Page 6063. In col. 2, line 5 of "Note Added in Proof," for "dehydromexicanin $L$ ", read "dehydromexicanin C."

Page 6064. In col. 1, lines $14-15$ from the end, transpose the "Calcd." and "Found" analyses for $\mathrm{C}_{15} \mathrm{H}_{22} \mathrm{O}_{4}$.

Page 6065. In col. 1, lines $24-25$, transpose the analyses for Allotetrahydrohelenalin, $\mathrm{C}_{15} \mathrm{H}_{22} \mathrm{O}_{4}$, to read "Calcd.: C , 67.64; H, 8.33. Found: C, 68.49; H, 8.03.' $-W$ Erner Herz.

## 1960, Vol. 82

W. F. Giauque, E. W. Hornung, J. E. Kunzler and T. R. Rubin. The Thermodynamic Properties of Aqueous Sulfuric Acid Solutions and Hydrates from 15 to $300^{\circ} \mathrm{K}$.

Page 66. In Table II, the melting point of $\mathrm{H}_{2} \mathrm{SO}_{4}$ erroneously given as $283.46^{\circ} \mathrm{K}$ should be $283.52^{\circ} \mathrm{K}$. All other thermodynamic values given for the melting point are cor-rect.-W. F. Giaũque.

James L. Dye, M. Patricia Faber and David J. Karl. Transference Numbers and Conductances of Multivalent Salts in Aqueous Solution: Zinc Sulfate and Zinc Perchlorate."

Page 315. The transference number data in Table I were not properly corrected for solvent conductance and volume change and hence the true values are slightly different from those given. The least-squares equation through the corrected points is

$$
T_{+}=0.3900-0.0628 N^{1 / 2}
$$

with a standard deviation of $0.07 \%$ for the ten determinations.

Page 317. The calculated association constants in Table IV (which were included to show lack of fit rather than verification of association) are incorrect, and a corrected Table IV is given.

Table IV
Association Constants Calculated for $\mathrm{Zn}_{\mathrm{n}}\left(\mathrm{ClO}_{4}\right)_{2}$

|  | $\overbrace{\lambda^{0} \mathrm{za}_{++}=56} \mathrm{~A}$ using $\frac{\lambda^{0} \mathrm{Zn}_{++}=59}{}$ |  |
| :---: | :---: | :---: |
| $N \times 104$ |  |  |
| 0.556 | 206 | 998 |
| 2.530 | 120 | 300 |
| 8.063 | 55 | 121 |

—James L. Dye.
Alberto Ercoli and Rinaldo Gardi. $\Delta^{4}$-Keto Steroidal Ethers. Paradoxical Dependency of their Effectiveness on the Administration Route.

Page 747. In col. 1, line 17, for 'm.p. 181-183 ', read "m.p. 184-186"." In line 18 , for " $[\alpha]_{\mathrm{D}}-83^{\circ}$ " read " $[\alpha] \mathrm{D}$ $-67.5^{\circ}$." In line 20, for 'm.p. 136-137'" read "m.p. 142$143^{\circ}$ " In col. 2 , line 36 , for " $[\alpha]_{\mathrm{D}}-47.5^{\circ}$ "read " $[\alpha]_{\mathrm{D}}-62^{\circ}$." In line 40 , for " $\mathrm{m} . \mathrm{p}$. $137-138^{\circ},[\alpha] \mathrm{D}-147^{\circ}$ " read "m.p. 158-159.5 ${ }^{\circ},[\alpha]_{\mathrm{D}}-142^{\circ} .{ }^{\prime \prime}$-Alberto Ercoli.
N. V. Schwartz and A. G. Brook. The Reaction of Triphenylsilylmetallics with Benzophenone. II. Triplienylsiloxydiphenylmethylpotassium.

Page 2439. In col. 2, line three of the equations, the first formula should read ' $\mathrm{Ph}_{3} \mathrm{SiOCPh}_{2} \mathrm{~K}$."

Nelson J. Leonard, Terry W. Milligan and Theodore L. Brown. Transannular Interaction between Sulfide and Ketone Groups.

Pages 4078 and 6431. The folded forms should have been pictured as


Ignacio Tinoco, Jr. Hypochromism in Polynucleotides.
Pages 4786 and 4789. Equation (1) and Equation (A11) should read

$$
\frac{F_{o a}}{f_{o s}}=1-\frac{4 K \lambda_{o s}^{2}}{N} \sum_{a^{\prime} \neq \mathrm{a}} \sum_{i=1}^{N} \sum_{\mathrm{j} \neq \mathbf{i}} \frac{G_{\mathrm{ij}} \mathrm{e}_{\mathrm{i}} \cdot \mathrm{e}_{\mathrm{i}} f_{o \mathrm{o}}{ }^{\prime} \lambda_{\mathrm{os}}{ }^{\prime 2}}{\lambda_{o \mathrm{oa}}{ }^{2}-\lambda_{\mathrm{oa}}{ }^{\prime 2}}
$$

Page 4789. Equation (A10) should read

Recalculation of the hypochromism of DNA with these corrected equations leaves Fig, 3 essentially unchanged; 0.03 or less should be added to each point on the curve.Ignacio Tinoco, Jr.
J. L. Dye, R. F. Sankuer and G. E. Smith. Ion Transport in Sodium-Ammonia Solutions.

Page 4798. The data for $T_{+}$in Table I are incorrect. The correct data (ref. 20) do not change the intercept ( $T_{+}^{\mathbf{0}}$ ).

Page 4802. Equation (2) in the last paragraph sloould read:

$$
\mathrm{M}^{+} \cdot \mathrm{e}^{-} \rightleftarrows 1 / 2 \mathrm{M}_{2} ; K_{2}=\left(\mathrm{M}_{2}\right)^{1 / 2} /\left(\mathrm{M}^{+} \cdot \mathrm{e}^{-}\right)
$$

Page 4803. In the first column, Table VI and a text paragraph immediately following it were inadvertently omitted fromi the printer's manuscript and should be inserted between the sentence ending ".. $9.2 \times 10^{-3}$." and the next sentence ". . . These calculations show . . .," as shown herewith

Table VI
$K_{2}$ Required for Various Values of $K_{1}{ }^{(t)}$

| $\begin{gathered} \text { Molarity } \\ \times 10^{4} \end{gathered}$ | $8.4 \times 10^{-8}$ | $\begin{aligned} & K_{2} \text { for } K_{1}\left({ }^{(1)}=\right. \\ & 9.2 \times 10^{-1} \end{aligned}$ | $10.0 \times 10^{-3}$ |
| :---: | :---: | :---: | :---: |
| 26.02 | 11.4 | 18.8 | 24.8 |
| 49.80 | 16.7 | 20.4 | 23.9 |
| 69.35 | 17.9 | 20.9 | 23.9 |
| 125.5 | 16.9 | 19.2 | 21.5 |
| 182.9 | 15.0 | 16.9 | 18.9 |
| 283.6 | 13.0 | 14.6 | 16.2 |
| Average | 15.2 | 18.5 | 21.5 |
| Deviation | $\pm 2.0$ | $\pm 1.8$ | $\pm 2.7$ |

As is evident from Table VI, the two constants are "coupled" to a certain extent; that the data can be fitted reasonably well over a range of $K_{1}$ values if $K_{2}$ is suitably altered. In addition to this, these paranneters are quite sensitive to experimental error. At a concentration of 0.1 molar, for example, an error of $\pm 1 \%$ in $T_{-}$causes $K_{2}$ to vary from 24.6 to 10.9 for a value of $K_{1}^{(t)}$ of $9.2 \times 10^{-3}$. James L. Dye.
J. L. Dye, G. E. Smith and R. F. Sankuer. The Activity Coefficient of Sodium in Liquid Ammonia.

Page 4803 . Equation (2) of the abstract should read

$$
\mathrm{Na}^{+} \cdot \mathrm{e}^{-} \rightleftarrows 1 / 2 \mathrm{Na}_{2}
$$

Page 4805. Equation (2) should read

$$
\mathrm{M}^{+} \cdot \mathrm{e}^{-} \rightleftarrows 1 / 2 \mathrm{M}_{2}
$$

-James L. Dye.
A. Bryson. The Effects of Substituent on the $p K_{\mathrm{a}}$ Values and $\mathrm{N}-\mathrm{H}$ Stretching Frequencies of 1- and 2-Naphthylamine, and The Ionization Constants of 3-Substituted Pyridines, 3 -Substituted Quinolines and 4-Substituted Isoquinolines.

Page 4864. In Table I, 3rd from last line, last col., the NH frequency for 1 -nitro-2-naphthylamine should read 3514 instead of 3541 .

Page 4869. Structure II should read


Pages 4869, Structure V; 4870, Structure VIII; 4874, Structure II; 4876, Structure XI, all should be modified by changing the symbol $-\delta$ at carbon atom 9 to $-\delta \delta$, as for example $V$, which should read


The alterations do not affect the validity of the arguments in the two papers concerned.-A. Bryson.

Jack Hine. Polar Effects on Rates and Equilibria. III. Page 4880. Equation (14) should read
$-\log 6 K_{d}=\tau_{\mathrm{p}}^{\mathrm{A}}\left(\sigma_{\mathrm{p}-\mathrm{x}}\right)^{2}$
-Jack Hine.
Robert West, Hsien-Ying Niu, David L. Powell and Monroe V. Evans. Symmetrical Resonance Stabilized Anions, $\mathrm{C}_{\mathrm{n}} \mathrm{O}_{\mathrm{r}-2}$.
Page 6204. In col. 2, lines 11-12 below formulas, read ". . . seven Raman active fundamentals, two polarized and five depolarized."-Robert West.
T. D. Coyle and F. G. A. Stone. Organoboron Halides. III. Lewis Acidity and $\mathrm{F}^{19}$ Nuclear Magnetic Resonance Spectra of Some Organodifluoroboranes.
Page 6225. In col. 1, paragraph 2, omit "log" before the term $K_{\mathrm{p}}$ (atm.).-F. G. A. Stone.

$$
\text { 1961, VoL. } 83
$$

V. J. Shiner, Jr. The Effects of Deuterium Substitution on the Rates of Organic Reactions. VI. Secondary Isotope Effects on the Solvolysis Rates of $\gamma$-Methyl Substituted $t$ Alkyl Ch1orides.
Page 241. In col. 2, the last line before "Experimental" should read "important, ${ }^{16,17}$ is a much more difficult question."
T. A. Manuel, S. L. Stafford and F. G. A. Stone. Chemistry of the Metal Carbonyls. VII. Perfluoroalkyl Iron Compounds.
Page 250. In col. 1, line 9, for "(m.p. 105-106 $)$ " read "(m.p. 15-160)." In lines 15-16-17, for "c.p.s." read "p.p.m."-F. G, A. Stone.
Hyp J. Dauben, Jr., and Domenick J. Bertelli. Iron Tricarbonyl Complexes of Cycloheptatriene, Cycloheptadiene and Cycloheptadienium Ion.
Page 498. In col. 2, lines 8-9, read " $\left(\pi-\mathrm{C}_{7} \mathrm{H}_{8}\right) \mathrm{Fe}(\mathrm{CO})_{2} \mathrm{I}$." -Hyp J. Dacben, Jr.
E. J. Burrell, Jr. Formation and Identification of Unique Radical Sites in Irradiated Amides.
Page 574. In col. 2, lines 17 and 22, for "Thermosi1" read "Spectrosil."-E. J. BURrell.
L. L. Ferstandig, W. G. Toland and C. D. Heaton. Molecular Complexes of Pyromellitic Dianhydride.
Page 1154. In Table III, col. 4, the units in the column heading should read " $1 . \mathrm{m} .^{-1} \mathrm{~cm} .^{-1}$."

Richard S. Juvet, Jr., and Jen Chiu. Gas Chromatography. IV. The Thermodynamics and Kinetics of the Alcoholysis of Acetals.
Page 1563. In col. 1, the second equation should read

Fritz K. Kneubüh1, W. S. Koski and W. S. Caughey. An Electron Spin Resonance Study of Silver Porphyrin.
Page 1608. In order to avoid misunderstanding, it is advisable to make some additional comments on the assumptions used in Eq. 3. Considering the symmetry at the center of the porphyrin, one should write the spin Hamiltonian as

$$
\begin{aligned}
& H_{\mathrm{s}}=\beta \mathrm{g} \| H_{\mathrm{z}} S_{\mathrm{z}}+\beta g \perp\left(H_{\mathrm{y}} S_{\mathrm{y}}+H_{\mathrm{x}} S_{\mathrm{x}}\right)+A S_{\mathrm{z}} I_{\mathrm{z}}^{\mathrm{Ag}}+ \\
& B\left(S_{\mathrm{y}} I_{\mathrm{y}}^{\mathrm{Ag}}+S_{\mathrm{x}} I_{\mathrm{x}}^{\mathrm{Ag}}\right)+\sum_{k=1}^{4}\left(C S_{\mathrm{z}} I_{z^{N, k}}^{N, k}+D_{\mathrm{k}} S_{\mathrm{y}} I_{\mathrm{y}}^{N, k}+E_{\mathbf{k}} S_{\mathrm{x}} I_{\mathrm{x}}^{N, k}\right)
\end{aligned}
$$

with

$$
\begin{aligned}
& D_{1}=E_{2}=D_{3}=E_{4} \\
& E_{1}=D_{2}=E_{3}=D_{4}
\end{aligned}
$$

if the nitrogens are counted clockwise. In our case, the $C$, $D_{\mathrm{k}}$ and $E_{\mathrm{k}}$ differ only slightly. Therefore, we put to a first approximation $D_{\mathrm{k}}=E_{\mathrm{k}}$ and obtain for the $\Sigma$

$$
C S_{z} I_{2}^{4 N}+D\left(S_{y} I_{y}^{4 N}+S_{x} I_{x^{4 N}}^{4 N}\right)
$$

which corresponds to the simplified Hamiltonian of our recent paper. The measured e.p.r. spectra do not contradict this assumption. An accurate test, however, can be made ouly by single crystal measurements.-Fritz K. Kyeubühl.
E. Gaetjens and H. Morawetz. Intramolecular Carboxylate Attack on Ester Groups. II. The Effect of Diastereoisomerism in Polymers and their Low Molecular Weight Models.
Page 1742. In col. 2, line 20, for "(ni.p. 130-151 )"' read "(m.p. 130-131 ${ }^{\circ}$ )."
Arthur M. Wilson and Norman L. Allinger. Conformational Analysis. XIV. The Use of the Polarograph for the Determination of the Conformations of the 2 -Halocyclohexanones.
Page 2000. In Table I, the heading of col. 3 should read " $I$, $\mu \mathrm{a} . / \mathrm{sec} .1 / 6 \mathrm{mg} . ~ \% \mathrm{~m} M$."
Page 2001. In col. 2, paragraph 7 , line 6 , the end of the line should read ". . . $1.13 \mu \mathrm{a} . / \mathrm{sec}^{1 / 6} \mathrm{~m} M . \mathrm{mg} .^{2 / 3}$, " and the end of line 10 should read ". . $0.43 \mu \mathrm{a} . / \mathrm{sec} .{ }^{1 / 6} \mathrm{mM}$. $\mathrm{mg} .^{2 / 8}$, ". -Arthur M. Wilson.
L. de Vries. Preparation of $1,2,4,4$-Tetrannethyl-3,5Dimethylene Cyclopentene; The Magenta Species derived from it by Protonation and from Hexamethylcyclopentadiene by Hydride Abstraction.
Page 2392. In formula IIIb the positive charge should be on the $\mathrm{CH}_{2}$ group.
Page 2393. In col. 1, line 35 , insert " 350.6 " between 333.6 and 370.0 . Line 36 , omit superscript " 7 ." Line 37 , add superscript " 7 " after " $\epsilon_{\max } 48,800$." Line 38 , " 563 " should be in italics. Line 43 , omit superscript " 7 ." Line 44, add superscript " 7 " after " $\epsilon_{\max } 49,600$." In drawing at the top of col. 2 , top line, insert a " + sign" between "II" and "IIIb." In the formulas, the capitals $A, B, C, D, E$, and $F$ serve to denote these formulas and are not part of them. The bonds apparently connecting these capitals to the five-membered rings should accordingly be shortened, and the capitals should be lowered.
J. W. Linnett. A Modification of the Lewis-Langmnir Octet Rule.
Page 2645. In col. 1, three lines above the formulas, for "II" read "III."
Page 2648. In col. 1, three lines below the first fornulas, for "XIX" read "XXIX."
Page 2649. In col. 1, line 32 from the end, for "XVII" read "XVIII."-J. W. Linnett.
R. K. Blackwood, J. J. Beereboom, H. H. Rennhard, M. Schach von Wittenau and C. R. Stephens. 6-Methylenetetracyclines. I. A New Class of Tetracycline Antibiotics.
Page 2774. Structures I-IV should show double bonds at 11a,12 and 2,3. Structures VI-VII should show corrected stereochemistry at the ja and 11a positions.

—R. K. Blackwood

