CUBE, OR SOLID MEASURE.

1728 inches	...	...	make	...	1 solid foot
27 feet			"	...	1 solid yard
40 feet rough, or fifty feet of hewn timber			"	...	1 ton or load
42 feet	...	...	"	...	1 ton of shipping
1 yard of earth	...	...	"	...	1 load

Thus, a CORD of wood is 4 feet broad 4 feet deep, and 8 feet long, being 118 cubic feet.—A STACK of wood is 3 feet broad, 3 feet deep, and 12 feet long, being 108 cubic feet.

The dimensions of timber, stone, excavations, and all works which have length, breadth, and thickness, are taken by lineal measure; but the contents are calculated by cubic measure.

A CUBE is a solid body, and contains length, breadth, and thickness. A cubic number is produced by multiplying the simple number twice into itself: thus, 343 is the cube number, being produced by multiplying the number 7 twice into itself; as, 7 + 7 × 7 = 343.

ANGULAR MEASURE, OR DIVISIONS OF THE CIRCLE.

60 seconds	=	1 minute	90 degrees	=	1 quadrant
60 minutes	=	1 degree	360 degrees or 12 signs	=	1 circumference
30 degrees	=	1 sign			

MEASURE OF TIME.

60 seconds	=	1 minute	28, 29, 30, 31 days	=	1 calendar month
60 minutes	=	1 hour	12 calendar months	=	1 year
24 hours	=	1 day	365 days	=	1 common year
7 days	=	1 week	366 days	=	1 leap year
28 days	=	1 lunar month			

In 400 years, 97 are leap years, and 303 common.

WEIGHT OF ENGLISH COIN.

		dwts.	gr.			dwts.	gr.
Gold:	Sovereign	5	3¼	Florin		7	6 6-11th
	Half-sovereign	2	13½	Shilling		3	15 3-11th
	Double Sovereign	10	6½	Sixpence		1	19 7-11th
Silver:	Crown	18	4 4-11ths	Fourpence		1	5 1-11th
	Half-Crown	9	2 2-11ths				

TO MEASURE UNSQUARED TIMBER.

In order to ascertain the contents, multiply the square of the quarter girth, or of ¼ of the mean circumference, by the length. When the buyer is not allowed his choice of girth in taper trees, he may take the mean dimensions, either by girthing it in the middle for the mean girth, or by girthing it at the two ends, and taking half of their sum. If not, girth the tree in so many places as is thought necessary, then the sum of the several girths, divided by their number, will give a mean circumference, the fourth part of which being squared, and multiplied by the length, will give the solid contents.

The superficial feet in a board or plank is known by multiplying the length by the breadth. If the board be tapering, add the breadth of the two ends together, and take half their sum for the mean breadth, and multiply the length by this mean breadth.

The solid contents of squared timber are found by measuring the mean breadth by the mean thickness, and the product again by the length. Or multiply the square of what is called the quarter girth in inches by the length in feet, and divide by 144, and you have the contents in feet.

Boughs, the quarter girth of which is less than 6 inches, and parts of the trunk less than 2 feet in circumference, are not reckoned as timber.

1½ inch in every foot of quarter girth, or ⅛ of the girth, is allowed for bark, except of elm. 1 inch in the circumference of the tree, or whole girth, or one-twelfth of the quarter girth is the general fair average allowance.

The quarter girth is half the sum of the breadth and depth in the middle.

The nearest approach to truth in the measuring of timber, is to multiply the square of ½ of the girth or circumference by double the length, and the product will be the contents.

TABLE TO FIND CONTENTS OF CASES, &c., OF A GIVEN AMOUNT.

EXAMPLE.—T.S. 1.149. 99 cases spirits at 1 ¾ galls. = 176 ¾ galls. RULE.—First find the whole gallons 99 + 1 = 99 galls.; then in line with 25 in the first column, and under the number 90 will be found 70.10, also under 9 is 7.1; making the fractional quantity 77.11, which, added to the whole gallons, = 176 ¾.

	2	3	4	5	6	7	8	9	10	20	30	40	50	60	70	80	90	100
1									10	20	30	1.8	1.18	1.28	2.6	2.16	2.25	3.4
2								18	20	1.8	1.28	2.16	3.4	3.24	4.12	45	5.20	6.8
3							24	27	30	2.16	2.26	3.24	4.22	5.20	6.18	10	8.14	9.12
4						28	1	1.4	1.8	3.4	3.24	5	6.8	7.16	8.24	10.12	11.8	12.16
5	5	6	8	5	6	1.3	1.8	1.13	1.28	4.12	4.22	6.8	7.26	9.12	10.30	15	14.2	15.20
6	10	9	12	10	12	1.10	1.16	1.22	2.6	5.20	6.18	7.16	9.12	11.8	13.4	17.16	16.28	18.24
7	15	12	16	15	18	1.17	1.24	1.31	2.26	6.8	8.14	10	11.16	13.4	15.10	20	19.22	21.28
8	20	15	20	20	24	1.24	2.8	2.8	3.14	6.8	10.10	11.8	13.24	15	17.16	22.16	22.16	25
9	25	21	24	25	30	1.31	2.16	2.17	3.24	7.16	11.8	12.16	15.20	18.24	19.22	25	25.10	28.4
10	30	24	28	30	3.	2.6	2.24	2.26	4.2	8.24	12.6	15	17.6	20.20	21.28	27.16	28.4	31.8
11	1.4	27	1	1.3	3.6	2.13	2.32	3.3	4.12	9.12	13.4	16.8	18.24	22.16	24.2	30	30.30	34.12
12	1.8	30	1.4	1.8	3.12	2.20	3.8	3.12	4.22	10.20	14.2	17.16	20.10	24.12	26.8	32.16	36.18	37.61
13	1.12	1.1	1.8	1.13	3.18	2.27	3.16	3.21	5.10	11.8	15.30	18.24	22.16	26.8	28.14	35	39.12	40.20
14	1.16	1.4	1.12	1.18	3.24	3.9	3.24	4.7	5.20	12.16	16.28	20.20	23.14	28.4	30.20	37.16	42.6	43.24
15	1.20	1.7	1.16	1.23	3.	3.16	4.8	4.16	5.30	13.4	17.26	21.18	25	30	32.26	40	45	46.28
16	1.24	1.10	1.20	1.28	3.6	3.23	4.16	4.25	6.8	14.12	19.22	23.14	26.18	31.28	35	42.16	47.26	50
17	1.28	1.13	1.24	2.1	3.12	3.30	4.24	5.2	6.28	15	20.20	25	28.14	33.24	37.6	45	50.20	53.4
18	1.2	1.16	1.28	2.6	3.18	4.5	5.2	5.11	7.6	15.20	21.18	26.8	29.22	35.20	39.12	47.16	53.14	56.8
19	1.6	1.19	2.	2.11	3.24	4.12	5.10	5.20	7.16	16.8	22.16	28.14	31.8	37.16	41.18	50	56.8	59.12
20	1.10	1.22	2.4	2.16	4.2	4.19	5.20	5.29	7.26	16.28	23.24	29.22	32.26	39.12	43.24	52.16	59.2	62.16
21	1.14	1.25	2.8	2.21	4.8	4.26	5.8	6.6	8.4	17.16	25	31.8	35.10	41.8	45.30	55	61.28	65.20
22	1.18	1.28	2.12	2.26	4.14	5.1	5.16	6.15	8.14	18.4	26.18	32.16	36.18	43.4	48.4	57.16	64.22	68.24
23	1.22	1.31	2.16	2.31	4.20	5.8	5.24	6.24	9.2	18.24	27.16	35	37.16	45	50.10	60	67.16	71.28
24	1.26	2.2	2.20	3.4	4.22	5.15	6.8	7.1	9.12	20.10	28.14	36.8	39.2	46.28	52.16	62.16	70.10	75
25	1.30	2.5	2.24	3.9	4.28	5.22	6.16	7.19	9.22	21.18	29.12	37.16	40.20	48.24	54.22	65	73.4	78.4
26	1.8	2.8	2.28	3.14	5.2	5.29	6.24	7.26	9.30	22.16	30.10	38.24	42.6	50.20	56.28	67.16	75.30	81.8
27	1.12	2.11	3.	3.19	5.8	6.4	7.8	8.5	9.2	23.24	31.8	40.20	43.24	52.16	59.2	70	78.24	84.12
28	1.16	2.14	3.4	3.24	5.14	6.11	7.16	8.14	18.4	25	32.6	41.8	45.10	54.12	61.8	72.16	81.18	87.16
29	1.20	2.17	3.8	3.29	5.20	6.18	7.24	8.23	9.12	26.18	33.4	43.4	46.28	56.8	63.14	75	84.12	90.20
30	1.24	2.20	3.12	4.2	5.26	6.25	7.24	9.2	9.22	27.16	34.2	45.10	48.14	58.4	65.20	77.16	87.6	93.24
31	1.28	2.23	3.16	4.7	5.32	6.2	8.2	9.12	19.12	28.4	35	46.28	50.16	60	67.26	80.24	90.24	96.28
1-32	2	3	4	5	6	7	8	9	10	20	30	40	50	60	70	80	90	100