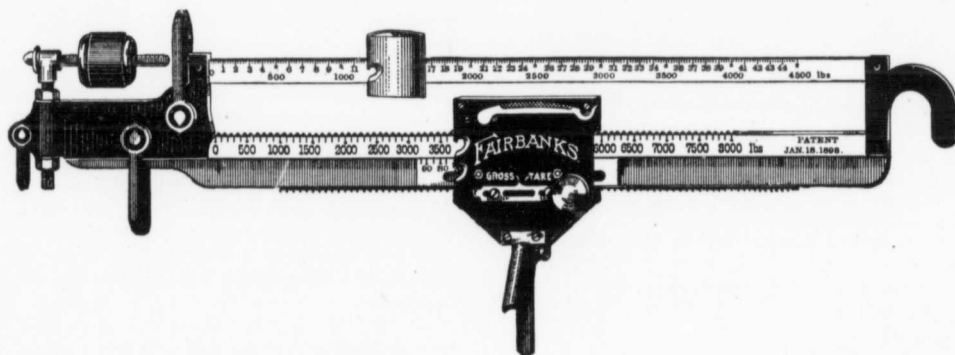


that company acquired the Rossland to Robson section of the Columbia & Western Railway, and continued with Mr. Tye until the completion of the railway through the Boundary to Midway. Next Mr. McAllister was with the Hamilton Steel Company, with works at Hamilton, Ontario. About 1900 he entered the employ of the Tennessee Copper Company, soon advancing to the position of assistant superintendent, which post he now relinquishes to come to the smelter which, it is claimed, holds the record for copper smelting, both as regards quantity treated per day and low cost of smelting.

Mr. McAllister has the reputation of being enterprising, progressive and fully competent to maintain the credit the B. C. Copper Company's works has gained for doing good work. He is a Scottish-Canadian, about 36 years of age, and comes well recommended.

TYPE REGISTERING BEAM.

THE above illustration is a cut of the most modern method of recording weights, being the quickest and surest way as the record is indelible and ineradicable. There is an advanced me-



chanical product which is to commerce what the printing press is to literature—indispensable. It obviates the necessity of reading from the beam, the weight being mechanically registered on the weigh ticket in printed characters. Rapid weighing is the demand of the present day, to meet which these beams have been designed and constructed. Rapidity of weighing under old methods or devices means multiplicity of errors. The Type Registering Beams are an instantaneous record of the reading of the beam with positive accuracy and evidence. This beam has beveled face graduated and figured so that the weights may be read in the usual manner. In addition to this the beam is provided with an internal mechanism so that when the load has been placed on the scale the ticket is inserted in the slot of the poise and by means of the handle an impression is made. This impression gives the gross weight of the load.

Should the weigher wish to print the tare ticket is inserted in the same slot and by a semi-automatic

mechanism the record is made just under the previous one so that the net weight can be calculated very easily. Only one operation is required for registering either the gross or the tare weight.

These beams, we learn, have been used with great success by many of the leading railroads and mines throughout this country, and are one of the many products of the Fairbanks Company.

RECENT MINING PATENTS.

WE are indebted to Mr. Rowland Brittain, patent attorney of Vancouver, for the following information.

METHOD OF TREATING ORES, U. S. Patent No. 722,809, granted March 17th, 1903, to F. R. Carpenter, Denver, Colorado.

Claim: The process of treating dry silicious ore containing precious metal which consists in smelting them with sulphur, copper and a basic flux, subjecting the matte produced to an oxidising roast then re-smelting the product with a silicious flux, thereby producing black copper containing the precious metal and a rich slag, adding the rich slag to a subsequent charge of ore, adding to the black copper metallic lead, sub-

jecting the mixture to heat and an oxidising blast, thereby forming copper litharge and a sulphur bearing material, and other reducing agents, thereby producing metallic lead and matte, and finally smelting the matte, producing metallic copper substantially as described.

THE RUTHENBERG ORE REDUCTION PROCESS.

At the plant of the Cowles Electric Smelting and Aluminum Works at Lockport, N.Y., there is installed apparatus, the invention of Marcus Ruthenberg, of Philadelphia, which is capable of performing two functions, that of agglomerating or fritting fine ores, concentrates, or flue dust so as to put them into much better condition for charging into the blast furnace, or that of reducing iron oxide to what may be termed a sponge, to be employed as a raw material in the open hearth furnace.

The apparatus, say the *Iron Age*, consists of a horizontal horseshoe magnet hinged so that its poles may