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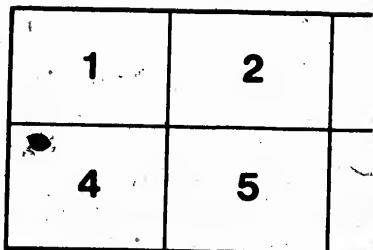
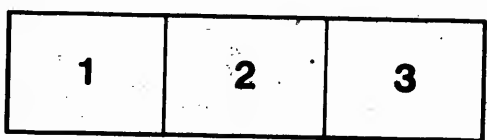
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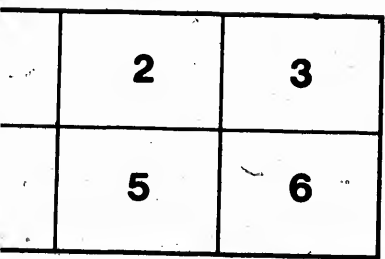
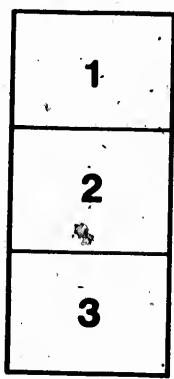
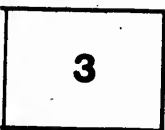
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Nov - 1854

TABLE
OF
COMBINING WEIGHTS:

FOR
PROFESSOR CHAPMAN'S

COURSE ON MINERALOGY.

University College, Toronto.
1854.

In the compilation of this Table, those substances only have been selected, which have a direct bearing on Mineralogical Science. The first column contains the name of the substance; the second, its symbol or formula; and the third, its combining weight. In the case of compound bodies, the percentage amount of the Electro-negative element is also given in a fourth column.

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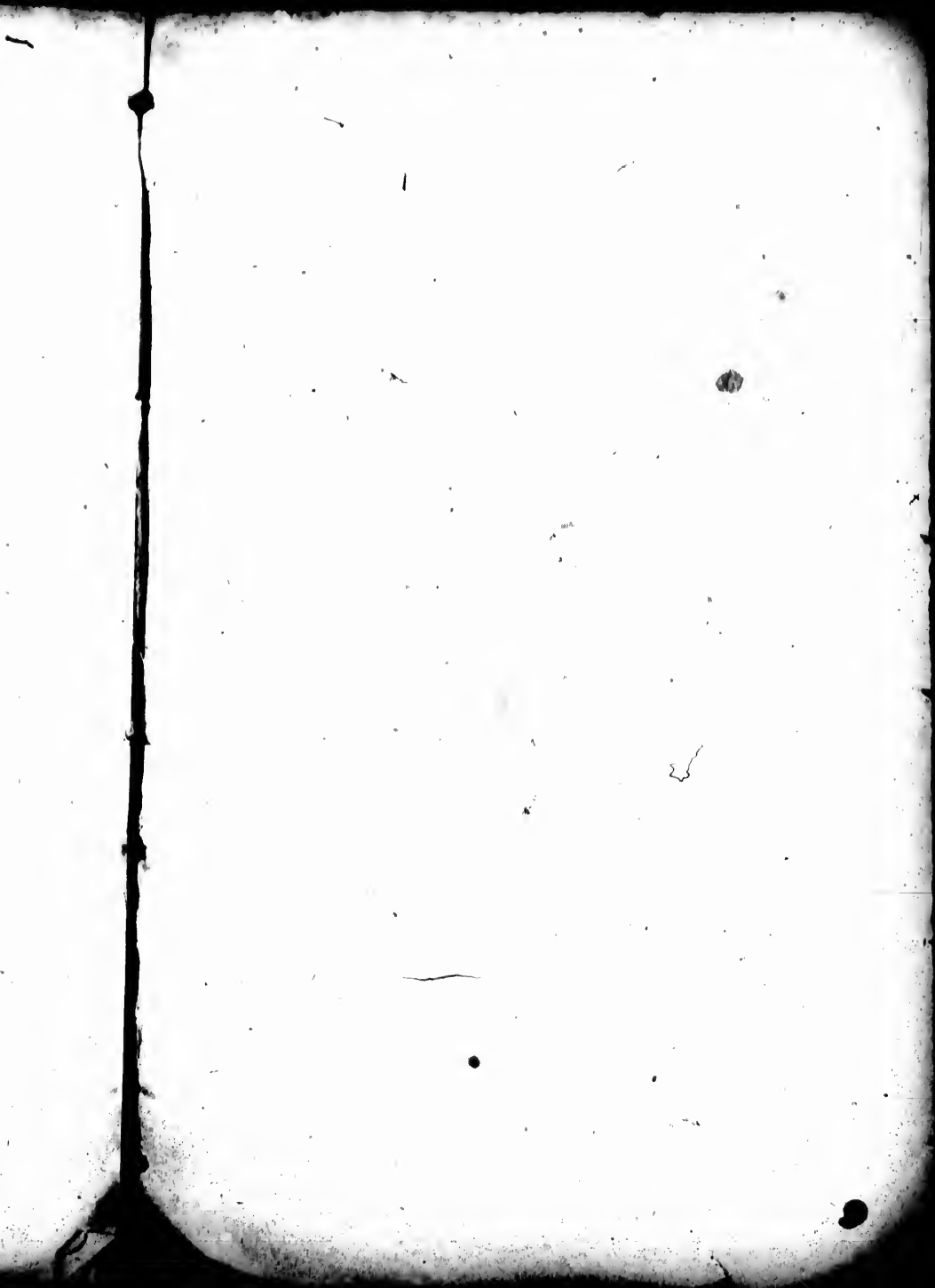
TABLE
OF
COMBINING WEIGHTS.

NAME OF SUBSTANCE.	FORMULA.	WEIGHT.	PER- CENTAGE. E-N. EL.
ALUMINUM	Al	170.9	
Alumina	Al ² O ³	641.8	46.74
ANTIMONY (Stibium)...	Sb	1012.9	
Sulphide of Ant.	Sb S ³	2215.15	27.19
Antimonius Acid ...	Sb O ³	1012.9	15.68
Antimonic Acid	Sb O ⁵	2112.9	23.66
ARSENIC	As	937.5	
Sulphides of arsenic {	As S ³	1530.75	39.11
	As S ⁵	1941.25	51.71
Arsenious Acid	As O ³	1237.5	24.24
Arsenic Acid	As O ⁵	1437.5	34.78
BARIUM	Ba	856.78	
Baryta	Ba O	956.78	10.45
BISMUTH	Bi	2660.76	
Sulphide	Bi S ³	3263.0	18.46
Oxide	Bi O ³	2960.76	10.13
BORON	B	186.2	
Boric Acid	BO ³	436.2	68.78
BROMINE	Br	999.02	
CADMIUM	Cd	696.77	
Sulphide	Cd S	897.52	22.37
Oxide	Cd O	796.77	12.55
CALCIUM	Ca	251.65	
Lime	Ca O	351.65	28.44
CARBON	C	75	
Carbonic Acid	CO ²	275	72.73
CERIUM	Ce	590.8	
Oxide	Ce O	690.8	14.48
Sesquioxide	Ce ² O ³	1481.6	20.52

NAME OF SUBSTANCE.	FORMULA.	WEIGHT.	PER- CENTAGE. E-N. EL.
CHLORINE	Cl	443.28	
CHROMIUM	Cr	828.59	
Sesquioxide	Cr ² O ³	957.18	31.34
Chromic Acid	Cr O ⁴	628.59	47.73
COBALT	Co	368.65	
Sulphides	Co S	569.4	35.20
	Co ² S ₃	1330.55	44.96
	Co S ²	770.15	52.13
Oxide	Co O	468.65	21.34
Sesquioxide	Co ² O ³	1037.30	28.92
COPPER (Cuprum)	Cu	395.6	
Sulphide	Cu ² S	991.95	20.24
Sub-oxide	Cu ² O	891.20	11.22
Oxide	Cu O	495.6	20.18
DIDYMIUM	Di	620	
Oxide	Di O	720	13.9
ERBIUM	E		
FLUORINE	Fl	235.43 [237.5P]	
GLUCINUM (Beryllium)	Be	87.12	
Glucina	or	58.08	
	Be ² O ³	474.24	} 63.20
	or Be O	158.08	
GOLD (Aurum)	Au	2458.33	
HYDROGEN	H	12.5	
Water	HO	112.5	88.80
IODINE	I	1586.0	
IRIDIUM	Ir	1232.08	
IRON (Ferrum)	Fe	350.52	
Sulphides	Fe S	551.28	36.41
	Fe ² S ³	1303.31	46.21
	Fe S ²	752.02	53.39
Oxide	Fe O	450.52	22.20
Sesquioxide	Fe ² O ³	1001.05	29.97
LANTHANUM	Ln	588.0	
Oxide	Ln O	688.0	14.54
LEAD (Plumbum)	Pb	1294.64	
Sulphide	Pb S	1495.39	13.43
Oxide	Pb O	1394.64	7.17
Chloride	Bb Cl	1737.92	25.51
LITHIUM	Li	82.03	
Lithia	Li O	182.03	54.93

NAME OF SUBSTANCE.	FORMULA.	WEIGHT.	PER- CENTAGE E-S. EL.
MAGNESIUM	Mg	150.10	
Magnesia	Mg O	250.10	39.07
MANGANESE	Mn	311.68	
Sulphides	Mn S	515.13	36.81
	Mn ² S ³	1201.62	46.62
	Mn S ²	746.18	53.81
Oxides	Mn O	444.68	22.40
	Mn ² O ³	989.37	30.32
	Mn O ²	544.68	36.72
MERC'Y (Hydrargyrum)	Hg	1250.0	
Sulphide	Hg S	1150.75	13.84
MOLYBDENUM	Mo	575.83	
Bisulphide	Mo S ²	977.33	41.08
Molybdic Acid	Mo O ³	875.83	34.28
NICKEL	Ni	369.33	
Sulphides	Ni S	570.08	35.22
	Ni ² S ³	1340.91	44.92
	Ni S ²	770.83	52.00
Oxide	Ni O	469.33	21.31
NIOBIUM	Nb		
NITROGEN	N	175.0	
Nitric Acid	NO ⁵	675.0	74.07
OSMIUM	Os	1242.62	
OXYGEN	O	100	
PALLADIUM	Pd	665.48	
PELOPIUM	Po		
PHOSPHORUS	P	392.28	
Phosphoric Acid	PO ³	802.28	56.05
PLATINUM	Pt	1232.08	
POTASSIUM (Kalium)	K	480.30	
Potash	KO	589.30	16.07
RHODIUM	Rh	651.96	
RUTHENIUM	Ru	652	
SELENIUM	Se	405.28	
SILICIUM	Si	277.78	
Silica	Si O ²	577.78	51.92
SILVER (Argentum)	Ag	1349.66	
Sulphide	Ag S	1550.41	12.95
Chloride	Ag Cl	1792.04	24.72
Iodide	Ag I	2035.66	54.02
Bromide	Ag Br	2349.28	42.55
Oxide	Ag O	1449.66	6.90

NAME OF SUBSTANCE.	FORMULA.	WEIGHT.	PER- CENTAGE. E-N. EL.
SODIUM (Natrium)	Na	280.73	
Soda	Na O	380.73	25.06
STRONTIUM	Sr	545.03	
Strontia	Sr O	645.03	15.48
SULPHUR	S	200.75	
Sulphuric Acid	SO ₃	500.75	59.91
TANTALUM (Ta, Pb, Nb)	Ta (Pb Nb)	2200.7	
Tantalic Acid (in- cluding pelopie and niobic acid)	TaPbNbO ₃	2500.7	11.55
TELLURIUM	Te	801.76	
TERRIUM	Tb		
THORIUM	Th	743.80	
Thoria	Th O	843.80	11.85
TIN (Stannum)	Su	735.30	
Binoxide	Su O ₂	935.30	21.38
TITANIUM	Ti	301.55	
Sesquioxide	Ti ² O ₃	903.10	33.22
Titanic Acid	Ti O ₃	501.55	30.88
TUNGSTENUM (Wol- framium)	W	1183.0	
Tungstic Acid	WO ₃	1483.0	20.23
URANIUM	U	750.0	
Oxide	UO	850.0	11.76
Sesquioxide	U ² O ₃	1800.0	16.66
VANADIUM	V	856.89	
Vanadic Acid	VO ₃	1156.89	25.03
YTRIUM	Y	402.5	
Ytria	YO	502.5	19.90
ZINC	Zn	406.59	
Sulphide	Zn S	607.34	33.05
Oxide	Zn O	506.59	19.74
ZIRCONIUM	Zr	420.20	
Zirconia	Zr ² O ₃	1140.40	26.31



UNIVERSITY COLLEGE, TORONTO.

Mineralogy and Geology.

PROFESSOR CHAPMAN,

LATE PROFESSOR IN UNIVERSITY COLLEGE, LONDON.

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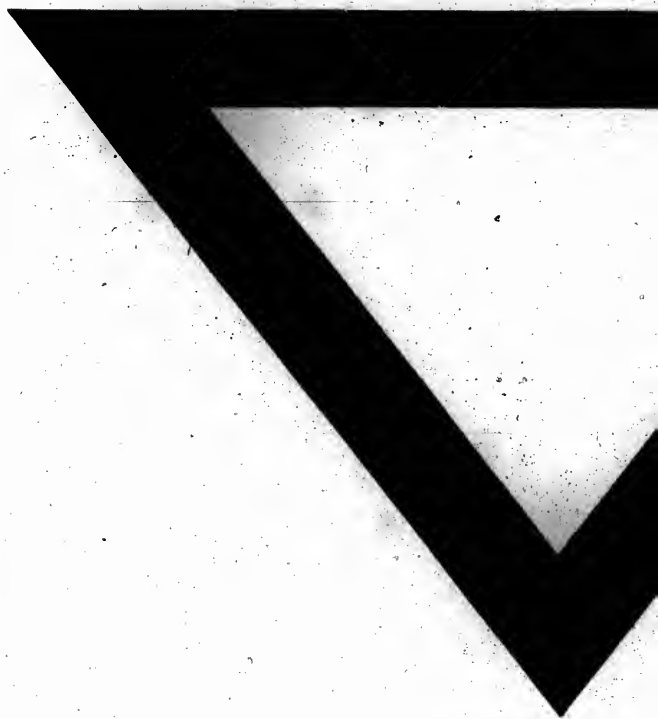
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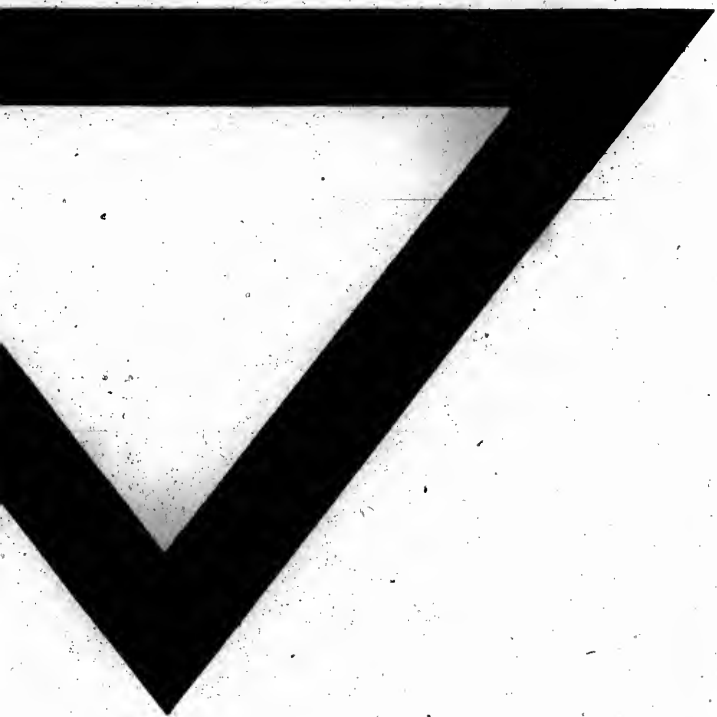
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