

NOTES ON ASSAYING AND ASSAY SCHEMES

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Notes on assaying and assay schemes by Pierre De Peyster Ricketts

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PIERRE DE PEYSTER RICKETTS

**NOTES ON
ASSAYING AND
ASSAY SCHEMES**

NOTES ON ASSAYING

AND

ASSAY SCHEMES;

BY

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FIFTEENTH EDITION.



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PREFACE.

WHEN I first published this little Manual in 1876, I endeavored to prepare it in such a way that it would prove serviceable to the practical as well as the scientific student, and for that reason avoided all chemical names as far as possible, giving them, when necessary, with the formulæ in parentheses, and in the Appendix for reference.

The same arrangement has been retained in the present enlarged and revised edition, the success of the first having led me to believe that the plan is a good one.

As I stated in my first preface, the work embodies the system of assaying practiced in the School of Mines of Columbia College, organized and developed by Prof. C. F. CHANDLER and by G. M. MILLER, E. C. H. DAY, F. PRIME, JR., T. M. BLOSSOM, E. M., and the author of these notes, who have successively had charge of the assay laboratory. The system of assay weights employed, was devised by Prof. CHANDLER, and will be found superior to any others in use, in the saving of time and calculation.

The chapters on gold, silver, and iron, are founded on the excellent papers published by Mr. BLOSSOM, in the *American Chemist* for 1870, modifications and additions having been made when deemed necessary. Most of the methods

given have been tested in the laboratory, and the results appended under the head of "REMARKS;" much attention having been paid to the various details peculiar to the West. For the processes for testing and assaying tellurides, and the cupel furnace for the use of soft coal, I am indebted to Mr. W. A. HOOKER. Mr. S. G. SACKETT and Captain C. B. DAHLGREN have also favored me with much useful information as to Western methods, which will, I think, be found useful both in the laboratory and field.

In the Appendix, the chapter on blowpipe analysis has been revised and enlarged, and an outline scheme for the assay of ores added, also a number of methods for testing gold ores and alloys.

The advertisements in the back of the book have been retained for the purpose of furnishing a guide to those who wish to procure assay apparatus, chemicals, etc.; while the lists of apparatus have been revised, prices and estimates being given.

PIERRE DE P. RICKETTS.

ASSAY LABORATORY, SCHOOL OF MINES,
NEW YORK, June 1st, 1879.



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| BISMUTH | “ | “ | “ | “ |
| TIN | “ | “ | “ | “ |
| COPPER | “ | “ | “ | “ |
| IRON | “ | “ | “ | “ |
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