TABLE II.

THREE-COIL GALVANOMETER.

Table giving the ratio of the currents producing the deflections δ and δ', the 1000-ohm coil being in circuit.

$\delta-\delta'$	Value of a† when $\delta>\delta'$	Value of a† when $\delta<\delta'$	$\delta-\delta'$	Value of a† when $\delta>\delta'$	Value of a† when $\delta<\delta'$
1	1.04	0.96	11	1.49	0.67
2	1.08	0.92	12	1.54	0.64
3	1.12	0.89	13	1.61	0.62
4	1.16	0.86	14	1.67	0.60
5	1.20	0.83	15	1.74	0 57
6	1.25	0.80	16	1.82	0.55
7	1.30	0.77	17	1.90	0.53
8	1.35	0.74	18	1.96	0.51
9	1.40	0.71	19	2.04	0.49
10	1.45	0.69	20	2.13	0.47

Examples.—Let $\delta=61°$. $\delta'=49°$; then $a=1.54$.
Let $\delta=49°$, $\delta'=61°$; then $a=0.64$.

RESISTANCE.

Variation in resistance due to alteration in temperature.

The following formula is given by Dr. Mathiessen, in which r_t is the resistance of the metal, or alloy, at the temperature $t°$ C and r^o its resistance at $0°C$.

$$r_t=r_o(1+a\,t\pm b\,t^2)$$

The following are the values of a and b:

	a	b
Most pure metals	0.003824	+0.00000126
Mercury	0.0007485	−0.000000398
German silver	0.0004433	+0.000000152
Platinum silver	0.00031	— —
Gold-silver	0.0006999	−0.000000062

*This Table gives the mean of a series of experiments, made by the author.

†$a=\frac{C}{C'}$, and δ is the deflection due to the current C.