

Specifications for Street Roadway Pavements. By S. Whinery. Published by the McGraw-Hill Book Company, New York. Size, 6 ins. x 9 ins.; cloth, 116 pp. Price, \$1 net.

This is the second edition of this work, the original edition having been issued in 1907. The work will be found of exceedingly great interest to those who have to do with the construction and maintenance of pavements as, in addition to a large amount of information on specifications specifically, which is included in Part I. of the book, Part II., comprising 26 pages, is devoted to instructions to inspectors on street paving work and will be found of great use. Practically all types of pavements are dealt with and the specifications submitted covering these pavements will be found very valuable to city engineers and municipal authorities in general. The book contains very copious foot-notes and altogether the work is one which will be welcomed by all those interested in the question of road construction and maintenance.

Natural Rock Asphalts and Bitumens. By Arthur Danby. Publishers, Constable & Company, Limited, London, Eng. 244 pp.; 4¾ ins. x 7¾ ins.; cloth bound; illustrated. Price, \$2.50 net.

The author opens with the statement that beyond the occasional articles in the technical journals and the pamphlets issued by the manufacturer, producer or seller of asphaltic materials there is no English work that is at all modern covering this subject. The book deals with the geology, history, properties and industrial applications of natural rock asphalts and bitumens, and contains a great deal of information that will appeal to any and all who have to do with the production, sale or use of these materials for any purposes whatsoever. The book goes into the geology of rock asphalts and bitumens; the sources of rock asphalt and bitumens; history and ancient uses of each of these materials; where to test and analysis, physical properties of rock asphalt. The use of rock asphalt for mastic work is given a special chapter. Altogether the work is one that is thorough, full of interest on a subject which is to many comparatively little known, and will prove exceedingly useful in making clear to many who are using these materials just what they are. The author has omitted unnecessary technicalities. Tests have been kept as simple as possible and the book should find a large sale because the subject is most ably handled. The author has clothed an otherwise dry subject with an interest that holds the reader's attention in a peculiar manner.

Transmission Line Formulae. By H. B. Dwight. Published by the D. VanNostrand Company, 25 Park Place, New York. Cloth; 137 pages; 28 figures; 17 tables. Price, \$2.00.

The object of this treatise is to compile a set of instructions for engineers which will enable them to make electrical calculations for transmission lines with the least possible amount of work.

The book may be divided into two parts. The first five chapters are designed for those who have an ordinary acquaintance with alternating current calculations. The second section is for reference and contains the mathematical derivation of the formulae used in transmission line work. A transmission line regulation chart is presented for use in determining transformer regulation and efficiency.

The volume is clearly written and the formulae should prove invaluable to electrical engineers interested in transmission work.

Railroad Construction. By Charles Lee Crandall, M.C.E., and Fred Asa Barnes, M.C.E. Publishers, McGraw-Hill Book Company, New York. 321 pp.; 6 ins. x 9 ins.; cloth bound; illustrated. Price, \$3.00 net.

This work, so the authors tell us in their preface, had its beginning in some notes on railroad construction which were first prepared about twenty-five years ago and issued in mimeograph form for the use of students at Cornell University.

The first chapter of the book takes up railroad construction generally and covers estimates; right-of-way; outlines of construction; clearing; shrinkage; overhaul; etc. Chapter two is devoted to earth work and contains a number of illustrations of well-known earth removing equipment, such as steam shovels, scrapers, graders, plows, dump cars, etc. Chapter three deals with the subject of rock excavating, principles of blasting, explosives, etc. Chapter four takes up the subject of tunnelling in which the various methods used in different countries are described and illustrated. Other chapters of the book cover the subjects of masonry, culvert work, foundation, track material, trestles and bridges, estimates and records. At the end of each chapter is given a table of references which will doubtless be found exceedingly useful to railroad construction engineers. There is a very full and complete cross index which forms a valuable feature of the book, as too many books are spoiled by the absence of a comprehensive and serviceable index.

Asphalt Construction for Pavements and Highways. A pocket book for engineers, contractors and inspectors. By Clifford Richardson, M.A.S.C.E., F.C.S., consulting engineer. Published by McGraw-Hill Book Company, 239 West 39th Street, New York. Size, 7 ins. x 4½ ins.; flexible binding; pp. v + 155. Price, \$2.00 net.

This book, as the author states, is written with a view of supplying necessary and helpful information in regard to asphaltic concrete and asphalt broken stone pavements. It has created a demand for highway engineers, contractors, and inspectors who are schooled in this work far in excess of the supply, and the result has been that many of them do not realize the importance of careful attention to details which is necessary to insure complete success in this line of work. The author states that the pocket book has been prepared with the hope of insuring better work in the future than has been done in some cases in the past. Its form has been selected so it can be readily carried in the coat pocket for reference on all occasions.

The book is made up of seventeen chapters and an index which should be a great help in rapidly locating desired points of information. Chapters I. II. and III. are very brief, making in all a total of eight pages, and are titled: Introductory, Broken Stone, Foundation. Chapter IV. deals with "The Intermediate Course." Chapters V., VI. and VII. are on Mineral Aggregate-Filler and Dust-Native Bitumens. Chapters VIII. and IX. are on Fluxes and Cement. Chapter X. is the longest in the book, containing about fifty pages, and is on Surface Mixtures. Chapters XI., XII. and XIII. deal with Maintenance and Repair, The Plant, Work Upon the Street. Chapter XIV. is advice to engineers, contractors and inspectors, and is made up of suggestions to the above three and to citizens. Chapter XV. is upon Preparatory Work; Chapter XVI., Methods for Examination of Bituminous Materials and Mineral Aggregates; Chapter XVII. contains instructions for taking samples and specimens for examination; Chapter XVIII., reference Tables.

The book should prove very handy to contractors and inspectors and to engineers not fully posted upon asphalt pave-