Boiler Tubes.—Lap-welded steel, 1¼-in., 10c.; 1½-in., 9c. per foot; 2-in., $9.10; 2¼-in., $10.85; 2½-in., $12; 3-in., $13.50; 3½-in., $16.75; 4-in., $21 per 100 feet, in fair supply at unchanged prices.

Bricks.—Common structural $10 per thousand. In steady demand. Red and buff pressed, at Don Valley works, $18 per 1,000, and moving freely.

Cement.—Star brand, $1.95 per barrel, f.o.b., Kingston, National, $1.95 per barrel, Toronto, in car lots; retail price, $2.15; English, Anchor, $3 per barrel in wood.

Fire Bricks.—In steady request; English, $32 to $35; Scotch, $30 to $35; American, $25 to $40 per 1,000.

Ingot Copper.—Quiet and with a downward tendency, Toronto price; Lake, 23c.; casting, 20 and 21c.

Lead.—Demand less strong; goods scarce for immediate delivery; $5.35 for pig.

Nails.—Wire, $2.55 base; cut, $2.75; spikes, $2.75. A fair supply on hand; prices steady.

Pig Iron.—Summerlee No. 1, to arrive, steadily in demand but hard to obtain, still quotes, nominally, $27; No. 2, $26; Cleveland, No. 1, $23.50, $24; Clarence, No. 3, not obtainable, but worth $24.

Steel Rails.—80-lb., $35 to $38 per ton. Steel beams, channels and angles, 2¾ to 3c. per pound.

Sheet Steel.—Firm, 10 gauge, $2.70; 12 gauge, $2.80; in moderate supply.

Tank Plate.—3-16 in., $2.65; Tees, $2.90 to $3 per 100 pounds; angles, 1¼ by 3-16 and larger, $2.75 to $3.

Tin.—Visible supply reduced, goods scarce and strongly held; 41 to 42c. for pig, and firm.

Tool Steel.—Jowitt's special pink label, 10½c. per pound; Capital, 12c.; Conqueror, highspeed, 70c. base.

Wrought Steam and Water Pipe.—Trade prices per 100 feet are: Black, ¼ and ⅜-in., $2.37; ½-in., $2.89; ¾-in., $3.90; 1-in., $5.60; 1¼-in., $7.65; 1½-in., $9.18; 2-in., $12.24; 2½-in., $20.10; 3-in., $26.40. Galvanized, ¼ and ⅜-in., $3.19; ½-in., $3.74; ¾-in., $5.06; 1-in., $7.26; 1¼-in., $9.90; 1½-in., $11.88; 2-in., $15.84; 3½-in., black, $34.20; 4-in., $38.85. Supplies are inadequate and the demand good. All quotations are firmly held.

Zinc.—Sheet zinc, a moderate business doing at steady prices. Toronto, slab, $6.25; sheet, $8.

BOOK REVIEWS.

Coal Mining.—Part I.—By Daniel Burns, member of the Institute of Mining Engineers, and lecturer in mining at the Glasgow Technical College, and George L. Kerr, member of the Institute of Mining Engineers. London: Whittaker and Company. Price, 2s. net; pp. 102.

This book is specially written for mining students and others who are deterred from purchasing the best existing works on account of their cost. Recognizing that it is impossible to issue a comprehensive treatise on this broad subject at a low price, it is believed that an issue in parts may to some extent overcome the difficulty, and enable many persons to gradually become possessors of a work that covers the ground thoroughly. With this end in view, the publication of this work in sections has been arranged for. Owing to there being practically no limit to the range of subjects connected with mining, the authors have had to assume an acquaintance on the part of the reader with many subsidiary subjects. This part will be found suitable, not only for students of mining, but also useful to the colliery manager and mining engineer, as work of reference. The work should prove of exceptional educational value, and should be a valuable aid to engineers interested in coal mining. The complete work will cover all the more important operations connected with coal mining in England, as well as the recent advances that have been made in its different branches.

Balancing of Engines.—By Archibald Sharp. London: Longmans, Green & Company, 39 Paternoster Row. Price 6s. net, pp. 207.

The subject of engine balancing is receiving more attention from engineers than, perhaps, ever before, due, no doubt, to the rapid development of gas engines, and the successful installation of steam turbines for land and marine use. Good balance of the inertia forces of the engine forms the subject matter of this work. With the exception of a few analytical investigations, the method of treatment is graphical. The engineering student will recognize many geometrical methods with which he is familiar, as applied to Statics of Structures. Much of this subject matter is published for the first time. A series of exercises, with answers in some cases, is appended at the end of most of the chapters, some of these being taken from papers set at the qualifying examinations of the Institute of Civil Engineers. A synopsis at the end of the volume presents, in a form convenient for easy reference, the inertia properties of most of the types of engines in actual use. This work will prove a valuable aid to either steam or gas engineers, and will be found useful to students, draftsmen, designers, and buyers of engines.

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Glues and Gelatines.—By R. Livingston Fernbach. London: Archibald Constable and Co., Limited. Size 5½ x 8, pp. 298. Price 10s. 6d.

A practical treatise on testing and examination of glues and gelatines is given in this work, and although it is published in England, it deals with American practice since the author is an American. In order that the commercial value of glue may be determined, it is necessary to test it, since testing is the only means by which the manufacturer is able to grade and put the prices on his product. The testing of glue is a subject that has been given very little consideration by writers, only brief references being made to methods which are obsolete. A study of this book will not enable the manufacturer to make a better product, as the author says: "To afford the uninitiated consumer a rational means of protection is the chief aim of this work."

The book also offers to chemists test methods which will enable them to determine the value of glue for specific purposes rather than merely defining its abstract chemical characteristics. The author does not go deeply into a discussion of the probable constitution of glutin or gelatine and allied substances, nor does he describe the chemical changes undergone by the glue yielding materials, and the course of manufacture. These principles are mere opinions and have yet to be substantiated in actual practice. They have no bearing whatever upon the fitness or unfitness of the glue for a given purpose, nor do they aid either chemist or consumer in deciding which of the glues is the better.

Of course manufacturing processes leave certain clues in the finished product that make it possible to determine to a certain extent the commercial value of the glue, but very few consumers know anything of the process, and consequently have to take the word of the salesmen as to the quality of the material they are purchasing. Over 50,000,000 pounds of glue, both foreign and domestic, are used in the United States yearly, and while the quantity used is considered, very few know anything of the properties of this valuable material. Mr. Fernbach is of the opinion that the day is not far distant when glue and gelatine will be purchased on specification. Readers of this book will be well prepared when such a time comes.

The first chapter, as usual, is introductory, and deals with the nature and properties of glue, sources of glue, principles of manufacture, etc. The following chapters set forth the analysis of glue and gelatines; substitutes for glue and gelatine; foreign glues; selection of glues; how to use glue; trade conditions affecting the price of glue; position of the jobber in the trade, etc.; recipes for the mixing of special glues and cements; analytical methods, and an appendix of valuable data for users of glue.