

would be more profitably spent otherwise if broad-gauge, open-minded engineers rather than specialists are the object of the trade.

**Building Construction and Drawing.** (Elementary Course.)

By Charles F. Mitchell, Lecturer on Building Construction to Regent Polytechnic, London, Eng.; Head Master of the Polytechnical School, assisted by Geo. A. Mitchell, A.R.I.B.A. Cloth; 472 pages; 7 x 4½ inches; about 1,100 illustrations; eighth edition; by D. VanNostrand & Company. Price, \$1.50 net.

The book aims to give with conciseness and accuracy a statement of the principles which should govern the execution and building work. The authors wish it to be equally valuable as a guide for students engaged in building. The contents comprise of fourteen chapters including Instruction to Beginners, Brickwork, Masonry, Girders, Joints in Carpentry; Floors, Partitions, Wood Roofs, Composite Roofs, Iron and Steel Roofs; Joinery Plumbing, Slating and Tiling, Building Quantities, and Memoranda. A few exercises are included in each chapter, and the appendix contains an index and treats with the Examination Papers and Syllabus of the English Board of Education. It contains the subject matter of previous editions carefully revised and subjects not hitherto treated or emphasized are: Isometric Projection, Monolithic Brickwork, Bonding of Brick Footings, Hollow or Storm Walls, Facing Bond, Fixing Bricks, Example of Face Jointing in Masonry, Polishing of Marbles, Calculations of strengths of Timber Pillars, Expansion Joints for Girders and Trusses, Quotations from the L.C.C. General Powers Act, 1909, Prevention of Dry Rot, Relative Position of Members in a Typical Roof, Ferro-Concrete for Roof Construction, Description of Door Hinges, and the New Rules (1910) for the Admeasurement of Slating and Tiling.

The present issue is the eighty-seventh thousandth which speaks for itself as to its usefulness and appreciation by those interested in building construction.

**Building Construction.**—A text book on the principles and details of modern construction for the use of students and practical men (advanced and honor courses). By Charles F. Mitchell, Lecturer of Building Construction to Regent Polytechnic, London, Eng., Head Master of the Polytechnical School, assisted by Geo. A. Mitchell, A.R.I.B.A. Seventh edition revised and much enlarged; 885 pages; 800 illustrations; cloth. Price, \$2.50 net.

The authors state that since the publication of the sixth edition considerable advances have been made in knowledge of building materials and methods of construction, thereby rendering it necessary to again revise and amplify and bring their book into line with current practice. Calculations have been rechecked; fresh examples added, and the text revised, and neither labor stinted nor counsel disregarded to make the new edition deserving of the approbation bestowed upon the former issues.

It contains 28 chapters. The chapter subjects are: Limes and Cements; Concrete; Asphalt; Plastering; Stones; Bricks; Tiles; Terracotta and Stoneware; Iron and Steel; Timber; Paints and Varnishes; Glass; Foundations; Brickwork; Flues; Fire-places and Tall Chimneys; Masonry; Carpentry; Half-timbered Work; Pillars; Columns and Stanchions; Graphic Statics; Girders; Fire-resisting Construction; Reinforced or Ferro-Concrete; Joinery; Stairs and Hand Rails; Sanitation Water Supply; Hot Water Apparatus and Ventilation; Electric Bells and Lighting.

The effects of the London County Council regulations in connection with skeleton framed buildings, and of those proposed to be adopted by the council with regard to buildings of reinforced concrete, have entailed the complete re-writing of the chapters dealing with these subjects, and as these regulations may serve as models of their kind it has been thought desirable to give their text in full.

Due note has also been taken of the revised report of the Royal Institute of British Architects on Reinforced Concrete, as well as of the recommendations of the District Surveyors' Association and of the recent work of the Engineering Standards Committee.

Throughout the book, the endeavor has been to describe the essential principles of good construction and to illustrate them by typical examples selected as far as possible from actual practice.

No further comment is needed on the merits of this book than the fact that with the present issue it will have reached a circulation of 52,000.

**A Handbook of English for Engineers.** By Wilbur Owen Sypherd, Professor of English in Delaware College. Flexible leather cover; 314 pages; 4 x 7 inches; Scott, Foresman & Company, Chicago and New York. Price, \$1.50 net.

The author's aim and hope that the contents of this book should be "of practical assistance to engineers in college classes and the early years of professional life" should most certainly be fulfilled. He has apparently, in preparing the book, carefully read the available literature on the subject and been painstaking in partly compiling and selecting from same. The book should be very useful in higher engineering classes and will doubtless find a place on the shelves of many engineers.

The book contains five chapters, dealing respectively with General Problems of Engineering Writing, Mechanical Details Common to the Various Forms of Technical Writing, Business Letters, Reports, and Articles for Technical Journals.

The first chapter touches on the problems of technical writing. In the second chapter directions for the use of abbreviations, punctuation marks, capital letters, etc. To engineers desirous of strengthening their English these two chapters are likely to be most serviceable.

The third chapter, on business letters, briefly states the main principles governing successful business correspondence and supplies examples of good and bad usage. There is, however, no mention of methods of drawing special emphasis to points under consideration.

The fourth chapter contains a systematic treatment re rhetoric of engineering reports. The author discusses the general essentials of reports; then gives more fully the requirements of reports on tests, reports on inspection work, and periodical reports, with examples of each kind.

The fifth chapter deals with articles for technical journals. He divides his subject into short articles and longer articles, including under the former editorials, summaries and abstracts, book review and explanations of new inventions.

It is a book dealing with a subject important to every engineer, and which in the first efforts to become technically proficient is often sadly neglected by them. Many an engineer, capably equipped technically, is sadly handicapped for advancement in his profession by neglect of just such niceties of rhetoric as this book brings out. It would be well for those who have not given much thought to this subject to possess themselves of the book.