

The use of nitro compounds has, of late years, become so large that a rational method of conducting the process of nitric acid distillation is imperatively called for.

Berthelot has shown that strong nitric acid is completely decomposed at about  $360^{\circ}$  into nitrogen peroxide, oxygen, and water. It is certain that with the retorts entirely surrounded by fire gases the temperature of the upper part of the retort exceeds  $100^{\circ}$ . It is not surprising, therefore, that the first distillate should show a dark red color. A recent distillation in glass, with pieces of cast iron immersed in the mixture of acid and nitrate, gave no additional color to the first distillate.

### NEW BOOKS.

COD-LIVER OIL AND CHEMISTRY. BY F. PECKEL MÖLLER, PH.D. London: Peter Möller. New York: Wm. H. Schieffelin & Co. Printed for private distribution.

This book is really two books in one. The first part treats of cod-liver oil, the methods of catching the fish, the preparation of the oil, and an account of its constituents. We learn that cod-liver oil was originally made from fresh cod-livers by the steam process, by Peter Möller, in 1853. The oil so prepared was a great improvement over the older product prepared by the putrefaction of the livers. It still, however, caused disagreeable after-effects when exhibited, and to remedy this an investigation was undertaken by P. M. Hyerdahl, presumably in the employ of Peter Möller. Mr. Hyerdahl finds that the disagreeable after-effects are caused by the presence of hydroxy acids in the oil, and that these may be excluded by rendering the livers in an atmosphere of carbon dioxide. This process is now carried out by Peter Möller, therefore buy your cod-liver oil of this firm. The deduction is not so stated in the book, which is well written and gives a very readable account of the subject, but the advertising purpose is obvious.

It is a pity that Mr. Hyerdahl's work was not made known through the regular channels—the *Berichte* for example. Chemists will be apt to look with suspicion upon statements so obviously interested.

The second part of the book is a treatise on organic chemistry of an original sort. The author has used the Daltonian symbols in modified form, and the result is, as might have been expected, that the poor devil of a printer has had a hard time of it. So long as printing is done as at present, authors should beware of using new characters; by so doing they not only increase the already difficult task of the printer but really put themselves at his mercy. If only one printer have the character he must be allowed to do the printing of course. While such symbols have certain advantages, their disadvantages seem greater. Only a few people seem to be able to remember that, after all, our symbols represent only very imperfect knowledge, and that they are only tentative. A chemist can, therefore, read this treatise with interest and profit; it can scarcely be considered a good book for beginners, but it was probably not intended for beginners.

EDWARD HART.

THE INCREASE IN WEIGHT OF TIN AND LEAD ON CALCINATION. BY  
JEAN REY, 1630. Alembic Club Reprints, No. II. 54 pp. Edinburgh:  
William F. Clay, 1894.

Rey is one of the less well-known investigators of the seventeenth century. He is properly to be classed with Hooke, Mayow, and Boyle, or the Oxford School of Chemists, as Thorpe has fitly called them, in their work upon the increase of weight of the metals when calcined, and the part played by the air in these processes. That which Thorpe has so well done for the others is now done for Rey in this little book. The quaintness of the original is well preserved in the translation, and the book is very valuable as giving an insight into the wisdom and the childishness of the times. His self-applause in the triumphant summing up of the evidence in support of his theory, that the air played an important part in the phenomena observed, is delicious.

The Alembic Club is doing a most valuable work for the science in the republication of these early essays. They are interesting and helpful to the earnest student and should have a wide circulation.

F. P. VENABLE.