

III. Corrective Note by MESSRS. DE LA RUE, STEWART, and LOEWY to their Paper "On some recent Researches in Solar Physics &c." *

The erroneous date given in our paper for one of Professor Wolf's maxima has already been corrected by us, and we give in the subjoined little Table the corrections of the few numerical data which are necessitated by the error of fixing the date of maximum at 1846·6 instead of 1848·6.

Professor Wolf's ratio $\frac{A}{B}$ (p. 86).

| Erroneous figures given previously. | | Corrected figures. | |
|-------------------------------------|--------------|--------------------|--------------|
| | Differences. | | Differences. |
| I. 1·265 } Mean 2·093 | -0·728 | 1·265 } Mean 1·548 | +0·283 |
| II. 2·615 } | +0·522 | 1·478 } | +0·073 |
| III. 2·400 } | +0·307 | 1·900 } | +0·352 |

The differences derived from our own results are respectively +0·061, -0·107, and +0·047, that is, they are still much smaller, and agree singly better with the mean, than if Professor Wolf's ratio were adopted; hence our conclusion is quite unaffected by this correction.

The remark made by us with reference to this maximum (*vide* p. 85) will remain in force even with the corrected date. We stated there that this particular maximum showed alone an appreciable difference from the dates fixed by ourselves, for it will be found that Professor Wolf's date differs still by about $\frac{3}{4}$ of a year from ours.

IV. "The Action of Oxygen on Copper Nitrate in a state of tension."

By J. H. GLADSTONE, Ph.D., F.R.S., and ALFRED TRIBE, F.C.S. Received March 14, 1872.

In our experiments on the action between copper and nitrate of silver in solution, we frequently noticed that the tips of the silver crystals became red, as though coated with a thin layer of metallic copper.

This apparent deposition of a positive on a more negative metal of course raised our curiosity, and led us to look closely into the circumstances under which it occurred. We found that it took place only when the nitrate of silver was exhausted, and only on those silver crystals which remained in metallic connexion with the copper. We found, too, that the cupreous coating formed most readily where air had the freest access, and, in fact, that it would not form at all in vessels from which oxygen was excluded, nor on those white crystals which were far below the surface of the liquid, though they might be in immediate contact with the copper plate. When an inverted jar was filled with nitrate-of-copper solution and silver crystals resting on branches of copper, and the liquid was displaced by oxygen gas, it was found that the tips of the crystals became red, and

* *Supra*, p. 82.