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, $n^{20}D$ 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, $n^{20}D$ 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_0" should read: 100 I/I_0.

Line 19 of the text, $\epsilon(1/cd \log I/I_0$. . . 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[10]" should read: Using the method described in later work by the author.[10] . . ."—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 ± 1 p. p. m. should be replaced by 18.3 ± 1 p. p. m.

"There was also a small computation error in the H/D ratio, 5750 ± 250. The correct H/D ratio, computed for the density difference of 18.3 ± 1 p. p. m., is 5815 ± 250, based on Taylor and Selwood's value, 1.1079, for the density of pure D_2O or 5790 ± 250, based on the value 1.1074 recently published by Tronstad, Nordhagen and Brun [*Nature*, **136**, 515 (1935)]. Obviously 5800 ± 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 further computations in our paper."—H. L. JOHNSTON.

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

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_3, Br_2 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.

ENERGY CONTENT ($E_T^\circ - E_0^\circ$) OF GASES

Temp, °K.	H_2	O_2	N_2	CO	OH	CO_2	H_2O
200	965	987	992	992	...	...	1192
250	1197	...	...	...	...	...	...
300	1440	1486	1489	1489	1523	1660	1791
400	1936	1998	1987	1989	2034	2403	2409
600	2936	3088	3006	3017	3048	4135	3687
800	3947	4265	4078	4110	4069	6107	5073
1000	4978	5511	5216	5270	5118	8247	6577
1200	6044	6802	6410	6485	6200	10503	8200
1400	7151	8123	7646	7741	7340	12844	9920
1600	8293	9476	8912	9025	8525	15246	11740
1800	9478	10852	10207	10334	9740	17698	13655
2000	10700	12248	11528	11665	10985	20187	15650
2200	11954	13667	12857	13011	12255	22703	17700
2400	13234	15110	14200	14365	13565	25248	19800
2600	14545	16570	15550	15725	14890	27819	21945
2800	15881	18049	16914	17096	16235	30406	24125
3000	17231	19544	18287	18476	17607	33012	26330
3200	18593	21061	19668	19860	19000		
3500	20650	23366	21743	21947	21105		

Homoamines and Homoacids. By Percy L. Julian and Bernard M. Sturgis.

Pages 1126–1127. "An unfortunate omission in our details concerning the preparation of rhodanine has just been discovered. After precipitating a mixture of thiocarbamylthioglycolic acid and rhodanine (not pure rhodanine) with the hydrochloric acid heated to 80–90°, the precipitate is filtered, dissolved in the least possible quantity of warm glacial acetic acid and boiled for five minutes. From this cooled solution the rhodanine separates fairly pure, and may be recrystallized either from alcohol or from glacial acetic acid. The latter is preferable."—PERCY L. JULIAN and BERNARD M. STURGIS.

Arsenated Phenoxyethanols. By Melvin R. Stevinson and Cliff S. Hamilton.

Page 1601. In Table I, for Compound 9 (sodium salt of 7), the calculated percentage of arsenic should be 23.93 instead of 23.65.—MELVIN R. STEVINSON.

The Photolysis of Dry Ozone at λλ208, 254, 280 and 313 mμ. II. Reaction Kinetics. By Lawrence Joseph Heidt.

Page 1711. Col. 1, line 31, "log $I_0/I/p_{O_3}$d" should read: $[\log (I_0/I)]/p_{O_3}d$. Col. 2, line 38, "the data of" should read: "the plots of the data of . . . ."

Page 1713. The first sentence of the legend under Fig. 1, should read: The curves resulted from calculations based upon our hypothesis. Col. 1, line 1, "The curves are hypothetical" should read: "The curves resulted from calculations based upon the hypothesis below." Col. 2, lines 16 and 17, "...in the presence of" should read: "...compared to that of...."

Page 1714. Col. 1, line 22, "i = 0.14 ± 1" should read: "$i_{minimum}$ = 0.14 ± 1. Col. 1, footnote, line 3, "$1/\phi$ with p_{O_2}/p_{O_3}" should read: "$1/\phi$ against p_{O_2}/p_{O_3}." Col. 2, line 22, "...difference between the long wave length...." should read: "difference between the energies corresponding to the long wave length...."

Page 1715. Col. 2, line 5, "...varies widely..." should read: "...varied widely...," and, "It is approxi-" should read: "It was approxi-." Col. 2, line 17, "...also $k_3/k_2 \ll 1$..." should read: "...also from the data, $k_3/k_2 \ll 1$...."

Page 1716. Col. 1, after paragraph ending with "...heated to softness." Insert the following paragraph: "The large erratic fluctuations in the experimentally determined values of $1/\phi$ may now be attributed mainly to the enormous momentary fluctuations in the light intensity during the course of an experiment when the spark was used as a light source. This was reassuring in view of the care taken to improve the accuracy of the results."—LAWRENCE JOSEPH HEIDT.

Androsterone (Communication to the Editor). By Russell E. Marker.

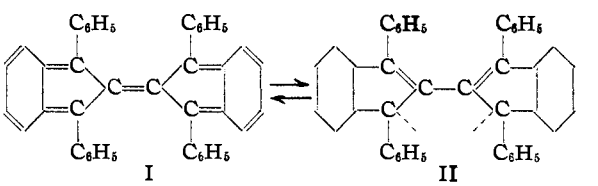
Page 1755. "In Table I, one important transformation was omitted, namely, the conversion of beta-cholestanol by means of thionyl chloride to alpha-cholestyl chloride."—RUSSELL E. MARKER.

The Decomposition of Nitramide in Acid and Salt Solutions. By Charles A. Marlies and Victor K. La Mer.

Page 1812. The characteristic of log $k^*_{corr.}$ in Fig. 3 should be one arithmetical unit smaller, the total range in the diagram being −5.8 to −3.0.—CHARLES A. MARLIES.

The Synthesis of Bis-2,2′-(1,3-diphenylindenol-3). A Contribution to the Rubrene Problem. By J. C. Eck and C. S. Marvel.

Page 1898. The formulas in the reaction shown in column two are erroneously printed and should be



I II

See also in this connection the Communication to the Editor, by A. Schönberg, to appear in the January, 1936, JOURNAL.—C. S. MARVEL.

Acetylene Polymers and their Derivatives. XXXIII. Cyano-4-butadiene-1,3. By Donald D. Coffman.

Page 1982. In the second paragraph of the Experimental Part, the *MR* (obsd.) of cyano-4-butadiene-1,3 is recorded as 24.57. This is erroneous and as a matter of fact this value is 26.40, which agrees well with the structure of the compound, which, because of its progressively conjugated system of three multiple bonds, should have considerably increased refraction.—DONALD D. COFFMAN.