

isolation of these compounds there is necessarily much loss of material and these figures are therefore given as minimal values.

WASHINGTON, D. C.

CORRECTIONS.

Page 1421, line 21, read 28.39 instead of 28.29.

Page 1422, line 7, read 12.69 instead of 12.09.

Page 1423, line 3, read 3.81 instead of 3.51.

Page 1424, line 3, read 42.26 instead of 42.46.

NEW BOOKS.

The Life of Robert Hare. By EDGAR FAHS SMITH. J. B. Lippincott & Co.

This is an important contribution to the history of American Science. In the absorption in present-day problems and achievements we are apt to underestimate and ignore the pioneers who laid the foundation for our building. It is a tardy recognition, but due these men, that we take account of their work.

Robert Hare belongs to the group of men which includes Franklin, Bache, Silliman, Joseph Henry and, later, Wolcott Gibbs. He was born in 1781 and died in 1858 and throughout his long life devoted his untiring energy and great ability to the development of the two kindred sciences of physics and chemistry. As Dr. Smith observes, he would in these days have been classed as a physical chemist.

At twenty years of age he was made a member of the Chemical Society of Pennsylvania, the first chemical society in the world, and presented a paper on his new invention, the oxy-hydrogen blowpipe, showing by means of it the fusion of platinum. This proved the beginning of the platinum industry and the introduction of this valuable instrument into the industries in general.

His early years were spent at work in his father's brewery and through his mechanical ingenuity many improvements were introduced into the business. In 1818 he served for a few months as professor of natural philosophy and chemistry at the College of William and Mary and the same year was made professor of chemistry in the medical department of the University of Pennsylvania, holding this position until his retirement after twenty-nine years of service.

His eagerness for research was most noteworthy in an age when teachers were generally content to limit their activities to lecture work, and when the providing of apparatus, commonly self-made, formed a heavy burden both in cost and labor. His own expression was that he "longed to return again to rove unshackled in the path of experiment."

It is impracticable in a brief review to mention all of his inventions and