in the 250 cc of reacting mixture. Under t is given the dura-
tion of the oxidation in minutes; under x the iodine liberated,
expressed as cubic centimeters of 0.010017 normal arsenite
solution; and under x' these values corrected for the falling
off in concentration of the reagents.[1] $R_o = \dfrac{dx}{dt}$ $(x = o)$ is
the "initial rate," *i. e.*, the number of cubic centimeters of
hundredth-normal iodine liberated per minute in the 250 cc
of reacting mixture whose composition is, and remains, that
given at the head of the table. Under K is given the "con-
stant of the fourth order" multiplied by 10^{13}.

The experiments of Table I are the standard with which
are compared those of Tables II, III and IV where the con-
centrations of the bromate, iodide and acid respectively are
doubled.

Effect of Bromate, Iodide and Acid

TABLE I

KBrO$_3$, 20.5; KI, 98.67; HCl, 95.15

t	x	x'	$R_o \times 10^4$	$K \times 10^{13}$
5	0.23	0.231	462	99
10	0.45	0.454	454	97
20	0.89	0.907	453	100
30	1.40	1.44	480	103
45	2.15	2.25	500	104
60	2.80	2.99	498	103
90	4.15	4.56	506	104

Average value, $R_o = 481 \times 10^{-4}$

TABLE II

KBrO$_3$, 41; KI, 98.67; HCl, 95.15

t	x	x'	$R_o \times 10^4$	$K \times 10^{13}$
5	0.46	0.464	928	99
10	0.90	0.907	907	97
20	1.80	1.87	935	100
30	2.75	2.90	966	103
45	4.00	4.32	960	104
60	5.24	5 79	965	103
90	7.60	8.77	973	104

Average value, $R_o = 948 \times 10^{-4}$

[1] See pages 681 and 685.