We are unable to explain fully the lower values now being found and the lack of concordance of the results. The latter fact would indicate the presence of some unknown catalyzer, possibly the surface of the glass vessels in which the reaction takes place.

The work is being pushed forward as rapidly as possible, and we hope in the near future to throw more light on this phase of the problem.

H. C. JONES.

BALTIMORE, MD.

CORRECTIONS.

"The Calomel Standard Cell," by G. F. Lipscomb and G. A. Hulett, THIS JOURNAL, **38**, 20.

Page 24. Column "July 12," 0.67098 should be 0.67078.
Column "Apr. 24," 0.67044 should be 0.67024.
Page 25, line 9. $.0525(T - 25)^2$ should be $-.0000025(T - 25)^2$.
Page 25, line 15. For 0.67159 read 0.67139.
Page 25, line 18. For 0.67159 read 0.67139 and for 30060 read 30047.
Page 25, line 22. For $HgCl_2$ read Hg_2Cl_2.

[CONTRIBUTION FROM THE CHEMICAL LABORATORY OF HARVARD UNIVERSITY.]

THE ADDITION OF ALIPHATIC NITRO COMPOUNDS TO UNSATURATED COMPOUNDS.

BY E. P. KOHLER.

Received January 20, 1916.

The object of this investigation was to find a method for preparing cyclopropane derivatives that have a nitro group in combination with one of the carbon atoms of the ring. Substances of this type are unknown and they cannot be made by any of the means commonly employed for making aliphatic nitro compounds. It was necessary, therefore, to make a suitable aliphatic nitro compound first and then to close the cyclopropane ring. A promising series of reactions for this purpose is represented by the following equations:

$$RCH{:}CHCOC_6H_5 + CH_3NO_2 = \begin{matrix} RCHCH_2COC_6H_5 \\ | \\ CH_2NO_2 \end{matrix} \quad \text{(I).}$$

$$\begin{matrix} RCHCH_2COC_6H_5 \\ | \\ CH_2NO_2 \end{matrix} + Br_2 = \begin{matrix} RCHCHBrCOC_6H_5 \\ | \\ CH_2NO_2 \end{matrix} + HBr \quad \text{(II).}$$

$$\begin{matrix} RCHCHBrCOC_6H_5 \\ | \\ CH_2NO_2 \end{matrix} - HBr = \begin{matrix} RCH - CHCOC_6H_5 \\ \diagdown\ \diagup \\ CHNO_2 \end{matrix} \quad \text{(III).}$$