Dec., 1935

## ADDITIONS AND CORRECTIONS

NOTICE TO READERS.—For the convenience of those who may wish to cut out the corrections and attach them to the margins of the articles corrected, they have been printed only upon one side of the page.

#### 1932, Vol. 54

Aliphatic Tertiary Alcohols and Chlorides Containing the Normal Amyl Group and the Related Olefins and their Ozonolysis. By Frank C. Whitmore and F. E. Williams.

Page 408. "The density reported for tri-n-amylcarbinol,  $d^{25}_4$  0.8293, was abnormally low when compared with those recorded for other di-n-amylcarbinols. The refractive index,  $n^{20}_{\rm D}$  1.4470, was recorded for the same carbinol.

"A more recent preparation of tri-n-amylcarbinol showed  $d^{25}_4$  0.8349, which is in complete accord with the densities of the homologs. The refractive index obtained on the present sample,  $n^{20}$ p 1.4484, indicates that the first sample of carbinol contained olefin."—Frank C. Whitmore, F. E. Williams and A. H. Popkin.

The Photolysis of Hydrogen Peroxide in Aqueous Solution. By Lawrence Joseph Heidt.

Page 2842. Table I, col. 5, " $I/I_{\rm 0}$ " should read: 100  $I/I_{\rm 0}$ .

Line 19 of the text,  $\epsilon(1/cd \log I/I_0...\text{should read }\epsilon = (1/cd) [\log (I_0/I)].$ 

Line 20, cm.), should read: cm.,.

Line 23, "Using the method of Forbes, Heidt and Boissonannas<sup>10</sup>" should read: Using the method described in later work by the author. "—LAWRENCE JOSEPH HEIDT.

### 1933, Vol. 55

The Desoxymorphines. By Lyndon F. Small and David E. Morris.

Page 2885. In the seventh line from the top  $[\alpha]D$  –118.8° should read  $[\alpha]D$  +118.8°.—LYNDON F. SMALL.

## 1934, Vol. 56

Low Pressure Data of State of Nitric Oxide and of Nitrous Oxide between their Boiling Points and Room Temperature. By Herrick L. Johnston and Harry R. Weimer.

Page 628. A misplaced decimal point occurs in the second term of Equation (6). The coefficient of this term should be 56115.0.—H. L. JOHNSTON.

The Interaction of the Acid Chloride of 2-Benzoylbenzoic Acid with Phenols. II. Diarylphthalides. By F. F. Blicke and R. D. Swisher.

Page 924. The third phthalide in Table I should be named 2'-hydroxy-5'-bromodiphenyl instead of 2'-hydroxy-4'-bromodiphenyl.—F. F. BLICKE.

The Vapor Pressure of Certain Ketones. By M. Glenn Mayberry and John G. Aston.

Page 2682. "...The range of the measurements was not given due to an oversight in revision. This was approximately the same for all ketones and extended from room temperature to the boiling point except in the case of the ketones of lower vapor pressure, when the range was from 10 or 20 mm. to 735 mm. In one exceptional case, namely, that of diisopropyl ketone, the range was 49-123°."—J. G. ASTON.

# 1935, Vol. 57

Preparation of Deuterium Free Water. Deuterium Content of Ordinary Water and the Atomic Weight of Hydrogen. Electrolytic Separation of the Oxygen Isotopes. By Herrick L. Johnston.

Page 485. "Dr. Malcolm Dole has kindly called our attention to the significance of a small correction for thermal expansion of the Pyrex float, which we did not apply in our original computations. With this correction applied, which amounts to 11 p. p. m. in density for each full degree of temperature (or 4.0% on the uncorrected density increments), our figure  $19.1 \pm 1$  p. p. m. should be replaced by  $18.3 \pm 1$  p. p. m.

"There was also a small computation error in the H/D ratio,  $5750 \pm 250$ . The correct H/D ratio, computed for the density difference of  $18.3 \pm 1$  p. p. m., is  $5815 \pm 250$ , based on Taylor and Selwood's value, 1.1079, for the density of pure  $D_2O$  or  $5790 \pm 250$ , based on the value 1.1074 recently published by Tronstad, Nordhagen and Brun [Nature, 136, 515 (1935)]. Obviously  $5800 \pm 250$  is the best representation of our results. These computations take account of the slight non-additivity of  $D_2O$  and  $H_2O$  volumes found by Luten [Phys. Rev., 45, 161 (1934)]. "These slight changes are without significance in the

Heat Capacities and Dissociation Equilibria of Gases. By Bernard Lewis and Guenther von Elbe.

further computations in our paper."—H. L. JOHNSTON.

Page 612. "Due to several typographical errors and also to the recent exact determination of the ' $\Delta$  level of the oxygen molecule by spectroscopic methods as 0.97 volt [Herzberg, Nature, 133, 759 (1934); Ellis and Kneser, Phys. Rev., 45, 133 (1934)] we wish to make corrections to Table I of this paper. The new oxygen values are obtained by adding  $^3/_2$  RT to the numbers given in Table II of Johnston and Walker's paper [This Journal, 57, 682 (1935)]. We have improved the values for other molecules by a more precise method of interpolation for temperatures intermediate between published values. In the revised table given herewith the values of NO, O<sub>2</sub>, Br<sub>2</sub> and HBr are omitted because they could not be improved upon.

"Log K of oxygen at 5000°K. in Table II should read 1.715."—BERNARD LEWIS.