

## REVISED SPECIFICATIONS FOR STEEL RAILS.

(Continued from Page 274.)

impair their strength shall be rejected. The ends of all No. 2 rails shall be painted white in order to distinguish them. Rails rejected under the drop test will not be accepted as No. 2 rails.

12. The manufacturer shall furnish the inspector daily, with carbon determinations of each blow, and a complete chemical analysis every 24 hours, representing the average of the other elements contained in the steel for each day and night turn. Analyses shall be made on drillings taken from small test ingots, the drillings being taken at a distance of not less than  $\frac{1}{4}$ -in. beneath the surface of said test ingots. On request of the inspector the manufacturer shall furnish drillings for check analysis.

The inspector representing the purchaser shall have free entry to the works of the manufacturer at all times while his contract is being executed, and shall have all reasonable facilities afforded him by the manufacturer to satisfy him that the rails are being made in accordance with the terms of the contract. All tests and inspection shall be made at the place of manufacture prior to shipment, and shall be so conducted as not to unnecessarily interfere with the operation of the mill.

## Open-hearth Steel Rails.

The specifications covering open-hearth steel rails are identical with the preceding with the following exceptions:

2. Rails of the various weights per yard specified below shall conform to the following limits in chemical composition:

	50 to 60 lbs. Per cent.
Carbon .....	0.46-0.59
Phosphorus, not over .....	0.04
Silicon, not over .....	0.20
Manganese .....	0.60-0.90

For each decrease of 0.003 per cent. in phosphorus down to 0.03 per cent. phosphorus, an increase of 0.01 per cent. carbon will be accepted.

In paragraph 10, it is provided in addition to the specifications mentioned in the Bessemer section, that "the number of the heat and the letters O. H. (to designate the grade of steel), shall be so stamped," etc.

Paragraph 12 opens with this sentence, "The manufacturer shall furnish the inspector a chemical analysis of each heat of steel covering the elements specified. Analyses shall be made," etc.

## MARKET CONDITIONS.

Montreal, August 31st, 1910.

While there is more activity in the Pittsburgh iron trade than was the case a week or ten days ago, an increased volume of business nearly always comes out in the fall. The railroads are no longer heavy buyers of steel, and this fact not only reacts upon the business of the steel companies, but will soon affect the reported earnings of the roads themselves. A year ago the lines were doing a big business in hauling their own freight, at good rates, and charging the cost of the transportation to the cost of the improvements under way.

An inquiry for 10,000 tons of basic pig-iron was made for last quarter delivery. It is said that the Pittsburgh pig-iron market will be called upon to deliver large tonnage within the next six weeks, so that the material required in the contracts can be made at the local mills. At present the price asked for pig-iron varies from \$13.75 to \$14.50, but it is said the former figure can be done on acceptable business.

The bi-monthly examination of the sales sheets of the Republic Iron & Steel Company will be held in Pittsburgh, September 10th, for the purpose of determining the rate to be paid puddlers and bar mill workers under the new scale during the months of September and October. Because of

Total Issue, Eleven Thousand, Second Edition  
Thoroughly Revised and Enlarged Now Ready

TAYLOR and THOMPSON'S

## Treatise on Concrete

Plain and Reinforced

8vo, Cloth, .00.

Second Edition, Revised and Enlarged.

Total Issue, Eight Thousand

TURNEAURE and MAURER

## Principles of Reinforced Concrete Construction

8vo, x + 429 pages. Cloth, \$3.50.

MERRIMAN—Treatise on Hydraulics. 8vo,  
Cloth, \$5.00.

SCHUYLER — Reservoirs: For Irrigation,  
Water Power, and Domestic Water Supply.  
Large 8vo, xxvi + 573 pages, 381 figures, 6  
plates. Cloth, \$6.00.

FOLWELL—Sewerage. The Designing, Con-  
struction, and Maintenance of Sewerage Sys-  
tems. 8vo, x + 506 pages, 46 figures, and 12  
plates. Cloth, \$3.00.

BREED-HOSMER. — The Principles and  
Practice of Surveying In two volumes.  
Vol. I. Elementary Surveying. Second  
Edition. 8 vo, xviii + 540 pages, 195 figures.  
Cloth, \$3.00.

Vol. II.—Higher Surveying. 8vo, xvii +  
432 pages, 162 figures Cloth, \$2.50.

TRACY—Exercises in Surveying for Field  
Work and Office Work. With Questions  
for Discussion. Intended for use in Con-  
nection with the Author's Book "Plane Survey-  
ing." 12mo, xvi + 169 pages. Morocco, \$1.00  
net.

TRACY—Plane Surveying. A Text-book and  
Pocket Manual. 16mo, xxvii + 792 pages,  
illustrated with line cuts. Morocco, \$3.00.

JOHNSON-SMITH—The Theory and Prac-  
tice of Surveying. Designed for the Use  
of Surveyors and Engineers Generally, but  
Especially for the Use of Students in Engi-  
neering. Small 8vo. Cloth. September, 1

RENOUF PUBLISHING CO.

25 McGill College Ave.

MONTREAL