NEW BOOKS, ETC.

A HAND BOOK OF GENERAL INSTRUCTIONS FOR MECHANICS. Containing Useful Rules and Memorandum for Practical Men. New York: D. Van Nostrand Company, 1909. 12mo.; 328 pp. Price,

The primary object of the author in writing this book is to give the mechanic, who has not had educational advantages, a text-book explaining established rules for calculating in a clear, simple, and concise way, making him familiar with the various technical terms and their meaning, and to be in general such a course of instruction as to impart in a simple manner the required knowledge to enable him to read understandingly more advanced works. The plan of the book is excellent, and the illustrations and examples are particularly clear. There is hardly anyone who has much occasion to use figures who would not be benefited by a perusal of parts of this book.

PRECIOUS METALS. Comprising Gold, Silver, and Platinum. By T. Kirke Rose, A.R.S.M., D.Sc. New York: D. Van Nostrand Company, 1909. 12mo.; 295 pp. Price, \$2.

This is one of the volumes of the "West-minster Series," which has proved such an excellent collection of technical literature. The present volume deals with the methods of treating gold by the wet and dry process. The extraction of silver, the refining and assaying of gold and silver ores, the assay of gold and silver bullion, minting, the manufacture of gold and silver wires, and a valuable chapter on platinum, together with tables on the production of precious metals. There has been room for a good book on gold and silver for some little time. This book seems to fill the niche admirably.

MOTORMAN'S PRACTICAL AIR BRAKE IN-STRUCTOR. By George R. Denehie. Chicago: Frederick J. Drake & Co., 1909. 18mo.; 280 pp., leather back.

This is a concise up-to-date treatise on the construction and operation of the different airbrake equipments used in modern electric transportation. The author has been at considerable pains, therefore, to collect, condense, and compile all the latest available information bearing upon this most important subject of handling an electric car or a train of cars safely and at the same time economically. The diagrams and illustrations are particularly clear. Some of them are reproduced in colors. The get-up of the book, however, is not equal to another book on the same subject which we reviewed a short time since.

LIFE OF SIR CHARLES TILSTON BRIGHT. Civil Engineer. By Charles Bright, AND EACH BEARING THAT DATE F.R.S.E. London: Archibald Constable & Co., Ltd. New York: D. [See note at end of list about copies of these patents.] Van Nostrand Company, 1908. 8vo.; 478 pp. Price, \$4.50.

478 pp. Price, \$4.50.

In this book is incorporated the story of the Atlantic cable and the first telegraph to India Acid from nickel-chlorid solution, recovering and the colonies. In response to a number of suggestions in view of the fiftieth anniversary of the Atlantic cable, Mr. Bright has brought out an abridged edition of the biography of his father, the original work having been written by Sir Charles Bright's brother and by his son. There is probably no branch of engineering which lends itself so readily to a full sight of the world as that of telegraphy. Therefore, the present volume will appeal to the general reader only in a lesser degree than to the engineer, the student, and the historian. Sir Charles Bright was as much a traveler as a scientist, and even when engaged on the most trying cable venture in unhealthy climates, he invariably kept a neatly written record of the day's performance -of what he had seen and learnt-never retiring to bed without attending to his task. The detail to be drawn upon is very large, and the author has certainly made an excellent selection. The story of the Atlantic cable is one of the most romantic in the history of science, and it is gratifying that the biography of the pioneer should be written by

THE LEAD AND ZINC PIGMENTS. By Clifford Dyer Holley, M.S., Ph.D. New York: John Wiley & Sons, 1909. 12ma; 340 pp.; 85 figures. Price, \$3

New pigments have come into use during the last ten years, new processes have been developed for the manufacture of the older pigments, new combinations of pigments have been worked out that have secured results hitherto unattainable. Yet up to the time mentioned above, except for short articles in some of the trade papers, these improvements and innovations remained practically unnoticed. Since public attention has been directed to the paint industry by the enactment of the various State laws regarding the sale of paint materials, several excellent American works have been written on this subject, but the majority of them have been directed more particularly toward the compiling of analytical methods and data than to the manufacture and uses of the various pigments. In this work the author has attempted to record the progress made in the United States in the manufacture of the more important pigments. and hence but little space has been given to European methods and processes except for comparison, as they have been discussed in

MANUAL OF STEAM ENGINEERING. By W H. Wakeman. New York and Chicago: New York Belting and Packing Company.

Mr. Wakeman's name is familiar to readers of the Scientific American Supplement, as well as to readers of technical journals in general, as the author of many articles on engineering subjects. In this little book he has presented instructions, suggestions, and illustrations for steam engineers concerning the application to modern daily practice of the approved theory of steam engineering. Although the work is issued no doubt as an advertising pamphlet, it is essentially an engineering reference book containing data that are required in everyday practice, arranged in convenient form and with sufficient explanation to render the matter both interesting and instructive.

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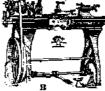
A Free Opinion as to the probable patentability of an invention will be readily given to any inventor furnishing us with a model or sketch and a brief description of the device in question. All communications are strictly confidential. Our Hand-Book on Patents will be sent free on

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Acid from nickel-chlorid solution, recovering	
Acid from nickel-chlorid solution, recovering hydrochloric, H. L. Wells	940,293
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Advertisement displaying apparatus, J. T.	,
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Advertising card, W. O. Holt	940,316
Hoffy Advertising card, W. O. HoltAir brake, J. W. Hicks Air ships and the like, optical instrument for	940,281 940,316 940,314
Air ships and the like, optical instrument for	
determining the direction of travel of, O.	
0. Krell	940,329
O. Krell Alfalfa drier and mill, W. E. Rickey Ambulance, J. P. L. Wilson Annealing and hardening furnace, W. S.	940,329 940,193
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Automobile engine, A. S. Krotz Automobile wheel drive, T. G. Rowe Automobile wind deflector, J. M. Patrick Awning fixture, F. O. Berg Baking powder tester, F. Kiely Bar bender, J. T. Richards Battery system, combined primary and sec-	940,031
Automobile wheel drive, T. G. Rowe	940,068 940.270
Automobile wind deflector, J. M. Patrick	940.270
Awning fixture, F. O. Berg	940,120
Baking powder tester, F. Kiely	940,258
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ondary, J. H. Gugler	940,008 940,358 940,106
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Bearing wheel, roller, A. Wulff	940,106
Bearings of textile machinery, means for	
Battery system. combined primary and secondary. J. H. Gugler Bearing, roller side, J. F. O'Connor Bearing wheel, roller, A. Wulff Bearings of textile machinery, means for protecting roll, J. L. Patterson. Bed, folding, J. Lyons Bed, sofa, L. G. Ibrig.	940,551 940,038 940,32
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Belt fastener, C. S. Eaton Binder or loose sheet holder, temporary, H. F. Bushong	
F. Bushong	940,508
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F. Bushong Binder, temporary, G. H. Moore Binder or loose sheet holder, temporary, H. F. Bushong	- ·
F. Bushong	940,50
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Blow-off pipes, protector for, A. R. Cham-	939,97
Blow-off pipes, protector for, A. R. Cham-	940,349 940,339 940,397 939,975 940,427 940,587
Block signaling, system. F. F. Brush Blow-off pipes, protector for, A. R. Chambers	939,973 940,42' 940,58'
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Block signaling, system. F. F. Brush Blow-off pipes, protector for, A. R. Chambers Board, apparatus for manufacture of composition, J. Feria. Boards, manufacturing composition, J. Feria. Boards, manufacturing composition, J. Feria. Boat lowering device, life, C. J. Christensen. Boiler low water signal, J. L. Setzer. Boller water circulator, C. C. Eckliff. Bone black kiln, B. Eba. Bookbinding, cloth, M. Taprogge Boot and shoe separable fastener, J. Jeperson Bottle, C. Papp Bottle, E. T. Greenfield Bottle, E. T. Greenfield Bottlet filling machine. Falls & Williams. Bottle tock, W. H. Bryan Bottle washer, milk, W. W. Haggard Bottler's apparatus. G. J. Meyer Bottling machine, J. H. Camp Bowling alley surfacing machine, G. B. Gonia Bowling pin, B. Merklen Brake, E. Herold Brake beam, H. Ziemss, Jr. Brick machine, J. J. Mead Brick machine, C. M. Starr Brush holder. E. R. Kuight Buckle, A. Bienenzucht Buffling machine, J. J. Heys Buggy top support, yielding, C. P. Johnson.	939,97 940,42' 940,45' 940,45' 940,51' 940,25' 940,28' 940,40' 940,34' 940,17' 940,34' 940,34' 940,41' 940,34' 940,41' 940,41' 940,41' 940,41' 940,41' 940,41' 940,41' 940,41' 940,34' 940,41' 940,41'
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Block signaling, system. F. F. Brush Blow-off pipes, protector for, A. R. Chambers Blow-off pipes, protector for, A. R. Chambers Board, apparatus for manufacture of composition, J. Feria. Boards, manufacturing composition, J. Feria. Boat lowering device, life, C. J. Christensen. Boiler low water signal, J. L. Setzer. Boller water circulator, C. C. Eckliff. Bone black kiln, B. Eba. Bookbinding, cloth, M. Taprogge Boot and shoe separable fastener, J. Jeperson Bottle, C. Papp Bottle, E. T. Greenfield Bottle, E. T. Greenfield Bottle filling machine. Falls & Williams. Bottle lock, W. H. Bryan Bottle washer, milk, W. W. Haggard Bottler's apparatus. G. J. Meyer Bottling machine, J. H. Camp Bowling alley surfacing machine, G. B. Gonia Bowling pin, B. Merklen Brake, E. Herold Brake beam, H. Ziemss, Jr. Brick machine, O. M. Starr Brush holder. E. R. Kuight Buckle, A. Bienenzucht Buffing machine, J. J. Heys Bugyt op support. yielding, C. P. Johnson. Building block, interlocking, B. Benas. Burglar alarm, M. Korhel	939,97 940,42 940,45 940,45 940,45 940,51 939,99 940,52 940,28 940,46 940,04 940,11 940,13 940,12 940,01 940,46 940,46 940,40 940,46 940,40 940,46 940,40 940,46 940,40 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49 940,49
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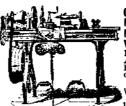
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