than in most other spots on the globe. The Phoenicians mined in Cornwall. This must needs have its effect. Though this may be a reason, it should not be allowed as an excuse.

We have before us several medical books no more pretentious than this, and they all breathe the spirit of progress in every page. One in particular on miscroscopical work, which is comparable with our assaying, gives its best efforts to illustrating time-saving and effort-saving methods. The latest mechanical devices and the latest stains whose greatest claims lie in their ability to do more and better work in a given time are given precedence over everything else. Surely medicine is not less academic than mining.

This book is not a high standard—for us it is no standard at all. A student trained only in this book would not be able to carry on successfully even a small commercial assay office in this country, and unless he had a very kind chief could not rightly fill the position of assistant in a large one. It is a useful book for reference, there is much to be learned from it, but it is of a type of which the weak points must be recognized by both our students and our teachers.

H. E. T. HAULTAIN.

EXCHANGES.

Mining and Scientific Press, June 6, 1908.—The fourth of Mr. T. A. Rickard's articles on Goldfield appears in this number. Its subtitle is "Rich Ore and Its Moral Effects." The article is an instruction summary of "high grading" in a country where that nefarious art was carried to a high pitch of perfection. We shall transcribe a few paragraphs from the paper:

"Rich ore invites theft. Wherever men find minerals so valuable that a small weight of it represents money, there the temptation to steal is inevitable, the weakguard of conventional morality is broken, and the conscience of the miner is debanched . . . . 'High-grading' is larceny."

The peculiar labor conditions gave the labor union a dangerous control of the stock market. "Mining operations were condutced under leasehold; the owners of the mines were, for the most part, without experience of mining; they had no capital, and they did not know where to look for ore; so they granted leases to parties of working miners willing to work, and to adventurous operators willing to furnish the money for exploration."

"The ore was rich indeed. In the Francis Mohawk lease at a depth of 200 feet, there was eight inches of stuff that assayed $250,000 per ton; it was free gold and calaverite or telluride of gold. The various leases on the Mohawk mine yielded a total of $50,000 per day for 106 consecutive days. One carload shipped to the Selby smelter weighed 47 tons, and assayed 609 ounces of gold per ton, so that the shipment was worth $591,637, that is, more than $6 per pound. There were many places in the mines where men knew thy were breaking ore worth 10 to 15 dollars per pound. It was easy to steal several pounds of ore. And they did . . . It is estimated that last summer over $1,000,000 worth of ore of which no proper account was made went out from the Mohawk and Combination mines, and $500,000 to $750,000 from the Florence. Not less than $1,000 per day of illicit bullion passed trhough the United States mint at Carson . . . . Only $300,000 was recovered last year from the whole camp, despite every effort to find the stolen ore. It is most difficult to trace the 'high grade,' for the thieves crush it at once and so destroy the chance to identify the poduct from any particular mine. Unless identified positively, the legal evidence is incomplete. The stolen ore is usually taken to a bogus assay office, the proprietor of which pays about 50 per cent. of its real worth. The ore is treated by chlorination . . . . In one case a plant was raided while in operation. The heading assayed 260 ounces gold per ton; the tailing assayed 15 ounces. Larceny does not wait on accurate metallurgical method."

The owner of the establishment said that "this residue would be sold to a man who intended to salt the oxidized ore on a neighboring claim. Even when the circumstantial evidence seems convincing, the local justices are afraid to convict; public opinion regards 'high grading' as rather humurous, the labor unions preach a doctrine by virtue of which a little rich ore is the miner's perquisite, the rush to become wealthy possesses everyone, and in the excitement the moral law is left high and dry."

"Regular harnesses were invented for carrying ore under the working clothes of the miners. They would step from the cage or bucket and stumble heavily laden on their way homeward without being arrested, although the officials knew why they walked so clumsily." Picturesque incidents are cited, especially of the connivance of the labor union. "And thus we come to the root of it all; the subservience of the lessees to the labor union. Why? Because the ore was rich, and the terms of the leases were short, the lessees could not afford to delay the extraction of ore by having trouble with the men; the men knew it, and so stole as much as they could . . . . The rights of property were not respected because the judges who preside over the local courts owed their position to political election."

But stealing was not confined to the miners. Stories are told of others, among them one of a mining company president who filled his suit case with specimen ore each time he visited the mine. His stealings in one year amounted to $22,000.

"During the strike that was ended in April, 1907, the stock market was worked by the labor union leaders. They would call a meeting under pretext of settling the strike, and the announcement of this fact would lead to the buying of shares by the general public; they would sell short, and then cover their shorts by open purchases made through their wives; this stimulated more buying; then the counting of votes cast at the meeting of the union would be dragged along so as to afford the time necessary to complete the stock transactions. Thus they see-sawed the market five or six times. This broke the brokers, who had been breaking the public. It was a merciless game of depredation. . . . There was not much to choose between them all; it was a case of catch as catch can, with the odds in favor of the one who first placed his hands on the ore—the miner himself."