

$n_D^{17.5}$  1.4700, and 1.6 times as much of a higher fraction, b. p. 93–97° (17–18 mm.), with  $n_D^{17.5}$  1.5022. Of these two fractions, the latter seemed identical with the dibromide from Heptene-A.

To explain these data, it is suggested that "Heptene-A" is largely or entirely methyl-2-hexene-2, and that "Heptene-B" is a mixture of methyl-2-hexene-2 and methyl-2-hexene-1, the former predominating.

**Summary.**—Methyl-2-hexanol-2 slowly undergoes dehydration into methyl-2-hexene-2 by refluxing. With iodine as a catalyst, the dehydration reaction proceeds more readily but methyl-2-hexene-1 also appears to be formed.

CONTRIBUTION FROM THE  
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## ADDITIONS AND CORRECTIONS

1921. VOLUME 43

**Indirect Method of Preparation of Organic Mercuric Derivatives and a Method of Linking Carbon to Carbon**, by Morris S. Kharasch.

Page 2243. The author writes as follows: ". . . Lines 22 and 34 should read '2,2',4,4',6,6'-hexanitro mercury diphenyl' instead of '2,2',4,4',6,6'-hexanitro diphenyl.' It is unfortunate that this omission of the word 'mercury' has occurred. The author intended to call attention to the very interesting fact that if the molecule of 2,4,6-trinitrophenyl mercuric chloride is treated with potassium periodide at room temperature, two simultaneous reactions take place. The first reaction is a substitution of the —HgX radical by iodine and the second reaction is a 'bridging' effect due to the potassium iodide.

"This is believed to clear up the apparent discrepancy in the article and results recorded in a recent publication [Whitmore and Thurston, *THIS JOURNAL*, 51, 1502 (1929)], except that since these authors refluxed the sample of 2,4,6-trinitrophenyl mercuric chloride with iodine for *eight* hours and did not employ potassium iodide at all, they could not have noted the formation of the 2,2',4,4',6,6'-hexanitro mercury diphenyl, as observed by the first author. It is the unusual speed of formation of this latter compound from 2,4,6-trinitrophenyl mercuric chloride and potassium iodide at ordinary temperature that was deemed worthy of mention."—M. S. KHARASCH.

1928. VOLUME 50

**The Analysis of Mixtures of Ethyl Alcohol, Ethyl Acetate, Acetic Acid and Water**, by S. Poznanski.

Page 986. Line 3 from the end should read: ". . . This method has the advantages that the unknown acid and standard dissociate equally in solution, . . ."

Page 988, line 4 from the end, insert "of a per cent." after "thousandths."—S. POZNANSKI.

**The Iodide, Iodine, Tri-iodide Equilibrium and the Free Energy of Formation of Silver Iodide**, by Grinnell Jones and B. B. Kaplan.

Page 1856. In Table IIA the second entry in the last column should read "0.0011364" instead of "0.001364."—GRINNELL JONES.

**The Normal Potential of the Iodine-Iodide Electrode**, by Grinnell Jones and B. B. Kaplan.

Page 2073. In Table IVA the *E* value at the foot of the last column should read “-0.25435” instead of “-0.254356.”—GRINNELL JONES.

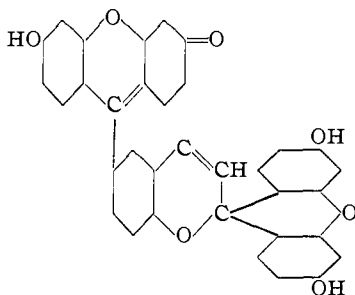
**The Atomic Weight of Cesium**, by Theodore W. Richards and Marcel Françon.

Page 2162. A note of correction has been received as follows: “. . . Professor Hönigschmid has pointed out a mistake in the calculation of one of the results. The second of the analyses reported should give for the atomic weight of cesium 132.841 instead of 132.832; the average is thus 132.811 instead of 132.809. This slight difference is unimportant and the result confirms, as before, the adopted value of 132.81.”—MARCEL FRANÇON.

**6-Aldehydo-coumarin and Dyes Derived from It**, by Rajendranath Sen and Dukhaharan Chakravarty.

Page 2430. Footnote 5 should read “Sen and Guha Sarkar, *J. Indian Chem. Soc.*, 1, 150-172 (1924).”

Page 2431. Formula III should read



RAJENDRANATH SEN

1929. VOLUME 51

**Trimethylacetaldehyde and Dimethylethylacetaldehyde**, by J. B. Conant, C. N. Webb and W. C. Mendum.

Page 1247. Line 5, for “ $\text{H}_2\text{C}(\text{OCR}_3)_2$ ” read “ $\text{H}_2\text{C}(\text{OCH}_2\text{CR}_3)_2$ .” Line 6, for “tertiary alcohols” read “carbinols.”

Page 1249. Line 12 of Experimental, for “Di-*tert.*-butyl Acetal of Formaldehyde,  $\text{H}_2\text{C}(\text{OC}(\text{CH}_3)_3)_2$ ” read “Di-*tert.*-butyl-carbinol Acetal of Formaldehyde,  $\text{H}_2\text{C}(\text{OCH}_2\text{C}(\text{CH}_3)_3)_2$ .”

Page 1250. Line 6, for “ $\text{C}_9\text{H}_{20}\text{O}_2$ ” read “ $\text{C}_{11}\text{H}_{24}\text{O}_2$ .” Line 12 from end, for “Di-*tert.*-amyl Acetal of Formaldehyde,  $\text{H}_2\text{C}(\text{OC}_5\text{H}_{11}\text{-*tert.*})_2$ ” read “Di-*tert.*-amyl-carbinol Acetal of Formaldehyde,  $\text{H}_2\text{C}(\text{OCH}_2\text{C}_5\text{H}_{11}\text{-*tert.*})_2$ .” Line 3 from end, for “ $\text{C}_{11}\text{H}_{24}\text{O}_2$ ” read “ $\text{C}_{13}\text{H}_{28}\text{O}_2$ .”—J. B. CONANT.

**Phenol-halo-phthaleins. Preliminary Paper**, by F. F. Blicke and F. D. Smith.

Page 1867. Footnote 8 should read “Blicke and Smith, *THIS JOURNAL*, 51, 1948 (1929).”—F. F. BLICKE.

**Halogen-Substituted Aromatic Pinacols and the Formation of Ketyl Radicals,  $\text{R}_2(\text{IMgO})\text{C}$** —, by M. Gomberg and John C. Bailar, Jr.

Page 2236. Line 9 from the end, for “substituted” read “unsubstituted.”—JOHN C. BAILAR, JR.

**Isomers of 2-pentene. III. The Ultraviolet Absorption Spectra of the Isomeric 2-Pentenes**, by Emma P. Carr.

Page 3052. The last part of Footnote 10 should read “Scheibe, May and Fischer, *Ber.*, 57, 1332 (1924).”

**Chemical Kinetics in Highly Dilute Solution. Bromo-acetate and Thiosulfate Ions in the Presence of Sodium Ion at 25°**, by Victor K. La Mer.

Page 3341. The author writes as follows: "... An unfortunate error was made in computing the ionic strengths of the final solutions. The contribution of the sodium thiosulfate to the ionic strength was computed in terms of a normal solution of valence type (1, -2), whereas the normality employed was really in terms of iodine equivalents, *i. e.*, for thiosulfate  $\mu = 3 N$  and not 1.5  $N$ . The net result is that each value of  $\mu$  given in the article must be multiplied by a factor  $40/25 = 1.60$  and each  $\sqrt{\mu}$  by  $\sqrt{1.60}$  or 1.265. This correction distorts Fig. 1 slightly and thereby weakens but does not destroy the conclusions reached. Thus the limiting experimental slope  $d \ln k/d \sqrt{\mu}$  for the lowest points is not equal to  $0.93 Z_A Z_B$  but to about  $0.75 Z_A Z_B$ . In other words, the limiting theoretical slope  $Z_A Z_B$  is being rapidly approached but has not been attained even for the region of dilution of  $\mu = 0.002$  to  $0.004$ , for a reaction of such comparatively simple valence type as the one employed. The values given in Table I refer to  $\sqrt{\mu}$  and not to  $\mu$ ."—VICTOR K. LA MER.

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## NEW BOOKS

**Lectures on Combustion.** By JOSEPH PRIESTLEY, LL.D., F.R.S., and JOHN MACLEAN, M.D., Professor of Mathematics, Natural Philosophy and Chemistry in the College of New Jersey. Edited by WILLIAM FOSTER, Princeton University. Foreword by Professor Hugh S. Taylor. Princeton University Press, Princeton, N. J., 1929. vii + 116 pp. Illustrated. 13 × 21 cm.

This small volume contains, first, a brief, but interesting biography of John Maclean, M.D., the first professor of Chemistry at the College of New Jersey (Princeton) by Professor Foster; second, a reprint of Priestley's famous valedictory pamphlet published in "Northumberland in America" in defense of the doctrine of Phlogiston, and third, "Two Lectures on Combustion and an Examination of Dr. Priestley's Considerations on the Doctrine of Phlogiston" by Maclean in answer to this pamphlet.

Professor Foster's biography shows Maclean as an attractive figure;—practicing medicine successfully and a member of the Faculty of Physicians and Surgeons of Glasgow University at 21; Professor of Chemistry and Natural History at Princeton at 25; an enthusiast for the newest developments of the chemical science of his period.

Priestley's pamphlet displays the skill and clarity of presentation of the accomplished writer and also an appealing modesty; but Maclean in his two lectures points out with vigor and persistency the errors, chiefly of *fact*, on which Priestley's arguments were based.

A Foreword by Professor Taylor states that this volume was issued on the occasion of the dedication of the new chemical laboratory at Princeton. This is indeed most appropriate; the enthusiasm of Maclean for chemistry and his emphasis of the importance of experimental investigations in that science afford a splendid heritage and an inspiring tradition.

ARTHUR B. LAMB