received from the section, and it was restored at the Plenary meeting after warm protests that parents ought not to surrender even temporarily to foreigners the responsibility for their own children at the elementary stage. I heard a Scotch mother behind me loudly protesting: "They shall no have my weans to play about wi'!"

(4) In favour of preparing text-books for elementary schools descriptive of child-life in many lands and setting forth simply the best achievements of each nation.

(5) In favour of plans for travel and interchange of teachers. The discussions in the section on the observance of Good-will Day caused what journalists euphemistically call a "breeze." Some patriotic Britishers and Canadians claimed that they already observed Empire Day on May 23rd, in the spirit of the proposed Good-will Day and hinted that a further observance was unnecessary. They got the inevitable answer from a Scotch Trades Unionist who temperately indicated the obvious difference between imperialism and internationalism, and deplored the old traditions of imperialism, and national aggression. The crisis was temporarily postponed by a decision to appoint a Committee on Good-will Day, but soon re-appeared in the next discussion on School Courses. Professor Satyamurti, M.L.C., of Madras University, reminded us that the world did not consist of Scotland and America; he deplored the arrogance of European nationalism, and especially the verse in our National Anthem in which God is asked to "Confound our enemies." The Chairman attempted to pour oil on troubled waters by reminding Professor Satyamurti that the objectionable verse is never used now; but an English school-mistress rose to defend the teaching of patriotism, and told us that the Union Jack had a grand history, that she was going to teach her children about it as long as she lived and that, if she was not to be allowed to teach it, she would no longer

teach. Our Trades Unionist again reminded us that the British Empire had done harm as well as good to the world, on which the Chairman remarked that it was bulking too largely in the discussion, and succeeded in putting an end to an argument which had somewhat marred the harmony of the session, but served to remind us of the difficulties of our project of brotherhood.

In the agenda for this section we were actually asked to consider whether "in the study of international contacts, it was advisable to include a study of such special movements as the codification of International Laws, Treaties and Agreements, Courts of International Justice, League of Nations, etc." Many delegates, including myself, protested against this absurdity. We can best teach "World Civics" to Elementary school children through the general curriculum, especially Geography and History, and by getting them to perform social services and to feel themselves members of a community.

The section was addressed by Sir Mark Hunter and another representative of the Simplified Spelling Society of which he was then Secretary, but passed no resolutions in connection with it.

SECONDARY EDUCATION.

The Plenary Meeting passed two resolutions on the recommendation of this section:

"That the World Federation of Education Associations encourage co-operation with affiliated Associations in the promotion of such aids to education as universal biography, visual instruction and the use of the motion film, particularly when of an educational and scientific nature, literature and language study, particularly in the modern field, aesthetics, and training for citizenship as possessing great potentialities for the development of an international outlook."

"That the World Federation of Education Associations prepare a statement of the ideals which should obtain in history and history teaching. Such statement should emphasize the necessity for an impartial treatment of international

intercourse. A frank admission of shortcomings should accompany the claim of services rendered to the cause of human welfare in each country. In proceeding from national to world history, emphasis should be laid upon the progress from conflict to conciliation."

The Secretary of the section has thus summarized the trend of its discussion:

"The discussion in this group centred mainly round the curriculum. It appeared to be the general opinion of the meetings that every subject could and should be taught from an international point of view. Languages become increasingly necessary in a narrowing world. National History should not give place to World History but should find its culmination therein. A sounder, worthier teaching of Geography is needed to elucidate this history and to give a more exact knowledge of the peoples of the world. Science, which is unquestionably international in its scope, should be so taught that the pupils realise the contributions to human welfare that have been, are being and will be made by all nations. Last but not least, Art in all its forms was recognized as a great power for the encouragement of a real sympathy between nations.

The responsibility of teachers was continually emphasized and it was recognized further that the first essential was the development of this international view-point in the teachers themselves. To this end it was suggested that various books of reference be prepared, but it was urged that the most important factor was the fostering of the exchange of teachers in all parts of the world."

ADOLESCENT EDUCATION.

This section only met once, no resolutions were passed and there was little discussion. It considered only indirectly the general question of normal adolescence, its trials, and special needs. Its attention was concentrated on a problem peculiar to England and other over-populated and industrialized countries, the problem of those

known officially in England as "Young Persons" who have left school and for whom work cannot be found. There were 200,000 such young persons between the ages of 14 and 18 in England last summer "generally reaching adult life without ever having been broken in by employment," and most of them without healthy interests or occupations. The obvious solutions are to raise the age for compulsory school attendance which now stands at 14, or to insist on attendance at continuation schools for some years after leaving school. The 1918 Education Act attempted to provide these solutions, but the local Education authorities could not or would not meet the cost. Sir Robert Blair, late Chief Educational Officer of London County Council, told us the tragic story of the establishment of compulsory day-continuation schools in certain London areas in June 1921 and how they had to be closed in July 1922, owing to economy propaganda, the selfishness of parents, and the refusal of neighbouring educational areas to co-operate. He warned the section that "to extend indefinitely the old type of Secondary school would be in effect not to provide the means of a liberal education but to multiply vocational schools of a technical character." That is a warning we might take to heart here, for our Anglo-Vernacular Schools are largely vocational schools for the overstocked clerical profession. He showed that voluntary continuation schools would not solve the problem because they flourish only when employment is brisk and languish during depression. He discussed the alternatives of extending the ordinary school-leaving age to 15 and of providing compulsory day-continuation schools and gave good reasons for preferring the latter. Definite vocational education can best be given in day-continuation schools to adolescents who have begun real work. Postponement of the school-leaving age to 15 will only postpone the evil. "Boys and girls of fourteen years of age have already spent nine years in Elementary schools. New experiences, internal and external, are beginning to crowd in upon them. Wage earning is

attractive. They are longing for new adventure. They desire to break with conditions they regard as fit only for children. The change from school to industry is severe and should be eased by the support of sympathetic teacher-advisers who must necessarily make a much closer study of industrial conditions than is possible for the elementary schoolmaster." The problem of the English adolescent is inevitably a problem of vocational education. We heard two eminent authorities on the subject. Mr. A. P. Laurie, Principal of the Heriot-Watt College, Edinburgh, told us he was tired of hearing attacks on vocational education and reminded us that the education in our Secondary Schools and Universities is vocational, and that vocational education is the only kind of education a student will put his back into. He poured scorn on successive chiefs of the English Education Department. "They seem to have no ideas beyond picking up clever little boys and girls out of the working-class, and by means of bursaries and secondary schools, lifting them out of the working into the middle-class. This is called equality of opportunity. As long as lawyers, doctors, divines, accountants and schoolmasters are properly trained for their job, the man of the pick and shovel, the saw and the hammer can go hang. He, the only really necessary person on whom we depend for our daily bread, who, if he is not efficient, brings down our whole trade and commerce with a smash, is not worth the trouble of teaching his job properly."

More constructive advice came from that wise old father of modern vocational education, Professor George Kerschensteiner of Munich University. He told us how he reorganised the continuation-schools of Munich in the nineties, and thus set an example followed by Scotland, England, Sweden and U. S. A. He laid down the following guiding principles for organising adolescent education:—

(i) When dealing with youths occupied in work for which they can feel a vocation, centre the educational arrangements round this work.

(ii) See to it that the scope of the educational arrangements is not limited to this particular kind of work, but that the pupil's interest in his work is widened so far as to embrace activities of social significance, i.e., see to it that the man is not swallowed up in the worker.

(iii) As soon as possible, organize the educational institution to be an active community controlled by common social values and aims.

(iv) When the adolescent's occupation is of a kind that no man can have a vocation for, let the education be based on social, æsthetic or religious interest, whichever may be present in the youth, and make any of these the source of development in his mind.

(v) In the last case, that of the fourth group, only a personality sacrificing itself in love can help to educate them.

(vi) The way to manhood lies through citizenship.

The last three principles refer to the unfortunate disappearance of the skilled craftsman, and to the amount of unskilled work which in these days of mass production, has to be done by somebody. They should be applied, I think, in this country to the education of adolescents destined for cooly-work and casual field labour.

ILLITERACY.

The plenary meeting passed no resolutions in connection with this section, but those who attended it heard interesting stories and discussions.

The Chairman of the section was Mrs. Cora Wilson Stewart, who started, fourteen years ago, a campaign against illiteracy in the rural State of Kentucky, where illiterate men and women met on moonlight nights in schools and classes. The movement spread rapidly to other backward rural areas and to the cities. In Alabama, some years ago, a certain Judge who often had illiterate people before him, used, after sentencing them, to suspend the sentence on condition that the criminal learnt to read and write within a year. The American

campaign has been conducted with extraordinary success and vigour.

The results and methods used in China by the National Society for the Advancement of Education have been even more striking. Eighty per cent. of the 400 millions in China are illiterate. Owing to the number of Chinese literary characters, and the difference between the spoken and written language, it used to take over ten years to learn to read and write. The spoken language is now used for literary purposes, and to be found in newspapers, magazines and books but even so it takes four or five years to learn to read and write it. Further simplification was necessary, so a selection has been made of one thousand characters which stand for the most useful words. People who master these thousand characters can write letters and read ordinary periodicals. They have diplomas publicly presented to them by Mayors or other prominent people. So far in 1925 two million such diplomas had been presented in two years. Slogans are much used both in China and America: "No illiteracy after this generation," "Another world is coming, war on illiteracy," and the success of the campaign in these two countries has clearly been due to aroused public opinion.

Speakers from India dealt with the difficulty of arousing public opinion there. Mr. Mackenzie, Director of Public Instruction in the United Provinces, attributed to its absence the comparative failure of the United Provinces Compulsory Education Act in the twenty Municipalities where it had been adopted. He was warmly urged to adopt propaganda rather than compulsion, and promised to carry back the message, but expressed doubt whether propaganda in itself would achieve the desired results in India. It is a pity that there was no delegate from the Punjab where public opinion against illiteracy has been successfully aroused in recent years, and an illiteracy campaign has met with considerable success. The section would have been interested too, in the

Y. M. C. A. rural reconstruction work at Ramanathapuram near Madras, where successful experiments in time-saving methods of teaching illiterates have been made in night schools. The March number of "Young Men of India" gives an account of them. Mr. R. V. Gogate, an Indian from Harvard University, and a Director of the Association, dealt with the need for a respectable standard of literacy. He stated that in India literacy is taken to mean ability to write your name, but that in Japan it means ability to read newspapers intelligently, and understand national affairs.

To my mind the most interesting discussion was on the benefits resulting from literacy. The American and Chinese slogans suggest that it will lead to a millennium, one American speaker went so far as to imply that it would solve the question of war and armaments. A Scotch schoolmaster pertinently asked whether it was the illiterates of Germany, France and Britain who had recently plunged the world in war. He was told they were spiritual illiterates because they did not know their fellows, and he then took spiritual illiteracy for his text and spoke of the spiritual illiterates of Scotland who read only racing news and the columns of Sunday papers which chronicle murders and divorces. That needed saying for it is useless to teach people to read unless you teach them to read wisely and provide them with reading matter. An illiteracy campaign is of little use unless followed by a library campaign and also, though this is less important, by organized facilities for further instruction. The Director of Public Instruction of the Punjab stated in his last annual report that, as a result of the illiteracy campaign in that province, a stage had been reached at which the organization of library facilities had become a matter of paramount importance. It is very many years since that stage was reached in Burma, the most literate province in the Indian Empire. These reflections lead us naturally to Adult Education, and I shall next consider the section which dealt with this subject.—*The Calcutta Review*, October 1926.

(To be continued.)

Reviews and Notices.

THE CHANGING SCHOOL, BY PHILIP BOSWOOD BALLARD. (HODDER & STOUGHTON, LTD.) Price 6s. net.

Dr. Ballard's books are always a delight. They are written in such an easy flowing style, that one could read them at any time and enjoy them even if one were not interested in 'Education,' which of course every one is. The book under review is no exception to the rule. It deals with the modern tendencies in education, especially the tendency in the West towards freedom and individual work, and we would advise every teacher and training student to read the book, which is not merely descriptive, but critical as well, and which will help him to know what is of real value, and what only passing fancy. Much attention is given in the book to the practical problems of discipline which are continually coming up in our class-rooms, and the suggestions as to how these problems have been met, will do much to help the teacher who reads the book.

The book ends with a delightful chapter on Nursery Schools from which we make the following quotation: "It is quite easy to love the good child: it requires much charity to love the naughty child. And it requires much insight to love him wisely. And yet he needs it just as much as the

good child." It is a quotation worth thinking over by many of our South Indian teachers.

HOME-CRAFT AND MOTHER-CRAFT IN INDIA, BY C. E. PARSONS. (CHRISTIAN LITERATURE SOCIETY FOR INDIA). Price 12 annas.

Miss Parsons is to be heartily congratulated on bringing out a hand-book for young house-keepers and mothers, and although the book is intended to cover the course of the Mysore Lower Secondary Examination, we would heartily recommend it to girls' schools in other parts of India also.

The aim of the book is "to make Indian and Anglo-Indian girls interested in and proud of house-keeping." We feel sure that the aim will be achieved, everything is simple and practical and adapted to Indian conditions.

The book is divided into four Parts:—

Part I. The house and its surroundings.

Part II. Furniture and clothes.

Part III. Food, health, money. Pets.

Part IV. Infants, children and the sick. Outside interests.

Thus it will be seen that the contents of the book are most comprehensive, and the detail too is calculated to be of much use.

We heartily recommend the book to all girls, whether teachers or not.

Almost Ready.**A PREPARATORY ALGEBRA**

Prepared in accordance with the Syllabus in the C Group (Optional) Mathematics for S. S. L. C. and Matriculation Examinations

BY

V. RAGHUNATHA AIYAR, B. A., L. T.,

Deputy Inspector of Schools, Tirukurungudi Range;

author of *A Course of General Mathematics*.

D. Crown 16mo. over 550 pages.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

MADRAS UNIVERSITY LIBRARY.

RECENT ADDITIONS.

Generalia.

Annual report on the working of the Rajputana Museum, Ajmer, 1925.

Needham, J. (Ed. by): Science, religion and reality.

B. Mathematics.

Brill, A.: Vorlesungen über ebene algebraische kurven u. algebraische funktionen.

Fricke, R.: Lehrbuch der algebra, B. 1.

Gauss, C. F.: Werke.

Lewent, L.: Conformal representation.

Pringsheim, A.: Vorlesungen über zahlen und funktionen lehre.

Weber, H.: Lehrbuch der algebra.

Curtiss, D. R.: Analytic functions of a complex variable.

C. Physics.

Burns, D.: Introd. to biophysics.

Einstein, A.: Meaning of relativity.

Kleemann, R. D.: Kinetic theory of gases and liquids.

Whetham, W. C. D.: Recent development of physical science.

Payne, C. H.: Stellar atmospheres.

Shaw, W. J.: Practical and experimental wireless telegraphy.

E. Chemistry.

Hatschek, E.: Foundations of colloid chemistry.

Eucken, A.: Fundamentals of physical chemistry.

Hamilton, L. F. and Simpson, S. G.: Calculations of quantitative chemical analysis.

Arrhenius, S. A.: Chemistry in modern life.

Molinari, E.: Treatise on general and industrial organic and inorganic chemistry.

Allen, A. H.: Commercial organic analysis, Vol. 1—3, 5th ed.

Austin, L. S.: Metallurgy of the common metals.

Field, S. and Bonney, S. R.: Chemical coloring of metals and allied processes.

Guillet, L. and Portevir, A.: Introd. to the study of metallography and macrography.

Partington, J. R.: Alkali industry.

Beilstein's handbuch der organischen chemie, B. 8. Isocyclische oxy-cxo-verbindungen.

Biochemische Zeitschrift, B. 174.

G. Natural Science (Genl.)

Apstein, C.: Die pycocysten.

Popofsky, A.: Die tripyleen radiolorein-oelodendridae.

Wille, N.: Die schizophyceen.

Fischer, B.: Die bakterien des meeres nach den untersuchungen.

Lohmann, H.: Eier und sogennate cysten der plankton—Expedition: anhang; cyphonantues.

Borget, A.: Allgemeiner teil—Bau u. fortpflanzung der tripyleen.

H. Geology.

Anderson, T.: Volcanic studies in many lands.

De Lapparent, A.: Traite de geologie, V. 1—3.

Miller, W. J.: Introd. to physical geology.

Walker, J. F.: Geol. and mineral deposits of Windermere map-area, British Columbia.

Shannon, V.: The minerals of Idaho.

I. Botany.

Huxley, L.: Life and letters of Sir Joseph Dalton Hooker.

Tansley, A. G.: Practical plant ecology.

J. Agriculture.

Proceedings of the Board of Agriculture in India, 1917, 1919, 1921-22, 1924.

K. Zoology.

Revue Suisse de Zoologie, t. 30-31.

L. Medicine.

Archiv der Pharmazie u. berichte der deutschen pharmazeutischen gesellschaft, B. 263.

Rockefeller Foundation. Annual Report, 1922.

N. Fine Arts.

Weigall, A.: Ancient Egyptian works of art.

O. Literature.

Wells, H. G.: Mankind in the making; Tales of wonder; Tales of the unexpected; Salvaging of civilisation; Invisible man; Passionate friends; Sea lady; Tono Bungay; War and the future; What is coming?

Welby, E. T.: Silver treasury of English lyrics.

Austen, Jane: The letters of—by Brimley Johnson.

Plautus: Three plays, tr. by F. A. Wright and Lionel Rogers.

- Chesterton, G. K.: The ballad of the white horse.
 Kipling, R.: Departmental ditties.
 " Recessional.
 " The five nations, 2 vols.
 " The seven seas, 2 vols.
 Larg, D. G.: Madame de Stael.
 Legouis, E. and Cazamian, L.: A hist. of the Eng. literature, tr. from the Fr., by H. D. Irvine, V. I.
 Lucas, E. V.: A wanderer in Venice.
 " A wanderer in Paris.
 " A Boswell of Baghdad.
 " Cloud and silver.
 " Edwin Austin Abbey.
 " Giving and receiving: essays and fantasies.
 " Listener's lure, an oblique narration.
 " Loiterer's harvest, a book of essays.
 " London lavender.
 " Mr. Ingleside.
 " Old lamps for new.
 " Over Bemertons, an easy-going chronicle.
 " Rose and Rose, a novel.
 " Roving east and roving west.
 " The open road, a little book for wayfarers.
 " The vermilion box.
 " 'Twixt eagle and dove.
 " Urbanities, essays, old and new.
 " Variety lane.
 Nicholl, A.: British drama.
 Pepys, S.: Private correspondence and misc. papers of—by J. R. Tanner, 2 vols.
 Quayle, T.: Poetic diction, a study of 18th century verse.
 Raleigh, Sir W.: The letters of—ed. by Lady Raleigh.
 Squire, J. O.: Poems.
 Stokes, F. G.: A dictionary of the characters and proper names in the works of Shakespeare.
 Tehbehov, A.: Three sisters and other plays.
 " The cherry orchard and other plays.
 Wells, H. G.: A modern Utopia.
 " An Englishman looks at the world.
 " Anticipations of the reaction of mechanical and scientific progress upon human life.
 " Bealby, a holiday.
 " In the days of the comet.
 " Joan, Peter, the story of an education.
 " Kipps, the story of a simple soul.
 Adams, J. Q.: Chief pre-Shakespearean dramas.
 Belloc, H.: On everything.
 " Hills and the sea.
 " On.
 " On nothing and kindred subjects.
 " The campaign of 1912 and the retreat from Moscow.
 " First and last.
 " This and that and the other.
 " On something.
 " Emmanuel Burden.
 " The four men.
 Brooke, S. A.: Tennyson: His art and relation to modern life.
 Brown, F. K.: The life of William Godwin.
 Browning, R.: A hand-book to the works of—by Mrs. Sutherland.
 Chesterton, G. K.: Tremendous trifles.
 " Charles Dickens.
 " The club of queer trades.
 " The flying Inn.
 " The innocence of Father Brown.
 " The man who knew too much.
 " All things considered.
 " The uses of diversity.
 " A miscellany of men.
 " The new Jerusalem.
 " Poems.
 " The superstition of divorce.
 " Chesterton day by day.
 " Heretics.

- Coxon, R.: Chesterfield and his critics.
 Drinkwater, J.: Collected poems.
 Garnett, C. B.: The queen and other poems.
 Hayward, A. L.: The days of Dickens.
 Lucas, E. V.: One day and another.
 " A little on everything.
 " Good company.
 " David Williams.
 " Verena in the midst.
 " Anne's terrible good nature and other stories.
 " Fireside and sunshine.
 " Harvest home.
 " You know what people are.
 " The second post—a companion to the gentlest art.
 Masfield, J.: The collected poems.
 Mathews, B. and Lieder, P. R.: The chief British dramatists excluding Shakespeare.
 Orr, Mrs. Sutherland: Life and letters of Browning.
 Raleigh, W.: The English novel.
 Wells, H. G.: Men like gods.
 " Select conversation with an uncle.
 Cranmer-Byng, L.: The rose garden of Sa'di.
 Zingwill, I.: Works, vol. 1—14.
 P. *Philology*.
 Barfield, O.: History in English words.
 Botlingk, O.: Nachtrage zum Sanskrit wörterbuch, Lief 5.
 Jespersen, O.: The philosophy of grammar.
 Q. *Religion*.
 Churchward, A.: The origin and evolution of religion.
 Read, F. W.: Egyptian religion and ethics.
 Berdoe, E.: Browning and the Christian faith.
 Eliot, Sir Ohas.: Hinduism and Buddhism.
 Macdonald, A. J.: War and missions in the East.
 " The heart of India.
 " Hindu gods and heroes.
 " Legends of Indian Buddhism.
 Field, D.: The religion of the Sikhs.
 Thomas, E. J.: Buddhist scriptures.
 R. *Philosophy*.
 Barnett, L. D.: Brahma knowledge.
 Haigh, E.: Religion and natural science.
 Taylor, A. E.: Platonism and its influence.
 Sadi: Scroll of wisdom.
 Baillie, J. B.: Studies in human nature.
 Montague, W. P.: The ways of knowing or the methods of philosophy.
 Turner, J. E.: A theory of direct realism and the relation of realism to idealism.
 Watt, H. J.: The sensory basis and structure of knowledge.
 Wordsworth, J. C.: Adventures in philosophy. Non-rational character of faith.
 Borel, H.: Rhythm of life based on the philosophy of Lao Tze.
 Confucius—Sayings.
 Giles, L.: Taoist teachings from the book of Liel Tzu.
 Lao Tzu—Sayings.
 S. *Psychology*.
 Bernard, L. L.: Instinct; a study in social psychology.
 Psychological monographs, vol. 34.
 Mead, G. C. F. and Clift, R. C.: Burton the anatomist.
 Gopalaswami, M. V.: Psychological studies.
 Fox, C.: Educational psychology.
 Lothian, A. J. D.: Outline of psychology for educators.
 Waddle, C. W.: Introd. to child psychology.
 Tredgold, A. F.: Mental deficiency.
 Watt, H. J.: Sensory basis and structure of knowledge.
 T. *Education*.
 Boyd, W.: Measuring devices in composition, spelling and arithmetic.
 Campagnac, E. T.: Education, its relation to the common purposes of humanity.
 Humberstone, T. L.: University reform in London.
 Question papers set for the Indian (Imperial) Police Examination, 1923.
 Mason, C. M.: Essay towards a philosophy of education.
 Palmer, H.: Principles of language study.
 Averill, L. A.: Psychology for normal schools.
 Hines, H. C.: Measuring intelligence.
 Nutt, H. W.: Supervision of instruction.
 Mayhew, A.: The education of India.
 Pear, T. H.: Skill in work and play.
 U. *Geography*.
 Davis, W. M.: Elementary physical geography.
 Frye, A. E.: Brooks and brook basins.

Keller and Bishop: Commercial and industrial geography.
 Newbegin, M. I.: An introd. to physical geography.
 Protheroe, E.: The domination of man.
 Wesels, C.: Early Jesuit travellers in Central Asia.

Febvre, L.: Geographical introd. to hist.
 Huntington, E.: Principles of human geography.
 Lobeck, A. K.: Block diagrams and other graphic methods.
 Newbegin, M. I.: Man and his conquest of nature.
 Gregory, J. W.: Geography, structural, physical, and comparative.
 Mill, H. K.: Africa.
 Johnston, H. F.: Sketch of historical geography.
 Blanford, H. F.: India, Burma and Ceylon.
 Douie, J.: The Punjab, N.-W. Frontier Province and Kashmir.

V. History.

Ribble, J. D. B.: A hist. of the Deccan.
 Wells, H. G.: Short hist. of the world.
 Harrison, A.: Thoughts and memoirs of Frederic Harrison.
 League of Nations: Treaty Series, V. 26—42.
 Roheim, G.: Australian totemism.

W. Politics.

Belloc, H.: The House of Commons and Monarchy.
 Morris, C. R.: Hist. of political ideas.

X. Economics.

Commons and Andrews: Principles of labour legislation.
 Herrick and Ingalls: Rural credits, land and co-operative.
 Toothaker, C. R.: Commercial raw materials.

Y. Sociology.

Ellwood, C. A.: The psychology of human society.

Z. Law.

Sankara Rama Sastri, C.: Fictions in the development of the Hindu Law Texts.

MADRAS UNIVERSITY LIBRARY: The number of readers and the number of books issued during the month of October 1926, were 3521 and 4932 respectively. The corresponding figures for the last year were 1774 and 2392.

EGMORE, } S. R. RANGANATHAN,
 31st Oct. '26, } Librarian.

LIST OF LATEST ADDITIONS TO THE CONNEMARA PUBLIC LIBRARY, EGMORE.

Adam, A. T.: Wire Drawing and the Cold Working of Steel.
 Barcroft, J.: The Respiratory Function of the Blood, Pt. 1.
 Blatter, E.: The Palms of British India and Ceylon.
 Bose, Sir J. C.: The Nervous Mechanism of Plants.
 Brailsford, H. N.: Socialism for To-day.
 Cecil of Chelwood (Viscount) and two others: Queen Alexandra—a Pictorial Biography.
 Chalmers, Lord: Further Dialogues of the Buddha.
English Men of Letters.
 George Meredith.
 Matthew Arnold.

Gadd, C. J.: A Sumerian Reading-Book.
 Haldane, Viscount: Human Experience—a study of its structure.

Leathem, W. H.: Life of St. Francis of Assisi.
 Morgan, T. H.: Evolution and Genetics.
 Moseley, S. A.: The Truth about Borstal.
 Parson, B. S.: Lefthandedness. A new interpretation.
 Paterson, T. S.: Sympathetic Training of Horse and Man.
 Shaw, Sir N., and Owens, J. S.: The Smoke Problem of Great Cities.
 Stammers, G. E. F.: The Fight against Infection.

Tawney, R. H.: Religion and the Rise of Capitalism.

Thomson, A. L.: Problems of Bird-Migration.
 Vaidya, C. V.: History of Mediaeval Hindu India, Vol. III.

Villiers, Elizabeth: Queen Alexandra, the Well-Beloved.

MADRAS, } F. H. GRAVELY,
 3rd Nov. 1926. } Principal Librarian.

THE FIRST INDIAN WOMEN'S EDUCATIONAL CONFERENCE.*

THIS is a most happy day in the life of our country, for we women have met here for the first time under your auspices to express our positive interest in the welfare of our nation, for it is on education that the future of all peoples depends. It is indeed gratifying to feel that the time has come for Indian women to have a say in the guidance and training of their sons and daughters. We, who have met here, feel very strongly that there is a great need for the awakening of a public conscience on this matter and we seek to arouse a sound and a proper interest on problems of education which are not peculiar to India but which are being faced by all nations. But the problems of India present peculiar difficulties and it is with no spirit of controversy but only with calm friendly appeal to the deep spirit of human reason and fairness that we sit in deliberation on the subject of Indian education to-day.

We have for the convenience of our survey arranged our problems under several headings according to the accepted divisions of present-day education, but there is a unity of aim behind the whole, *viz.*, the fullest possible development of the complete child—we want to arouse a more active, wide-spread interest in the importance of education as a whole. If I may mention some of the points which are perhaps the most essential to sound education, I would say that instruction in the child's vernacular all through its school education is the first. Then since we all know that true culture is the blossom from the

* Presidential Address delivered by Srimati R. S. SUBBU LAKSHMI AMMAL, B.A., L.T., Headmistress, Model Section, Lady Willingdon Training College, Madras.

"seed of race" as Sir John Woodroffe said, fed by its natural food, its racial literature, we require the restoration of our classical languages, Sanskrit, Arabic, etc., to their proper place. A common language is also necessary.

We feel urgently too that primary education at least should be the right of every boy and girl in India. A great hindrance to this is lack of proper type of teachers. Those who have had to do anything with children know that sympathy and understanding are the prime necessities for a teacher and we want our women, both Muhammadan and Hindu, to arouse and offer themselves for this great service for the Motherland. But it is a matter of great regret that Hindu women, and worse still the Muhammadan women, do not consider the teacher's profession an honourable one and hence we do not find them coming forward to help their own children. "Full many a gem of purest ray serene," the thick purdah of homes keeps hidden away. There are thousands and thousands of Hindu and Muhammadan women, with very good home education, intelligent and capable, who are sitting at home and doing nothing. Is this not a reproach when such a large percentage of our children are growing up uneducated?

Another aspect on which we have felt that a word from the women's point of view might be wise is on the subject of the practical aspect of life. We require sound education for our boys and girls for vacations in life and a development of the correlation of the mind or soul and social activities of all kinds. This must be begun young at the period of the child's greatest natural activity and continued like the cultural literary side through the whole course of education. So our programme gives permanent place to Technical Educa-

tion, Domestic Science and the Fine Arts which are too much neglected at present.

Physical development, sex hygiene, early marriage and the need for training in mothercraft are pressing problems for consideration, and I hope we will learn much about these in the course of our work here to-day. I would like to say a word especially on early marriage which is the greatest social hindrance to educational and therefore cultural advancement of our race. At an age when young boys and girls should be going to school and allowing both their body and mind to be growing, enriching their minds with high and noble ideals and thoughts, at an age when they should not be hampered with cares and worries which spoil their health, mental as well as physical, at an age when their minds should be young, pure, unsullied by worldly desires, etc., the poor young boys and girls are married and allowed to enter into the mysteries of married life and made to face all the problems, troubles, worries and cares of a family. Imagine a young girl of thirteen years being a mother with a young baby, kept awake at nights to look after the child, and in many homes doing all the domestic work, etc. How can we expect such a girl to live a long and healthy life and how can we expect a child born to another child of thirteen to grow up into a healthy boy or girl? Again imagine a boy of fifteen years' school going age, being a father chained down to a family, unable to guide either his mother or his young delicate wife, having at the same time to study all his school lessons and satisfy his teachers. By the time he completes his course and in a position to earn his living, he has a big family consisting of a wife and a number of children,

old parents and probably some younger brothers to educate and younger sisters to be married, and very often one or two widowed sisters with their children depending on him. This poor young man has all these problems to face. The whim of some elder members of the family to see their younger ones married, the avarice of some father who wants to make money, the ambition of some mother to have a grandson, or the laziness of a mother-in-law who wants a cook in the family, bring about these early marriages and make victims of these poor young boys and girls and the consequences are poor health, short life, degenerate offspring and want of time for the healthy growth of the mind on aesthetic, ethical, intellectual and religious lines. This state of affairs should be put an end to at once and the education of boys and girls not interfered with in any way. These then, are some of the problems we are asking you to discuss to-day and we hope our Conference will be fruitful in good results. This is the first of a series of Conferences which will be held all over India and consummated in an All-India Conference at Poona of elected delegates of all the Provincial Conferences. Thus a great voice from the women of India will be raised on behalf of Indian children and their most urgent needs.

On behalf of the members of the executive committee, I offer my thanks to all the delegates that have come from distant places to help in making this meeting a success. We request all our sisters to take a profound interest in all the problems concerning the education of our children and come forward with their suggestions and advice.

The Educational Review.

The recent annual report for 1924-25 on the progress of education in India issued by the Commissioner of Education with the Government is gratifying reading, though it does not record any startling progress. There is steady improvement in the percentages of literacy and of children at school, and there is enough evidence that the educational machine in the country is running on smooth lines, continuing to do its useful work. The total number of educational institutions is over 28,000 and nearly ten million scholars are at school and college. During the twelve months covered by the period, the number of scholars rose by nearly 500,000. The progress implied in the last figure must however be discounted to some extent, as four-fifths of the increased strength is in the infant class. Reference has been made constantly in these columns to the great waste of educational effort in this country, occasioned by the dropping of a large number of pupils in the course of their education without reaching definite stages of instruction. As the report points out, while there are over four million pupils in the infant class, the next one has only a million and a quarter, while the number dwindles down in the two higher classes to 900,000 and 600,000 respectively. Of course, no benefits are secured to a pupil by the nominal association with a school for a year or two, during which there is no time to learn anything at all. The percentage

at school of the male population of India has increased during the last four years from 5.1 to 5.97 and that of the female population from 1.1 to 1.23. As it is usual to reckon on 15% as the percentage of the school-going population to the total population in the country, the report calculates that at the present rate of progress, it will take forty years more to bring the entire school-going population under the benefits of education. This is of course a depressing fact, though the Government of India does not seem to worry very much about it, taking refuge perhaps under the fact that education is now a 'transferred' subject. It is melancholy reading that "there are still thousands of villages unprovided with a school. There are still millions of parents who do not send their children to a school provided at their door."

For reasons into which we need not enter here, it is a pity that the progress of Indianisation in the army has been very

Indian Military College,
Dehra Dun.

slow and the number of Indian military officers has not been showing any appreciable increase, in spite of effusive professions by the Government, from time to time, of its intention to accelerate the pace of Indianisation. It is possible that the Committee which is now sitting under the presidency of General Skeen will improve matters. But in the meantime, it behoves all patriotic Indians to take advantage of the facilities offered by the Indian Military College at Dehra Dun for the training of lads for admission

sion into Sandhurst. Educationists all over the country will be doing a piece of useful service by bringing the institution to the notice of prospective candidates. The following information should be circulated as widely as possible:—

(1) The college will provide school education on English lines for Indian youths who desire subsequently to enter the Royal Military College, Sandhurst, with a view to obtaining commissions in the Indian Army. It is intended for those who wish to make the Army their profession in life. The course of study at the college will, however, be such that, should a boy fail in the examination for entrance to the Royal Military College, Sandhurst, he will be in as good a position to pass the University entrance examination, as if he had been educated at an ordinary school.

(2) Candidates will be accepted from—

(a) Provinces of British India: (b) Indian States.

Nominations will be made by His Excellency the Commander-in-Chief on the recommendation of the Local Government or Administration or the Political Officer, as the case may be.

(3) Candidates must be under 12 and over 11 years of age on the 1st December 1926.

(4) Candidates should attach to their applications a medical certificate from the officer commanding a British or Indian Station Hospital or a Civil Surgeon to the effect that they are physically fit in all respects, particulars regarding which will be published in *The Fort St. George Gazette* on the 12th October 1926 and in three successive issues.

(5) The fees will be Rs. 1,500 for each school year and are liable to enhancement hereafter, if circumstances require. The fees payable by candidates who are sons of Indian officers of good service will be determined by His Excellency the Commander-in-Chief in each particular case. These fees will include tuition,

messing, and medical attendance of the ordinary kind and, as initial provision, one suit of the uniform to be worn by students when at the college.

In the event of it becoming necessary for cadets to be admitted into a civil hospital, all charges incurred will be borne by the parents or guardians of the cadets.

(6) Parents or guardians of candidates are required to attach to the applications a declaration in the following form:—"I, the father of a candidate for admission to the Prince of Wales' Royal Indian Military College, Dehra Dun, having made myself acquainted with the fees payable at Dehra Dun, and subsequently, at the Royal Military College, Sandhurst, am able and willing to pay the prescribed fees and meet the incidental expenses. It is my intention to make the Army my ward's profession in life."

Signature of parent or guardian.

The details of the estimated expenses of Indian cadets at the Royal Military College, Sandhurst, as recently revised, amounting to £557-14-0 in the case of the son of an officer below the rank of Lieutenant-Colonel, and £775-4-0 in the case of the son of a private gentleman, will be published in *The Fort St. George Gazette* on the 12th October 1926 and in three successive issues.

(7) One general mess will be maintained. All students will be required to mess together. Special care will be taken that no food is served in the mess which could in any way offend the religious susceptibilities of any student.

(8) All applications should be submitted to the Private Secretary to His Excellency the Governor of Madras, Madras Governor's Camp, not later than the 15th November 1926, in the prescribed form. No applications received after the 15th November will be considered.

The budget of the Government of His Exalted Highness the Nizam of Hyderabad for the ensuing year provides for some useful items which

deserve wide attention. The present experiment of imparting higher education through an Indian vernacular at the Osmania University is to be extended to the departments of Medicine, Agriculture and Technology, spheres in which it has generally been considered very difficult to use the vernacular in India. A sum of rupees three lakhs is being provided for the translation of books from English into Urdu in those subjects. There has been for many years in Hyderabad a Medical School where instruction has been imparted in Urdu to students for being trained as Sub-Assistant Surgeons. It is now proposed to raise it into a full-fledged Medical College, imparting instruction for the M. B. degree. The Government of the Nizam has already done much for Art and Archæology in the State and a small but adequate grant is being provided for the purpose of publishing a tri-colour photographic record of the famous frescoe paintings of the Ajanta Caves. The latter publication will be awaited with considerable interest by all students of Art in India and abroad.

Two important resolutions were passed at the recent meeting of the Academic Council of the Andhra University which would seem to carry its work forward by a step. On the motion of the Rev. Johnstone, modified by discussion, it was resolved "that such Honours and Post-graduate teaching as may be organised in the University be organised and controlled by the University, and

Government be asked to approve and support the scheme financially." It is of course necessary that a University should have entire charge of its Post-graduate departments, if it is to do any useful work at all and we hope the Andhra University will begin to agitate for it with all the strength it can command. Another resolution which may have far-reaching importance is the decision to appoint a Committee to consider the introduction of Telugu as a medium of instruction, occasioned by the following proposal of Mr. R. Venkatasividu:—

Regard being had to the importance of the vernacularisation of studies, it is resolved that subject to the following time-limit, provision be made for the teaching and the examination of the non-language subjects in all the Arts courses through the vernacular:—(1) For the Matriculation from July 1929. (2) For the Intermediate from July 1931. (3) For B. A. Pass Course from July 1933. (4) For B. A. (Hons.) from July 1934.

The following points have been referred to it for consideration:—(1) Position of other vernaculars in the scheme; (2) Vernacularisation of the S. S. L. C. course; (3) Whether to introduce the principle on the basis of grades or on the basis of subjects; (4) Which subjects are to be taught in vernacular immediately and finally as to the time they allow to bring the whole reform into force. We trust the University will not come to a decision in the matter without careful deliberation, particularly in the light of experience gained elsewhere in India. We are afraid the Vice-Chancellor was unduly optimistic when he made the

declaration that the Gurukul University, had taught all subjects successfully in Hindi. It is not much of a University, nor has it been particularly successful in importing higher education in any subject. It has now been in existence for more than two decades and we should like to have a statement of those *alumni* of the institution who have distinguished themselves in any subject of study or in any department of national activity. It is hoped the Andhra University is aiming at something more efficient than the so-called University at Gurukul. We appreciate the spirit underlying the proposal, that the syllabus of Indian History should be revised, so as to give more prominence to Andhra history, but we are afraid the best method of advancing the study of Andhra history is not by tampering with the general syllabus of Indian history, probably distorting the historical perspective of students in the bargain, but by making provision for its special study in the higher courses in Indian history. The absence of suitable books on the subject has not yet apparently troubled the authorities of the University. We should suggest the early institution of a course of University lectures on Andhra history, to be made available later as a good and reliable text-book on the subject for students. There are a sufficiently large number of scholars of Indian history in the Presidency who can be expected to do justice to the subject.

We warmly commend to the attention of all members of the teaching profession, Prof. Bertrand Russell's new book *On Education, Especially in Early Childhood* (George Allen and Unwin, 6s. net). Though written essentially from the stand-point of a parent, the book is of considerable use to the student of pedagogics and deals with many aspects of child-psychology and education at school and even college. There is a preliminary examination of the various educational systems of the world: Chinese education which encouraged thoroughness and made children merely learn things by heart; the Japanese system which makes national greatness the supreme purpose of education; the institutions of the Jesuits who subordinated education to the welfare of the Catholic church; Dr. Arnold's system with its aristocratic ways which aimed consciously or unconsciously, at the training of hardened people to rule over an empire, and the American public schools which are transforming a heterogeneous selection of mankind into a homogeneous nation. He defines the aims of education as the development of Vitality, Courage, Sensitiveness and Intelligence, all understood in a wide sense. Professor Bertrand Russell has very stimulating and original ideas and he approaches educational problems not merely in the light of the social and economic conditions of to-day, but also in relation to the larger problems of the general happiness of mankind. There are separate chapters on "Nursery Schools," "The School Curriculum before Fourteen," "Last School Years," "Day

Prof. Bertrand
Russell
on Education.

Schools and Boarding Schools" and "the University." Prof. Bertrand Russell is no blind believer in the advantages of the residential system of education for young children.

"In a school," he writes, "Many aspects of life do not appear, it is an artificial world, whose problems are not those of the world at large. A boy who is only at home during the holidays, when everybody is making a fuss over him, is likely to acquire far less knowledge of life than a boy who is at home every morning and evening. This is, at present, less true of girls, because more is demanded of them in many homes; but in proportion as their education is assimilated to that of boys, their home life also will become similar and their present knowledge of domestic affairs will disappear. After fifteen or sixteen it is good for boys to have a certain share in parental occupations and anxieties—not too much, it is true, since that would interfere with education, but still some, lest they should fail to realise that the old people have their own life, their own interests and their own importance. In the school, only young people count, and it is for them that everything is done. In holidays the atmosphere of home is apt to become arrogant and hard, ignorant of the problems of adult life, and quite aloof from their parents."

"This state of affairs is apt to have a bad effect on the affections of young people. Their affection for their parents becomes atrophied, and they never learn to adjust themselves to people whose tastes and pursuits are different from their own. I think this tends towards a certain selfish completeness, a feeling of one's personality as something exclusive. The family is the most natural corrective of this tendency, since it is a unit composed of people of different ages and sexes, with different functions to perform; it is organic in a way in which a collection of homogeneous individuals is not. Parents love their children largely because they give so much trouble; if parents give no trouble to their

children, their children will not take them seriously. But the trouble they give must be legitimate; it must be only such as is necessary if they are to do their work and have a life of their own. Respect for the rights of others is one of the things young people ought to learn, and it is more easily learnt in the family than elsewhere. It is good for boys and girls to know that their father can be harassed by worries and their mother worn out by a multiplicity of details. And it is good that filial affection should remain alive during adolescence. *A world without family affection tends to become harsh and mechanical, composed of individuals who try to dominate, but become cringing if they fail.* I fear that these bad effects are to a certain extent produced by sending children to boarding schools, and I regard them as sufficiently serious to off-set great advantages."

In view of the present political situation in India, there has been a tendency in some quarters to underrate the usefulness of institutions like the recent Congress of the Universities of the Empire which held its sittings in London and Cambridge. It is therefore gratifying to find that Sir P. C. Ray, whose sturdy nationalism is above suspicion, has written appreciatively of the doings of the last Congress in the pages of the current number of the *Calcutta Review*. He refers to the setting up of the Bureau of the Universities Congress "as probably the longest step in advance taken by Universities in modern times." One of the most remarkable utterances delivered at the Congress was the speech of the Rt. Hon. the Earl of Balfour, Chancellor of the Universities of Cambridge and

The Empire
Universities'
Congress.

Edinburgh, who opened the proceedings of the first day when there was a discussion on the University and the State. "If the State were asked to subscribe large funds," said Earl Balfour, "there would always be a natural and pardonable instinct on the part of the State to control and supervise the working of the institution which they were doing so much to support. It was natural, but it was extremely dangerous. He did not think that in the older Universities in England there was any probability of that danger becoming menacing to any serious extent. They had received assistance from the State in this country, but their traditions were deeply rooted, and he did not think that there was any serious symptom of any government attempting to interfere with University autonomy which, *whether well or ill exercised was at the worst far better than State control.*" Dr. Hill, the Secretary of the Congress, also paid a tribute to the freedom given to the Universities by successive governments in England. The Universities were given absolute discretion in the spending of their grants. "Not the faintest trace of dictation or of political influence," he said "is to be observed over selection of members of the staff, or on the scope or character of their teaching. Probably that freedom alone safe-guards the health of Universities." Sir P. C. Ray is very much impressed by the advantages of such united organisations and we hope he will persuade the Calcutta University to join the similar organisation of Universities in India, the Inter-University Board.

We are glad to find that the All-India Teachers' Federation has just issued its annual Year Book containing valuable information with regard to Teachers' organisations in India. It is perhaps characteristic of the want of energy and organisation on the part of members of the teaching profession in India, that they should not have come forward in larger numbers to support the Federation. As yet only two provincial educational organisations have joined the Federation—the All-Bengal Teachers' Association and the U. P. Secondary Teachers' Association. We hope the other provincial organisations, particularly the South India Teachers' Union, which is one of the oldest educational organisations in the country, will join the Federation and strengthen its activities. The Year Book which has just been issued is a valuable publication and contains an account of the proceedings of the inaugural meeting of the Federation held last Christmas at Cawnpore, together with such information as is available about the existing educational organisations in India. All enquiries are to be addressed to the Secretary of the Federation, Mr. Devi Prasad Khattri, Headmaster, Prithinath High School, Cawnpore, from whom copies of the Year Book can also be obtained at the small cost of a rupee.

The All-India
Teachers'
Federation.

UNIVERSITY OF MADRAS.

JOHNSON'S LIFE OF MILTON. Edited by W. H. SHARP, M. A., Director of Public Instruction, Bombay. (New Edition.) Price, Re. 1-8.

Students will find this edition at once scholarly and complete. The Introduction is divided into sections dealing with (1) the Life and Works of Johnson, (2) the age of Johnson, (3) Johnson as a critic and a stylist, (4) the Lives of the poets, etc., etc.

The Notes are very full and scholarly and betray wide and minute reading of the literature of the 17th and the 18th century. All the important points in the text are thoroughly discussed and elucidated and the various authorities are quoted with fulness and precision, thus obviating the necessity of consulting books not easily procurable.

TENNYSON'S THE COMING OF ARTHUR AND THE PASSING OF ARTHUR.

Edited with an Introduction and Notes. By JOHN C. SCRIMGEOUR, M. A., Professor of English Literature, Scottish Churches College, and Lecturer in English, University of Calcutta. Price, Re. 1-4.

A comparison of Prof. Scrimgeour's edition with other editions of 'The Coming of Arthur' and 'The Passing of Arthur' will at once show how much more the former is likely to prove serviceable to Indian school-boys than any other edition of these two Idylls, inasmuch as Prof. Scrimgeour has conscientiously striven to elucidate real difficulties rather than indulge in compiling erudite comments on the text.

Another striking feature is a full summary of the two Idylls. It should go a long way to help the student in following the course of Arthur's story.

The Introduction contains a valuable section on "Who was King Arthur?" Here the editor claims to have written clearly and in a manner the young pupil can easily grasp, on a subject presenting some difficulty.

It is claimed that in every respect Prof. Scrimgeour's edition is better adapted to the actual requirements of those for whom it is specially intended than any other edition put on the market.

TENNYSON'S ENOCH ARDEN. Edited with Introduction, Summary, Notes and Full Paraphrase. By A. DARBY, M. A., Principal, Rajaram College, Kolhapur.

Second Edition. Price, Re. 1-4.

Just the edition for Indian students. No other edition of *Enoch Arden* approaches it in point of usefulness.

SIMPLE ESSAYS. With their Outlines, by M. MACMILLAN, D. Litt., I. E. S. (Retired), English Lecturer in the University of Birmingham. Formerly Principal and Professor of English Literature, Elphinstone College, Bombay. 19th Edn. Price, Re. 1-8.

The book contains 150 model essays. It is admittedly the best book for Junior college students. No other book of its kind even approaches it in point of usefulness and reliability.

A FIRST BOOK OF ENGLISH UNSEENS. With an Introduction and Exercises, by J. W. HOLME, M. A., I. E. S., Professor of English Literature, Presidency College, Calcutta. Third Edition. Price, Re. 1-2.

This "First Book of English Unseens" is intended to fulfil a double function: first, to provide a selection of extracts to be used as a basis for various kinds of English Composition, secondly, as an anthology in prose and verse of the great English writers.

The exercises have been made as various as possible. They include paraphrasing, expanding and summarising; but in addition a more general section has been included of passages to be made the basis of miscellaneous grammatical and other exercises.

THE REVISED PARAPHRASE TEXT-BOOK. Containing over 400 Unseen Passages in Prose and Poetry, by M. MACMILLAN, B. A., D. Litt., English Lecturer in the University of Birmingham. Formerly Principal and Professor of English Literature, Elphinstone College, Bombay, and A. BARRETT, B. A., Professor of English Literature, Deccan College, Poona. Eleventh Edition. Price, Re. 1-2.

The book contains over 400 passages of prose and poetry of various grades of difficulty. The greatest care has been bestowed in making the selection. As a Manual of English "Unseens" it will be found unsurpassable.

"We confidently recommend this little Book."—*The Indian Journal of Education.*

K. & J. COOPER, Educational Publishers, Hughes Road, BOMBAY.

REVISED EDITION OF DRYDEN'S PREFACE TO THE FABLES

EDITED WITH INTRODUCTION AND NOTES

By Prof. P. SESHADRI, M.A.

Benares Hindu University.

Price: Rs. 10.

Hand-book of the English Language FOR HIGH SCHOOLS

BY

MR. K. SUBRAMANI AIYAR, B.A., L.T.,

A Fellow of the University of Bombay;

An Incorporated Accountant of London, and late Principal of the Byramjee Jeejeebhoy
College of Commerce, Bombay,

REVISED BY

MR. MARK HUNTER, M.A.,

Principal, Government College, Rajahmundry.

FIFTH EDITION. PRICE—Rs. 1-4.

(Approved as a text-book by the Director of Public Instruction, Bombay.)

The Educational Review: January 1905—This is an old favourite of our school-boys appearing in an improved form. We can see the hand of the reviser in many places, the notes that he has added being particularly valuable.

The Indian Journal of Education—This book, now in its fifth edition, has been thoroughly revised by Mr. Hunter, who has done much to improve it..... We have no hesitation in recommending Mr. Subramani Aiyar's Handbook to students.

A Text-book of Tamil Composition

Specially adapted to meet the requirements of S.S.L.C. and Intermediate
Examinations

(Prepared in accordance with the recommendations of the University of Madras)

BY

G. DAMODARA MUDALIAR, B.A.

Tamil Reader, Office of the Registrar of Books, Madras,

(sometime an Assistant in the Wesley College, Madras).

Price Rs. 12.

Approved as a Text-book for Schools and Colleges.

(Fort St. George Gazette, 21st October 1913.)

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

MACMILLAN & CO.'S SPECIAL EDITIONS FOR INDIA.

ENGLISH LITERATURE SERIES

General Editor: J. H. FOWLER, M.A.

With Introductions and Notes by the various Editors.

The following volumes in this Series can now be supplied in Limp Cloth binding at
Rs. 1 per volume:—

- | | |
|---|--|
| <p>Addison—<i>Essays from</i>. Edited by J. H. Fowler, M.A.</p> <p>Andersen—<i>Stories from</i>. Selected by Mrs. P. A. Barnett.</p> <p>Arabian Nights—<i>Stories from</i>. Edited by A. T. Martin, M.A.</p> <p>Austen—<i>Pride and Prejudice</i>. Abridged by H. A. Treble, M.A.</p> <p>Ballads—<i>Old and New</i>. Selected and Edited by H. B. Cotterill, M.A.</p> <p>Bates—<i>A Naturalist on the Amazons</i>. Abridged and Edited by F. A. Bruton, M.A. 80 Illustrations.</p> <p>Borrow—<i>Wanderings in Spain</i>. Edited by F. A. Cavenagh, M.A.</p> <p>Browning—<i>Selections from</i>. Edited by Mrs. M. G. Glazebrook.</p> <p>Buckley—<i>Children of the Dawn. Old Tales of Greece</i>. By E. F. Buckley. With Introduction by A. Sidgwick; Notes and Subjects for Essays by J. H. Fowler. 2 Volumes.</p> <p>Bunyan—<i>Pilgrim's Progress</i>. Abridged and Edited by O. F. Knox, M.A.</p> <p>Byron—<i>Childe Harold. Cantos III and IV</i>. Edited by J. H. Fowler, M.A.</p> <p>Carlyle—<i>Abbot Samson. Chapters 'from Past and Present,' Book II</i>. Edited by F. A. Cavenagh, M.A.</p> <p>Cavendish—<i>Life of Wolsey</i>. Edited by Mary Tout, M.A.</p> <p>Cervantes—<i>Don Quixote</i>. Abridged and Edited by O. F. Knox, M.A.</p> <p>Defoe—<i>Robinson Crusoe</i>. Abridged and Edited by J. Hutchison.</p> | <p>Dickens—<i>David Copperfield</i>. Abridged by H. A. Treble, M.A.</p> <p>—<i>A Christmas Carol</i>. Edited by O. F. Knox.</p> <p>Dowse—<i>A Book of Poetry Illustrative of English History</i>. Edited by G. Dowse, B.A. Part I. A.D. 61—1485. Part II. The Tudors and Stuarts. Part III. The Hanoverian Dynasty.</p> <p>Eliot—<i>Silas Marner</i>. Abridged by May Oopsey.</p> <p>Fowler—<i>British Orators. Passages Selected and Arranged by J. H. Fowler, M.A.</i></p> <p>First Book of English Prose for Repetition. Passages Chosen and Arranged by J. H. Fowler, M.A.</p> <p>Frazer—<i>Prose for Repetition</i>. Selected and Arranged by Norman L. Frazer, M.A.</p> <p>Gandy—<i>The Pandav Princes</i>. Edited by Wallace Gandy.</p> <p>—<i>A Persian Hero. Stories from the 'Shah Nameh.'</i> Edited by W. Gandy.</p> <p>—<i>Wanderings of Rama, Prince of India</i>. Edited by W. Gandy.</p> <p>Gaskell—<i>Cranford</i>. Abridged and Edited by Mrs. F. S. Boas. Illustrated.</p> <p>Gibbon—<i>The Age of the Antonines. (Chapters I—III of the Decline and Fall.)</i> Edited by J. H. Fowler, M.A.</p> <p>—<i>The Decline and Fall of the Roman Empire. Narratives from, selected and edited by J. H. Fowler, M.A. First Series.</i></p> <p>Goldsmith—<i>Vicar of Wakefield</i>. Abridged by Mrs. F. S. Boas.</p> <p>Grimm—<i>Fairy Tales. A selection</i>. Edited by A. T. Martin, M.A.</p> |
|---|--|

MACMILLAN & CO., LTD., MADRAS, BOMBAY, CALCUTTA AND LONDON.

ENGLISH LITERATURE SERIES—(Contd.)

- Hawthorne**—Stories from a Wonder-Book for Girls and Boys. Edited by J. H. Fowler, M.A.
—Tanglewood Tales. Edited by J. H. Fowler, M.A.
Irving—Rip Van Winkle, The Legend of Sleepy Hollow, and other Sketches. Edited by H. M. Buller, M.A.
Keary—Heroes of Asgard. By A. and E. Keary. Adapted and Edited by M. R. Earle.
Kingsley—Andromeda, with the Story of Persens prefixed. Edited by George Yeld, M.A.
Lamb—Tales From Shakespeare. Edited by H. A. Treble, M.A. First Series and Second Series, Limp, 2 Volumes.
Lee—Seventeenth Century Prose. Selected and Edited by E. Lee.
Longer Narrative Poems (18th Century). Edited by G. G. Loane, M.A.
Longer Narrative Poems (19th Century) Edited by G. G. Loane, M.A.
Longfellow—Shorter Poems. Edited by H. B. Otterill, M.A.
Macaulay—Essay on Sir W. Temple. Edited by G. A. Twentymen, M.A.
—Essay on Frances Burney. Edited by A. D. Greenwood.
—Essay on Clive. Edited by H. M. Buller, M.A.
—Essay on Warren Hastings. Edited by H. M. Buller, M.A.
—Narratives from. Edited by F. Johnson.
—Essay on Addison. Ed. by R. F. Winch, M.A.
Malim—Njal and Gunnar. Edited by H. Malim, M.A.
Malory—Morte D'Arthur. Selections. Edited by Dorothy M. Macardie.
Mitra—Hindu Tales from the Sanskrit. Translated by S. M. Mitra. Edited by Mrs. A. Bell.
Morris—Life and Death of Jason. Abridged and Edited by R. W. Jepson, B.A.
Motley—The Rise of the Dutch Republic. Narratives from, selected and edited by J. Hatchinson.
Napier—History of the Peninsular War. Narratives from, edited by M. Fanshawe, B.A.
Parkman—Pioneers of France in the New World. Selections from, edited by Kenneth Forbes, M.A.
Peacock—Maid Marian. Edited by F. A. Cavenagh, M.A.
Perry—The Boy's Odyssey. By W. C. Perry. Edited by T. S. Peppin, M.A.
Plutarch—Life of Alexander. North's Translation. Edited by H. W. M. Parr, M.A.
—Life of Julius Caesar. North's Translation. Edited by H. W. M. Parr, M.A.
Reynard the Fox. Edited by H. A. Treble, M.A.
Roberts—Tales of Old Britain. Edited by E. P. Roberts, 2 Volumes.
Roe—Tales from Indian History. By Mrs. A. S. Roe.
Ruskin—Crown of Wild Olive. Edited by J. H. Fowler, M.A.
—Sesame and Lilies. Edited by A. E. Roberts, M.A.
Scott—Ivanhoe. Abridged and Ed. by F. Johnson.
—The Talisman. Abridged and Ed. by F. Johnson.
—Tales of a Grandfather. Abridged and Edited by J. Hutchison. 2 Volumes.
Sertum: A Garland of Prose Narratives. Selected and Edited by J. H. Fowler and H. W. M. Parr. 2 Volumes.
Shakespeare—Select Scenes and Passages from the English Historical Plays. Edited by C. H. Spence, M.A.
—Midsummer Night's Dream. Edited by P. T. Creswell, M.A.
Sidney—Defence of Poesy. Edited by D. M. Macardie.
Southey—Episodes from Life of Nelson. Edited by C. H. Spence, M.A.
Spenser—Tales from, By Sophia H. MacLehose.
Stewart—The Tale of Troy. Re-told in English by Aubrey Stewart. Edited by T. S. Peppin, M.A.
Stow—A Survey of London. Selections from, edited by A. Barter.
Swift—Gulliver's Travels. Abridged and Edited by G. O. Earle, B.A.
Thoreau—Chapters from Walden. Edited by A. Cruse.
White—Selborne. Selections. Edited by F. A. Bruton, M.A. 40 Illustrations.
Yonge—A Book of Golden Deeds. By Charlotte M. Yonge. Abridged and Edited by Mrs. H. H. Watson. 2 Volumes.

MACMILLAN & CO., LTD., MADRAS, BOMBAY, CALCUTTA AND LONDON.

MODERN INDIAN WORTHIES

By N. NARAYANAN, B.A., B.L., L.T.

ILLUSTRATED

Revised and Enlarged Edition. As. 8.

CONTENTS.—Rajah Ram Mohun Roy—Sir Jamssetji Jijibhai—Sir Syed Ahmed—Nawab Sir Salar Jung—Rajah Sir T. Madhava Rao—Sir T. Muthusamy Ayyar—Maharaja Rama Varma—Kashinath Teinbak Telang—Miss Toru Dutt—Raja Ravi Varma—Jamssetji Nusservanji Tata—Ramesh Chunder Dutt—Behramji M. Malabari—Sir P. M. Mahta—Gopala Krishna G. Khale—Dadabhai Naoroji—Bal Gangadhar Tilak—Sir N. G. Chandavarkar—C. R. Das—Sir Surendranath Bannerjee.

LIGHT FOR LIFE

By SIR NARAYAN G. CHANDAVARKAR, Kt., B.A., LL.D.

Part I, 12 As.

Part II, 8 As.

THOMAS HARDY'S WORKS

With Introductions and Biographical Notes

BY

J. H. FOWLER, M.A.

Rs. 2 each.

Far from the Madding Crowd.
 The Mayor of Casterbridge.
 The Return of the Native.

The Trumpet Major.
 Under the Greenwood Tree.

THE WORKS OF LORD MORLEY

Price per volume, Rs. 2-8-0.

Burke, 1 Vol.

Rousseau, 2 Vols.

Diderot and the Encyclopædists, 2 Vols.

Studies in Literature, 1 Vol.

On Compromise, 1 Vol.

SHORT HISTORY OF MANKIND

BY

H. G. WELLS.

Adapted and Edited for School use from the Author's "Short History of the World"

BY

E. H. CARTER, O.B.E., M.A.

Illustrated. Indian Edition.

Rs. 1-4.

MACMILLAN & CO., LTD., MADRAS, BOMBAY, CALCUTTA AND LONDON.

THE ADVENTURES OF HAJJI BABA OF ISPAHAN

By JAMES MORIER, with 40 Illustrations by H. R. MILLER, and an Introduction

By EARL CURZON OF KEDLESTON.

500 pages. Rs. 2.

BHIM SINGH

A Romance of Mughal Times

By

FRANK E. SELL, M.A.,

194 pages. Illustrated. Rs. 2.

THE WORKS OF RABINDRANATH TAGORE

Price Re. 1 each.

CHITRA. A Play.
CRESCENT MOON. Child Poems.
CYCLE OF SPRING. A Play.
FRUIT GATHERING. Sequel to *Gitanjali*.
THE GARDENER.
GITANJALI. Song Offerings.
HUNGRY STONES AND OTHER STORIES.
LOVER'S GIFT AND CROSSING.
NATIONALISM.
POEMS OF KABIR.
POEMS FROM TAGORE.
POST OFFICE. A Play.
SADHANA. The Realisation of Life.
STRAY BIRDS. Poems.
STORIES FROM TAGORE.

Price Re. 1-4 each.

CREATIVE UNITY.
KING OF THE DARK CHAMBER. A Play.
PERSONALITY. Lectures delivered in America.
THE FUGITIVE. Poems.

Price Re. 1-8 each.

MASHI AND OTHER STORIES.
MY REMINISCENCES.
SACRIFICE AND OTHER PLAYS.

Price Rs. 2 each.

GLIMPSES OF BENGAL.
GORA.

Price Rs. 2-8 each.

THE HOME AND THE WORLD. A Novel.
THE WRECK. A Novel.

MACMILLAN & CO., LTD.

(Incorporated in England)

MADRAS, BOMBAY, CALCUTTA AND LONDON.

2nd Edition—Entirely Revised

A HIGH SCHOOL MANUAL OF ENGLISH

By N. G. WELINKAR, M.A., LL.B.

Senior Professor of English, Osmania University College, Hyderabad (Deccan).

Honorary Fellow of the University of Bombay; formerly Principal, Dyal Singh College, Lahore.

Second Edition of A PRACTICAL MANUAL OF ENGLISH,

Revised and largely re-written in co-operation with

S. R. KIRKPATRICK, B.A.

Headmaster, Government High School, Gulbarga.

CONTENTS:—Part I.—Grammar. Chapter I. Nouns; II. Adjectives; III. Pronouns; IV. Verbs; V. Adverbs; VI. Prepositions; VII. Conjunctions and Interjections. Part II.—Grammar (Diction); Chapter I. Words; II. Prefixes and Suffixes; III. Synonyms, etc.; IV. Special Words for Study. V. Analysis and Synthesis of Sentences; VI. Punctuation and the Use of Capital Letters; VII. Direct and Indirect Narration; VIII. Recasting of Sentences; IX. Paraphrasing; X. Figurative Language; XI. Idiom. Part III.—Composition. Chapter I. The Sentence; II. The Paragraph; III. The Essay IV. Letters and Telegrams V. Narratives based on Poems; VI. Summarising; Test Papers.

Approved for school use (vide Fort St. George Gazette, Part I-B, dated 19-5-1925)

Price: Re. 1-8-0.

I have read this Manual with great interest and feel certain that it will be of real help to all students reading in High Schools. Messrs. Welinkar and Kirkpatrick are tried educationists, and, as such, have known how to make the study of English easy for Indian students. So well has the subject-matter been arranged and explained that, unlike the majority of books dealing with Grammar, this Manual captivates the interest even of those who have long finished their student days and are using the English language almost as their mother-tongue. I consider this book a very happy result of the co-operation of the East with the West.

SYED ROSS MASOOD,

Director of Public Instruction, Hyderabad (Dn.)

SOME OPINIONS.

"Mr. N. G. Welinkar, Professor of English, Osmania University, Hyderabad, is an old Bombayite and his: 'A Practical Manual of English' was at one time very popular with the students appearing for the Bombay Matriculation. The book under review is the revised edition of this manual, largely re-written in co-operation with Mr. S.R. Kirkpatrick, Headmaster, High School, Gulbarga. It is admittedly not a book for a beginner, and appears to be written with a view to help the Matriculation students in answering their General-English Paper. It is however largely free from the bad points common in such books and occasionally exhibits refreshing freedom from convention. Thus, on page 204, the sentence: 'I saw my old teacher who invited me to dinner' is rightly put down as compound and not complex; for 'who' here means 'and he.' Again on page 128, in the sentence: 'A man was sent who was to deliver the message', the clause beginning with 'who' is described as an adverbial clause. This led us to expect some discussion about the parsing of the words, 'who', 'when', 'where' but it could not be found. This is the great defect of the book. In about 300 pages the authors have tried to compress 'Grammar', 'Idiom' and 'Composition' and had perforce to omit a number of important things. However what is given is all important and the Matriculation students will find it very useful."—*The Progress of Education, Poona*, September 1924.

Mr. D. S. PAUL, Headmaster, C. B. M. High School, Vizagapatam, (13-9-24), writes:—In thanking you for the specimen copy of Welinkar's High School Manual of English, I beg to state that it is an excellent book and eminently suited for the standards it is written for. I shall recommend it to the students here.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

CLASS EXERCISES IN ENGLISH COMPOSITION

WITH AN INTRODUCTION

COMPILED BY

S. R. KIRKPATRICK, B.A.,

Headmaster, Govt. High School, Gulbarga.

(Double Crown 16mo. about 190 pages). Price—14 as. Charges extra.

This work is designed to meet the requirements of students preparing for the High or Secondary School Leaving Certificate or the Matriculation Examinations of Indian Universities. It consists of a hundred one-hour papers in English Composition for practice in class under the supervision of the teacher. The exercises provide an abundance of almost every conceivable variety of work in composition, and their compilation will, it is hoped, help teachers to get over the difficulty of finding the time to dictate or cyclostyle questions which under present circumstances often take as much time to write out as the answers to them. Teachers who use this book will, if they place a copy in the hands of each pupil, be able readily and without needless expenditure of time to give their classes frequent practice in just those types of exercises that are most helpful to the acquisition of the necessary standard in English Composition.

These exercises have been prepared in the interests of students. The compiler asks no return for his work, and has arranged with the publishers for the payment of his share of the profits to the Imperial War Relief Fund. Every student, therefore, who is told by his teacher to purchase this book, will have the satisfaction of knowing that, in addition to providing himself with facilities for practice in English Composition, he is making a contribution to the great cause.

SOME OPINIONS.

Mr. N. G. WELINKAR, M.A., LL.B., *Chief Inspector of High Schools, Hyderabad (Deccan)*:—"The book will be a valuable aid in teaching English Composition in High School classes and I shall be glad to do what I can to encourage its use in the High Schools under me."

The Rev. D. G. M. LEITH, M.A., *Principal, Kellett High School, Triplicane, Madras*:—"My first impression was that we do not need such a book, but as I looked into it I discovered that it would be of very great practical use in providing suitable Composition exercises for the VI Form.....The book is suggestive of fresh types of exercises that can be given. I think that the book will be found very useful for the VI Forms in High Schools."

Mr. P. F. DURAND, B.A. (Cantab), *Principal, Nizam College, Hyderabad*:—"I write to say that I shall be very glad to recommend to students of the Madras Aliya."

Mr. P. VENKATARAMIAH, B.A., *Headmaster, Board High School, Harpanahalli*:—"I shall try my best to make it popular in the upper forms of the school."

Mr. T. V. SRINIVASA AYYAR, B.A., L.T., *Headmaster, Board High School, Amalapuram*:—"I shall recommend it to the boys."

SRINIVASA VARADACHARI & CO., Printers & Publishers, MOUNT ROAD, MADRAS.

'EXERCISES IN ELEMENTARY MATHEMATICS'

for Training and Middle Schools

(for Masters and Mistresses)

with a Chapter on 'Hints on Teaching Methods'

(in Tamil and Telugu)

By M. D. GOPALACHARI, B.A., L.T.,

First Asst., Govt. Secondary Training School, Chittoor; author of the F.A. Algebra Manual, and sometime Asst. Examiner in Mathematics at the University and School Final Examinations.

(TAMIL EDITION—As. 10.)

Approved as a Text-book for School use, vide *Fort St. George Gazette*, Part I-B, dated 19-5-'25.

Mr. GOVINDA AYYANGAR, Headmaster, Govt. Training School, Chingleput, writes:—"Mr. Gopalachari's 'Exercises in Elementary Mathematics' afforded me a very pleasant reading. The authors, aim to write a text-book in Tamil for Training Schools which will serve as a working basis has been fully realised. I am recommending the book to the students of this school."

Mr. D. MARCASUSAI PILLAI, Head Master, R. O. Training School for Mistresses, Trichinopoly, (6-8-24) writes:—"M. R. Ry. M. D. Gopalachari, B.A., L.T., has carefully prepared his little book entitled 'Exercises in Elementary Mathematics' (in Tamil) with the object of providing students undergoing training in the Training Schools with a Text-book exactly based on their syllabus to serve as a working basis. He has drawn up a definite and complete syllabus for their Training course, as a guidance for the teachers and students, and has further taken the trouble to furnish them with a set of Question Papers in Mathematics given in the previous T. S. L. C. Examinations. He has thus made commendable efforts to prepare and direct the way for a successful course of training in Mathematics. I am quite sanguine that this handbook will be properly used in Training Schools and will secure the object of the author."

Mr. V. RAMACHANDRA AYYAR, B.A., L.T., Head Master, Sarvajana High School, Peelamedu, Coimbatore (12-12-'24) writes:—"I welcome the publication of the 'Exercises in Elementary Mathematics,' by Mr. M. D. Gopalachari, as it supplies a long-felt want of students in training classes. The book is admirably adapted to the requirements of the training school syllabus and besides contains some useful hints on the teaching of vulgar fractions, etc. The exercises are well-chosen and I am sure they will help the students who work through them to pass with high marks. I have much pleasure in recommending the book also to teachers and students in the lower forms of High Schools for the valuable exercises it contains."

Telugu Edition of the book.

Crown 8vo. about 160 pages. Price As. 10.

Approved as a Text-book for school use, vide *Fort St. George Gazette*, Part I-B, p. 513, dated 22-12-'25.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

FOURTH AND REVISED EDITION OF THE INTERMEDIATE BOOK-KEEPING

BY

K. SUBRAMANI AIYAR, B.A., L.T., F.S.A.A.,

Senior Partner of Messrs. K. S. Aiyar & Co., Bombay; Secretary to the Accountancy Diploma Board, Bombay (1915 to 1923)
Principal
of Pachaiyappa's Commercial School, Madras (1886-1889); of the Govt. School of Commerce, Calicut (1895-1900);
of the Byramjee Jeejeebhoy College of Commerce (1900-1908), and of the Govt. College of Commerce, Bombay (1918-1914).

Price Rs. 3. Postage, &c. extra.

Approved for use in Commercial Classes in English Schools, by the Text-Book Committee, United Provinces. vide No. G. 6336/XVIII-243, dated 21-3-18.

Recommended as a text-book for S. L. C. Examination of the Bombay University.

Officially recommended for class use by the Commissioner for Govt. Examinations, Madras.

By the same Author.

Sixth Edition—Price Re. 1-8-0.

THE ELEMENTS OF BOOK-KEEPING

OFFICIALLY RECOMMENDED

AS A TEXT-BOOK

FOR

The Bombay Government School Final Examination

Order No. 6451, dated Nagpur, the 31st July, 1917.

The books noted above have been sanctioned for use as Library books in the High and Anglo-Vernacular Schools of the Central Provinces and Berar.

CONTENTS.

Part I.—The Principles of Double Entry exemplified by the Journal and the Ledger.

Chap. I. The waste-book, the journal, and the ledger; II. Closing the ledger; III. Rent, salaries, and trade charges; IV. Personal, real, and nominal accounts; V. Journalizing Assets and Liabilities; VI. Cheques; petty cash and bank accounts; VII. Trial closing; VIII. Interest, discount, and bad debts; IX. House-property, furniture, and depreciation; X. The balance and profit and loss sheets; XI. Bills; XII. Bills Receivable; XIII. Bills Payable; XIV. Miscellaneous Ledger accounts.

Part II.—Practical Book-keeping by Double Entry exemplified by the Cash-book, the bought and sold books, the bill books, the journal, and the ledger.

XV. The cash book; XVI. The bought, sold, and bill books; XVII. Single entry book-keeping; XVIII. Invoices and account sales; XIX. Interest ledger; XX. Exchange operations; XXI. Madras Govt. Elementary Examination Papers; Bombay University School Final Examination Papers, and Bombay Joint Board School-Leaving Examination Papers; Answers.

SRINIVASA VARADACHARI & CO., 4 MOUNT ROAD, MADRAS.

4th Edition (1924) Revised according to the New Government Syllabus to meet the requirements of New Lower Grade Examination.

COMMERCIAL PRACTICE (THEORY AND PRACTICE OF COMMERCE)

Including a knowledge of Business Methods & Correspondence
for use in Secondary Schools for the Public Examination for School-Leaving Certificate and for the Govt. Technical Lower Grade Examination in the subject

by the late RAO SAHIB S. VAIDYANATHA AYYAR,
Headmaster, Government School of Commerce, Calicut.

Officially recommended for class use by the Commissioner for Govt. Examinations, Madras.

Price : Rs. 3-8-0.

Approved as a suitable Text-book.
(Fort St. George Gazette, 4th June 1912, page 371).

By the same author.

Sixth Edition (1923)—Revised.

A TEXT-BOOK OF TYPE-WRITING.

(Recommended by the Director of Public Instruction as a Text-book for the Government Technical Examinations in Type-writing.)

Price—Rs. 3.

By the same author.

4th Edition—Revised.

BOOK-KEEPING AND ACCOUNTS

With numerous Exercises and Select Examination Papers.—A Standard Work for the use of Schools and Classes preparing for Public Examinations in the subject and for the use of Accountants and Book-keepers in Business offices

Approved as a Suitable Text-book (Fort St. George Gazette, Oct. 21, 1913.)

Officially recommended for reference by the Commissioner for Govt. Examinations, Madras.

Price Rs. 3-8 0

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

COMMERCIAL CORRESPONDENCE

*Prepared in accordance with the Syllabus in the subject
for the Madras Secondary School-Leaving Certificate Examination
and
the Madras Government Technical Examinations*

By T. V. SUBRAMANIA AYYAR,
Commercial Instructor, Model High School, Teachers' College, Saidapet, Madras.
Dedicated to Mr. R. G. GRIEVE, M.A., F.R.G.S., F.M.U.
Ag. Director of Public Instruction.

WITH A FOREWORD

By Mr. M. K. DANDEKAR, B.A., A.S.A.A., F.M.U.,
Principal, Government Institute of Commerce, Madras.

Approved as a suitable Text-book for School use.
(*Fort St. George Gazette*, 24th July 1923, page 671).

D. Crown 16mo. 180 pages. Price Re. 1-8-0.

CONTENTS.

- CHAP. I. LETTERS AND LETTER-WRITING—Private Letters; Official Letters; Business Letters.
II. METHOD OF KEEPING CORRESPONDENCE—OUTWARD—Addressing Envelopes; Indexing; Cross Reference or Page Indexing.
III. INWARD CORRESPONDENCE.
IV. OF BANKS AND ACCOUNTS—Current Account; Pass Book; Over-drafts; Deposit Accounts.
V. NEGOTIABLE INSTRUMENTS—Endorsement; Holder and Holder in Due Course; Payment; Noting and Protesting; Capacity of a Minor; Inland and Foreign Instruments; Lost Instruments.
VI. CHEQUES—Endorsement; Presentment for Payment; Crossed Cheques; Forms of Crossing; "Not Negotiable" Cheques; Material Alterations.
VII. BILLS OF EXCHANGE—Parties to a Bill of Exchange; The Course of a Bill; Discounting a Bill; Period of a Bill; Drawee in case of need; Acceptance and Payment for Honour or Supra Protest; Protest for better security; Accommodation Bills; Bills and Forged Endorsements; Miscellaneous; Some Terms in a Bill with Explanation.
VIII. PROMISSORY NOTES—Parties to a Note; Classification of Pro.-Notes; Payment; Period of Limitation; Stamp Duty.
IX. SOME FORMS USED IN BUYING AND SELLING—Indents; Marks; Invoices; Statement of Account; Account Sales; Debit and Credit Notes; Receipts.
X. TRANSPORT OF GOODS—Transport of Goods by Rail; Transport by Sea; Freight; Charter Party.
XI. CUSTOMS HOUSE FORMALITIES FOR EXPORTING.
XII. BILLS OF LADING.
XIII. CUSTOMS HOUSE FORMALITIES FOR CLEARING (IMPORTING) GOODS.
XIV. MARINE INSURANCE.
XV. COMMON COMMERCIAL TERMS AND ABBREVIATIONS USED IN CORRESPONDENCE—Commercial Terms; Abbreviations.

APPENDIX.—SPECIMEN FORMS.

SELECT QUESTIONS FROM EXAMINATION PAPERS.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

GRADUATED EXERCISES IN TYPE-WRITING

By T. V. SUBRAMANIA AYYAR,
Commercial Instructor, Government Muhammadan College, Madras;
Author of Commercial Correspondence.

Useful for both Touch and Sight Methods
Demy 8vo. 240 pages. PRICE Re. 1-8-0.

By the same author.

BOOK-KEEPING FOR BEGINNERS

OPINIONS.

M. K. DANDEKAR, Esq., B.A., F.S.A.A. (LOND.) HON., *Principal, Govt. College of Commerce, Madras* :—

"I read the Manuscript copy of 'Book-keeping for Beginners' and I was pleased to note the treatment of the subject made easy. In a few points, I differ with the author especially in the arrangement of the subject-matter. * * * * The book will be found useful for whom it is intended."

M.R.Ry. L. T. ANANTHANARAYANA SASTRY AVL., *Headmaster, Govt. School of Commerce, Calicut* :—

"* * * Mr. T. V. Subramania Ayyar is the author of a book entitled 'Commercial Correspondence' prepared to suit the curriculum of the School Final class and it has been approved by the Text-Book Committee. He is now preparing a book on Book-keeping which is written in the same style and language as the first one and which I am sure will also be approved by the Text-Book Committee. I wish him success in his attempts to popularise Commercial Education"

Over 400 pages—bound in cloth. Price Rs. 2.

Approved as a Text-Book suitable for school use and Libraries.
vide Fort Saint George Gazette, Part I.B p. 511, dated 22-12-'25.

CONTENTS.

Chapter I. Introduction. Chapter II. Capital Account, Opening Entries. Chapter III. Order of Accounts, Trial Balance, Closing of Accounts, Profit and Loss Account, Balance Sheet. Chapter IV. The Journal. Chapter V. Bank Accounts. Chapter VI. Cash Book—Discount. Chapter VII. Some of the forms and statements used. Chapter VIII. Some more accounts: Drawing account, Trading account, Carriage account, etc. Chapter IX. Bills of Exchange. Chapter X. Imprest system and Petty cash. Chapter XI. Some more real accounts.—Capital and Revenue Receipts and Expenditure. Chapter XII. Outstanding and Suspense account, Reserve for Bad and Doubtful debts, etc. Chapter XIII. Consignment accounts—Outward and Inward). Chapter XIV. More Subsidiary books. Chapter XV. Working from the Trial Balance. Chapter XVI. Contract account. Chapter XVII. Goodwill. Chapter XVIII. Partnership. Chapter XIX. Partnership (continued)—Dissolution and Liquidation. Chapter XX. Joint adventure account. Chapter XXI. Foreign bills. Chapter XXII. Sectional and Self-Balancing Ledgers. Chapter XXIII. Single Entry. Chapter XXIV. Non-Trading Concerns. Appendix A.—Additional Exercises from various sources; Appendix B.—Questions on Theory and Principle of Book-keeping; Appendix C.—The Book-keeper's Compendium.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

BOOKS BY

Mr. P. LAKSHMI NARASU NAIDU, B.A.

Professor of Physical Science, Pachaiyappa's College, Madras.

- (1) **Intermediate Physics.** Prepared in accordance with the University Syllabus. Demy 8vo. 647 pp. with 840 diagrams and an Elaborate Index. Rs. 4.
- (2) **Intermediate Chemistry.** Prepared in accordance with the new Regulations of the Indian Universities. Demy 8vo. 550 pp. with 244 diagrams and an Elaborate Index. Rs. 3-8-0.
- (3) **Lessons in Elementary Physics.** Prepared in accordance with the Syllabuses of the Matriculation and the School Final Examinations. Second edition. Crown 8vo. 550 pp. with copious illustrations. Re. 1-4-0.
- (4) **Lessons in Elementary Chemistry.** Prepared according to the Syllabuses of the Matriculation and the School Final Examinations. Second edition. Crown 8vo. 329 pp. with copious illustrations. As. 12.
- (5) **Essence of Buddhism.** With 105 illustrations of Buddhist Art. Second edition. Revised and Enlarged. Price—Paper cover Re. 1-8-0. Cloth bound Rs. 2.

SOME OPINIONS ON THE SECOND EDITION.

The first edition was welcomed by competent critics in Asia, Europe and America as one of the most successful expositions of Sakyamuni's teachings and in its present form—practically so much rewritten and enlarged as to amount to a new book—it will long hold its own as one of the standard works on the subject. We can give it no higher praise than by saying that it is quite worthy to take rank with the books of scholars like Buys Davids and Oldenbry.—*Hindustan Review*, May-June, 1912.

To those who wish to obtain a knowledge of the noble religion promulgated by Sakyamuni from the standpoint of the scientific scholar imbued with the spirit of modern research there is no work that we can recommend better than the *Essence of Buddhism*.....The compilation from Buddhist sources embodied in the *Essence of Buddhism* is splendid, and we sincerely trust that the book will have a very wide circulation in Buddhist and non-Buddhist countries where English is spoken. Buddhism is intended for the honest searcher of philosophic truth, and in these days of scientific scepticism when theological religion is losing its ground, a work like this is opportune. To those who wish to know the path leading to enlightened peace we cordially recommend Mr. Narasu's *Essence of Buddhism*.—*The Mahabodhi and the United Buddhist World*, July 1912.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

SUBODHA RAMA CHARITHAM

A Sanskrit Poetry of Ramayana, written in a simple style

BY

SRIMATHI V. BALAMMAL

Very useful for beginners. Price—As 6. Postage extra.

Approved by the Text-Book Committee, Madras, as suitable for School Reading, vide Fort Saint George Gazette, 6th Aug. 1918, p. 457.

Approved by the Inspector-General of Education in Mysore, as a suitable Text-book for the IV Standard of Sanskrit Schools in the State.

Proceedings of the D.P.I., Bombay, No. 10652, dated 6-12-17 :—

* * * "the book 'Subodharama Charitam,' price six annas, is sanctioned as a prize and library book for Secondary Schools in this Presidency. * * *

The D.P.I., Bengal, No. ^{8490-AC} 37/178-AC-18, dated 6th December 1918 :—

Approved as a prize and library book for use in Schools in this Presidency.

SOME OPINIONS.

MONSIEUR JULIEN VINSON, professeur à l'Ecole des langues orientales vivantes, rue de l'Université, No. 86 à Paris (France), Sept. 10th :—

"With great pleasure and enjoyment did I receive and read your most valuable work 'Subodharama Charitam' so elegantly written by you in the Sanskrit language and much elegantly printed at Madras. It appears worthy of all praise and I hope it shall be used as a text-book in the Universities examinations. If you were able to send me another copy, I would like to present the Asiatic Society here with it.

We both are poets, since I wrote a few Tamil verses, but you are young, full of hopes and joys, and I am old having experienced much trouble and sorrow. Allow me then to wish you a long and happy life, devoted both to literary works and domestic virtue, which certainly are the most precious jewels with which may be adorned so charming a young lady as you."

MR. M. COLLINS, B.A., Ph.D., Professor of Comparative Philology, Madras University (18-11-'16) :—

I have read with interest the little book called Subodharama Charitam by Siste V. Balammal. It gives the story of the Ramayana in a clear although extremely concise form the whole poem consisting of only 251 slokas, if we omit the verses which stand in felicitous meter, at the beginning of each of the six Kandas. The story is told in a pleasing simple style, which nevertheless displays the author's intimate acquaintance with the Sanskrit tongue and with its intricate grammatical lore. Written as this book is by a Hindu lady I feel that it should have a beneficial and stimulating influence as a text-book for girls' schools in which Sanskrit is taught.

For copies apply to :—

1. SRIMATHI V. BALAMMAL, 'Vivekasrama,' Sullivan's Gardens Road, Mylapore, Madras.

or

2. MESSRS. SRINIVASA VARADACHARI & CO., Mount Road, Madras.

BOOKS

By Miss CORRIE GORDON, Ed.B. (Edin.)

Associate of the Froebel International Union, London; Specialist in Child Education;

President of the Association of Child Nature and Education of India; and

Lecturer, Teachers' College, Saidapet.

Recommended by the Academic Council of the University of Madras
as suitable for students taking the L. T. Degree Examination.

ESSAYS ON THE CHILD AND HIS EDUCATION

Price Re. 1-8. Postage, etc. extra.

OPINIONS.

The Hindustan Review, April 1917:—"Miss Corrie Gordon has rendered a service to the students of Kindergarten by publishing her *Essays on the Child and His Education* (Srinivasa Varadachari & Co., Madras). Though not professing to write a systematic treatise on the subject, Miss C. Gordon has managed to cover in her Essays, a very large ground. The information is well put together and will be found exceedingly useful by teachers and pupils alike. For those desirous of following up their course of studies further, she has appended a very instructive select bibliography of leading works on the subject. Altogether it is a capital little book and deserves

wide appreciation in this country for use in which it is especially intended by the writer."

Indian Education, June 1917:—"Miss Gordon deals with the child in the strict sense of the term, the young child, and her outlook is in the main that of Froebel. She has however remarks on Montessori, so the reader is brought quite up to date. The book is pleasant and readable and we know of no other better fitted to give the young teacher an insight into the general ideas and principles of the modern treatment of the young in Europe. It is suitable for school libraries and for the libraries of training institutions."

"FROM A KINDERGARTEN WINDOW"

ESSAYS ON EDUCATIONAL SUBJECTS

FOR

TEACHERS AND STUDENTS

D.Fcap. 16mo. about 180 pages. Price Re. 1-8-0. Charges extra.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

CHILD NATURE AND EDUCATION

AN INTRODUCTION TO CHILD STUDY

Price—Rs. 2.

OPINIONS.

The Madras Mail, Friday, October 31, 1924:

Books which deal with the problems of educational psychology from the Indian point of view are too few, and we, therefore, welcome most cordially one which makes such a study and makes it well. Miss Gordon's contribution to this field is one which ought to be read carefully and digested thoroughly by all those who have to do with the education of children, whether teachers or parents.

The value of Child Study is twofold, first from the point of view of theoretical psychology, and second of education. Education along with psychology has much to learn from the science of biology which suggests to both of these sciences the unit for study, viz., a reaction which is a response to a stimulus. The mental life ought to be viewed as is the physical from this point of view. Further, biological science is showing the usefulness both as to method and content of the observation of development. The study of child-nature is in accord with the genetic method which characterises all the biological sciences. Educationally we have more to do with children than with adults in our schools and so from the practical point of view also the more that we can learn about the natures of educands the better for our work. Miss Gordon's book is thus a real contribution to our literature for it considers these questions with special reference to conditions in South India.

One of the most important of modern developments in this science is that made through the observation of individual differences. Although education is a social process and children are social in nature, yet we cannot deal with them too much in groups without doing great injustice to matters in which they are unlike. Studies made in Europe and America have their value for Indian teachers, but observations made in India, as Miss Gordon's have been, are of great value in enabling us to ascertain the similarities and differences with children of other countries, and the differences among groups and individuals here. Miss Gordon has not only given the result of her own observations but—what is even more important—she has shown teachers and others how they may observe for themselves.

The book surveys the more important problems connected with the study of child-nature. It deals with the stage of child development, with the processes of sense-perception, with play, hand-work, and fatigue, with exceptional children, both sub-normal and supra-normal, with measurements of intelligence, and with the application of the Kindergarten system to the Indian system. It is one of the books which the Academic Council on the recommendation of the Board of Studies in Teaching has declared as suitable for candidates for the L. T. degree. We hope that it may have a wide circulation as its influence is sure to be for good.

Education (Allahabad), March 1925.

The distinguished author of the book under review is one of the few enthusiasts in India who have taken to a systematic study of child-nature. The book embodies the results of close study by the author, not merely of the existing literature on the subject, but of the actual mental and physical growths of children, as witnessed by her in several schools in Britain and India where she has had the opportunity to work. Within a brief space of 300 pages, the author has contrived, in her plain, matter of fact, and at the same time, engaging style, to elucidate the various topics connected with child life such as the sense perception, play, the service of Hand in Mental Development, fatigue, exceptional children, measurement of Intelligence and the Kindergarten system; touching the various theories on these topics and supplementing them by her own views based on personal study and investigation. We would especially commend to our readers the beautiful and inspiring chapter on the Kindergarten system in which without going into technical detail, the author has surveyed the basic principles of the system and pleaded in accordance with these principles for the Indianisation of Indian education. We are sure that this little book will prove an excellent handbook for teachers as well as parents and others interested in the subject and kindle in them a deeper interest therein. It has been already recommended by the Academic Council of the Madras University as a suitable text-book for the students appearing for the L. T. Examination and we hope that other Universities will soon follow suit. We congratulate both the author and the publishers on this valuable publication and recommend every teacher to secure a copy thereof.

The Madras Christian College Magazine, January 1925.

The study of child-nature is exceedingly important for both of the sciences of Psychology and Education. Its importance for Psychology is from the genetic point of view. In the child one is able to observe in simpler forms many of the processes at work which in adult experience become so complex as to make them difficult of analysis. Its importance for Education is too obvious to need extended notice, and yet there are some who are so short-sighted as to neglect it. Here in South India there are a great number of schools in charge of teachers who do not know the elementary facts about child-nature. But with the progress of education the time will surely come when it will be considered as dangerous to employ a teacher who is ignorant of child-nature as it is to employ a man for a physician who knows nothing of anatomy and physiology. Such a book as that which Miss Gordon has written will serve a useful purpose in hastening that day by putting teachers in possession of a primer which contains the fundamentals of the subject in a readable style. It is the type of book which we would like to see translated into our South Indian vernaculars, because it not only includes the principles of the science, but states them with special reference to the needs of Indian teachers.

A personality is the outcome of forces which are both hereditary and environmental so that child study must take account of both sets of factors. Much more is to be gained by teachers through the study of children for themselves than the mere perusal of books on the subject, however authoritative they may be. The trouble with so many students of other things as well as of child-nature is the evident desire to be spoon-fed. They desire to get their information at second-hand rather than take the trouble to study for themselves. In many instances teachers have not the technique necessary to observe intelligently. Very valuable, then, is Miss Gordon's chapter on 'How to Study a Child,' particularly for those who are beginners in child study, and it is a matter of vital concern as much for the parent as for the teacher.

Certain subjects have been especially studied recently by educationists, and Miss Gordon gives useful accounts of the results of these studies. One chapter is devoted to the place of play in child life and in the educative process. It is a wholesome corrective for the old fashioned idea that play is a superfluity. The author brings out some of the most useful services which are rendered by play, for play has direct educative value, assisting in the training of the judging and other mental processes, as well as in the spirit of fair-play and other moral qualities. The play-ground affords a splendid type of voluntary democratic organisation. Another chapter is devoted to "The Services of the Hand in Mental Development." Sometimes the school in emphasising the development of the mental processes has tended to neglect the fact that intelligence is sometimes motor, and that these two factors, the mental and motor, are closely related to one another. The questions of 'Exceptional Children' and 'The Measurement of Intelligence' are closely related, since it is through the latter that we get our most accurate knowledge of the former. A final chapter deals with a question on which Miss Gordon is surely competent to speak, 'The Kindergarten System and Its Application to Indian Children.' Altogether she has succeeded in writing a most useful little book, and we hope that it may have a good circulation among teachers and parents who cannot but profit by what she has written on the nature of children and how they should be educated.

REVIEWS AND PAPERS—EDUCATIONAL AND LITERARY

By GERALDINE HODGSON, B.A.

Trinity College, Dublin;

sometime Cobden Scholar of Newnham College, Cambridge.

D. Cr. 16mo. 310 pp. Rs. 2. Charges extra.

CONTENTS.

Educational.—Peter Paul Vergerius; Roger Ascham; John Colet; Fynes Moryson on European Education in the 16th Century; Milton as an Educator; John Stuart Mill as an Educator; Matthew Arnold as an Educator; The Place of Personality in Education; Dr. Creighton as an Educator.

Literary.—One of Shakespeare's Comedies; Henry Vaughan; Dryden's Inconsistency; Wordsworth; Mr. William Watson's Poems; Mr. Tabb's Poems; William and Fate—A Review; The Treasure of Humble Men; The Life of the Bees; Opinion; A Protest against Literary Rigidity.

SRINIVASA VARADACHARI & CO., 4, Mount Road, Madras.

The College Classics Series of Shakespeare's Plays.

GENERAL EDITOR: F. W. KELLETT, M.A.

Henry V., by P. H. Sturge, M.A., Professor, Nizam's College, Hyderabad. Cloth Re. 1-6-0

Tempest, by E. E. Kellett, M.A., Master, Leys School, Cambridge. Cloth Re. 1-6-0.

Midsummer-Night's Dream, by Rev. R. Scott, M.A., Professor of English, Wilson College, Bombay. Cloth Re. 1-6-0.

As You Like It, by the late F. W. Kellett, M.A. Cloth Re. 1-6-0.

King John, by Mark Hunter, M.A., Principal, Rajahmundry College. Cloth Re. 1-4-0.

Julius Caesar, by Mark Hunter, M.A., Principal, Rajahmundry College. Third Edition—Cloth Re. 1-12-0.

Merchant of Venice, by J. H. Stone, M.A., Principal and Professor, Presidency College, Madras. Cloth Re. 1-6-0.

Othello—The Moor of Venice, by Michael Macmillan, B.A., late Principal and Professor of English, Elphinstone College, Bombay. Cloth Re. 1-6-0.

Hamlet, by W. J. Goodrich, M.A., formerly Principal and Professor of English, Pachaiyappa's College, Madras, and afterwards Principal and Professor of English, Ahmedabad College, Bombay. Cloth Re. 1-10-0.

Macbeth, by Dr. J. Morrison, M.A., late Principal and Professor of English, General Assembly's Institution, Calcutta. Re. 1-6-0.

A few of the opinions of the Series are given below.

Of the College Classics Series of Shakespeare's Plays, PROFESSOR E. DOWDEN, Trinity College, Dublin, writes —

"I must ask you for a full and generous forgiveness of my silence. When *The Tempest* came, I was much occupied with French literature, and I looked hastily into it, and kept postponing a fuller examination. The *Henry* the Fifth came when I was in America.

Now I am acquainted with both volumes of your Shakespeare Series, and I can return you genuine thank for editions, so thorough, so scholarly, and at the same time, so interesting in their treatment of literary history of the genius and work of Shakespeare and of the individual plays dealt with in each volume.

I hope the series will be widely used by students of Shakespeare.—7th January 1897.

Twelfth Night, by Michael Macmillan, M.A., D.Litt., I.E.S. (Retired) English Lecturer in the University of Birmingham; formerly Principal and Professor of English, Elphinstone College, Bombay. Cloth Re. 1-12-0.

The Madras Christian College Magazine :—"Dr. Macmillan is well-known for his scholarly editions of *Julius Caesar* and other plays, and this edition of *Twelfth Night* is worthy of his reputation. It may be cordially recommended to Indian students.

Errors of the press are few and unimportant. The notes are no mere compilation, but the work of a ripe scholar bringing his own judgment to bear on the text. Many old puzzles are treated in a fresh and interesting fashion."

The Hindustan Review :—"In their 'College Classics Series of Shakespeare's Plays,' Messrs. Srinivasa Varadachari & Co. (Madras) have recently published an excellent text of *Twelfth Night*, edited and annotated by Professor Macmillan. The introduction is exceedingly good and the notes are all that they should have been. Though primarily meant for Indian students, the series in which it appears should appeal to all lovers of the great dramatist. The get-up is very neat.

The Mysore University Magazine, February, 1918 :—"Messrs. Srinivasa Varadachari & Co., of Madras, have published a new edition of *Twelfth Night*, by Mr. M. Macmillan. This edition belongs to the College Classics Series of Shakespeare's Plays. There is a full introduction, which gives a good summary of all information necessary for a thorough understanding of the play, together with a criticism. The notes are quite full and deal with all the difficulties. The editor at times shows great ingenuity in defending a more difficult interpretation. Mr. Macmillan, who is a lecturer in Birmingham University, was formerly in the Indian Educational Service, and one of the special features of this edition is the introduction of parallels from Indian literature. This feature should be of much value to Indian students, for whom the edition is primarily intended, and for whom it may be cordially recommended.

Shakespeare—Richard II., with Introduction and Notes, by Prof. J. C. Rollo, M.A., Mysore University. Price Re. 1-12-0.

SRINIVASA VARADACHARI & CO., 4, Mount Road, Madras.

Fifth & Revised Edition.

A COURSE OF GENERAL MATHEMATICS FOR HIGH SCHOOLS

(WITH ADDITIONAL CHAPTERS)

Written in accordance with the recently-
revised S. S. L. C. Syllabus in
Elementary Mathematics

By V. RAGHUNATHA AIYAR, B.A., L.T.

Assistant, Teachers' College, Saidapet.

Crown 8vo. 568 pages with over 200 diagrams.

Approved as a Text-book for Schools under Public management,
vide Fort St. George Gazette, Part I-B, p. 641, dated 21-6-21.

Approved as a Text-book suitable for school use,
vide Fort St. George Gazette, Part I-B, p. 877, dated 21-9-21.

Price—Rs. 2.

CONTENTS.

Chapter I. The Four Rules; Factors and Multiples; Vulgar Fractions; Decimals.
Chapter II. Symbolic Arithmetic; Symbolic Representation; Positive and Negative quantities;
Some Identities and their Applications. Chapter III. The Simple Equation and its Applica-
tions. Chapter IV. Circles, Angles and Parallels; The Circle; Angles; Drawing perpendi-
culars with set squares; Parallels. Chapter V. Ratio and Proportion; Ratio; Proportion,
Direct and Inverse; Proportional Division. Chapter VI. Averages. Chapter VII. Percentage.
Chapter VIII. Areas of Simple Rectilinear Figures; The Rectangle; The Right-angled
Triangle; The Parallelogram; The Triangle; The Trapezium. Chapter IX. Graphs
(Introductory)—Plotting. Chapter X Simple Interest. Chapter XI. Contracted Methods.
Chapter XII. Compound Interest. Chapter XIII. The Cube and the Cuboid. Chapter XIV.
Simultaneous Equations and their applications. Chapter XV. The Straight Line Graph;
Chapter XVI. Square Root. Chapter XVII. Symmetry in Figures; Constructions.
Properties of symmetrical figures and their applications; Construction of Regular Polygons;
Construction of Tangents. Chapter XVIII. Area of the Circle, Sector and Segment.
Chapter XIX. The Right Prism, Cylinder and Cone. Chapter XX. Graphs—(continued).
Chapter XXI. Miscellaneous Examples. Chapter XXII. Discount and Exchange.
Chapter XXIII. Stocks and Shares. Chapter XXIV. Time and Distance. Chapter XXV.
Time and Distance—Graphs. Chapter XXVI. Partnership. Chapter XXVII. Problems
on Work and Time. Chapter XXVIII. Problems on Profit and Loss; Madras Secondary
School-Leaving Certificate Examination Papers. Appendix I. Tables of Money, Weights
and Measures; Answers.

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

UNIVERSITY OF MADRAS.

Intermediate Examination, 1927.

SHAKESPEARE—MERCHANT OF VENICE, RS. A.P. with Introduction and Notes, by J. H. Stone, M.A., College Classics Series ...	1 6 0
TENNYSON—SELECTIONS, containing Ulysses, Cænone, Sir Galahad and Morte D'Arthur, edited with Introduction and Notes, by E. H. ELLIOT, B.A., sometime Junior Professor of English, Presidency College, Madras; late Principal of the Coimbatore College. 2nd edition ...	0 8 0
—MORTE D'ARTHUR alone, with Introduction and Notes, by the same author ...	0 8 0
—MORTE D'ARTHUR, with Notes, by W. L. Venkatramiah, B.A., T. P. Kothandaramaier, B.A., B.L., and S. Anantanarayanaier, B.A. Reduced Price.	0 4 0

Intermediate Examination, 1928.

SHAKESPEARE—MERCHANT OF VENICE with Introduction and Notes, by J. H. Stone, M.A. (College Classics Series) ...	1 6 0
GRAY—ELEGY AND OTHER POEMS, with In- troduction and Notes, by E. E. Kellett, M.A. ...	0 8 0
ARNOLD—FORSAKEN MERMAN AND RUGBY CHAPEL, with Introduction and Notes, by E. H. Elliot, B.A. ...	0 4 0

B. A. Degree Examination, 1927.

SHAKESPEARE—OTHELLO, with Introduc- tion and Notes, by M. Macmillan, M.A. College Classics Series ...	1 6 0
—TEMPEST, with Introduction and Notes, by E. E. Kellett, M.A. College Clas- sics Series ...	1 6 0
MILTON—LYCIDAS, with Introduction and Notes, by N. Vaidyanatha Aiyer, M.A. ...	0 4 0

B. A. Degree Examination, 1928.

SHAKESPEARE—THE TEMPEST, with In- troduction and Notes, by E. E. Kellett, M.A. (College Classics Series) ...	1 6 0
—MACBETH, with Introduction and Notes, by Dr. J. Morrison, M.A. (Col- lege Classics Series) ...	1 6 0
MILTON—PARADISE LOST, BOOK I, with In- troduction and Notes, revised by E. H. Elliot, B.A. ...	0 14 0
MATTHEW ARNOLD—SCHOLAR GYPSY AND THYRSIS, with Introduction and Notes, by E. H. Elliot, B.A. ...	0 12 0

B. A. Honours Degree Examination, 1927 to 1930.

CHAUCER—PROLOGUE, with Introduction and Notes, by W. J. Goodrich, M.A. ...	1 0 0
—by G. Maddox, B.A. Reduced price ...	0 4 0
—KNIGHT'S TALE, Part I. Lines 1 to 629, with Introduction and Notes, by E. H. Elliot, B.A. ...	1 0 0
—NONNE PREESTES TALE, with In- troduction and Notes, by the same Editor.	1 2 0
SHAKESPEARE—A MIDSUMMER NIGHT'S DREAM, with Introduction and Notes, by Rev. R. Scott, M.A. ...	1 6 0
—HENRY V, with Introduction and Notes, by P. H. Sturge, M.A. ...	1 6 0
—TWELFTH NIGHT, with Introduc- tion and Notes, by M. Macmillan, M.A. ...	1 12 0
—OTHELLO, with Introduction and Notes, by the same Editor ...	1 6 0
MILTON—PARADISE LOST, Book I, with In- troduction and Notes, revised by E. H. Elliot, B.A. ...	0 14 0
—PARADISE LOST, BOOK II, with In- troduction and Notes, by W. Bell, M.A. ...	0 12 0
POPE—RAPE OF THE LOCK, with Introduc- tion and Notes, by E. E. Kellett, M.A. ...	1 0 0
TENNYSON—THE COMING OF ARTHUR, In- troduction and Notes only, by E. H. Elliot, B.A. ...	0 12 0
—THE PASSING OF ARTHUR, Intro- duction and Notes only, by the same editor	0 12 0
—ULYSSES and other poems, with Introduction and Notes, by the same editor ...	0 8 0
MATTHEW ARNOLD—SCHOLAR GYPSY AND THYRSIS, with Introduction and Notes, by the same Editor ...	0 12 0
—THE FORSAKEN MERMAN AND BALDER DEAD, with Introduction and Notes, by the same editor ...	0 12 0
DRYDEN—PREFACE TO THE FABLES, with Introduction and Notes, by P. Seshadri, M.A.	0 10 0
LAMB—ESSAYS OF ELIA (Selections) with In- troduction and Notes, by J. H. Stone, M.A.	1 4 0
CARLYLE—THE HERO AS POET, with In- troduction and Notes, by Rev. S. Gnan- amuthu, M.A. ...	0 8 0
MATTHEW ARNOLD—ESSAYS IN 'CRITI- CISM, containing, Marcus Aurelius and Literary Influence of Academies, with In- troduction and Notes, by P. Seshadri, M.A.	1 0 0
ADDISON—THE COVERLEY PAPERS, with In- troduction and Notes, by E. H. Elliot, B.A.	1 12 0

SRINIVASA VARADACHARI & CO., 4, Mount Road, Madras.

UNIVERSITY OF MADRAS—(continued)

Oct. 1926.]

ADVERTISEMENTS.

IN THE PRESS.

A HISTORY OF INDIA

FOR USE IN HIGH SCHOOLS

BY

C. S. SRINIVASACHARIAR, M.A.,

Professor of History, Pachaiyappa's College, Madras

AND

M. S. RAMASWAMI AIYANGAR, M.A.,

Professor of History, Maharajah's College, Vizianagram.

TAMIL EDITION

OF

PROF. P. V. SESHU AIYAR AND MR. V. VENKATASUBBAYYA'S

ELEMENTARY MATHEMATICS

PART I

BY

S. SIVARAMAN, B.A., L.T.,

Municipal College, Salem.

PART I for Form I—Almost ready.

PARTS II & III for Forms II & III respectively

—In preparation

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.

B.A. Honors Degree Examin., 1927 to 1930—(contd.)

COLERIDGE—THE RIME OF THE ANCIENT MARINER, with Introduction and Notes, by E. E. Kellott, M.A. ... 0 12 0

CHRISTABEL, with Introduction and Notes, by the same editor ... 0 12 0

SHELLEY—ADONAI, with Introduction and Notes, by W. E. Hoare, M.A. ... 0 10 0

KEATS—ISABELLA, with Introduction and Notes, by E. H. Elliot, B.A. ... 0 12 0

BYRON—CHILDE HAROLD'S PILGRIMAGE, Canto I, with Introduction and Notes, by E. E. Kellott, M.A. ... 1 0 0

Do Do. Canto IV, with Introduction and Notes, by E. H. Elliot, B.A. ... 1 0 0

SWEET—A SECOND ANGLO-SAXON READER, Archaic and Dialectal, Part 2, Rs. 3-6 Reduced to ... 2 0 0

Other Intermediate and B.A. Books.

INTERMEDIATE GEOMETRY (Theory and Practice), by M. Sanyanarayana, M.A., L.T., and K. S. Patrachariar, M.A., L.T. 3rd and Revised Edition, 1924 ... 2 8 0

THE STUDENT'S COMPANION TO GEOMETRY, for the Intermediate Examination of the University of Madras, under the New Regulations, by K. Daya Rao, B.A., L.T. ... 0 8 0

EXAMPLES ON TRIGONOMETRY, containing the F.A. Trigonometry Papers for 15 years, 1888 to 1902, with Solutions of all the Problems, by P. A. Subramania Aiyar, B.A., L.T. ... 0 8 0

EXAMPLES ON ALGEBRA, containing F.A. Algebra Papers for 17 years, 1889 to 1906, by the same author ... 0 8 0

INTERMEDIATE CHEMISTRY, by P. Lakshmi Narasu, B.A., Professor of Physical Science, Pachaiyappa's College, Madras. ... 3 8 0

INTERMEDIATE PHYSICS, by the same author ... 4 0 0

CHEMICAL PROBLEMS AND THEORIES by Hridaya Krishna De ... 1 0 0

LECTURES IN LOGIC, by Rao Bahadur S. Mangesh Rao, B.A. ... 2 8 0

DEDUCTIVE LOGIC, for Intermediate Students, by Prof. G. Sanyanarayana Murti, M.A. ... 2 0 0

STUDENT'S HAND-BOOK OF PSYCHOLOGY, by the late Dr. S. Sathianadhan, M.A., LL.D. (2nd Edition) ... 1 0 0

QUESTIONS AND ANSWERS ON ELEMENTARY LOGIC, by M. Macmillan, M.A. ... 1 0 0

THE ELEMENTS OF HUMAN PHYSIOLOGY, by G. S. Ramasami Aiyar, B.A. ... 1 0 0

NOTES ON HUXLEY'S PHYSIOLOGY, Rs. A.P. by T. S. Muhammad Husain, B.A. (2nd Edition) ... 0 12 0

B.A. EXAMINATION ENGLISH LANGUAGE, LITERATURE AND COMPOSITION PAPERS of 1881 to 1906 (both inclusive) ... 0 5 0

F.A. MATHEMATICS—ALGEBRA AND TRIGONOMETRY PAPERS, with Solutions and Notes from 1901—1903, by B. Hanumantha Rao, B.A. ... 0 4 0

MATHEMATICAL PROBLEM PAPERS by A. A. Krishnasami Aiyangar, M.A., L.T. ... 1 4 0

TAMIL COMPOSITION, by G. Damodara Mudaliar, B.A. ... 0 12 0

Books at Reduced Prices.

ROBINSON—SHORT HISTORY OF ROME—Rs. A.P. Rs. 2-10-0—Shop soiled. Reduced to ... 1 0 0

GREEK HISTORY, by Alice Zimmern ... 1 4 0

ELEMENTS OF ANIMAL PHYSIOLOGY, by John Angell. Re. 1-2-0. Reduced to ... 0 10 0

PHYSICS—An Elementary Text-book for University Classes, by C. G. Knott. Rs. 5-10-0. ... 3 0 0

HISTORICAL OUTLINES OF ENGLISH ACCIDENCE, by Rev. Richard Morris, M.A. Rs. 3-12-0. Reduced to ... 1 0 0

OUTLINES OF THE HISTORY OF ENGLISH LITERATURE, by J. M. D. Meiklejohn, M.A. Re. 1-2-0. Reduced to ... 0 10 0

HUXLEY'S PHYSIOGRAPHY. Rs. 4-8-0. Reduced to ... 2 8 0

TOPINARD'S ANTHROPOLOGY Rs. 2-10-0. Reduced to ... 1 12 0

TYLOR'S do. Rs. 5-10-0. Reduced to ... 3 0 0

LESLIE STEPHEN'S SCIENCE OF ETHICS. Rs. 12. Reduced to ... 6 0 0

WILLIAM'S EVOLUTIONAL ETHICS. Rs. 9. Reduced to ... 5 0 0

THATCHER & SCHWILL'S EUROPE IN THE MIDDLE AGES. Rs. 6-12-0. Reduced to ... 4 0 0

PLOETZ EPITOME OF HISTORY—ANCIENT, MEDIAEVAL & MODERN. Rs. 5-10-0. Reduced to ... 3 8 0

FAWCETT'S MANUAL OF POLITICAL ECONOMY. 7th edition. Rs. 9-0-0. Reduced to ... 4 0 0

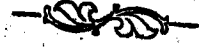
JUDD'S—STUDENT'S LYALL, A Manual of Elementary Geology, 1896. Rs. 6-12-0. Reduced to ... 2 12 0

LAING'S ENGLISH LITERATURE Rs. 18-0. Reduced to ... 0 12 0

RAWLINSON'S MANUAL OF ANCIENT HISTORY. 2nd edition. Rs. 10-8-0. Reduced to ... 5 0 0

SRINIVASA VARADACHARI & CO., 4, Mount Road, Madras.

தமிழ்ப் பிரசுரங்கள்.



1. நந்தன் சரித்திரம்.—ஆசிரியர் T. G. சுவாமிநாத அய்யங்கார் அவர்கள், M.A.,
விலை அனா 10.
Approved as a Library Book.
2. போஜ சரித்திரம்.—ஆசிரியர் K. S. ராமஸ்வாமி சாஸ்திரி அவர்கள், B.A., B.L.,
ஸப்ஜட்ஜ், நாகபட்டணம், விலை அனா 10.
Approved as a Text-book suitable for School use, vide Fort St. George Gazette, Part I-B,
dated 19-5-1925.
3. ராஜ ராஜ சோழன் I.—ஆசிரியர் P. V. ஜகதீச ஸ்வர் அவர்கள், B. ரங்கசாரிபா
ரவர்களுடைய முன்னுரையுடன் கூடியது. விலை அனா 8.
Approved as a Text-Book suitable for School use.
4. இட்டார்க்கு இட்ட பலன்.—ஆசிரியர் மிஸ் J. பொன்னுசாமி ராவ். விலை அனா 10.
Approved as a suitable Text-Book, vide Fort St. George Gazette, dated 24-7-25.
5. திலகவதி.—சுகாதாரி V. பாலம்மாள் (சிந்தாமணி பத்திராதிபர்) எழுதியது.
ராவ் ஸாஹெப் S. கிருஷ்ணஸ்வாமி அய்யங்கார் எழுதிய முன்னுரையுடன் கூடியது.
விலை ரூ. 1—4—0.
Approved as a Library Book.
6. தமிழ் வசன லக்ஷணம்.—G. தாமோதர முதலியார், B.A., எழுதியது. விலை
அனா 12.
Approved as a Text-Book for Schools and Colleges, vide Fort St. George Gazette,
21st October 1913.
இரகுவம்சம் முதல் பாகம்.—(1—6 சருக்கங்கள்) பண்டித நடுச சாஸ்திரியார்
வர்கள் எழுதியது. விலை அனா 12.
இரகுவம்சம் இரண்டாம் பாகம்.—(7—12 சருக்கங்கள்) பண்டித நடுச சாஸ்திரி
யார்வர்கள் எழுதியது. விலை அனா 12.
Parts I and II are approved as suitable class-books, vide Fort St. George Gazette, Part I-B,
page 478, dated 3-6-24.
சுகாதாரபோதினி.—(முன்னுரை பார்த்திக்கு) K. வாதாராஜ ராவ் இயற்றியது.
விலை அனா 8.
Approved as a Text-book suitable for School use, vide Fort St. George Gazette, Part I-B
dated 19-5-1925.
7. மனு சரித்திரம்.—சென்னை க்ரீஸ்மியன் காலேஜ் தமிழ் பேராசிரியராயிருந்த
ஜி. இரங்காசாரியார், M.A., L.T., அவர்கள் இயற்றியது. விலை அனா 10.
காவிரிநாஸன்.—ஆசிரியர் K. S. ராமஸ்வாமி சாஸ்திரி அவர்கள், B.A., B.L., ஸப்
ஜட்ஜ், தஞ்சாவூர். விலை அனா 12.

Third, Revised and Corrected Edition
IMPORTANT TO INTERMEDIATE STUDENTS.
INTERMEDIATE GEOMETRY
(THEORY AND PRACTICE)

Containing a detailed and exhaustive treatment of the matter for the Intermediate Examination with special reference to the Syllabuses of the Madras and Mysore Universities.

Crown 8vo. 360 pp. with over 130 diagrams

BY M. SATYANARAYANA, M.A., L.T.

Chief Lecturer in Mathematics, Maharajah's College, Vizianagaram
AND

K. S. PATRACHARIAR, M.A., L.T.

Chief Lecturer in Mathematics, Government College, Kumbakonam.

Price : Rs. 2-8-0.

CARLYLE:
"THE ANCIENT MONK"
(Past and Present—Book II)
with
NOTES, INTRODUCTION AND APPENDICES, Etc.

BY

P. R. KRISHNASWAMI, M.A.

Govt. College, Kumbakonam.

Price: Rs. 1.

**THE HISTORY OF EDUCATION IN THE
MADRAS PRESIDENCY**

By Dr. S. SATHIANADHAN, M.A., LL.M.

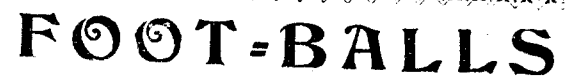
Board, Rs. 3.

(Published with the sanction of the Director of Public Instruction, Madras.)

"The Director welcomes the appearance of this much-needed volume, the publication of which was sanctioned in Proceedings No. 609, dated 26th January 1894. Mr. Sathianadhan has spared no pains to get at facts, and having got them, he has presented them in an orderly arrangement and in clear, well-chosen language. The book deserves to be in the hands of every one engaged in educational work in this Presidency."—*Proceedings of the Director of Public Instruction, No. 1187, dated 6th December 1894.*

"This is a most useful and valuable book and well deserves the high praise the Director of Public Instruction has given it. The information is very complete, well-arranged and well-written."—*The Madras Mail.*

SRINIVASA VARADACHARI & CO., 4, MOUNT ROAD, MADRAS.



BLADDERS

INFLATORS

TENNIS REQUISITES

1927 TENNIS BALLS

SELECTED USED TENNIS BALLS,
Please Send Your Inquiries & Orders to

TEL. ADD.:—"Balls, Poona".

