ART. XLI.—*On the action of sunlight on Sulphurous Acid*; by
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WE know that plants under the influence of the sunlight reduce carbonic acid and water to organic compounds, and organized parts; we know further, that the albuminous principles, as well as some ethereal vegetable oils, contain sulphur which doubtless comes from the sulphates contained in the soil. As regards this reduction of sulphuric acid, it seemed to me of interest to ascertain whether sunlight possesses any reducing power upon the oxygen compounds of sulphur out of the tissues of the plant. For this purpose I exposed diluted sulphuric acid, solutions of sulphates and sulphites and aqueous sulphurous acid under various conditions, in sealed tubes to the sunlight during the last summer.

It was only with the sulphurous acid that any change was noticed. The tubes containing this substance *remained clear during two months*, but after that time a disturbance set in which slowly increased, and sulphur was deposited in a finely divided state.

The sulphurous acid was thus gradually reduced to sulphur, but the oxygen was not liberated, another part of the acid having been oxydized by it to sulphuric acid. It seems very singular that a space of two months elapsed before any change was observed; it appears that the absorption of a great amount of light was necessary for the separation of the first atom of sulphur, which was followed then by more atoms in much shorter intervals of time.

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