of that paper, gave with considerable accuracy the ionization-coefficients of the simple solutions of these salts in terms of their molecular concentration. To save space I may tabulate here the values of the ionization-coefficients used in the calculations for simple solutions. They are as follows :—

SODIUM CHLORIDE.		POTASSIUM CHLORIDE.	
Grm.-mols. per litre.	Ionization-coefficient at 18° C.	Grm.-mols. per litre.	Ionization-coefficient at 18° C.
·25	·792	·1875	·8267
·5	·736	·3402	·811
·8928	·6806	·375	·796
1·0	·676	·5	·788
1·5	·633	·6856	·769
1·8353	·601	·75	·768
2·0	·5866	1·0	·756
2·5	·5504	1·0167	·755
2·8373	·5255	1·4202	·731
3·0	·514	1·5	·731
3·9375	·4516	2·0	·712
		2·185	·7048
		2·5	·695
		2·986	·681
		3·0	·680

These coefficients were obtained from Kohlrausch and Grotrian's and Kohlrausch's observations of conductivity at 18° C.* In obtaining them I took the specific molecular conductivity (referred to mercury) at infinite dilution to be 1216×10^{-8} for KCl, and 1028×10^{-8} for NaCl, not being aware at the time that Kohlrausch had given 1220 and 1030 respectively as more exact values. Nevertheless, to save labor, I have used the above values of α in the calculations of this paper, having satisfied myself by a re-calculation in one case that no appreciable difference in the results would be produced by the employment of more exact values. It will be noticed that in one or two cases the above values of α are obviously a little out; but they would seem to be sufficiently accurate for my purpose. I did not foresee the extent of the calculations,

* Wied. *Ann.* vi. (1879) p. 37, and xxvi. (1885) p. 195.