Alcoholmetrical Table of Tralles.

Alcohol in 100 measures of spirit.	Specific gravity at 60° Fahr.	Alcohol in 100 measures of spirit.	Specific gravity at 60° Fahr.	Alcohol in 100 measures of spirit.	Specific gravity at 60° Fahr.	Alcohol in 100 measures of spirit.	Specific gravity at 60° Fahr.
0	·9991	26	·9689	51	·9315	76	·8739
1	·9976	27	·9679	52	·9295	77	·8712
2	·9961	28	·9668	53	·9275	78	·8685
3	·9947	29	·9657	54	·9254	79	·8658
4	·9933	30	·9646	55	·9234	80	·8631
5	·9919	31	·9634	56	·9213	81	·8603
6	·9906	32	·9622	57	·9192	82	·8575
7	·9893	33	·9609	58	·9170	83	·8547
8	·9881	34	·9596	59	·9148	84	·8518
9	·9869	35	·9583	60	·9126	85	·8488
10	·9857	36	·9570	61	·9104	86	·8458
11	·9845	37	·9556	62	·9082	87	·8428
12	·9834	38	·9541	63	·9059	88	·8397
13	·9823	39	·9526	64	·9036	89	·8365
14	·9812	40	·9510	65	·9013	90	·8332
15	·9802	41	·9494	66	·8989	91	·8299
16	·9791	42	·9478	67	·8965	92	·8265
17	·9781	43	·9461	68	·8941	93	·8230
18	·9771	44	·9444	69	·8917	94	·8194
19	·9761	45	·9427	70	·8892	95	·8157
20	·9751	46	·9409	71	·8867	96	·8118
21	·9741	47	·9391	72	·8842	97	·8077
22	·9731	48	·9373	73	·8817	98	·8034
23	·9720	49	·9354	74	·8791	99	·7988
24	·9710	50	·9335	75	·8765	100	·7939
25	·9700						

Table showing the Value of the Degrees of Baumé's Hydrometer in those of Tralles's Alcoholmeter.

Baumé.	Tralles.	Baumé.	Tralles.	Baumé.	Tralles.	Baumé.	Tralles.
10·12	·0	20	50·1	30	75·6	40	92·9
11	4·3	21	53·2	31	77·6	41	94·2
12	9·8	22	56·1	32	79·6	42	95·5
13	16·1	23	58·9	33	81·5	43	96·7
14	22·9	24	61·6	34	83·4	44	97·8
15	29·2	25	64·2	35	85·1	45	98·8
16	34·5	26	66·6	36	86·8	46	99·7
17	39·2	27	69·0	37	88·4	46·37	100·0
18	43·1	28	71·3	38	90·0		
19	46·8	29	73·5	39	91·4		

RELATIONS BETWEEN THERMOMETERS.

In *Fahrenheit's* thermometer, the freezing point of water is placed at 32°, and the boiling point at 212°. and the number of intervening degrees is 180.

The *Centigrade* or *Celsius's* thermometer, which is now recognized in the U. S. Pharmacopœia and has been adopted generally by scientists, marks the freezing point *zero*, and the boiling point 100°.

In *Reaumur's* thermometer the freezing point is at *zero*, and the boiling point at 80°.

In *De Lisle's* thermometer, used in Russia, the graduation begins at the boiling point, which is marked *zero*, while the freezing point is placed at 150°.

From the above statement, it is evident that 180 degrees of Fahrenheit are equal to 100° of the Centigrade, 80° of Reaumur, and 150° of De Lisle; or 1 degree of the first is equal to $\frac{5}{9}$ of a degree of the second, $\frac{4}{9}$ of a degree of the third, and $\frac{5}{6}$ of a degree of the last. It is easy, therefore, to convert the degrees of one into the equivalent number of degrees of the other; but in ascertaining the corresponding points upon the different scales, it is necessary to take into consideration their different modes of graduation. Thus, as the zero of Fahrenheit is 32° below the point at which that of the Centigrade and of Reaumur is placed, this number must be taken into account in the calculation.

1. If any degree on the *Centigrade* scale, either above or below zero, be multiplied by 1·8, the result will, in either case, be the number of degrees above or below 32°, or the freezing point of *Fahrenheit*.

2. The number of degrees between any point of *Fahrenheit's* scale and 32°, if divided by 1·8, will give the corresponding point on the *Centigrade*.

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