be wondered at. The experiments of Table XIII were carried out with solutions of potassium iodide that had not been freed from carbonate, and are therefore not directly comparable with the other experiments of this paper.

TABLE XIII. (Colourless)

Potash, 25 cc (0.929-n); Iodide, 20 cc (0.956·F); Iodine 20 cc (0.089-n); As (0.0101-n) Volume, 200 cc

θ	As(0°)	$K_2 \times 10^4$(0°)	As(30.4°)	$K_2 \times 10^4$(30.4°)
0	—	—	6.28	457.0
7	6.78	45.0	2.32	396.8
10	6.32	40.6	1.68	437.9
14	5.56	44.3	—	—
20	4.80	45.1	—	—
		Av. 43.7		Av. 431.

TABLE XIV. (Brown)

Potash, 1.0 cc; Iodide, 20 cc; Iodine, 20 cc; Volume, 200 cc

θ	x	R(0°)	θ	x	R(30.3°)
2	4.2	2.1	1	32.3	32.3

Summary

In the presence of a large excess of potash, the rate of formation of potassium iodate is, approximately, proportional to the concentrations of $\overline{OI}$, $\overline{I}$, and HOI.

In presence of a large excess of iodine, the rate is increased by increasing the amount of potash or iodine, and decreased by adding to that of the potassium iodide.

On continually increasing the amount of potash, so that the solution changes from brown to colourless, the rate passes through a maximum.

The temperature coefficient is smaller than is customary.

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