

pan, and boil them over a slow fire until they are reduced to a fine pulp. Then put them in jelly jars and keep them in a cool place.—*American Housewife.*

LIQUID SARCE.—One cup of sugar and one third cup of butter, rubbed to a cream. Then stir in the well-beaten white of one egg. Flavor with nutmeg or lemon. Just before bringing to the table add one-fourth cup of boiling water.

Arts and Manufactures.

SCALES OF TEMPERATURE.

Many of our readers, in their search after information on beet root sugar, and other questions which are treated of in works published on the continent of Europe, will find the temperature therein stated at so much "Centigrade" or "Cent." This of course means the Centigrade scale of temperature; and as our English ideas are mainly founded on Fahrenheit scale (in which we have been educated), it is often very troublesome and disappointing not to be able at once to tell what so many degrees "Cent." means according to our scale "Fahr."

To meet this difficulty we have constructed the following table a reference to which will at once give the inquirer the information wanted by a causal glance. The following are the rules on which the table has been constructed:

To convert Centigrade to Fahrenheit—Multiply the number of degrees Centigrade by nine (9), divide the product by five (5), add 32 to the product, and you have the answer in Fahrenheit scale thus:

100 Cent. — Multiply by 9.

9

5) — Divide by 5.

180

32 Then add 32.

212 Answer — i. e., the heat of boiling water by Fahrenheit scale.

To bring Fahrenheit to Centigrade, reverse the calculation.

Fahrenheit commences at 0, which is the temperature of snow and common salt mixed.

He makes water just freezing 32°, and boiling water at the level of the ocean, or with a barometrical pressure of 30 inches, 212°.

The Centigrade scale starts from the temperature of freezing water, which it makes 0, it then considers water when boiling at the level of the ocean (or when the Barometer stands at 30 inches) 100; and the intermediate scale is divided into 100 parts or degrees; thus when the temperature is below freezing, the Centigrade scale has so many degrees "minus" attached to it, "Reaumer's" scale, also extensively used on the continent of Europe, and often referred to in books, is nearly one-fifth less

than Centigrade. This Reaumer scale also commences with freezing water, as 0, and makes boiling water at the level of the ocean (or 30 inches Barometer) 80°; so that by the table here given, if you have a heat given by Reaumer, all you have to do is to add a fourth to it (which is the same as deducting a fifth), thus brings it to Centigrade, and you can then refer to the table for the corresponding degree Fahrenheit. Thus:

80 Reaumer is boiling water.

Add $\frac{1}{5}$ 20

100 Makes Centigrade; then look for 100 Cent., and you find 212° Fahrenheit.

These are all well-known facts; but the public, who are the chief readers of newspapers, have not scientific works always at hand to refer to, and this table may save a good deal of searching and trouble, besides placing the matter in a plain and easy point of view to those who may not have particularly studied the subject.

As both the Centigrade and Reaumer's scales start from freezing as 0, and the one makes boiling water 100° and the other 80°, the adding one-fourth or deducting one-fifth will not be mathematically correct in the low numbers, and the above calculation is near enough for all ordinary and practical purposes.

TABLE OF TEMPERATURE—"CENTIGRADE" REDUCED TO "FAHRENHEIT" SCALE.

Cent.	Fahr't.	Cent.	Fahr't.	Cent.	Fahr't.
0	32	36	96.4	72	161.3
1	33.4	37	98.3	73	163.2
2	35.3	38	100.2	74	165.4
3	37.2	39	102.1	75	167
4	39.1	40	104	76	168.4
5	41	41	105.4	77	170.3
6	42.4	42	107.3	78	172.2
7	44.3	43	109.2	79	174.1
8	46.2	44	111.1	80	176
9	48.1	45	113	81	177.4
10	50	46	114.4	82	179.3
11	51.4	47	116.3	83	181.2
12	52.3	48	118.2	84	183.1
13	55.2	49	120.1	85	185
14	57.1	50	122	86	187.4
15	59	51	123.4	87	188.3
16	60.4	52	125.3	88	190.3
17	62.3	53	127.2	89	192.1
18	64.2	54	129.1	90	194
19	66.1	55	131	91	195.4
20	68	56	132.4	92	197.3
21	69.4	57	134.3	93	199.2
22	71.3	58	136.2	94	201.1
23	73.2	59	138.1	95	203
24	75.1	60	140	96	204.4
25	77	61	141.4	97	206.3
26	78.4	62	143.3	98	208.2
27	80.3	63	145.2	99	210.1
28	82.2	64	147.1	100	212
29	84.1	65	149	101	213.4
30	86	66	150.4	102	215.3
31	87.4	67	152.3	103	217.2
32	89.3	68	154.2	104	219.1
33	91.2	69	156.1	105	221
34	93.1	70	158	106	222.4
35	95	71	159.4	107	224.3
				108	226.2
				109	228.1
				110	230