BOOK REVIEWED.

The Electric Furnace, its Evolution, Theory and Practice. By Alfred Stansfield, D.Sc., Associate of the Royal School of Mines; Professor of Metallurgy in McGill University, Montreal, Quebec. Pages, 194, 689 in., with 53 illustra-tions; cloth, \$2. The Canadian Engineer, Toronto, Ont In his preface the author says: "On my first visit to Canada, m 1897, I constructed an electric furnace and showed it in operation at a lecture on Canada's metals, which was delivered by the late Sir William Roberts-Austen. The application of electrical heat to Metallurgy has always interested me greatly and I hope this little book will serve to instil a similar interest in others, and to help forward the application of electric smelting in a country which is so rich in water-powers and mineral resources. This book originated in a series of papers, written about a year ago for the Canadian Engineer, in which I endeavoured to present, as simply as possible, the principles on which the construction and use of the electric furnace depend, and to give an account of its history and present development. The original papers were written at a time when the experiments of Dr. Eugene Haanel, at Sault Ste. Marie, were attracting public attention, and a large section of the book has been devoted to the consideration of these and other advances in the electro-metallurgy of iron and steel."

The various chapters of the book are as follows: I., History of the Electric Furnace; II., Description and Classification of Electric Furnaces; III., Efficiency of Electric and other Furnaces, and Relative Cost of Electrical and Fuel Heat; IV., Electric Furnace Design, Construction and Operation; V., Production of Iron and Steel in the Electric Furnace; VI., Other Uses of the Electric Furnace; VII., Future Developments of the Electric Furnace.

The scope of the book can be gathered from the foregoing titles of the chapters composing it. The first chapter is historical; the three next following relate to the classification, etherency and design of electric furnaces; Chapters V. and VI. are devoted to the manufacture of iron and steel, and other products of the electric furnace; while Chapter VII. is an attempt to look into the future and to note the directions in which electrical heating may be expected to develop.

The rapid growth of the electric furnace, observes the author in his introduction, makes it increasingly difficult for the metallurgist to keep in touch with its recent developments. A few years ago it was a scientific enriosity; now it threatens to rival the Bessemer converter, the open-hearth steel furnace, and even the blast furnace itself. The halo of romance that has always surrounded electricity in all its forms has caused the wildest schemes to be originated, and has given them a hearing; while, on the other hand, a practicable electric smelting processes have been considered visionary.

In this book, it has been the author's purpose to trace the evolution of the electric furnace from its simplest beginnings, and to set forth, as briefly as is consistent with clearness, the more important facts relating to its theory and practice. No attempt has been made to give a description of all the electric furnaces that have been invented, but rather to set forth charly the fundamental principles of this form of furnace; to show its various forms; to indicate its limitations; and, if possible, to be of some assistance to those who wish to design electric furnaces, or to judge of the feasibility of schemes mvolving their use.

Apart from the prospective interest British Columbia has in the commercial development of the electric furnace as a material aid to the eventual utilization of the iron ore sources of the Province, particular interest attaches to the attention given in this book to the Snyder furnace for obtaining liquid zinc, since it is to the commercial success of the Snyder process that many mine owners in the Kootenay are how looking for the solution of existing difficulties in the way if the profitable mining of lead ores containing a higher predicts. It is encouraging to note that Dr. Stansfield says. "The Snyder furnace has in this volume been described at length, as being the first electrical zinc furnace in which any rational attempt has been made to obtain the zinc in a liquid state."

Beside being freely illustrated, the text contains a number of tables which add to its usefulness and value. A copious index greatly facilitates reference. The book is clearly printed on good paper, and it is neatly and serviceably bound. It should find many readers, for its subject is of much importance and, as the author observes in the last paragraph in his book, "the strides of physical science in recent years have been so enormous that there seems to be no limit to what may ultimately be possible."

OFFICIAL NOTICES.

(From The British Columbia Gazette.)

Constable Louis E. Herchmer to be deputy mining recorder for the Fort Steele mining division, at Marysville, East Kootenay, in place of Donald MacDonnell, resigned.

Francis II. French to be acting deputy mining recorder for the Simulkameen and Osoyoos mining divisions, at Hedley, Similkameen, during the absence of Carl Ilairsine.

George O'Brien, of Coal Creek, Crow's Nest Pass, to be a member of the Board of Examiners at the Coal Creek mine, in place of John McCliment, resigned.

George S. B. Perry, of Vancouver, manager of the Pacific Coast Pipe Company, Limited, has been appointed the new attorney of the Telkwa Mining, Milling and Development Company.

ORE SHIPMENTS THROUGH KASLO IN 1908.

The Kaslo Kootenaian has published the following table showing ore and concentrates shipped through Kaslo, totals for February and for the year to the end of that month, appearing separately.

SILVER-LEAD.

Mine.	In	February.	For Year
		Tons.	Tons.
Rambler, McGuigan		107	174
Silver Glance, Bear Lake	••		22
Whitewater, Whitewater Camp	•••	89	113
Whitewater Deep, Whitewater Camp.	••	671/2	1821/2
Revenue, South Fork	•••		20
Reco, Sandon	•••	20	83
Slocan Sovereign, Sandon	•••		221/
Ruth, Sandon	••	671/2	199
Sunset, Sandon	••	40	10114
Ferguson Mines, Ferguson		70	239
Wellington, Bear Lake		20	20
Bismark, South Fork	••	20	20
Total		501	119616
	•••		
21NC.			
Ruth, Sandon		210	830
Whitewater, Whitewater Camp		21	21
Whitewater, Whitewater Camp	•••	173	173
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Total 4	104	102
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The silver-lead ore and concentrates were all shipped to the Consolidated Mining and Smelting Company's smelter at Trail. Of the zinc, 173 tons of the Whitewater product was sent to Antwerp, Europe, and the remainder—851 tons in all—to the Kootenay Ore Company's sampling works at Kaslo.

On January 16 the total visible supply of copper in Europe was stated to be 20,780 tons (2,240 lb.); on February 3 it was estimated to be 20,660 tons, a decrease of 120 tons.