

CHEMICAL TABLES

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Chemical Tables by Stephen P. Sharples

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STEPHEN P. SHARPLES

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TABLES**

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BY

STEPHEN P. SHARPLES, S.B.

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1866.

P R E F A C E .

THE following work was undertaken at the suggestion of Dr. Wolcott Gibbs, and has been executed under his immediate supervision. No labor has been spared to render the collection of tables as complete as possible, and to insure perfect accuracy in the figures. In all cases the tables have been taken from the original sources, or have been carefully compared with them. The tables on pages 94-99, 100-108, are new, and have been computed expressly for this work: the logarithms at the end of the volume are taken from the well-known five-figure table of August.

Many tables have been introduced, which are not in common use in the laboratory. This has been done partly for the sake of completeness, but principally because the progress of science continually brings the physical and chemical properties of bodies into closer relations with each other. Thus the researches of Landolt have recently shown that the chemical constitution of a mixture or compound may, in many cases, be deduced with accuracy from its optical properties alone.

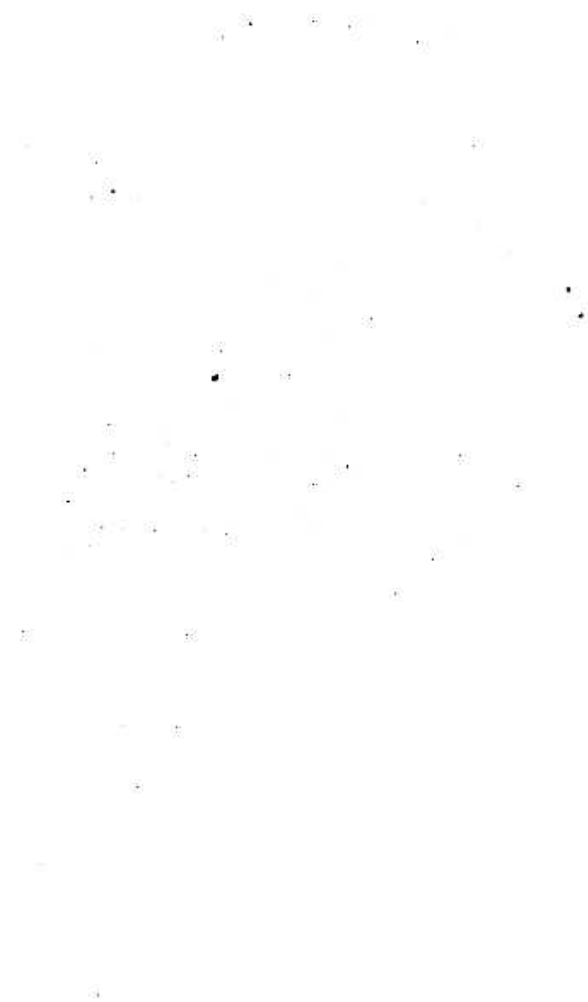
The tables usually found in works on chemistry, giving the vapor densities of bodies referred to air taken as unity, have been omitted in this work, for the reason that it is always more convenient to refer gases and vapors to hydrogen as the unit of density as well as of weight and volume, and the vapor density is then very simply and directly related to the atomic weight.

The table of wave lengths on page 148 will be found convenient for use in connection with Kirchhoff's chart of the spectrum. With its assistance the wave length of any observed line may be determined with sufficient accuracy by the ordinary methods of interpolation.

The Editor will be greatly obliged for any criticisms or suggestions which may enable him to render the work more perfect in case it should pass to a second edition.

S. P. S.

LAWRENCE SCIENTIFIC SCHOOL,
Cambridge, June, 1866.



CONTENTS.

	PAGE
Elements, their Equivalents and Logarithms	5
Atomic and Molecular Weights of the Elements	7
Formulas, Equivalents, and Per Cents of the Constituents of Compounds	9
Factors for Analysis	20
Formulas for Indirect Estimation	23
Factors for Soda, Potassa, and Binoxide of Manganese	24
Table of Per Cents of Chlorine and Binoxide of Manganese	25
" " Chlorine in Chloride of Lime	26
Specific Gravity of the Elements	29
" " frequently occurring Combinations	30
Ammonia, Per Cent of, in Solution	35
Potassa " " "	35
Soda " " "	36
Sulphuric Acid, Specific Gravity of	37
" " Table for diluting	38
Nitric Acid, Specific Gravity of	39
Hydrochloric Acid, Specific Gravity of	40
Acetic Acid " " "	41
Alcohol, Per Cent of, in dilute Spirits by Weight	42
" " " " Volume	43
" " Table for diluting by Volume	44
" " " " Weight	45
Salt, Per Cent of common, in Solutions	46
Specific and Atomic Heat of the Elements	51
Specific Heats of some of the most common Substances	52
Latent Heat of Vaporization	53
Specific Heat of Bodies in solid, liquid, and gaseous states	54
" " Gases and Vapors	56
" " Water and Latent Heat of Vapor of Water	57
Total Heat of Vaporization	57
Linear Expansion of Solid Bodies	58
Cubical " " " "	60

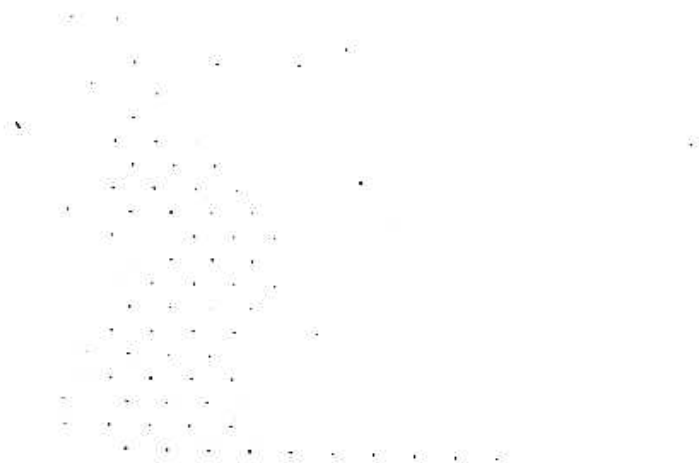
Expansion of a Glass Vessel	61
" " Glass	62
" " Mercury	63
Thermometers, Comparison of Air and Mercury	64
" " Centigrade and Fahrenheit	65
" " Fahrenheit and Centigrade	66
Expansions and Boiling-Points of Liquids	68
Elevation of Boiling-Point, by Solution of Salts	72
Volume of Water at different Temperatures	72
Tension of Vapor of Alcohol	74
" " Ether	75
" " Bisulphide of Carbon	75
" " Chloroform	76
" " Benzene	76
" " Chloride of Carbon	76
" " " Ethyl	77
" " Bromide	77
" " Iodide	77
" " Wood Spirit	78
" " Acetone	78
" " Bromide of Ethylene	78
" " Chloride of Silicon	79
" " Tetrachloride of Phosphorus	79
" " " " Boron	79
" " Chloride of Cyanogen	80
" " Oil of Turpentine	80
" " Sulphur	80
" " Sulphurous Acid	81
" " Oxide of Methyl	81
" " Chloride of "	81
" " Ammonia	81
" " Sulphuretted Hydrogen	82
" " Carbonic Acid	82
" " Protoxide of Nitrogen	82
Heat Units evolved by combination of Elements	83
" " Combustion in Oxygen	84
" " Action of Bromine and Iodine	85
" " " Chlorine	85
" " Combination of Acids and Bases	86
Formulas for Weights and Volumes and Densities of Gases	89
Physical Properties of Gases	93
Logarithms of $\frac{h}{760}$ from $h = 1$ to $h = 699$	94
" " " $h = 700$ to $h = 760.9$	98

CONTENTS.

vii

Logarithms of $\frac{1}{1+0.00867t}$ from $t=0.1$ to $t=350.9$	100
Tension of Vapor of Water from -32° to $+320^{\circ}$	109
“ “ “ for each $\frac{1}{10}$ of a degree from 85 to 101	111
“ “ “ “ “ “ “ “ - 10 to + 35	112
“ “ Mercury	114
Table of $\frac{0.0012563}{(1+0.00867t)760}$	115
“ $\frac{0.0012932}{760(1+0.00867t)}$	116
“ $\frac{0.00867}{1+0.00867t}$	121
Examples of the Use of Table for Reduction of a Barometer to 0°	123
Reduction of Barometer with Glass Scale to 0° C.	124
“ “ “ Brass Scale “	132
“ Water Pressure to Mercury Pressure	133
Correction of Barometrical Column for Capillarity	134
Coefficients of Absorption of Gases	136
Estimation of Weight of Gases from their Volumes	140
Formulas for Use of Tables relating to Light	147
Wave Lengths	148, 149
Indices of Refraction	150
“ “ of Essential Oils	154
“ “ of Hydrocarbons of Essential Oils	156
Solubilities of some of the more common Precipitates	161
French Weights and Measures	163
English and French Weights and Measures compared	164
Table of Logarithms	167

① ② ③ ④ ⑤



⑥

⑦