Through the kindness of Dr. Sheppard, we secured a sample of Eastman's highly purified gelatin,⁴ which proved to be practically ash-free and gave a Sörensen value of 4.7 in distilled water. We repeated the experiments exactly as described in the earlier paper, except for using a more dilute buffer solution so as to increase the sensitivity of the measurements. In all cases, the buffer solutions had a final concentration of 0.02 M phosphoric acid plus sodium hydroxide to give the desired Sörensen value. The results obtained, at 7°, are shown in Fig. 1.

The second point of minimum, at 7.7, stands out too sharply to be attributed to experimental error and we found that the results can easily be duplicated. Moreover, Mathews and Higley⁵ studied the absorption spectrum of gelatin with changing Sörensen value and found minimum values for the wave length of maximum absorption in the ultraviolet at $P_{\rm H}$ 4.68 and 7.66, coinciding with our points of minimum swelling. Since they used gelatin solutions, it was not necessary to use an extraneous buffer material. It is important to note that they used purified gelatin and regulated the Sörensen value by the simple addition of hydrochloric acid or sodium hydroxide.

That the two points of minimum have a real existence seems established, although the explanations offered as to the cause still remain in the controversial stage.

LABORATORIES OF A. F. GALLUN AND SONS COMPANY MILWAUKEE, WISCONSIN Received October 8, 1923 John Arthur Wilson Erwin J. Kern

ADDITIONS AND CORRECTIONS

1921, Volume 43

The Purification and Some Physical Properties of Certain Aliphatic Alcohols, by Roger F. Brunel, J. L. Crenshaw and Elise Tobin.

P. 565. In line 22, instead of "-0.00042t³" read "0.0003671t³."

P. 574. Table I, under columns headed d_4^{25} and M_{25}^{D} , read as follows.

<i>n</i> -Propyl alcohol		iso-Butyl alcohol	
А	0.79975	А	0.79762
В	0.79952	В	0.79762
Most probable value	0.7997	C (Res.)	0.79764
$M_{25}^{\rm p}$	17.54	Most probable value	0.79763
		$M_{25}^{ m D}$	22.22

sec-Butyl alco**h**ol

A-III	0.80228
IV	0.80234

⁴ For method of preparation, see Sheppard, Sweet and Benedict, THIS JOURNAL, **44**, 1858 (1922).

⁵ Paper presented before the Leather and Gelatin Division at the 66th meeting of the American Chemical Society, Milwaukee, Wis., September 12, 1923.

Dec., 1923	ADDITIONS AND	D CORRECTIONS	314
В	0.80224		
Most probable v	alue 0.80229		
	M ^D ₂₅ 22.14		
P. 575. Table 1	I, under column head	ed d ²⁵ , read as follows.	
n-Propyl alcohol		iso-Butyl alcohol	
Authors' value	0.7997	Authors' value	0.79763
P. 576. sec-Bu	tyl alcohol		
Authors' value	0.80229		
P. 577. In line	7, for " $k = 0.032368$ "	read ''k = 0.032368.''	

1922, Volume 44

Ion Activities in Homogeneous Catalysis. The Formation of Para-chloro-acetanilide from Acetylchloro-amino-benzene, by Herbert S. Harned and Harry Seltz.

P. 1478. In Equation 1, instead of " $C_6H_5NClCOCH_3^+ + H + Cl^+$ " read " $C_6H_5^ NClCOCH_3 + H^+ + Cl^-$."

P. 1480. In the second line from the bottom, read "log $F_a' = \alpha' C - \beta' C^{m'}$."

P. 1483. In the eleventh line of the text, read "whence E_{e} is found to be 2.14 \times 10^4 cals. between 25° and 35° , and 1.93×10^4 cals.," etc.

A Study of the Velocity of Hydrolysis of Ethyl Acetate, by Herbert S. Harned and Robert Pfanstiel.

P. 2201. For
$$\frac{T'_0 - T}{T_E} = x$$
 read $\frac{T'_0 - T_A}{T_E} = x$.

Examination of Neoarsphenamine. II. The Constitution of the French Drugs, by A. Douglas Macallum.

P. 2581. Table II, the last three lines should read:

Element or group	Av. % found	Molecular proportions
Bisulfite (CH ₂ OSO ₂ Na)	29.12	1.844
Total		2.144

Sulfonate (-SO₃Na)

P. 2582. Note added by author (December 18, 1922).

The general sparing solubility of these compounds in alcohols is in agreement with an arseno structure, this property having been used at one time by Bart (Ger. pat. 270,-568) to distinguish certain arseno compounds from the arsenoxides and arsines.

The Absorption of Carbon Monoxide by Cuprous Ammonium Carbonate and Formate Solutions, by Alfred T. Larson and Clark S. Teitsworth.

P. 2880. In line 26, instead of "moles per liter," read "equivalents per liter."

P. 2882. In Figs. 2 and 3, the axis of abscissa should be 4 cm. per scale division. In Fig. 2, the axis of ordinate should be 1.25 volumes per scale division.

Optically Active Dyes. I, by A. W. Ingersoll with Roger Adams.

P. 2933. In line 29, for "made up to 50 cc. in a mixture of" read "dissolved in a mixture of." In line 32, for "made up to 50 cc. in a mixture of" read "dissolved in a mixture of."

P. 2934. In line 8, for "(70 to 75%)" read "(90 to 95%)."

P. 2935. In line 17, for "l-Ethyl(p-nitrobenzoylamino)acetic Acid" read "l-Ethyl-phenyl(p-nitrobenzoylamino) Acetate."

P. 2936. In line 4, for "d-Ethyl(p-nitrobenzoylamino)acetic Acid" read "d-Ethyl-phenyl(p-nitrobenzoylamino) Acetate."

Index of Authors. P. 2982. Omit line 7, ("McCollum, E. V., etc.").

Index of Subjects. P. 3004. Omit line reading "Nutrition, Newer Knowledge of (McCollum, book rev.).....2974.

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