

Roger Adams, Ben F. Aycock, Jr., and S. Loewe. Tetrahydrocannabinol Analogs. XVII.

Page 664. In col. 1, after line 11, insert "the corresponding olefins.<sup>1</sup> The other three compounds were prepared by reaction of hydrogen with."—ROGER ADAMS.

Roger Adams, Scott MacKenzie, Jr., and S. Loewe. Tetrahydrocannabinol Homologs with Doubly Branched Alkyl Groups in the 3-Position. XVIII.

Page 665. In Table I, entry 4 should read " $-\text{CH}(\text{CH}_3)\text{C}_4\text{H}_9^4$  7 3.65  $\pm$  0.33."

Page 667. In Table II, the last entry, the found hydrogen value should be "0.15" instead of "0.31."—ROGER ADAMS.

B. L. Zenitz, Elizabeth B. Macks and Maurice L. Moore. Preparation of  $\alpha, \alpha$ -Dimethyl- and  $N, \alpha, \alpha$ -Trimethyl- $\beta$ -cyclohexylethylamine.

Page 955. The authors write: It has been called to our attention that the melting point of 147–148° which we stated as having been obtained by Mentzer, Buu-Hoi and Cagniant, *Bull. Soc. Chim.*, 9, 813 (1942), for  $\alpha, \alpha$ -dimethyl- $\beta$ -phenylethylamine hydrochloride and as being in disagreement with that obtained by us for this compound was actually the melting point of another compound. Although *C. A.*, 38, 3261 (1944), lists "PhCH<sub>2</sub>CMe<sub>2</sub>NH<sub>2</sub>·HCl, m. 147–8° (sublimes)," reference to Mentzer, Buu-Hoi and Cagniant's original paper indicates that this melting point is that of the corresponding cyclohexyl analog. Therefore, in col. 2 delete the remainder of paragraph 3 following "sym-bis-( $\alpha, \alpha$ -dimethyl- $\beta$ -phenylethyl)-urea at 230°."

We also regret our failure to indicate that  $\alpha, \alpha$ -dimethyl- $\beta$ -cyclohexylethylamine hydrochloride had previously been reported by Mentzer, Buu-Hoi and Cagniant. Therefore, in col. 1, footnote (2b) should begin, "Although only compounds III and IV have been described in the literature (refs. 5, 6a and 6b)."

Page 956. In col. 2, paragraph 8, under " $\alpha, \alpha$ -Dimethyl- $\beta$ -phenylethylamine (III)," delete "147–148°."<sup>6b</sup>

Page 957. In col. 2, line 9 add, "reported m. p. 147–148°."<sup>6b</sup> after "2-propanol."—B. L. ZENITZ.

C. S. Marvel and R. R. Chambers. Polyalkylene Sulfoxides from Diolefins and Dimercaptans.

Page 993. In col. 2, line 10, for "butadiene" read "diene."—C. S. MARVEL.

T. L. Gresham, J. E. Jansen, F. W. Shaver and J. T. Gregory.  $\beta$ -Propiolactone. II. Reactions with Salts of Inorganic Acids.

Page 1000. In col. 1, last line, for "III" read "II."—T. L. GRESHAM.

M. A. Spielman and Guy M. Everett. Some N-Alkyl-2,4-oxazolidinediones and their Anticonvulsant Properties.

Page 1022. In Table I, the third column heading should read "5,5-Substituents."—M. A. SPIELMAN.

M. S. Kharasch, P. S. Skell and Paul Fisher. Reactions of Atoms and Free Radicals in Solution. XII. The Addition of Bromo Esters to Olefins.

Page 1058. In Table I, line 9, the addition product should be "methyl  $\beta$ -carbomethoxy- $\delta$ -bromoundecanoate."—M. S. KHARASCH.

A. L. Wilds and Thomas L. Johnson. The Synthesis of 1,3,5-Estratrien-3-ol-16-one, a Structural Isomer of Estrone.

Page 1168. In col. 2, line 9 from the end, for "equilenin" read "equilin."—A. L. WILDS.

D. S. Tarbell and J. F. Bunnett. 1,4-Dimethoxy-2-butene and 1,4-Dimethoxy-3-chloro-2-butanol.

Page 1291. The second author's name should be "Bunnett" instead of "Burnett" as printed.—J. F. BUNNETT.

Joseph Gordon and W. F. Giauque. The Entropy of Ethyl Chloride. Heat Capacity from 13 to 287°K. Vapor Pressure. Heats of Fusion and Vaporization.

Page 1509. The authors write: "Our attention has been called to an arithmetical error in the calculation of the moments of inertia of ethyl chloride. Also recently, Gordy, Simmons and Smith [*Phys. Rev.*, 74, 243 (1948)] have obtained accurate values for C–H, 1.109 Å, and C–Cl, 1.779 Å, in methyl chloride. In recalculating we have preferred to substitute these values as more reliable estimates of these distances in C<sub>2</sub>H<sub>5</sub>Cl. The distance C–C, 1.54 Å, and tetrahedral angles are retained.

"The revised values of the moments of inertia are  $I_1 = 27.63 \times 10^{-40}$ ,  $I_2 = 150.3 \times 10^{-40}$  and  $I_3 = 167.1 \times 10^{-40}$  g. cm.<sup>2</sup>.

"The revised angle between the C–C direction and the principal axis of  $I_1$  is 43° 48' 20".

"The reduced moment of inertia was found to be  $4.800 \times 10^{-40}$  g. cm.<sup>2</sup>.

TABLE IX (REVISED)

CALCULATION OF THE ENTROPY OF ETHYL CHLORIDE GAS FROM MOLECULAR DATA AT ITS BOILING POINT 285.37°K.

	Cal. deg. <sup>-1</sup> mole
Translation	38.20
Rotation (rigid molecule)	23.37
Vibration	1.98
	63.55
Total entropy measured	65.31

Entropy due to internal rotation 1.76

"At 285.37°K.  $S_{\text{free}} - S_{\text{restricted}} = 3.45 - 1.80 = 1.77$  cal. deg.<sup>-1</sup> mole<sup>-1</sup>, from which the potential barrier restricting internal rotation is estimated as 3700 instead of 4700 cal. mole<sup>-1</sup>.

TABLE X (REVISED)

ENTROPY OF ETHYL CHLORIDE GAS AT 298.1°K.

	Cal. deg. <sup>-1</sup> mole <sup>-1</sup>
Translation	38.42
Rotation (rigid molecule)	23.49
Vibration	2.19
Internal rotation	1.84
	65.94

"In the summary the entropy at the boiling point due to restricted rotation should be 1.76 instead of 1.55 cal. deg.<sup>-1</sup> mole<sup>-1</sup> and the potential barrier should be changed from 4700 to 3700 cal. mole<sup>-1</sup>. The entropy at 298.1°K. and 1 atmosphere should be 65.94 instead of 65.91 cal. deg.<sup>-1</sup> mole<sup>-1</sup>."—JOSEPH GORDON AND W. F. GIAUQUE.

F. M. Lewis, Cheves Walling, William Cummings, E. R. Briggs and F. R. Mayo. Copolymerization. VI. Effects of Temperature and Solvents on Monomer Reactivity Ratios.

Page 1520. In the ( $M_2$ )<sub>0</sub> column of Table I, for Styrene-Methyl Methacrylate at 131°, for "6.45" read "64.50."—FRANK R. MAYO.

Frederick M. Lewis and Frank R. Mayo. Copolymerization. IX. A Comparison of Some *cis* and *trans* Isomers.

Page 1534. In the Styrene-Monomethyl Maleate section of Table II, the quantities in the ( $M_2$ )<sub>0</sub> column should read "23.36, 48.68, 78.00," and in the ( $M_1$ ) column, "61.85 34.91, 3.58."—FRANK R. MAYO.