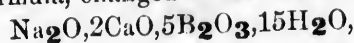


ON THE RELATIVE COMPOSITION OF ULEXITE & FRANKLANDITE.

Reprinted from the *Chemical News*, Vol. xxxv p. 189.

In the *Philosophical Magazine* for April, (p. 286,) Prof. J. Emerson Reynolds describes a new mineral borate, found with Ulexite at Tarapaca, Peru, which he names Franklandite. I wish to point out that, in comparing the composition of the two minerals, the author has adopted the wrong formula for Ulexite. In the *Chemical News*, (vol. xv., p. 192,) I showed that the formula for Ulexite, (then called natroborocalcite, &c.) originally proposed by myself, but subsequently erroneously termed "Kraut's," was the correct expression of the composition of the mineral. This formula, changed to the new notation, is



and it came to be designated the name of Kraut because this chemist preferred it to among them doubtless to Rammeisberg's



on account of its general, upon comparison of the numerous analyses published, especially of the Peruvian mineral "Tiza" &c. This formula of Rammeisberg's was particularly shown by Dr Lunge, not to agree so well as "Kraut's," even with its author's own analysis; and another mineral like Ulexite appears to exist in the same deposit, having closely similar composition, as indicated by the same writer, (*Chem. News*, vol. xv., p. 86 :) but, as I mentioned in "Contributions to Mineralogy of Nova Scotia," III. & V., (*Phil. Mag.*, January, 1868 and April, 1870,) the mineral now known as Ulexite occurs here under comparatively simple conditions, affording purer material for analysis than the mixture of salts frequently examined from Peru, and hence, no doubt, the correctness of my formula.

Now, on comparing Ulexite and Franklandite, Professor Emerson Reynolds gives, as the empirical formula of the latter,—