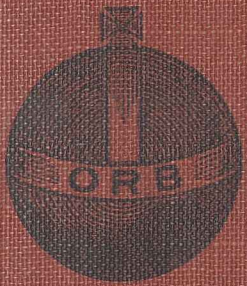
THE

REFEREE

A HANDBOOK OF USEFUL INFORMATION



FIFTEENTH EDITION

(WITH APPENDIX)

With the Compliments of

JOHN LYSAGHT (Aust.) LTD.

PLEASE READ THIS.

Galvanized Iron

"ORB" CORRUGATED.



"QUEEN'S HEAD" PLAIN.



Manufactured at Newcastle (New South Wales).

Your attention is specially drawn to the fact that John Lysaght (Australia) Limited are manufacturing "ORB" Galvanized Corrugated, "Queen's Head" and "Fleur-de-lis" Galvanized Plain Iron at Newcastle (N.S.W.)

These works are of the most modern type, and equipped with the very best and latest Sheet Rolling and Galvanizing Machinery, whilst the same care and close attention are devoted to the manufacture of the locally made sheets as in the English works. The makers can, therefore, confidently guarantee that the quality of the Newcastle Sheets is equal to that of the same well-known brands of John Lysaght Ltd., Bristol (Eng.), which are the standard for quality throughout the world.

Every sheet of LYSAGHT'S "ORB," "QUEEN'S HEAD" and "FLEUR-DE-LIS" Iron is branded and guaranteed, and sheets of Australian manufacture have the word "AUSTRALIA" under the brand.

PLEASE NOTE!

That Lysaght's Galvanised Plain and Corrugated Iron, and Black Sheets, are stocked by all the leading Ironmongers, Timber Merchants and Storekeepers throughout the Commonwealth, from whom current prices can always be obtained upon application.

Further copies of this Publication may be obtained post free, upon application at any of the Offices of JOHN LYSAGHT (Australia) LTD., in the various Capital Cities of the Commonwealth.

THE REFEREE

15TH EDITION

BEING

A GENERAL GUIDE FOR IRONWORKERS, STOREKEEPERS, COUNTRY RESIDENTS, &c.

CONTAINING

TABLES OF WEIGHTS, MEASUREMENTS, AVERAGE RAINFALL, POSTAL AND OTHER USEFUL INFORMATION

Revised June, 1927. *Copyright.*

Whether made in England or Australia, every detail of the manufacture of LYSAGHT'S SHEETS receives the same careful scrutiny as has served to gain world-wide recognition of their reliability for over seventy years.

The various tables contained herein have been carefully compiled from existing sources of information. No responsibility is accepted, and no originality is claimed in respect thereof. They are intended to give closely approximate information which may not always be readily accessible elsewhere.

The Publisher will be thankful to receive suggestions for further improvements or to have pointed out any printer's or other errors which may have inadvertently crept in. Communications may be addressed to Box 196 D, G.P.O., Sydney.

Sydney:

WEBSDALE, SHOOSMITH LTD., Printers,
117 Clarence Street.

The Evolution of Galvanized Iron

IT is interesting to note at the present day, when the use of Galvanized Iron has become so widely extended, that its introduction dates back only to 1837. Although a plain sheet was exhibited at the Great Exhibition in 1851, it was not until the application of steam power for the purpose of corrugating was brought about in 1854, that Galvanized Iron really came into practical use.

In 1857 the celebrated "ORB" Brand was first manufactured by Mr. JOHN LYSAGHT.

During the seventy years that have since elapsed, greatly improved methods for its production, and extreme care displayed in its manufacture, have secured for **LYSAGHT'S GALVANIZED IRON** an unrivalled reputation throughout the world, and so universally has it been adopted to meet the needs of modern civilization, that it may with truth be said that the sun is always shining on "ORB" IRON.

We are pleased to record that the major portion of the heavy sheets of "Elephant Iron," and the more familiar corrugated curved sheets so extensively used for roofing Hutments and Dug-outs on the Western and other Fronts during the Great War were manufactured by Messrs. John Lysaght Limited, of Bristol, Newport and Scunthorpe (Eng.).

INDEX

	PAGE
Aluminium—Size and Weight of Sheets	40
Asbestos Cement Sheets—Sizes and Weights of	80
,, ,, Slates and Shingles	81
Barbed Wire	73
Beam Wireless Service	102
Black Steel Sheets	19, 20, 21, 22, 23
Brickwork—Useful Information	83, 84
Broadcasting—Regulations	100, 101, 102
Bolts—Carriage	51
Calendar, 1928-9	106
Chain—Sustaining Degree of Best Mining	85
,, Load and Strain of Best Mill Proof	85
Commonwealth Statistics	92, 93, 95, 96
Cotter Pins	59
Copper Sheets—Weights and Gauges	27
,, Tubes	28
Costing System	43, 44
Currency—British and Foreign	90
Distances between Ports	97
"Durabestos" Building Sheets	80
Decimal Equivalents	63
Expansion of Metals	27
Fertilizers	98, 99
First-Aid to the Injured	107/111
Fittings—Water and Steam, Trade Price List	38
Fluxes—For Soldering	25
Fusing Temperature of Metals	27
Galvanized Iron, Evolution of	3
,, Sheets, Life of	12
Gauges—Birmingham, Imperial, American	39
Galvanizing—Good: What it Means	35
Guest, Keen & Nettlefold—Agents for	45
Guest, Keen & Nettlefold—Supplement	45/64
Hints for Reckoning	18, 82
Hoops	41
Iron—Bar Iron, Flat	71
,, Black Sheet	19, 20, 21, 22, 23
,, Galvanized, Evolution of	3
,, ,, Thicknesses and Sections of	7
,, ,, Corrugated, Covering Capacity	8
,, ,, ,, Counts and Weights	8
,, ,, ,, Price per Sheet	9, 10, 11
,, ,, Plain, Count and Weight	13
,, ,, ,, Price per Sheet	14, 15, 16, 17
,, Plates	66, 67, 69
,, Round and Square	70
Joists, Steel Stanchions	72
Lead, Sheet, Weight per Roll and per Foot	26
Lysaght's Trade Marks	6
Motor Body Sheets	22, 23
Mensuration of Surfaces and Solids	90
Nails—Number in lb.	8
Nuts—Pressed and Forged	52

	PAGE
Pipes—Galvanized, Iron, Composition	29
„ Lead	31
„ Acetylene and Water	30
Postal Information	91, 92
Price per ton—How much per lb.?	18
Price per cwt. at a given price per lb.	82
Pig Iron	68
Ratchet Braces	61
Rainfall Statistics	95, 96
Railways—Commonwealth and State	93
Railway Carriages and Waggons (Steel)	94
Rope—Manila	83
„ Flax	83
„ Wire, Weights and Strength	42
Rivets	60
Screws—Guest, Keen & Nettlefolds	46, 58
„ Wood	47, 65
„ „ Weight per lb.	64
„ Number per lb.	27
„ Machine	48
„ Roofing	49
„ Coach	50
Scissors	62
Selling Price of Goods, How to Fix	43, 44
Slates, Roofing	79
Solders	25
Statistics	92, 93, 95, 96
Steel Plates	66, 67, 69
Tanks—Circular and Square, Capacity of	34, 36
„ Galvanized Iron required for	37, 38
Tiles, Roofing, Covering Capacity and Weight of	80
„ Walls and Floor, Sizes and Diagrams	105
Trade Marks, Lysaght's	6
Timber	86
Tinplates	26
Tubes—Seamless Copper, Weight of	28
„ Gas, Water, Steam—Trade List	32
Useful Information	12, 35, 82, 84, 85
Wallpapers—Effect of Colours on Light	79
„ Table of Measurements	79
Weight of Metals per Superficial Foot	24
„ „ „ „ Cubic Inch	24
Weights and Measures—British	87, 88, 89
„ „ „ Electrical	89
„ „ „ Metric	89
„ „ „ British Equivalents	90
What Good Galvanizing Means	35
Wire Netting	73, 74, 75, 76, 77
„ Barbed	73
„ Steel	78
„ Iron, Copper and Brass	103
„ Number of Feet per lb. of Weight	82
„ Electric Light	78, 104
„ Hooks	53
„ Eyes	54
„ and Cables—Comparison Table	78
Zinc Sheets	25

LYSAGHT'S TRADE MARKS



LYSAGHT "ORB"

GALVANIZED CORRUGATED IRON

is favourably known and used throughout the world. Its uniformly reliable character is recognised by consumers everywhere. There are many imitations, but to those who compare its covering capacity with other nominally cheaper brands, its superiority in all respects is at once apparent.



LYSAGHT "ORB" BLUE

The highest grade of Tankmaking Sheets available. (Manufactured in England).

Specially recommended for use under exacting climatic conditions or where the water possesses mineral properties detrimental to the life of ordinary sheets.



LYSAGHT "GUINEA"

A superior sheet, manufactured in England and Australia, second only to "Orb" in quality and appearance.

Recommended for use when price is a consideration.



LYSAGHT "QUEEN'S HEAD"

GALVANIZED TINNED SPECIAL FLAT SHEETS, manufactured in England and Australia.

This brand will stand the severest tests, and commands the confidence of iron-workers everywhere.



"FLEUR-DE-LIS"

GALVANIZED TINNED FLAT SHEETS,

manufactured in England and Australia, enter largely into consumption in the lighter gauges, for that class of work in which a somewhat cheaper sheet is asked for. It will be found equal to all such requirements.

NOTE.—When Sheets of the above brands are of Australian manufacture, the word "AUSTRALIA" is stencilled in blue under the brand on every Sheet.

BLACK SHEETS—See pages 19 to 23.

When Requiring Corrugated Iron
ask for—

Lysaght's Australian Orb

IT IS EQUAL to the best imported Brands of English Manufacture.

IT IS made in **AUSTRALIA** from Australian Raw Materials.

IT IS true to gauge and contains the standard number of sheets per case.

EVERY SHEET GUARANTEED

Registered Trade Mark.



Branded in Blue on every Sheet.

EVERY SHEET GUARANTEED

IT IS packed in 10-cwt. felt-lined cases.

IT IS Standard 3in. corrugations, with $\frac{3}{4}$in. pitch, and corrugates evenly throughout.

IT IS approved and recommended by leading Architects.

ASK FOR

Lysaght's Australian Orb

and assist Local Industry

Sections of LYSAGHT'S Galvanized Sheets

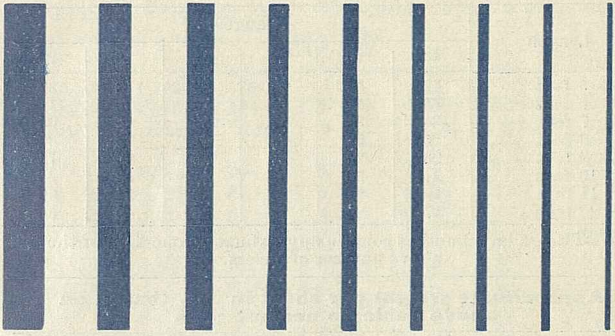
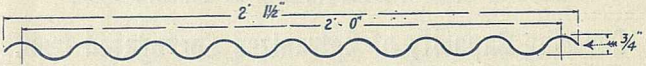
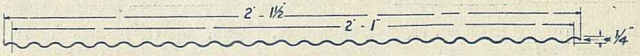


Illustration showing the approximate thickness of Plain Sheets, according to the respective gauges. (See page 39).



The "ORB" Standard for Roofing Sheets, eight 3-inch corrugations of ¾-inch pitch.



The "ORB" Standard 1-inch corrugations of ¼-inch pitch, used extensively for Ceilings, Linings, Bath Screens, etc.

For further useful information on Galvanized Sheets, see letterpress on pages 3, 12 and 35.

Galvanized Iron—Corrugated.

Approximate number of sheets to a case (ordinary Corrugations) weighing about 10 cwt.

Length	Gauges.					
	18	20	22	24	26	28
5 feet	42	53	66	83	118	132
6 feet	35	44	55	69	98	111
7 feet	30	38	47	59	84	95
8 feet	26	33	41	51	73	83
9 feet	23	29	36	45	65	74
10 feet	21	26	33	41	58	66
11 feet	19	24	30	38	54	62
12 feet	17	22	28	35	49	56

NOTE :—2 cwt. bundles contain approximately one-fifth of the above number of sheets.

Approximate weight per sheet in lbs. (based on above table to nearest ½lb).

Gauge	5 ft.	6 ft.	7 ft.	8 ft.	9 ft.	10 ft.	11 ft.	12 ft.
18	26½	32	37½	43	49	53	58½	64 lbs.
20	21	25½	29½	34	38½	43	46½	51 ,,
22	17	20¼	24	27¼	31	34	37¼	40½ ,,
24	13½	16¼	19	22	25	27¼	29¾	32½ ,,
26	9½	11½	13½	15½	17¼	19½	20¾	23 ,,
28	8½	10	11¾	13½	15¼	17	18¼	20 ,,

Cases of LYSAGHT'S Brands of Corrugated Iron usually contain sheets in excess of the numbers given in above tables.

Covering Capacity of Galvanized Corrugated Iron.

One Ton of Galvanized Corrugated Iron has the following approximate covering capacity:—

	24g. 3in. Cor.	26g. 3in. Cor.	26g. 1 in. Cor.	28g. 1 in. Cor.
Single Lap	1,600 sq. ft.	2,200 sq. ft.	2,327 sq. ft.	2,645 sq. ft.
Lap and half	—	2,000 ,,	—	—
Double Lap	1,400 ,,	1,900 ,,	2,230 ,,	2,535 ,,

NOTE.—To ascertain the number of squares (10 ft. x 10 ft.) divide by 100.

To ascertain cost per square divide price per ton by number of squares.

SPRING HEAD NAILS.

One packet (100 nails) is usually allowed to one square of roofing.

Galvanized Iron—Corrugated

Approximate price per sheet (to nearest half-penny) based on given rates per ton. This table is not a price list.

20 G

Price per Ton.	106 Sheets **5 ft.**	88 Sheets **6 ft.**	76 Sheets **7 ft.**	66 Sheets **8 ft.**	58 Sheets **9 ft.**	52 Sheets **10 ft.**
£22/-/-	4/1½	5/-	5/9	6/8	7/7	8/5½
£22/10/-	4/2½	5/1	5/11	6/9½	7/9	8/7½
£23/-/-	4/4	5/2½	6/0½	6/11½	7/11	8/10
£23/10/-	4/5	5/4	6/2	7/1	8/1	9/1½
£24/-/-	4/6	5/5	6/3½	7/3	8/3	9/3
£24/10/-	4/7	5/6½	6/5	7/5	8/5	9/5
£25/-/-	4/8½	5/8	6/6½	7/6½	8/7	9/7
£25/10/-	4/9½	5/9½	6/8	7/8½	8/9½	9/9½
£26/-/-	4/11	5/10½	6/10	7/10½	8/11½	10/-
£26/10/-	5/-	6/-	6/11½	8/-	9/1½	10/2
£27/-/-	5/1	6/1½	7/1	8/2	9/3½	10/4½
£27/10/-	5/2	6/3	7/2½	8/4	9/5½	10/6½
£28/-/-	5/3	6/4	7/4	8/5½	9/7½	10/9

22 G

Price per ton	132 Sheets **5 ft.**	110 Sheets **6 ft.**	94 Sheets **7 ft.**	82 Sheets **8 ft.**	72 Sheets **9 ft.**	66 Sheets **10 ft.**
£22/-/-	3/4	4/-	4/8	5/4½	6/1	6/8
£22/10/-	3/5	4/1	4/9½	5/6	6/3	6/10
£23/-/-	3/6	4/2	4/10½	5/7	6/4½	7/-
£23/10/-	3/7	4/3	5/-	5/8½	6/6	7/1½
£24/-/-	3/8	4/4½	5/1	5/10	6/8	7/3
£24/10/-	3/8½	4/5½	5/2½	5/11½	6/9½	7/5
£25/-/-	3/9½	4/6½	5/4	6/1	6/11	7/7
£25/10/-	3/10	4/7½	5/5	6/2½	7/1	7/8½
£26/-/-	3/11	4/8½	5/6	6/4	7/2½	7/10½
£26/10/-	4/-	4/9½	5/7½	6/5½	7/4	8/-
£27/-/-	4/1	4/11	5/9	6/7	7/6	8/2
£27/10/-	4/2	5/-	5/10	6/8½	7/7½	8/4
£28/-/-	4/3	5/1	5/11½	6/10	7/9	8/5½

Galvanized Iron—Corrugated.

Approximate price per sheet (to nearest half-penny) based on given rates per ton. This table is not a price list.

24 G

Price per Ton.	166 Sheets. 5 ft.	138 Sheets. 6 ft.	119 Sheets. 7 ft.	102 Sheets. 8 ft.	90 Sheets. 9 ft.	82 Sheets. 10 ft.
£18 0 0	2/2	2/7	3/0½	3/7	4/-	4/5
18 10 0	2/3½	2/8½	3/1½	3/7½	4/1½	4/6
19 0 0	2/3½	2/9	3/2½	3/9	4/3	4/8
19 10 0	2/4	2/10	3/3½	3/10	4/4	4/9
20 0 0	2/5	2/11	3/4½	3/11	4/5½	4/11
20 10 0	2/6	3/-	3/5½	4/-	4/7	5/-
21 0 0	2/6½	3/0½	3/6½	4/2	4/8	5/1½
21 10 0	2/7	3/1½	3/7½	4/2½	4/9½	5/3
22 0 0	2/8	3/2	3/8½	4/4	4/10½	5/4½
22 10 0	2/8½	3/3	3/9½	4/5	5/-	5/6
23 0 0	2/9	3/4	3/10½	4/6	5/1½	5/7½
23 10 0	2/10	3/5	4/-	4/7	5/2½	5/9
24 0 0	2/10½	3/6	4/0½	4/8½	5/4	5/10
24 10 0	2/11½	3/7	4/1	4/9½	5/5	6/-
25 0 0	3/-	3/7½	4/2½	4/10½	5/6½	6/1
25 10 0	3/1	3/8½	4/3½	5/-	5/8	6/2½
26 0 0	3/1½	3/9	4/4½	5/1	5/9	6/4
26 10 0	3/2	3/10	4/5½	5/2	5/10½	6/5½
27 0 0	3/3	3/11	4/6½	5/3½	6/-	6/7
27 10 0	3/3½	4/-	4/7½	5/4½	6/1	6/8½
28 0 0	3/4½	4/0½	4/8½	5/6	6/2½	6/10
28 10 0	3/5	4/1½	4/9½	5/7	6/4	6/11
29 0 0	3/6	4/2½	4/10½	5/8	6/5	7/1
29 10 0	3/6½	4/3	4/11½	5/9	6/6½	7/2
30 0 0	3/7½	4/4	5/0½	5/10½	6/8	7/4
30 10 0	3/8	4/5	5/1½	5/11½	6/9	7/5
31 0 0	3/9	4/6	5/2½	6/1	6/10½	7/6½
31 10 0	3/9½	4/7	5/3½	6/2	7/-	7/8
32 0 0	3/10	4/7½	5/4½	6/3	7/1	7/9½
32 10 0	3/11	4/8½	5/5½	6/4	7/2½	7/11
33 0 0	3/11½	4/9½	5/6½	6/5½	7/4	8/0½
33 10 0	4/0½	4/10	5/7½	6/6½	7/5	8/2
34 0 0	4/1	4/11	5/8½	6/8	7/6½	8/3½
34 10 0	4/2	5/-	5/9½	6/9	7/8	8/5
35 0 0	4/2½	5/1	5/10½	6/10	7/9	8/6½
35 10 0	4/3	5/1½	5/11½	6/11	7/10½	8/8
36 0 0	4/4	5/2½	6/0½	7/0½	8/-	8/9
36 10 0	4/4½	5/3½	6/1½	7/1½	8/1	8/10½
37 0 0	4/5½	5/4½	6/2½	7/3	8/2½	9/-
37 10 0	4/6	5/5	6/3½	7/4	8/4	9/1½
38 0 0	4/7	5/6	6/4½	7/5	8/5	9/3
38 10 0	4/7½	5/7	6/5½	7/6½	8/6½	9/4½
39 0 0	4/8½	5/8	6/6½	7/7½	8/8	9/6
39 10 0	4/9	5/9	6/7½	7/9	8/9	9/7½
40 0 0	4/10	5/9½	6/8½	7/10	8/10½	9/9

Galvanized Iron—Corrugated.

Approximate price per sheet (to nearest half-penny) based on given rates per ton. This table is not a price list.

26 G

Price per ton.	236 Sheets 5 ft.	196 Sheets 6 ft.	168 Sheets 7 ft.	146 Sheets 8 ft.	130 Sheets 9 ft.	116 Sheets 10 ft.
£18 0 0	1/6	1/10	2/2	2/6	2/9	3/1
18 10 0	1/7	1/11	2/2	2/6½	2/10	3/2
19 0 0	1/7	1/11	2/3	2/7	2/11	3/3
19 10 0	1/8	2/-	2/4	2/8	3/-	3/4
20 0 0	1/8	2/0½	2/5	2/9	3/1	3/5
20 10 0	1/9	2/1	2/5	2/10	3/2	3/6
21 0 0	1/9	2/1½	2/6	2/10½	3/3	3/7
21 10 0	1/10	2/2½	2/7	2/11	3/4	3/8
22 0 0	1/10½	2/3	2/7½	3/-	3/5	3/9½
22 10 0	1/11	2/4	2/8	3/1	3/6	3/10½
23 0 0	1/11	2/4½	2/9	3/2	3/6	4/-
23 10 0	1/11½	2/5	2/10	3/3	3/7	4/1
24 0 0	2/-	2/5½	2/10	3/3	3/8	4/2
24 10 0	2/0½	2/6	2/11	3/4	3/9	4/3
25 0 0	2/0½	2/6½	3/-	3/5	3/10	4/4
25 10 0	2/2	2/7	3/0½	3/6	3/11	4/5
26 0 0	2/2½	2/8	3/1	3/7	4/-	4/6
26 10 0	2/3	2/8½	3/2	3/7½	4/1	4/7
27 0 0	2/3½	2/9	3/2½	3/8	4/2	4/8
27 10 0	2/4	2/9½	3/3	3/9	4/3	4/9
28 0 0	2/4½	2/10½	3/4	3/10	4/3½	4/10
28 10 0	2/5	2/11	3/5	3/11	4/5	4/11
29 0 0	2/5½	2/11½	3/5½	4/-	4/5½	5/-
29 10 0	2/6	3/-	3/6	4/0½	4/6½	5/1
30 0 0	2/6½	3/1	3/7	4/1	4/7½	5/2
30 10 0	2/7	3/1½	3/8	4/2	4/8	5/3
31 0 0	2/7½	3/2	3/8½	4/3	4/9	5/4
31 10 0	2/8	3/2½	3/9	4/4	4/10	5/5
32 0 0	2/8½	3/3	3/10	4/4½	4/11	5/6
32 10 0	2/9	3/4	3/10½	4/5	5/-	5/7
33 0 0	2/9½	3/4½	3/11	4/6	5/1	5/8
33 10 0	2/10	3/5	4/-	4/7	5/2	5/9
34 0 0	2/10½	3/5½	4/0½	4/8	5/3	5/10½
34 10 0	2/11	3/6	4/1	4/9	5/4	5/11
35 0 0	2/11½	3/7	4/2	4/9½	5/4½	6/0½
35 10 0	3/-	3/7½	4/3	4/10	5/5½	6/1½
36 0 0	3/0½	3/8	4/3½	4/11	5/6½	6/2½
36 10 0	3/1	3/8½	4/4	5/-	5/7½	6/3½
37 0 0	3/1½	3/9½	4/5	5/1	5/8½	6/4½
37 10 0	3/2	3/10	4/5½	5/1½	5/9	6/5½
38 0 0	3/2½	3/10½	4/6½	5/2½	5/10½	6/6½
38 10 0	3/3	3/11	4/7	5/3	5/11	6/7½
39 0 0	3/3½	4/-	4/8	5/4	6/-	6/8½
39 10 0	3/4	4/0½	4/8½	5/5	6/1	6/10
40 0 0	3/4½	4/1	4/9½	5/6	6/2	6/10½

The Life of a Galvanized Sheet is Dependent

upon the weight and perfection of its **Zinc Coating.** This fact is universally acknowledged by scientists, and is not controvertible.

Claims have been advanced that the life of a galvanized sheet is affected by the material upon which the zinc coating is deposited. These claims cannot be sustained. So long as the coating remains unimpaired, **corrosion cannot take place.**

Lysaght's Orb and **Queen's Head Brands** hold the premier position for **perfection of galvanizing,** and the **life** of these sheets is **guaranteed.**

Galvanized Iron—Plain.

Approximate number of 6 ft. sheets to a case of Plain Iron averaging about 10 cwt.

Gauge	Width.		
	24 in.	30 in.	36 in.
14	30	23	19 shts.
16	36	29	24 ,,
18	47	37	31 ,,
20	57	45	38 ,,
22	74	59	49 ,,
24	86	69	57 ,,
26	120	97	80 ,,
28	140	112	92 ,,
30	160	130	112 ,,

Approximate weight per sheet 6 ft. long, in lbs., based on foregoing list.

Gauge	Width.		
	24 in.	30 in.	36 in.
14	37	48⅔	59 lbs.
16	31	38⅔	46⅔ ,,
18	24	30¼	36 ,,
20	19½	25	29½ ,,
22	15	19	23 ,,
24	13	16¼	19⅔ ,,
26	9⅓	11⅓	14 ,,
28	8	10	12¼ ,,
30	7	8¾	10 ,,

Cases of Lysaght's Brands of Plain Galvanized Iron usually contain sheets in excess of the number given in the above tables.



LYSAGHT'S "Queen's Head" Special Flat Plain Galvanized Iron is a High-grade Sheet of exceptional finish.

It will stand the severest tests, and commands the confidence of Iron-workers everywhere.

LYSAGHT'S "Fleur-de-Lis" Plain Iron is largely used for the manufacture of lighter classes of guttering, down pipe, ridging, etc., its smoothness of surface and freedom from buckle being conspicuous features.



LYSAGHT'S BRANDS of Plain Iron are obtainable to order in any gauge in sheets up to 12 feet long and 56 inches wide, subject to a maximum area of 48 square feet.

Galvanized Iron—Plain.

Approximate price per sheet (to nearest half-penny) based on given rates per ton. This table is not a price list.

Price per Ton.	16 G			18 G		
	72 Sheets. 24 in.	58 Sheets. 30 in.	48 Sheets. 36 in.	94 Sheets. 24 in.	74 Sheets. 30 in.	62 Sheets. 36 in.
£18 0 0	5/-	6/2½	7/6	3/10	4/10	5/10
18 10 0	5/2	6/4½	7/8	4/-	5/-	6/-
19 0 0	5/3	6/6½	7/11	4/0½	5/1½	6/1½
19 10 0	5/5	6/8½	8/1½	4/2	5/3	6/3
20 0 0	5/7	6/10½	8/4	4/3	5/5	6/5
20 10 0	5/8	7/0½	8/6½	4/4	5/6½	6/7
21 0 0	5/10	7/3	8/9	4/5½	5/8	6/9
21 10 0	5/11	7/5	8/11½	4/7	5/10	6/11
22 0 0	6/1	7/7	9/2	4/8	6/-	7/1
22 10 0	6/3	7/9	9/4	4/9	6/1	7/3
23 0 0	6/4½	7/11	9/7	4/10½	6/2½	7/5
23 10 0	6/6	8/1	9/9	5/-	6/4	7/7
24 0 0	6/8	8/3	10/-	5/1	6/6	7/9
24 10 0	6/10	8/5½	10/2½	5/2½	6/7½	7/11
25 0 0	6/11	8/7½	10/5	5/4	6/9	8/1
25 10 0	7/1	8/9½	10/7½	5/5	6/10½	8/3
26 0 0	7/2½	8/11½	10/10	5/6	7/-	8/5
26 10 0	7/4	9/1½	11/0½	5/7½	7/2	8/6½
27 0 0	7/6	9/3½	11/3	5/9	7/3½	8/8½
27 10 0	7/7½	9/6	11/5½	5/10	7/5	8/10
28 0 0	7/9	9/9	11/8	5/11½	7/7	9/0½
28 10 0	7/11	9/10	11/10½	6/1	7/8½	9/2
29 0 0	8/0½	10/-	12/1	6/2	7/10	9/4
29 10 0	8/2	10/2	12/3½	6/3	7/11½	9/6
30 0 0	8/4	10/4	12/6	6/4½	8/1	9/8
30 10 0	8/5½	10/6	12/8½	6/6	8/3	9/10
31 0 0	8/7	10/8	12/11	6/7	8/4½	10/-
31 10 0	8/9	10/10	13/1½	6/8½	8/6	10/2
32 0 0	8/10½	11/0½	13/4	6/9½	8/7½	10/4
32 10 0	9/-	11/2½	13/6½	6/11	8/9	10/6
33 0 0	9/2	11/4½	13/9	7/-	8/11	10/7½
33 10 0	9/3½	11/6½	13/11½	7/1½	9/0½	10/9
34 0 0	9/5	11/8½	14/2	7/3	9/2½	10/11½
34 10 0	9/7	11/10½	14/5½	7/4	9/4	11/1½
35 0 0	9/8½	12/1	14/7	7/5	9/5½	11/3
35 10 0	9/10	12/3	14/9½	7/6½	9/7	11/5
36 0 0	10/-	12/4½	15/-	7/8	9/8½	11/7
36 10 0	10/1½	12/7	15/2½	7/9	9/10	11/9
37 0 0	10/3½	12/9	15/5	7/10½	10/-	11/11
37 10 0	10/5	12/11	15/7½	8/-	10/1½	12/1
38 0 0	10/6½	13/1	15/10	8/1	10/3	12/3
38 10 0	10/8	13/3	16/0½	8/2	10/5	12/5
39 0 0	10/10	13/5	16/3	8/3½	10/6½	12/7
39 10 0	10/11½	13/7½	16/5½	8/5	10/8	12/9
40 0 0	11/1	13/9½	16/8	8/6	10/9½	12/10½

Galvanized Iron—Plain.

Approximate price per sheet (to nearest half-penny) based on given rates per ton. This table is not a price list.

Price per Ton.	20 G			22 G		
	114 Sheets. 24 in.	90 Sheets. 30 in.	76 Sheets. 36 in.	148 Sheets. 24 in.	118 Sheets. 30 in.	98 Sheets. 36 in.
£18 0 0	3/2	4/-	4/9	2/5	3/0½	3/8
18 10 0	3/3	4/1	4/10	2/6	3/1½	3/9
19 0 0	3/4	4/3	5/-	2/7	3/2½	3/10½
19 10 0	3/5	4/4	5/1½	2/7½	3/3½	4/-
20 0 0	3/6	4/5	5/3	2/8	3/4½	4/1
20 10 0	3/7	4/7	5/5	2/9	3/5½	4/2
21 0 0	3/8	4/8	5/6	2/10	3/6½	4/3
21 10 0	3/9	4/9	5/8	2/11	3/7½	4/4½
22 0 0	3/10	4/11	5/9½	2/11½	3/8½	4/6
22 10 0	3/11	5/-	5/11	3/0½	3/10	4/7
23 0 0	4/-	5/1	6/0½	3/1	3/11	4/8
23 10 0	4/1	5/3	6/2½	3/2	4/-	4/9½
24 0 0	4/2	5/4	6/4	3/3	4/1	4/10½
24 10 0	4/3½	5/5	6/5	3/4	4/2	5/-
25 0 0	4/4½	5/7	6/7	3/4½	4/3	5/1
25 10 0	4/5½	5/8	6/8½	3/5	4/4	5/2½
26 0 0	4/7	5/9	6/10	3/6	4/5	5/3½
26 10 0	4/8	5/11	7/-	3/7	4/6	5/5
27 0 0	4/9	6/-	7/1	3/8	4/7	5/6
27 10 0	4/10	6/1	7/2½	3/9	4/8	5/7
28 0 0	4/11	6/3	7/4½	3/9½	4/9	5/8
28 10 0	5/-	6/4	7/6	3/10	4/10	5/9½
29 0 0	5/1	6/5	7/7½	3/11	4/11	5/11
29 10 0	5/2	6/7	7/9	4/-	5/-	6/-
30 0 0	5/3	6/8	7/10	4/1	5/1	6/1½
30 10 0	5/4	6/9	8/-	4/1½	5/2	6/2½
31 0 0	5/5	6/11	8/2	4/2	5/3	6/4
31 10 0	5/6	7/-	8/3½	4/3	5/4	6/5
32 0 0	5/7	7/1	8/5	4/4	5/5	6/6½
32 10 0	5/8	7/3	8/6½	4/5	5/6	6/7½
33 0 0	5/9	7/4	8/8	4/5½	5/7	6/9
33 10 0	5/10	7/5	8/10	4/6	5/8	6/10
34 0 0	5/11	7/7	8/11	4/7	5/9	6/11
34 10 0	6/0½	7/8	9/1	4/8	5/10	7/0½
35 0 0	6/1½	7/9	9/2½	4/9	5/11	7/2
35 10 0	6/2½	7/11	9/4	4/9½	6/-	7/3
36 0 0	6/3½	8/-	9/5½	4/10	6/1	7/4
36 10 0	6/5	8/1	9/7	4/11	6/2	7/5½
37 0 0	6/6	8/3	9/9	5/-	6/3	7/6½
37 10 0	6/7	8/4	9/10½	5/1	6/4	7/8
38 0 0	6/8	8/5	10/-	5/1½	6/5	7/9
38 10 0	6/9	8/7	10/1½	5/2	6/6	7/10½
39 0 0	6/10	8/8	10/3	5/3	6/7	7/11
39 10 0	6/11	8/9	10/4½	5/4	6/8	8/1
40 0 0	7/-	8/11	10/6	5/5	6/9	8/2

Galvanized Iron—Plain.

Approximate price per sheet (to nearest half-penny) based on given rates per ton. This table is not a price list.

Price per Ton.	24 G. 172 Sheets. 24 in.	24 G. 138 Sheets. 30 in.	24 G. 114 Sheets. 36 in	26 G. 240 Sheets. 24 in.	26 G. 194 Sheets. 30 in.	26 G. 160 Sheets. 36 in.
£18 0 0	2/1	2/7	3/2	1/6	1/10	2/3
18 10 0	2/2	2/8	3/3	1/6½	1/11	2/4
19 0 0	2/2½	2/9	3/4	1/7	1/11½	2/4½
19 10 0	2/3	2/10	3/5	1/7½	2/-	2/5
20 0 0	2/3½	2/11	3/6	1/8	2/1	2/6
20 10 0	2/4½	3/-	3/7	1/8½	2/1½	2/7
21 0 0	2/5	3/0½	3/8	1/9	2/2	2/7½
21 10 0	2/6	3/1½	3/9	1/9½	2/2½	2/8
22 0 0	2/7	3/2	3/10	1/10	2/3	2/9
22 10 0	2/7½	3/3	3/11	1/10½	2/4	2/10
23 0 0	2/8	3/4	4/-	1/11	2/4½	2/10½
23 10 0	2/9	3/5	4/1½	1/11½	2/5	2/11
24 0 0	2/9½	3/6	4/2½	2/-	2/6	3/-
24 10 0	2/10	3/6½	4/3½	2/0½	2/6	3/1
25 0 0	2/11	3/7½	4/4½	2/1	2/7	3/1½
25 10 0	3/-	3/8½	4/5½	2/1½	2/7½	3/2
26 0 0	3/0½	3/9½	4/7	2/2	2/8½	3/3
26 10 0	3/1	3/10	4/8	2/2½	2/9	3/4
27 0 0	3/2	3/11	4/9	2/3	2/9½	3/4½
27 10 0	3/2½	4/-	4/10	2/3½	2/10	3/5
28 0 0	3/3	4/1	4/11	2/4	2/11	3/6
28 10 0	3/4	4/1½	5/-	2/4½	2/11½	3/7
29 0 0	3/4½	4/2½	5/1	2/5	3/-	3/7½
29 10 0	3/5	4/3	5/2	2/5½	3/0½	3/8
30 0 0	3/6	4/4	5/3	2/6	3/1½	3/9
30 10 0	3/6½	4/5	5/4	2/6½	3/2	3/10
31 0 0	3/7½	4/6	5/5	2/7	3/2½	3/10½
31 10 0	3/8	4/6½	5/6	2/7½	3/3	3/11
32 0 0	3/9	4/7½	5/7	2/8	3/3½	4/-
32 10 0	3/9½	4/8½	5/8	2/8½	3/4	4/1
33 0 0	3/10	4/9½	5/9½	2/9	3/5	4/1½
33 10 0	3/11	4/10	5/10½	2/9½	3/5½	4/2
34 0 0	3/11½	4/11½	6/-	2/10	3/6	4/3
34 10 0	4/-	5/-	6/0½	2/10½	3/7	4/4
35 0 0	4/1	5/1	6/1½	2/11	3/7½	4/4½
35 10 0	4/1½	5/2	6/2½	2/11½	3/8	4/5
36 0 0	4/2½	5/3	6/4	3/-	3/8½	4/6
36 10 0	4/3	5/3½	6/5	3/0½	3/9	4/7
37 0 0	4/4	5/4	6/6	3/1	3/10	4/7½
37 10 0	4/4½	5/5	6/7	3/1½	3/10½	4/8
38 0 0	4/5	5/6½	6/8	3/2	3/11	4/9
38 10 0	4/6	5/7	6/9	3/2½	4/-	4/10
39 0 0	4/6½	5/8	6/10	3/3	4/0½	4/10½
39 10 0	4/7	5/9	6/11	3/3½	4/1	4/11
40 0 0	4/8	5/10	7/-	3/4	4/1½	5/-

word "AUSTRALIA" below the brand.

Galvanized Iron—Plain.

Approximate price per sheet (to nearest half-penny) based on given rates per ton. This table is not a price list.

Price per Ton.	28 G.			30 G.		
	280 Sheets. 24 in.	224 Sheets. 30 in.	184 Sheets. 36 in.	320 Sheets. 24 in.	260 Sheets. 30 in.	224 Sheets. 36 in.
£18 0 0	1/3½	1/7	1/11½	1/1½	1/4½	1/7
18 10 0	1/4	1/7½	2/-	—	—	—
19 0 0	1/4	1/8	2/0½	1/2	1/5½	1/8
19 10 0	1/4½	1/8½	2/1	—	—	—
20 0 0	1/5	1/9	2/2	1/3	1/6½	1/9
20 10 0	1/5½	1/10	2/2½	—	—	—
21 0 0	1/6	1/10½	2/3	1/4	1/7½	1/10
21 10 0	1/6½	1/11	2/4	—	—	—
22 0 0	1/7	1/11½	2/4½	1/4½	1/8	1/11
22 10 0	1/7	2/-	2/5	—	—	—
23 0 0	1/7½	2/0½	2/6	1/5	1/9	2/0½
23 10 0	1/8	2/1	2/6½	—	—	—
24 0 0	1/8½	2/1½	2/7	1/6	1/10	2/1½
24 10 0	1/9	2/2	2/8	—	—	—
25 0 0	1/9½	2/2½	2/8½	1/6½	1/11	2/2½
25 10 0	1/10	2/3	2/9	—	—	—
26 0 0	1/10	2/3½	2/10	1/7½	2/-	2/3½
26 10 0	1/10½	2/4	2/10½	—	—	—
27 0 0	1/11	2/5	2/11	1/8	2/1	2/5
27 10 0	1/11½	2/5½	3/-	—	—	—
28 0 0	2/-	2/6	3/0½	1/8½	2/2	2/6
28 10 0	2/0½	2/6½	3/1	—	—	—
29 0 0	2/1	2/7	3/2	1/9½	2/3	2/7
29 10 0	2/1	2/7½	3/2½	—	—	—
30 0 0	2/1½	2/8	3/3	1/10½	2/4	2/8
30 10 0	2/2	2/8½	3/4	—	—	—
31 0 0	2/2½	2/9	3/4½	1/11	2/4½	2/9
31 10 0	2/3	2/9½	3/5	—	—	—
32 0 0	2/3½	2/10	3/6	2/-	2/5½	2/10
32 10 0	2/4	2/10½	3/6½	—	—	—
33 0 0	2/4	2/11	3/7	2/1	2/6½	2/11
33 10 0	2/4½	2/11½	3/7½	—	—	—
34 0 0	2/5	3/-	3/8	2/1½	2/7½	3/-
34 10 0	2/5½	3/1	3/9	—	—	—
35 0 0	2/6	3/1½	3/9½	2/2	2/8	3/1½
35 10 0	2/6½	3/2	3/10	—	—	—
36 0 0	2/7	3/2½	3/11	2/3	2/9	3/2½
36 10 0	2/7	3/3	3/11½	—	—	—
37 0 0	2/7½	3/3½	4/-	2/4	2/10	3/3½
37 10 0	2/8	3/4	4/1	—	—	—
38 0 0	2/8½	3/4½	4/1½	2/4½	2/11	3/4½
38 10 0	2/9	3/5	4/2	—	—	—
39 0 0	2/9½	3/5½	4/3	2/5	3/-	3/5½
39 10 0	2/10	3/6	4/3½	—	—	—
40 0 0	2/10	3/6½	4/4	2/6	3/1	3/7

Price per ton—how much per lb?

A SIMPLE METHOD OF ARRIVING AT THIS.

EXAMPLE—1 ton £28
Divided by 7 4
„ „ 4 1

Deduct last two numbers .. .. 3 pence per lb.
Or—1 ton £100
Divided by 7 .. .. 14.285
„ „ 4 .. .. 3.571

Deduct last two numbers .. .. 10.714 pence per lb.
Or conversely—Price per lb., 3d.—how much per ton?

3
Multiplied by 9 1/3rd

£28 per ton

ANOTHER VERY SIMPLE METHOD.

4¾d. per lb.—how much per ton?
Bring to farthings, and multiply by 7 and divide by 3.
19 × 7 = 133 ÷ 3 = £44/6/8 per ton.

This applies to any sum, providing it is brought to farthings.

Also the reverse:—
£48/15 per ton, how much per lb.?
48.75 × 3 = 146.25 ÷ 7 = 20.892 ÷ 4= 5.223d. per lb.

TO FIND THE VALUE OF A GIVEN WEIGHT AT A GIVEN PRICE PER TON.

	Tons	Cwt.	Qr.	Lbs.	
Example—	2	10	1	18 at	£5/10/- per ton.

Reckon the tons as pounds; cwts. as shillings; each qr. 3d., and for every 9lbs. 1d., equals—
£2 10 5 multiplied by the price
per ton = 5½ pounds sterling.

£12 12 1
1 5 2½

£13 17 3½ Answer.

TO FIND THE PREMIUM OR DISCOUNT OF ANY SUM.

Example— £24/10/6 at 3½ per cent.

Multiply the sum named by double the rate per cent., and point off the product one to the right.

£24 10 6
Double 3½ per cent. = 7

£17.1 13 6 Answer, 17 1/10th of a Shilling, say, 17/2.

Black Sheets

The uniform "Blued" finish and general excellence of quality of

LYSAGHT'S

C.R.C.A. Patent Flattened

"SOUTHERN CROSS" Black Sheets

makes them particularly suitable for general manufacturing purposes and for work of a special nature.

For less important work, and when price is the primary consideration, we recommend

LYSAGHT'S

"SUNSTAR" Brand

These Sheets are C.R.C.A., true to gauge and dead flat.

LYSAGHT'S

NEWCASTLE C.R.C.A. BLACK SHEETS.
(manufactured in Australia)

will be found to give every satisfaction for general working-up purposes.

Special qualities are prepared and are being successfully used for:—

DEEP DRAWING, TINNING, VITREOUS ENAMELLING, and MOTOR BODY WORK.

The above qualities are rolled in 10 to 30 gauge, in lengths up to 12 feet, and in widths up to 56 inches (Newcastle sheets, 38 inches), and are stocked in sizes:—6ft. x 24in., 30in. and 36in. wide, in 10 to 30 gauge.

Iron—Black Sheet.

Weight and Thickness.

Gauge	Lbs. per square foot	Thickness inches	Thickness mm	Gauge	Lbs. per square foot	Thickness inches	Thickness mm
3/16	7.50	.1874	4.770	19	1.76	.0440	1.118
8	6.28	.1570	3.988	20	1.56	.0392	.996
9	5.59	.1398	3.551	21	1.39	.0349	.886
10	5.00	.1250	3.175	22	1.25	.0312	.794
11	4.45	.1113	2.827	23	1.11	.0278	.707
12	3.96	.0991	2.517	24	.99	.0247	.629
13	3.52	.0882	2.240	25	.88	.0220	.560
14	3.14	.0785	1.994	26	.78	.0196	.498
15	2.79	.0699	1.775	27	.69	.0174	.443
16	2.50	.0625	1.587	28	.62	.0156	.396
17	2.22	.0556	1.412	29	.55	.0139	.353
18	1.98	.0495	1.257	30	.50	.0124	.315

On the above basis, the approximate Number of Sheets 6ft. long in One Ton of Black Sheet Iron is as follows:—

Gauge	WIDTH		
	24in.	30in.	36in.
10g	37	29	24
12	47	37	31
14	59	47	39
16	74	59	49
18	94	75	62
20	119	95	79
22	149	119	99
24	188	150	125
26	239	191	159
27	270	216	180
28	301	241	200
30	373	298	248

Weight of Steel is about 2 per cent. more than Iron.

equal to the best imported.

Lysaght's Black Sheets

Descriptive List of Qualities in most General Use

For Newcastle Works Qualities see page 19.

Quality.

No. A1.—"**Queen's Head.**"—A high-grade quality of C.R.C.A. Sheets, extensively used for special work.

No. 1.—"**Southern Cross.**"—An excellent quality of C.R.C.A. Mild Steel Sheets, suitable for all ordinary working-up purposes, well and favourably known by sheet-metal workers throughout the Commonwealth.

No. 1a.—"**Sunstar.**"—A good C.R.C.A. Sheet, dead flat and specially manufactured for those purposes where price prevents our higher grade sheets being used.

No. 3.—**Deep Stamping Best Pickled C.R.C.A.**—Suitable for severe stamping or spinning.

No. 4.—**Best Bright Polished Steel Sheets.**—This quality has a smooth, polished, bright surface. The sheets are flattened and resheared true and square.

No. 9.—**Railway Waggon Body Sheets.**—These are supplied very largely for making covered railway goods waggons. The sheets are finished dead flat, and resheared exact to required dimensions.

No. 11.—**Superior Charcoal Finish Panel Plates for Railway Carriages, etc.** (see page 89).

No. 13.—**Copper Soft Steel Sheets C.R.C.A.**—This is an extra soft quality, specially prepared for beating and stamping. It is very suitable for blocking for ships' ventilators or any similar purpose.

No. 14.—"**LYCO.**"—**Enamelling Quality.**—Special pickled steel sheets for vitreous enamelling.

No. 21a.—**Best Bright Tinning Finish.**—For making large tinned sheets, special articles and hollow-ware that require tinning after manufacture.

DESCRIPTIVE LIST OF QUALITIES.—Continued.

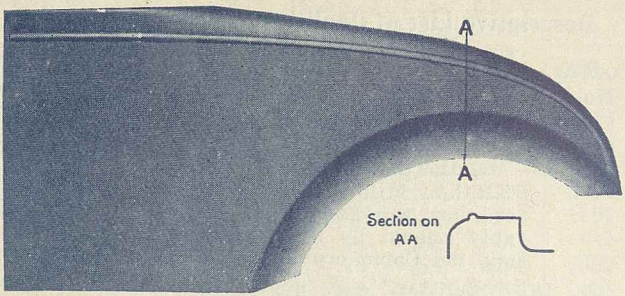


Illustration showing the working quality of our "Auto D.D." Sheets.

Quality.

No. 22a.—Auto D.D. Motor Body Sheets are a quality specially prepared for all varieties of Press Work and Stampings employed in modern body mass-production methods. The surface is free from wave, buckle, and scale, and is particularly suitable for the direct application of "DUCO" and similar finishes.

No. 22.—Auto Quality similar in finish to **Quality No. 22a.**, but prepared dead flat, and intended for use in flat panelling, etc. Its special feature is the superior finish obtained with the "DUCO" process.

No. 25.—Special Motor Body Sheets, of superior finish, with smooth, clean surface, silver-bright, and with good working-up capability. Used by leading motor body builders on the Continent, Great Britain and Australia.

ELECTRICAL SHEETS.—The manufacture of these sheets is carried out on the most highly developed lines. The Department is equipped with all necessary apparatus for the production of the best qualities, and for carrying out tests. **All sheets are supplied to definite guarantees as to Watts' Loss.**

"Stalloy" High Resistance Transformer Sheets and **"Lohy's" Special Dynamo Sheets** can be supplied to special order.

All the above qualities are obtainable in all gauges from 10-g to 30-g and in widths up to 56 inches.

beautiful appearance. It's bright and it lasts!

LYSAGHT'S MOTOR BODY SHEETS

Q 22 A AUTO DEEP DRAWING

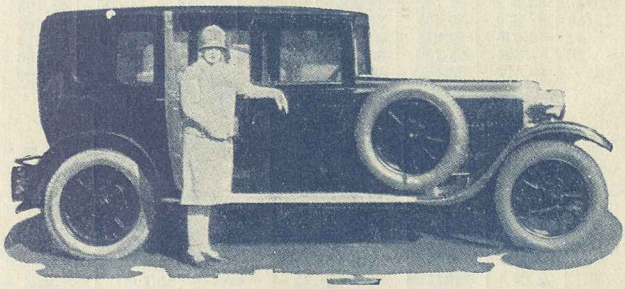
Q 22 AUTO QUALITY

Specially prepared for use with "DUCO."

Q 25 SILVER BRIGHT FINISH

USED EXCLUSIVELY BY

Leading Continental and Australian Body Builders.



Factory Costs show that the extra price of these Sheets is recouped by the economy effected in

"WORKING-UP" and "FILLING."

Stocked in 20 and 22 gauge, 6, 7, and 8 feet long 24, 30 and 36 inches wide.

OTHER GAUGES AND SIZES ROLLED TO ORDER.

VARIOUS METALS

The Comparative Weight of a Superficial Foot.

Thickness in inches.	Wrought Iron.	Cast Iron.	Steel.	Copper.	Brass.	Lead.	Zinc.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1/16	2.526	2.344	2.552	2.891	2.734	3.708	2.344
1/8	5.052	4.687	5.104	5.781	5.469	7.417	4.687
3/16	7.578	7.031	7.656	8.672	8.303	11.125	7.031
1/4	10.104	9.375	10.208	11.563	10.938	14.833	9.375
5/16	12.630	11.719	12.760	14.453	13.672	18.542	11.719
3/8	15.156	14.062	15.312	17 344	16.406	22.250	14.062
7/16	17.682	16.406	17.865	20.234	19.141	25.958	16.406
1/2	20 208	18.750	20.417	23.125	21.875	29.667	18.750
9/16	22.734	21.094	22.969	26.016	24.609	33.375	21.094
5/8	25.260	23.437	25.521	28.906	27.344	37.083	23.437
11/16	27.786	25.781	28.073	31.797	30.078	40.792	25.781
3/4	30.312	28.125	30.625	34.688	32.813	44.500	28.125
13/16	32.839	30.469	33.177	37.578	35.547	48.208	30 469
7/8	35.635	32.812	35.729	40.469	38.281	51.917	32.812
15/16	37.801	35.156	38.281	43.359	41.016	55.625	35.156
1	40.417	37.500	40.833	46.250	43.750	59.333	37.500

Gauge.	Iron.	Copper.	Brass.	Gauge.	Iron.	Copper.	Brass.
30	.48	.550	.527	15	2.88	3.298	3.161
29	.52	.595	.579	14	3.32	3.801	3.644
28	.56	.641	.615	13	3.80	4.351	4.170
27	.64	.733	.702	12	4.36	4.992	4.786
26	.72	.824	.790	11	4.80	5.496	5.268
25	.80	.916	.878	10	5.36	6.137	5 883
24	.88	1.008	.966	9	5.92	6.778	6.497
23	1.00	1.145	1.097	8	6.60	7.557	7.248
22	1.12	1.282	1.229	7	7.20	8.244	7.902
21	1.28	1.466	1.405	6	8.12	9 297	8.912
20	1.40	1.603	1.536	5	8.80	10.076	9.658
19	1.68	1.924	1.844	4	9.52	10.900	10.448
18	1.96	2.244	2.151	3	10.36	11.862	11.370
17	2.32	2.656	2.546	2	11.36	13.007	12.468
16	2.60	2.977	2.853	1	12.00	13.740	13.170

Weight of a Cubic Inch of

Lead	equals	.4103 lbs.	Iron, cast equals ...			.263 lbs.
Copper, sheet	,,	.3225 ,,	Tin	,,	...	.2636 ,,
Brass	,, ,,	.3037 ,,	Zinc	,,	...	.26 ,,
Iron	,, ,,	.279 ,,	Water	,,	...	.03617 ,,

guaranteed by the manufacturers.

ZINC SHEETS

Gauge No.	Approximate weight per sq. ft.	Thousandths of an inch.	7′ x 2′ 8″ Approximate		7′ x 3′ Approximate		8′ x 3′ Approximate		Nearest Wire Gauge.
			Weight per sht.	No. of shts. in 10 cwt.	Weight per sht.	No. of shts. in 10 cwt.	Weight per sht.	No. of shts. in 10 cwt.	
	oz.		lb. oz.		lb. oz.		lb. oz.		
1	2¼	.004	2 10	427	—	—	—	—	41
2	3¼	.006	3 13	294	—	—	—	—	38
3	3¾	.007	—	—	4 15	227	—	—	37
4	4¾	.008	—	—	6 4	180	—	—	34
5	5¾	.010	—	—	7 9	148	—	—	31
6	6¾	.011	7 14	142	8 14	126	10 2	111	30
7	7¾	.013	9 1	124	10 3	110	11 10	96	29
8	9	.015	10 8	107	11 13	95	13 8	83	28
9	10	.017	11 11	96	13 2	85	15 0	75	27
10	11½	.019	13 7	83	15 2	74	17 4	65	25
11	13	.021	15 3	74	17 1	66	19 8	57	24
12	15	.025	17 8	64	19 11	57	22 8	50	23
13	17	.028	—	—	22 5	50	25 8	44	22
14	19	.031	—	—	24 15	45	28 8	39	21
15	22	.036	—	—	28 14	39	33 0	34	20
16	25	.041	—	—	32 13	34	37 8	30	19
17	28	.046	—	—	36 12	30	42 0	27	18
18	31	.051	—	—	40 11	28	46 8	24	—
19	35	.059	—	—	45 15	24	52 8	21	17
20	39	.065	—	—	51 3	22	58 8	19	16
21	43	.072	—	—	56 7	20	64 8	17	15

SOLDERS

For Lead ..	1 part Tin, 2 parts Lead.
For Brass ..	2 parts Brass, 1 part Zinc.
Hard Solder ..	2 parts Copper, 1 part Zinc.
Soft Solder ..	2 parts Tin, 1 part Lead.
Ordinary Solder	1 part Tin, 1 part Lead.

FLUXES—for Soldering

Tinned Iron	Resin or Spirits of Salts.
Copper and Brass ..	Sal-Ammoniac or Spirits of Salts.
Zinc	Spirits of Salts.
Lead	Resin.

CHARCOAL TIN PLATE LIST

Size & Number of Sheets in Box.	Weight. cwt. qrs. lbs.	Thickness in Wire Gauge.
1C { 14 x 10 ins., 225 Sheets } or { 14 x 20 ins., 112 Sheets }	1 0 0	30
1x " "	1 1 0	28
1xx " "	1 1 21	26 Easy
1xxx " "	1 2 14	25
1xxxx " "	1 3 7	25 Full
1xxxxx " "	2 0 0	24
1xxxxxx " "	2 0 21	23 Easy
SDC { 15 x 11 ins., 200 Sheets } or { 15 x 22 ins., 100 Sheets }	1 1 27	26 Easy
SDx " "	1 2 20	25 Easy
SDxx " "	1 3 13	25 Full
SDxxx " "	2 0 6	24
SDxxxx " "	2 0 27	24 Full
SDxxxxx " "	2 1 20	22 Easy
SDxxxxxx " "	2 2 13	22 Full
DC { 16¾ x 12½ ins., 100 Sheets } or { 16¾ x 25 ins., 50 Sheets }	0 3 14	28 Full
Dx " "	1 0 14	25 Easy
Dxx " "	1 1 7	24
Dxxx " "	1 2 0	23
Dxxxx " "	1 2 21	22
Dxxxxx " "	1 3 14	21
Dxxxxxx " "	2 0 7	20

LEAD

Weight per Super Foot.

Inch.	Lbs.	Inch.	Lbs.	Inch.	Lbs.
1/16	3·7	7/16	25·9	3/4	44·7
1/8	7·4	1/2	29·5	13/16	48·3
3/16	11·1	9/16	33·2	7/8	51·0
1/4	14·8	5/8	36·9	15/16	55·1
5/16	18·5	11/16	40·6	1	59·4
3/8	22·2				

LEAD SHEET

Weight per Roll—30 feet x 7 feet 9 inches.

	C.	Q.	L.		C.	Q.	L.
3 lbs.	6	0	14	5 lbs.	10	1	14
3½ "	7	0	20	6 "	12	1	0
4 "	8	1	0	7 "	14	2	0
4½ "	9	1	0				

APPROXIMATE WEIGHTS OF SHEET COPPER

Wire Gauge	Weight per sq. ft.	Weight per sheet 4ft. x 2ft.	Wire Gauge	Weight per sq. ft.	Weight per sheet 4ft. x 2ft.
No.	Lbs. Oz.	Lbs.	No.	Lbs. Qrs.	Lbs.
30	0 8	4	15	3 8	28
29	0 9	—	14	4 0	32
28	0 10	5	13	4 8	36
27	0 11½	6	12	5 0	40
26	0 13	—	11	5 8	44
25	0 14	7	10	6 4	50
24	1 0	8	9	7 0	—
23	1 3	9	8	7 10	—
22	1 6	11	7	8 8	—
21	1 8	12	6	9 8	—
20	1 12	14	5	10 2	—
19	2 0	16	4	11 0	—
18	2 4	18	3	12 0	—
17	2 12	22	2	13 0	—
16	3 0	24	1	14 0	—

Approximate Quantity of Nettlefold's Galvanized Roofing Screws to the lb.

1¾ x 12	56
2 x 12	48
2½ x 14	31
3 x 14	27
Lead Washers	57

Evenden Spring-Head Nails—

1½in.	1¾in.	2in.	2¼in.	2½in.
105	88	80	75	70

EXPANSION OF METAL

A comparison between the common metals at 32 degrees Fahr. and 212 degrees Fahr. showed the following results:—

Lead expands	1	part in	349	Block Tin expands	1	part in	403
Zinc ,,	1	,,	322	Cast Iron ,,	1	,,	901
Copper ,,	1	,,	581	Wrought Iron ,,	1	,,	846
				Brass ,,	1	,,	584

It will be observed that in expansiveness lead is only beaten by zinc.

Fusing Temperature of Metals

	Degrees Fahr.		
Solder	330	Brass	1650
Tin	426	Silver	1830
Lead	630	Copper	2192
Zinc	800	Gold	2280
		Cast Iron	2912

WEIGHTS PER LINEAL FOOT OF SOLID DRAWN COPPER TUBES

Calculated on Basis of Copper at 558 lbs. per cubic foot

"Imperial" Wire Gauge Thickness

Outside	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Diameter	.192	.176	.160	.144	.128	.116	.104	.092	.080	.072	.064	.056	.048	.040	.036
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1/4	—	—	—	—	—	—	—	—	—	—	0.14	0.13	0.12	0.10	0.09
5/16	—	—	—	—	—	—	—	—	—	0.26	0.24	0.22	0.19	0.16	0.15
3/8	—	—	—	—	—	—	—	—	0.41	0.37	0.34	0.30	0.26	0.22	0.20
7/16	—	—	—	—	—	—	0.66	0.60	0.53	0.48	0.44	0.39	0.33	0.28	0.26
1/2	—	—	—	—	0.97	0.89	0.82	0.74	0.65	0.59	0.53	0.47	0.41	0.34	0.31
5/8	—	—	1.39	1.28	1.16	1.07	0.97	0.87	0.77	0.70	0.63	0.56	0.48	0.40	0.37
1	1.89	1.76	1.64	1.50	1.36	1.25	1.13	1.01	0.89	0.81	0.73	0.64	0.55	0.47	0.42
1 1/8	2.18	2.03	1.88	1.72	1.55	1.42	1.29	1.15	1.01	0.92	0.83	0.73	0.63	0.53	0.47
1 1/4	2.47	2.30	2.12	1.94	1.75	1.60	1.45	1.29	1.14	1.03	0.92	0.81	0.70	0.59	0.53
1 3/8	2.77	2.57	2.36	2.16	1.94	1.78	1.61	1.43	1.26	1.14	1.02	0.90	0.77	0.65	0.58
1 1/2	3.06	2.84	2.61	2.38	2.14	1.95	1.77	1.57	1.38	1.25	1.12	0.98	0.85	0.71	0.64
1 5/8	3.35	3.10	2.85	2.59	2.33	2.13	1.92	1.71	1.50	1.36	1.22	1.07	0.92	0.77	—
1 3/4	3.64	3.37	3.09	2.81	2.53	2.30	2.08	1.85	1.62	1.47	1.31	1.15	0.99	0.83	—
1 7/8	3.93	3.64	3.34	3.03	2.72	2.48	2.24	1.99	1.75	1.58	1.41	1.24	1.07	0.89	—
2	4.22	3.91	3.58	3.25	2.92	2.66	2.40	2.13	1.87	1.69	1.51	1.32	1.14	0.95	—
2 1/8	4.52	4.17	3.82	3.47	3.11	2.84	2.56	2.27	1.99	1.80	1.60	1.41	1.21	—	—
2 1/4	4.81	4.44	4.07	3.69	3.31	3.01	2.72	2.41	2.11	1.91	1.70	1.49	1.28	—	—
2 3/8	5.10	4.71	4.31	3.91	3.50	3.19	2.87	2.55	2.23	2.02	1.80	1.58	1.36	—	—
2 1/2	5.39	4.98	4.56	4.13	3.69	3.37	3.03	2.69	2.35	2.13	1.89	1.66	1.43	—	—

LYSAGHT'S IRON supplied to H. M. Admiralty.

Composition Pipe

(INSIDE DIAMETER).

Inch	lbs.	oz.		Inch	lbs.	oz.	
¼	0	13	per yard	⅝	3	4	per yard
5/16	1	0	,,	¾	4	4	,,
⅜	1	5	,,	⅞	4	12	,,
7/16	1	10	,,	1	5	8	,,
½	2	2	,,				

Length of Coils up to ½ inch, usually 50 yards.

⅝ inch	¾ inch	⅞ inch	1 inch
40 yards	30 yards	25 yards	20 yards

Pipes—Cast Iron (Water)

Spigot and Faucet

NINE FEET LENGTHS

Diam.	Cwts.	Qrs.	Lbs.	Diam.	Cwts.	Qrs.	Lbs.
2½	0	3	2	14	9	1	26
3	1	0	10	15	9	3	26
4	1	1	16	16	10	3	6
5	2	0	14	18	14	0	25
6	2	2	0	20	16	1	20
7	3	0	20	22	17	3	2
8	3	2	14	24	22	0	0
9	4	2	10	27	24	0	21
10	5	1	0	30	27	0	0
12	7	0	0	33	32	0	0

Galvanized Piping—(Iron)

Weight per 100 feet.

Size	Per 100 Feet.			Size	Per 100 Feet.		
	Cwt.	Qrs.	Lbs.		Cwt.	Qrs.	Lbs.
½	0	3	0	1½	2	3	2
¾	1	0	5	2	4	0	6
1	1	1	22	3	6	0	8
1¼	2	1	10				

SIZES of PIPES for WATER

The table below gives approximately suitable diameters of pipes for passing different quantities of water. For short mains up to 200 yards long, the diameter of same, if smaller than the figures given, is not of much importance, but when they exceed 200 yds. in length the diameters given in this table are desirable.

Gallons per minute.	Diameter of pipe in in.	Gallons per minute.	Diameter of pipe in in.
½	½	60	4
¾	¾	100	5
1½	1	160	6
3	1¼	220	7
5	1½	300	8
10	2	400	9
15	2½	500	10
20	3	800	12
40	3½	1000	14

ACETYLENE PIPE SERVICE

Number of half-foot Burners or equivalent of other sizes, to burn at 2½ inches or higher pressure at the burners.	Distance from Generating apparatus if a main pipe, or distance from main pipe if a branch.	Sizes of Pipes.
2	15 feet	⅛ inch
5	30 „	¼ „
10	40 „	⅜ „
20	50 „	½ „
50	100 „	¾ „
70	130 „	1 „
100	150 „	1¼ „
150	180 „	1½ „
270	250 „	2 „

Consumers of Galvanised Iron should note that every sheet of LYSAGHT'S "ORB" IRON has the Trade Mark stencilled thereon in blue, and is guaranteed. Beware of Imitations.

LEAD PIPE—Water and Gas

Inside Dia.	Strength.	Weight per Yard.	Average Length	Inside Dia.	Strength	Weight per Yard.	Average Length.
Inch		Lbs.	Yards.	Inch.		Lbs.	Yards.
$\frac{3}{8}$	Thin	$3\frac{1}{2}$	35	$1\frac{1}{4}$	Thin	10	17
,,	Middle	4	32	,,	Thin	11	16
,,	Strong	$4\frac{1}{2}$	28	,,	Middle	12	14
,,	Strong	5	24 or 48	,,	Middle	$12\frac{1}{2}$	13
,,	Strong	$5\frac{1}{2}$	22 or 44	,,	Strong	14	12
$\frac{1}{2}$	Thin	3	39	,,	Strong	16	11
,,	Thin	$3\frac{1}{2}$	35	$1\frac{1}{2}$	Thin	12	14
,,	Middle	4	32	,,	Thin	14	12
,,	Strong	$4\frac{1}{2}$	28	,,	Middle	$15\frac{1}{2}$	11
,,	Strong	5	48	,,	Strong	$17\frac{1}{2}$	9
,,	Strong	6	38	,,	Strong	21	8
,,	Strong	7	33	$1\frac{3}{4}$	Thin	15	11
,,	Strong	8	29	,,	Middle	17	10
$\frac{5}{8}$	Thin	$4\frac{1}{2}$	28	,,	Strong	19	9
,,	Middle	5	24 or 48	2	Thin	19	9
,,	Strong	6	38	,,	Middle	23	7
,,	Strong	7	33	,,	Strong	26	7
,,	Strong	8	29	,,	Thin	19	
$\frac{3}{4}$	Thin	5	24	,,	Middle	23	
,,	Thin	6	20	,,	Strong	26	
,,	Middle	7	25	,,	Strong	30	
,,	Strong	8	22	$2\frac{1}{2}$	Thin	26	
,,	Strong	$8\frac{1}{2}$	20	,,	Thin	27	
,,	Strong	9	19	,,	Middle	30	
,,	Strong	10	17	,,	Strong	33	
,,	Strong	11	16	3	Thin	36	
,,	Strong	12	14	,,	Middle	42	
1	Thin	7	25	,,	Strong	44	
,,	Thin	8	22	$3\frac{1}{2}$	Thin	45	
,,	Middle	9	19	,,	Middle	49	
,,	Middle	$9\frac{1}{2}$	18	,,	Strong	52	
,,	Strong	10	17	4	Thin	48	
,,	Strong	11	16	,,	Middle	57	
,,	Strong	12	14	,,	Strong	61	
,,	Strong	14	12	5	Thin	73	
,,	Strong	15	11	,,	Strong	84	
				6		68	

12-foot Lengths

TRADE PRICE LIST OF WROUGHT IRON GAS, WATER AND STEAM TUBES

TUBES (Current at June 1st, 1927).

Internal Diam. in inches.	⅛ & ¼	⅜	½	¾	1	1¼	1½	1¾	2	2¼	2½	3	3½	4	4½	5	6
Tubes 2ft long & over per ft	-/4	-/4¼	-/5½	-/6¾	-/9¼	1/1	1/4½	1/8	1/10	2/6	2/10	3/3	4/-	4/5	5/6	6/-	7/6
Pieces 12 to 23½ in. long (each)	-/10	-/11	1/1	1/5	1/11	2/8	3/4	4/6	4/9	6/9	8/-	10/6	13/6	15/6	21/-	24/-	32/6
Pieces 4 to 11½ in. long (each)	-/7	-/8	-/9	-/11	1/3	1/8	2/2	2/10	3/-	4/3	5/3	6/9	9/3	10/9	15/6	18/-	25/3
Long Screws, 12 to 23½ in. long (each)	-/11	1/-	1/3	1/7	2/2	2/10	3/9	5/-	5/3	7/6	9/-	12/-	15/6	17/-	23/-	26/6	35/6
Long Screws, 3 to 11½ in. long (each)	-/8	-/9	-/10	1/1	1/5	1/11	2/6	3/3	3/6	5/-	6/6	8/6	11/6	13/-	17/-	20/-	28/-
Barrel nipples (each) ..	-/5	-/5	-/6	-/7	-/9	1/-	1/4	1/8	1/9	2/6	3/-	4/-	6/-	7/-	10/-	12/6	20/-
Bends (each)	-/8	-/9	-/11	1/2	1/7½	2/7½	3/2	4/2	5/2	8/6	12/-	18/-	25/-	32/6	80/-	105/-	150/-
Springs, not socketed (each)	-/5	-/6	-/7	-/9	1/1½	1/11½	2/3½	3/1	3/11	6/9	9/6	14/6	20/-	26/6	70/-	93/-	132/-

Every sheet of LYSAGHT'S "ORB" and

TRADE PRICE LIST OF WROUGHT IRON GAS, WATER AND STEAM FITTINGS

FITTINGS (Current at June 1st, 1927).

Internal Diam. in inches	⅛ & ¼	⅜	½	¾	1	1¼	1½	1¾	2	2¼	2½	3	3½	4	4½	5	6
Pipe Union .. .. each	2/-	2/6	3/-	4/-	5/6	6/9	8/-	9/-	10/-	15/-	17/6	22/6	27/6	35/-	48/-	66/-	105/
Elbows, square .. ,,	-/10	-/11	1/1	1/3	1/6	2/2	2/7	3/4	4/3	6/9	9/6	14/-	22/-	28/-	75/-	95/-	150/
Elbows, round .. ,,	-/11	1/-	1/2	1/5	1/8	2/4	2/10	3/9	4/8	7/3	10/6	16/-	24/-	30/-	75/-	95/-	150/
Tees .. .. ,,	1/-	1/1	1/3	1/7	1/10	2/6	3/1	4/2	5/1	7/9	11/6	18/-	26/-	32/-	78/-	98/-	155/
Crosses .. .. .. ,,	2/2	2/4	2/9	3/3	4/1	5/6	6/7	8/6	10/6	17/-	22/-	40/-	56/-	66/8	175/	220/	350/
Sockets, plain .. ,,	-/3	-/3	-/4	-/5	-/6	-/8	/10½	1/1	1/3	1/9	2/6	3/6	5/-	6/-	10/-	12/-	18/-
Sockets, diminished ,,	-/4	-/5	-/6	-/7	-/9	1/-	1/4	1/9	2/-	4/-	5/-	7/-	9/-	11/-	25/-	35/-	55/-
Flanges .. .. .. ,,	-/9	-/10	1/-	1/2	1/4	1/9	2/-	2/3	2/9	4/-	5/-	8/6	10/-	11/6	16/-	18/-	27/-
Caps .. .. ,,	-/3½	-/3½	-/5	-/6	-/8	1/-	1/3	1/7	2/-	3/-	4/4	6/-	9/9	10/6	25/	30/-	45/-
Plugs .. .. .. ,,	-/3	-/3	-/4	-/5	-/6	-/8	-/10	1/-	1/3	2/-	2/6	4/9	7/-	10/-	22/-	30/-	48/-
Backnuts .. .. ,,	-/2	-/2	-/3	-/3½	-/5	-/6	-/8	-/10	1/1	1/9	2/3	3/6	4/6	5/6	14/-	18/-	26/-
Nipples .. .. .. ,,	-/2	-/2	-/3	-/3½	-/4	-/6	-/8	-/10	1/-	1/9	2/3	3/6	4/6	5/6	14/-	18/-	26/-

"QUEEN'S HEAD" IRON branded Blue.

SOMETHING ABOUT TANKS

CIRCULAR CORRUGATED IRON.
REPUTED CAPACITY.

Diam.	Height of Tank.			
	4 ft.	5 ft.	6 ft.	8 ft.
ft. in.	gall.	gall.	gall.	gall.
3 3	200	250	300	400
3 6	240	300	360	480
3 9	280	350	420	560
4 0	310	390	470	620
4 4	—	—	540	720
4 6	—	—	590	787
5 0	—	—	720	960
6 0	—	—	1,050	1,400

SQUARE IRON.

CAPACITY.	
2 ft. 8 in. sq.	100 gall.
3 ,, 3 ,, ,,	200 ,,
3 ,, 8 ,, ,,	300 ,,
4 ,, 0 ,, ,,	400 ,,

WATER.

1 pint pure water weighs 1¼lb.
1 gallon pure water contains 277·274 cubic ins.
1 cubic ft. distilled water, 62 deg. Fahr., weighs 62·321 lbs.
1 cubic yard distilled water, 62 deg. Fahr., weighs ¾ ton.
1 cubic fathom distilled water, 62 deg. Fahr., weighs 6 tons.

To Compute the Capacity of a Tank

SQUARE OR RECTANGULAR.—Multiply the length by the breadth and the product by the depth; the result multiplied by 6¼ (6.2321) will give the base and contents in gallons.

CIRCULAR.—Rule A—Multiply the circumference by itself and the product by half the height.

Example:—Circumference 20 ft., height 6 ft.
20 ft. x 20 ft. x 3 ft. 1,200 gals. approximate capacity.

Rule B.—Multiply the diameter by itself and the product by five times the height.

Example:—Diameter 6 ft., height 6 ft.
6 ft. x 6 ft. x 30 ft. = 1,080 gals. approximate capacity.

A GOOD TANK

It is highly necessary that a **Corrugated Iron Tank** should possess lasting properties, and adaptability to withstand the climatic conditions of the locality in which it is to be used.

Thousands of TANKS are made every year from Lysaght's Corrugated "ORB" Sheets, the durable properties of which, in a pure dry atmosphere remote from the sea, are almost unlimited.

In tropical countries and other localities in which the water possesses mineral properties, the result is, however, less satisfactory, and in such cases Tanks should be made from **Lysaght's Special Blue Tank-Making Sheets**, which are largely used for this purpose in India and other tropical countries.

Stocks of these Sheets are available throughout Australia.

What Good Galvanizing Means

As the strength of a chain is that of its weakest link, so the life of a *galvanized sheet* depends upon the uniformity of its *zinc coating;* the smallest ungalvanized spot weakens the life of the whole sheet.

So far as durability is concerned, the base of the galvanized sheet is immaterial. *Pure Iron, Charcoal Iron* or *Steel* will all perish quickly when the coating is destroyed.

Lysaght's Orb and Queen's Head Brands are by common consent the *most perfect* and *heavily coated sheets manufactured,* and will therefore outlast any other make.

All Australian



This huge tank is made from
18 Gauge Orb

Manufactured at

LYSAGHT'S NEWCASTLE (N.S.W.) WORKS

Dimensions :—

HEIGHT OVERALL	... ...	22 feet
(Wall 18 ft. 6 in., Cone 3 ft. 6 in.)		
CIRCUMFERENCE	... ...	50 feet
DIAMETER	...	15 feet 6 ins.
CAPACITY { WATER	...	24,000 gallons
CAPACITY { WHEAT	...	3,000 bushells
WEIGHT (approx.)	... ...	2 tons

Useful Information for Plumbers and Tankmakers

GALVANIZED IRON REQUIRED FOR THE MANUFACTURE OF CIRCULAR CORRUGATED IRON TANKS OF VARIOUS CAPACITIES.

Capa'ty of Tank. Gals.	Height ft.	Diam. ft.	Diam. in.	Iron Required.
200	4	3	3	2 sheets 10ft. x 24G. Galv. Corrugated Iron, curve each to a full circle. 1 sheet each 72in. x 36in. x 24G. P.G. Iron 72in. x 36in. x 26G. ,,
400	6	3	9	6 sheets 6ft. x 24G. Galv. Corrugated Iron, curve each to half circle. 1 sheet each 72in. x 36in. x 24G. P.G. Iron 72in. x 36in. x 26G. ,,
500	4	5	0	4 sheets 8ft. x 24G. Galv. Corrugated Iron, curve each to half circle. 2 sheets each 72in. x 30in. x 24G. P.G. Iron 72in. x 30in. x 26G. ,,
600	6	4	4	6 sheets 7ft. x 24G. Galv. Corrugated Iron, curve each to half circle. 2 sheets each 72in. x 24in. x 26G. P.G. Iron 72in. x 24in. x 24G. ,,
800	6	5	3	3 sheets each 8ft. & 9ft. x 24G. Galv. C. Iron, curve 1/8 & 1/9 to circle. 1 sheet each 72in. x 30in. x 24G. P.G. Iron 72in. x 36in, x 24G. ,, 72in. x 30in. x 26G. ,, 72in. x 36in. x 26G. ,,
1000	6	6	0	3 sheets each 9ft. & 10ft. x 24G. Galv. C. Iron, curve 1/9 & 1/10 to circle. 2 sheets each 72in. x 36in. x 24G. P.G. Iron 72in. x 36in. x 26G. ,,
1000	8	5	0	8 sheets 8ft. x 24G. Galv. Corrugated Iron, curve each to half circle. 2 sheets each 72in. x 36in. x 24G. P.G. Iron 72in. x 36in. x 26G. ,,
1200	6	6	3	6 sheets 10ft. x 24G. Galv. Corrugated Iron, curve each to ⅓ circle. 2 sheets each 72in. x 36in. x 24G. P.G. Iron 72in. x 36in. x 26G. ,,
2000	6	8	3	9 sheets 9ft. x 24G. Galv. Corrugated Iron curve each to 1/3 circle. 5 sheets each 72in. x 36in. x 24G. P.G. Iron 72in. x 36in. x 26G. ,,
2500	6	9	3	9 sheets 10ft. x 24G. Galv. Corrugated Iron, curve three to circle. 5 sheets each 72in. x 36in. x 24G. P.G. Iron 72in. x 36in. x 26G. ,,

Useful Information for Plumbers and Tankmakers — Continued

GALVANIZED IRON REQUIRED FOR THE MANUFACTURE OF CIRCULAR CORRUGATED IRON TANKS OF VARIOUS CAPACITIES.

Capa'ty of Tank Gals.	Height ft.	Diam. ft. in.	Iron Required
3,000	6	10 0	6 sheets each 8ft., 9ft. x 24 gauge Corr. Iron. Curve ¼ circle. 2/8 ft., 2/9 ft. to 1 circle. 7 sheets 36in. x 24 gauge, 7 sheets 36in. x 26 gauge Plain Galvd. Iron.
4,000	6	11 6	6 sheets each 9ft., 10ft. x 24 gauge Corr. Iron. Curve ¼ circle. 2/9 ft., 2/10 ft. to 1 circle. 8 sheets 36in. x 24 gauge, 8 sheets 36in. x 26 gauge Plain Galvd. Iron.
5,000	6	13 0	12 sheets 9ft., 3 sheets 8ft. x 24 gauge Corr. Iron. Curve 1/5 circle. 4/9 ft., 1/8 feet to 1 circle. 10 sheets 36in. x 22 gauge, 10 sheets 36in. x 26 gauge Galvd. Plain Iron.
6,000	6	14 4	9 sheets 10ft., 6 sheets 9ft. x 24 gauge Corr. Iron. Curve ⅕ circle. 3/10 ft., 2/9 ft. to 1 circle. 15 sheets 36in. x 22 gauge, 36in. x 26 gauge Plain Galvd. Iron.
8,000	6	16 6	12 sheets 9ft., 6 sheets 10ft. x 24 gauge Corr. Iron. Curve ⅛ circle. 4/9 ft., 2/10 ft. to 1 circle. 18 sheets 36in. x 22 gauge, 18 sheets 36in. x 26 gauge Plain Galvd. Iron.
10,000	6	18 0	18 sheets 10ft. x 24 gauge Corr. Iron. Curve ¼ circle. 6/10 ft. to 1 circle. 20 sheets 36in. x 22 gauge Plain Galvd. Iron.
15,000	6	22 6	12 sheets 9ft., 12 sheets 10ft. x 24 gauge Corr. Iron. Curve ⅛ circle. 4/9 ft., 4/10 ft. to 1 circle. 32 sheets 36in. x 22 gauge Plain Galvd. Iron.
20,000	6	25 6	12 sheets 9ft., 15 sheets 10ft. x 24 gauge Corr. Iron. Curve 1/9 circle. 4/9 ft., 5/10 ft. to 1 circle. 45 sheets 36in. x 22 gauge Plain Galvd. Iron.
30,000	6	32 6	33 sheets 10ft. x 24 gauge Corr. Iron. Curve 1/11 circle. 11/10 ft. to 1 circle. 66 sheets 36in. x 22 gauge Plain Galvd. Iron.

COMPARISON OF WIRE AND SHEET GAUGES

Gauge	Approx. thickness in inches	Thickness or Diameter in Inches.				
		Birmingham Sheet*	Stubbs (Birmingham Wire)	Imperial Standard (British)	Brown & Sharp American Standard	Roebling (Steel Wire)
4/0	½	.542	.454	.400	.4600	.393
3/0		.500	.425	.372	.4096	.362
2/0		.445	.380	.348	.3648	.331
0		.400	.340	.324	.3249	.307
1		.353	.300	.300	.2893	.283
2		.315	.284	.276	.2576	.263
3		.280	.259	.252	.2294	.244
4	¼	.250	.238	.232	.2043	.225
5		.222	.220	.212	.1819	.207
6		.198	.203	.192	.1620	.192
7		.176	.180	.176	.1443	.177
8		.157	.165	.160	.1285	.162
9		.140	.148	.144	.1144	.148
10	⅛	.125	.134	.128	.1019	.135
11	7/64	.111	.120	.116	.0907	.120
12	3/32	.099	.109	.104	.0808	.105
13		.088	.095	.092	.0720	.092
14	5/64	.078	.083	.080	.0641	.080
15		.070	.072	.072	.0571	.072
16	1/16	.062	.065	.064	.0508	.063
17		.056	.058	.056	.0453	.054
18	1/20	.050	.049	.048	.0403	.047
19		.044	.042	.040	.0359	.041
20		.039	.035	.036	.0320	.035
21		.035	.032	.032	.0285	.032
22	1/32	.031	.028	.028	.0253	.028
23		.028	.025	.024	.0226	.025
24	1/40	.025	.022	.022	.0201	.023
25		.022	.020	.020	.0179	.020
26		.020	.018	.018	.0159	.018
27		.017	.016	.0164	.0142	.017
28	1/64	.016	.014	.0148	.0126	.016
29		.014	.013	.0136	.0113	.015
30	1/80	.012	.012	.0124	.0100	.014
31		.011	.010	.0116	.00893	.0135
32		.0098	.009	.0108	.00795	.0130
33		.0087	.008	.0100	.00708	.0110
34	1/128	.0077	.007	.0092	.00630	.0100
35		.0069	.005	.0084	.00561	.0095
36		.0061	.004	.0076	.00500	.0090

*This Gauge (B.G.) is the customary commercial gauge for Iron and Steel Sheets, whether Black, Galvanized or tinned. It is sometimes erroneously referred to as the Birmingham Wire Gauge (B.W.G.), but the latter is a different gauge.

It is useful to remember that 10 B.G. is ⅛in., 16 B.G. is 1/16 in., and that for every addition of 6 to the gauge number, the thickness is halved.

SIZES AND WEIGHTS OF ALUMINIUM SHEETS

Size	Thickness		Alumin-	Size	Thickness		Alumin-
SWG	Inches	Mm.	ium	S.W.G.	Inches	Mm.	ium
	.375	9.53	5.26	14	.078	1.98	1.10
3/0	.372	9.45	5.22		.077	1.96	1.08
	.353	8.96	4.96	15	.072	1.83	1.01
2/0	.348	8.84	4.89		.070	1.78	0.982
1/0	.324	8.23	4.55		.068	1.73	0.955
	.315	8.00	4.42		.065	1.65	0.914
	.312	7.93	4.38	16	.064	1.63	0.900
1	.300	7.62	4.21		.063	1.60	0.885
	.289	7.34	4.06		.062	1.58	0.871
	.280	7.11	3.93		.060	1.53	0.843
	.278	7.06	3.90	17	.056	1.42	0.786
2	.276	7.01	3.87		.055	1.40	0.773
	.270	6.86	3.79		.051	1.30	0.716
3	.252	6.40	3.54		.050	1.27	0.702
	.250	6.35	3.51	18	.048	1.22	0.675
	.238	6.05	3.34		.047	1.19	0.660
4	.232	5.89	3.26		.044	1.12	0.618
	.223	5.66	3.13		.042	1.07	0.590
	.216	5.49	3.03	19	.040	1.02	0.562
5	.212	5.38	2.98		.039	0.991	0.548
	.200	5.08	2.81		.038	0.965	0.534
	.198	5.03	2.78	20	.036	0.914	0.506
6	.192	4.88	2.70		.035	0.899	0.492
	.187	4.75	2.62	21	.032	0.813	0.449
	.182	4.62	2.56		.031	0.793	0.435
7	.176	4.47	2.47	22	.028	0.711	0.393
	.166	4.22	2.33		.027	0.686	0.379
8	.160	4.06	2.25		.025	0.635	0.351
	.157	3.99	2.20	23	.024	0.610	0.337
	.150	3.81	2.11		.023	0.584	0.323
9	.144	3.66	2.02	24	.022	0.559	0.309
	.140	3.56	1.97		.021	0.533	0.295
	.136	3.45	1.91	25	.020	0.508	0.281
10	.128	3.25	1.80		.019	0.483	0.267
	.125	3.18	1.76	26	.018	0.457	0.253
	.124	3.15	1.74		.017	0.432	0.239
11	.116	2.95	1.63	27	.0164	0.417	0.230
	.112	2.85	1.57		.0160	0.406	0.225
	.111	2.82	1.56		.0156	0.397	0.219
12	.104	2.64	1.46	28	.0148	0.376	0.208
	.100	2.54	1.41		.0140	0.356	0.196
	.099	2.51	1.39		.0139	0.353	0.195
13	.092	2.34	1.29	29	.0136	0.346	0.191
	.090	2.29	1.26	30	.0124	0.315	0.174
	.088	2.24	1.24		.0123	0.312	0.173
	.082	2.08	1.15		.0120	0.305	0.169
14	.080	2.03	1.12	31	.0116	0.294	0.163

The above weights are subject to a variation of 2%.

HOOPS

Weight of a Ten-foot length in Pounds.

Width	16 WG	18 WG	19 WG	20 WG	21 WG	22 WG
½	1.10	.83	.71	.60	.54	.48
⅝	1.38	1.04	.89	.74	.68	.60
¾	1.66	1.25	1.07	.89	.82	.71
⅞	1.80	1.35	1.16	.97	.88	.77
	10 WG	12 WG	14 WG	16 WG	17 WG	18 WG
1	4.68	3.65	2.60	2.08	1.81	1.55
1⅛	5.26	4.10	2.92	2.34	2.04	1.75
1¼	5.85	4.56	3.25	2.60	2.27	1.93
1⅜	6.43	5.01	3.57	2.86	2.49	2.13
1½	7.02	5.47	3.90	3.12	2.72	2.32
1¾	8.15	6.35	4.55	3.60	3.15	2.70
2	9.36	7.30	5.20	4.16	3.63	3.10
2¼	10.53	8.20	5.85	4.68	4.08	3.50
2½	11.71	9.12	6.50	5.20	4.54	3.87
2¾	12.87	10.03	7.15	5.72	4.99	4.26
3	14.05	10.95	7.80	6.25	5.45	4.65
3¼	15.10	11.80	8.40	6.70	5.80	5.00
3½	16.30	12.70	9.10	7.20	6.30	5.40
3¾	17.50	13.60	9.70	7.70	6.70	5.80
4	18.73	14.60	10.40	8.33	7.26	6.20
4¼	19.19	15.50	11.05	8.84	7.70	6.60
4½	21.07	16.40	11.70	9.36	8.17	7.00
4¾	22.23	17.33	12.35	9.88	8.62	7.36
5	23.42	18.25	13.00	10.41	9.08	7.75
5½	25.75	20.07	14.30	11.45	9.98	8.22
6	28.10	21.90	15.60	12.50	10.90	9.30

(Galvanized Hoops slightly exceed these weights).

Wire Ropes—Weights and Strength

Circumference.	Diameter.	Weights in lbs. per fathom.			Breaking Strain in gross tons.				Circumference.
		Patent Steel Hoisting Ropes.	B.B. Wire Rigging.	Flexible Hawsers.	Patent Cast Steel.	Plough Quality Cast Steel.	Galv'd B.B. Rigging.	Galv'd C.S. Hawsers.	
6	1	34⅜	32	30	115	170	55	88	6
5½	1⅛	29	26	26	95	142	42	74	5½
5	1⅛	24	22	21	80	120	34	59	5
4¾	1	21⅜	20	17	71	107	32	47	4¾
4½	1	17½	16	12½	57	85	26	36	4½
4	1	15½	14	11	51	75	22	33	4
3½	1	12	11	8	39	58	16	26	3½
3	1	8¾	8	6	28	42	11	18	3
2¾	⅞	7	7	5	24	36	8.55	15½	2¾
2½	⅞	6	6	4	20	29	7.4	12	2½
2¼	⅞	5	5	3	15½	23	6.35	9½	2¼
2	⅞	4	4	2½	12½	18½	4.3	7	2
1¾	⅝	3	3	2	9½	14½	3.25	5½	1¾
1½	⅝	2	2	1½	7	10½	2.25	4	1½
1¼	½	1½	1½	1⅛	4½	7	1.75	3	1¼
1	⅝	1	1	¾	3	4½	1	1¾	1

To Fix Selling Price of Goods

Useful Information for Small Traders and others whose business does not justify the installation of a Special Costing System.

The Costing of goods upon a scientific basis is highly necessary in any business, large or small, and many instances have been known of business failure through lack of knowledge upon this vital point.

In fixing price to be charged for the goods sold, the first step to be taken is to ascertain the overhead expenses (i.e., rent, rates and taxes, wages, salaries and all expenses, except the cost of the goods), and when this amount has been ascertained see what percentage it bears to the annual turnover, then add to this the amount of nett profit desired to be made and the combined total is the gross profit on sales that should be secured.

Take, for instance, the case of a Country Storekeeper who has a capital of £6,000 invested in a business, with a turnover of £30,000 per annum. If, for instance, he desires to make 20 per cent. on his capital, say £1,200 per annum, and has overhead expenses amounting to £3,000 per annum, he requires to make a gross profit of £4,200 per annum upon a turnover of £30,000 to provide all his expenses and to give the desired return upon his capital.

The proportion that £4,200 bears to turnover £30,000 is exactly 14 per cent., which is the required amount of gross profit to be made on sales.

The amount, however, to be added to the cost price of the goods is **not 14 per cent., but 16⅔ per cent.**, i.e.,

for example:—

Adding 14 per cent.				**Adding 16⅔ per cent.**			
Cost price	£100	0	0	Cost price	£100	0	0
Add 14 per cent.	14	0	0	Add 16⅔ per cent.	16	6	8
Selling price ..	£114	0	0	Selling price ..	£116	6	8
Deduct cost ..	100	0	0	Deduct cost ..	100	0	0
Gross profit ..	£14	0	0	Gross profit ..	£16	6	8

£14 profit on selling price £114 gives gross profit 12.29 per cent., but £16/6/8 profit on selling price £116/6/8 gives gross profit 14.01 per cent.

The 14 per cent. gross profit is merely given as an illustration of the working of the system, the actual amount required to be added is, of course, a matter for each individual trader to determine, and would be dependent upon the following considerations:—

(1) Volume of Annual Turnover.

(2) Cash or "Credit" Sales.

(3) Nature of business, where located, whether a luxury trade on which good profits might be expected or whether dealing with the supply of necessary commodities on which the profits would naturally be upon a much smaller scale.

(4) Local competition.

(5) The existence of any price fixing regulations or price maintenance conditions of sale on the part of manufacturers of proprietary lines, etc.

The following table will show the amount to be added to the cost price of goods to secure the percentage of gross profit required, viz:—

Gross Profit Required.	Add to Cost Price.	Selling Price of Goods costing £1.
		£ s. d.
5 per cent.	5 1/3 per cent.	1 1 1
7 1/2 "	8 1/4 "	1 1 8
10 "	11 1/4 "	1 2 3
12 1/2 "	14 2/7 "	1 2 11
14 "	16 2/3 "	1 3 3
15 "	17 3/4 "	1 3 7
16 "	19 1/4 "	1 3 10
17 1/2 "	21 1/4 "	1 4 3
18 "	22 "	1 4 5
19 "	23 1/2 "	1 4 8
20 "	25 "	1 5 0
21 "	26 3/4 "	1 5 4
22 1/2 "	29 "	1 5 10
25 "	33 1/3 "	1 6 8
27 1/2 "	38 "	1 7 7
30 "	43 "	1 8 7
32 1/2 "	48 1/4 "	1 9 8
33 1/3 "	50 "	1 10 0
35 "	54 "	1 10 10
37 1/2 "	60 "	1 12 0
40 "	66 2/3 "	1 13 4
45 "	82 "	1 16 5
50 "	100 "	2 0 0

LYSAGHT'S "ORB" is a Perfect Roofing Sheet.

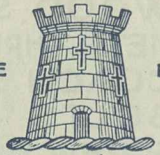
GUEST, KEEN & NETTLEFOLDS, LTD.

BIRMINGHAM. ENGLAND.

WITH WHOM

JOHN LYSAGHT LTD.

HAVE BEEN AMALGAMATED SINCE 1920

CASTLE  BRAND

The Trade Mark that makes Satisfied Customers

REPRESENTATIVE FOR AUSTRALIA
FOR SCREWS, BOLTS, NUTS & ACCESSORIES

J. K. MERRITT

258A LITTLE COLLINS STREET, MELBOURNE
BOX 182B, G.P.O.
418 GEORGE STREET, SYDNEY
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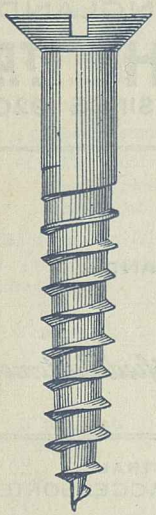
REPRESENTATIVE FOR AUSTRALIA
FOR PLATES, BARS, PIG IRON, ETC.

JOHN LYSAGHT (AUSTRALIA) LTD.

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ADELAIDE - PERTH

LYSAGHT'S GALVANIZED IRON used throughout

Specify
NETTLEFOLDS



on all your indents for :—

WOOD SCREWS
METAL THREAD SCREWS
COACH SCREWS
BOLTS & NUTS
SCREW HOOKS. ETC.
COTTER PINS
RIVETS AND
WASHERS. &c.&c.&c.

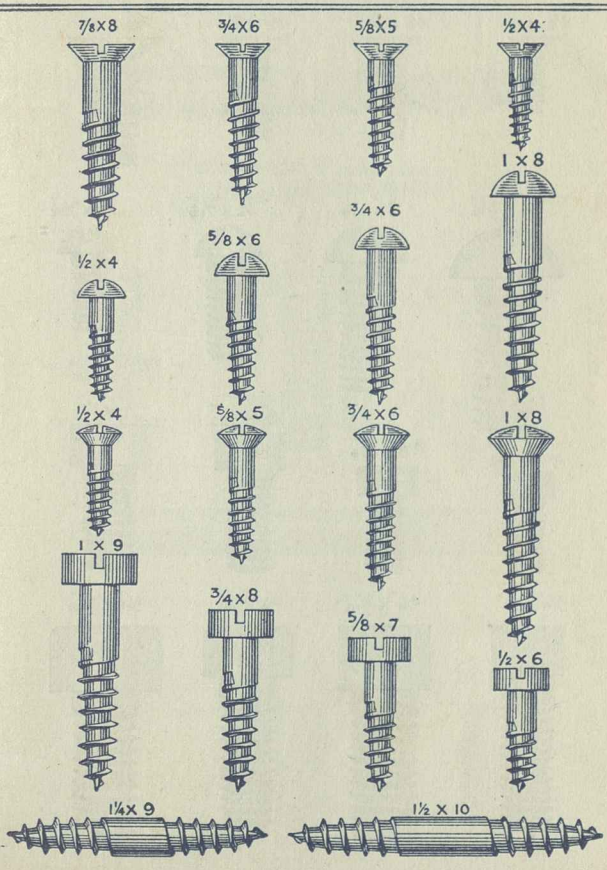
THE STANDARD QUALITY ALL OVER THE WORLD AND RENOWNED FOR
EFFICIENCY AND RELIABILITY

Stocks are carried by all the leading Hardware Merchants and Storekeepers throughout the Commonwealth and New Zealand.

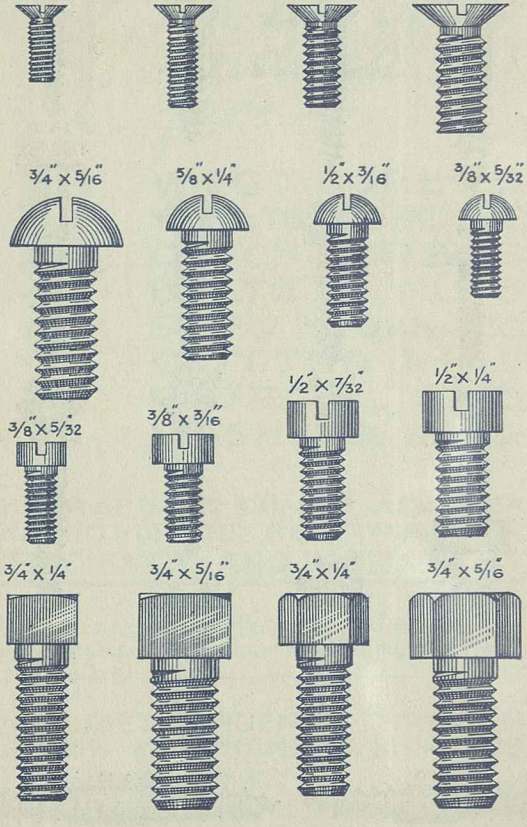
ENQUIRIES & INDENTS THROUGH BRITISH MERCHANTS & SHIPPERS

AUSTRALIAN REPRESENTATIVE.
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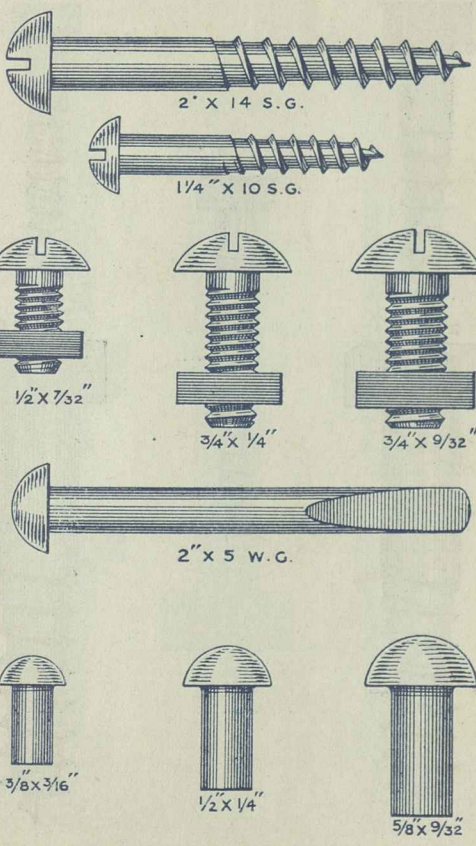
NETTLEFOLDS
RENOWNED
WOOD SCREWS



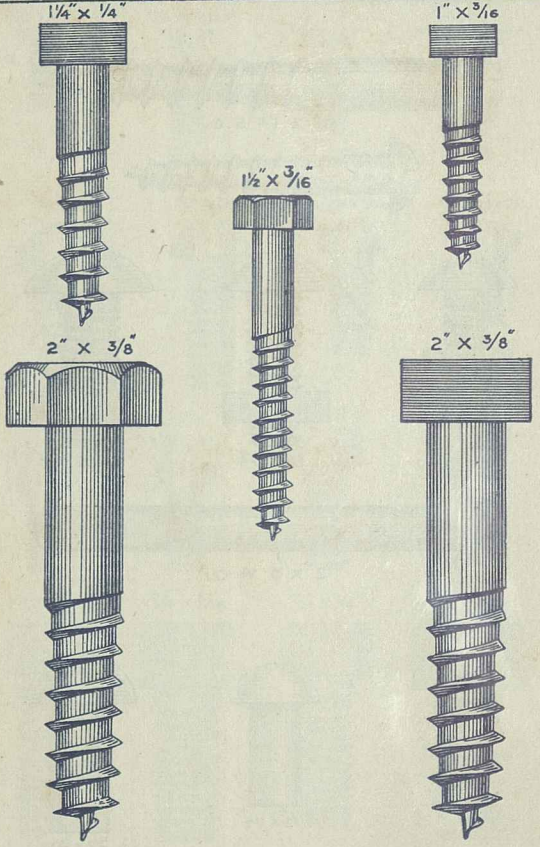
NETTLEFOLDS
RENOWNED
MACHINE SCREWS



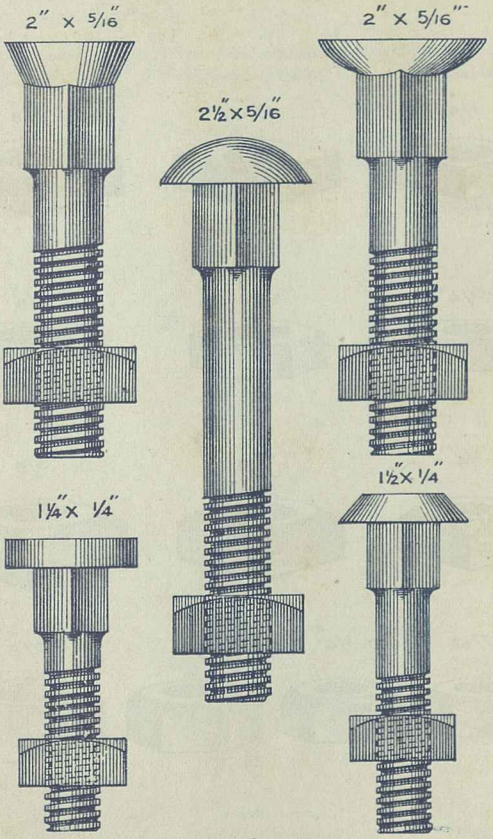
NETTLEFOLDS
RENOWNED
ROOFING FITTINGS



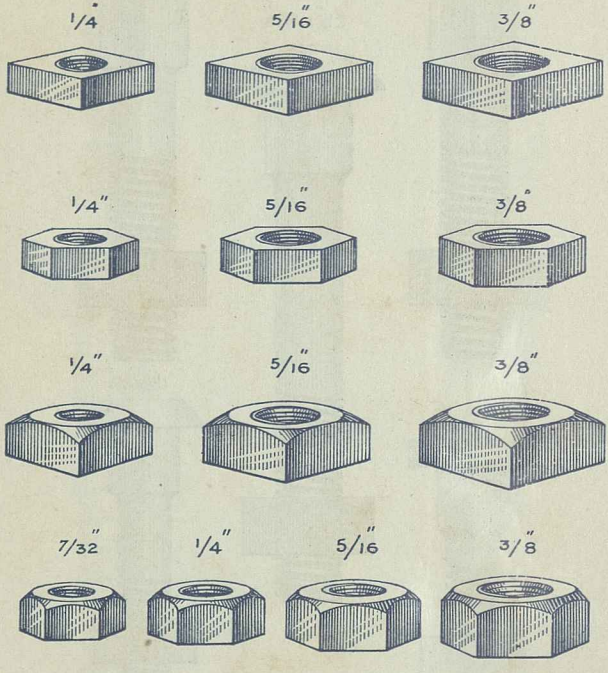
NETTLEFOLDS
PATENT
COACH SCREWS



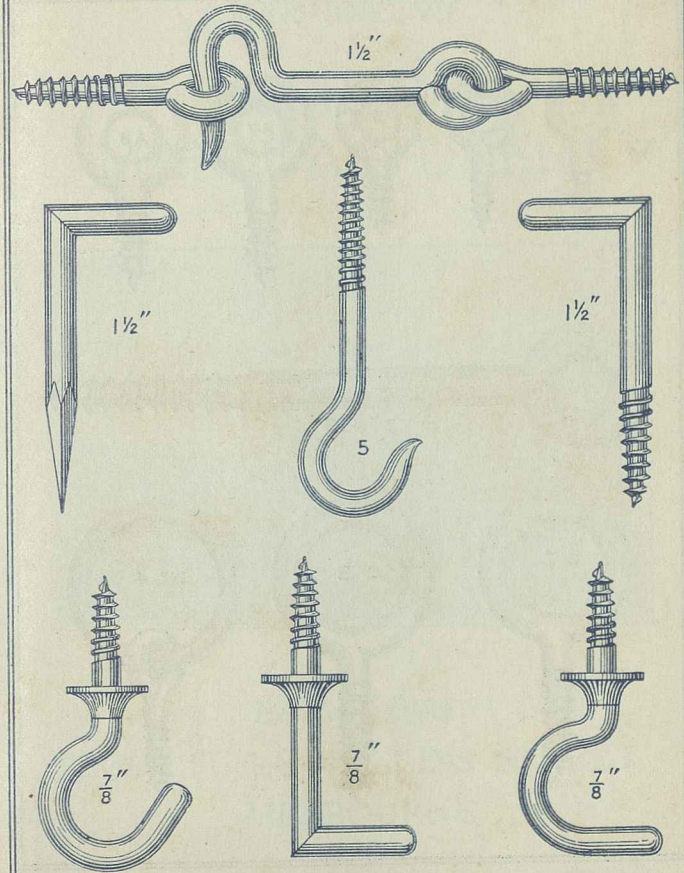
NETTLEFOLDS
RENOWNED
CARRIAGE BOLTS



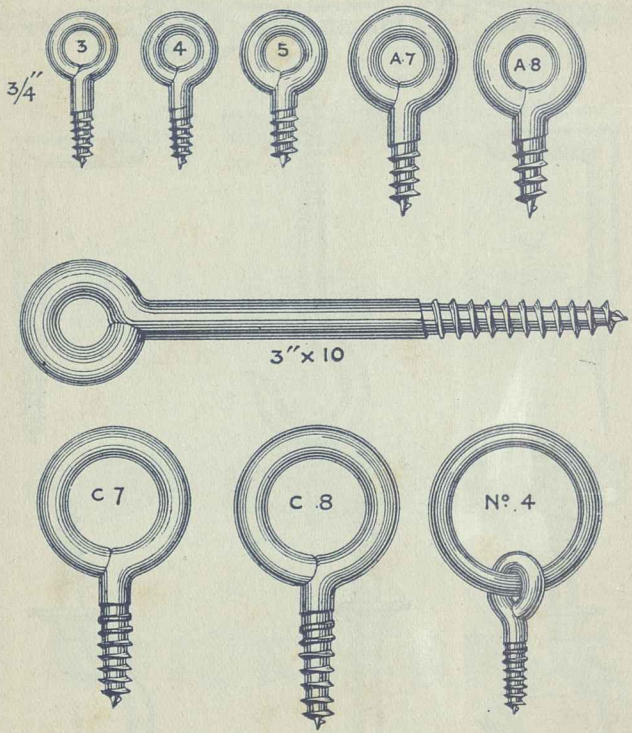
NETTLEFOLDS
PRESSED AND
FORGED NUTS



NETTLEFOLDS
PATENT
WIRE HOOKS



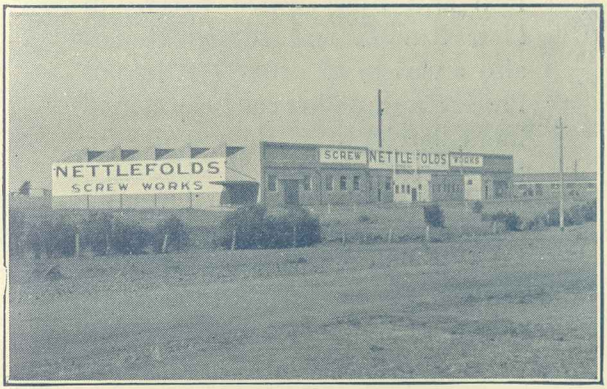
NETTLEFOLDS
PATENT
WIRE EYES



NETTLEFOLDS PTY. LTD.

SUNSHINE, VIC.

SCREW MANUFACTURERS



Registered Office:

285a LITTLE COLLINS STREET
MELBOURNE

NETTLEFOLDS Pty. Ltd.

SUNSHINE, VIC.

HAVE pleasure in announcing that they are now making Iron and Brass Wood Screws in Flat, Round, and Raised Heads, also a variety of other Nettlefolds Products. Supplies can be obtained immediately from their works at Sunshine.

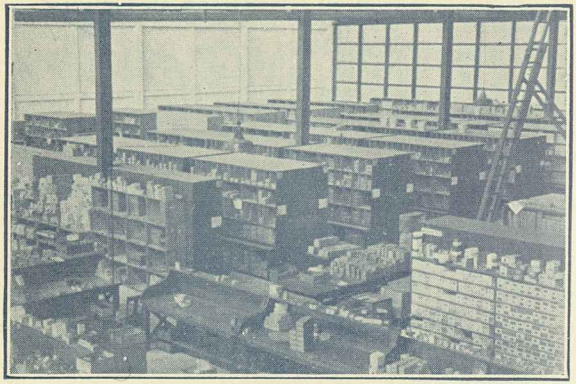
Substantial stocks are also kept of Messrs. Guest, Keen and Nettlefolds Screw Department Products, and general orders can be executed ex stock. Prices on application.

Please address all enquiries, etc., to Sunshine Works.

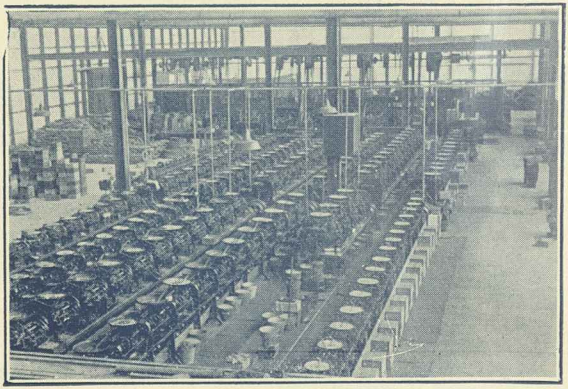
Stocks Include—

Wood Screws of all Classes and all Finishes
Galvanised Gutter Screws
„ Cone Head Screws
„ Mushroom Head Bolts and Nuts
Metal Thread Screws, Whitworth Threads
„ „ „ and Nuts Assorted
Step Bolts
Coach Screws
Handrail Screws
Washers and Brass Screw Cups
Nuts—Square and Hexagon
Gate Hooks
Screw Hooks
Shouldered Cup and Square Hooks
Cup and Jug Hooks, Household Assortment
Screw Eyes
Tinned S. Hooks
Cotter Pins
Cotter Pins (assorted) for Agricultural Implements
„ „ „ „ Motor Cars
„ „ „ „ Ford Cars
Rivets—Pan Heads
„ Tinmen's
Other Rivets to order
Countersunk Head Clout Nails
Ratchet Braces
Spindle Screws (assorted)
Copper Nails
„ Cut Tacks
„ Hose Rivets and Washers
„ Roves
Cricket Spikes
Cap Lifters
Tinned Skewers (assorted)
Boss Pig Rings and Ringers
Netting Staples
Brass Escutcheon Pins
Special or Pattern Screws, Rivets, etc., can be manufactured.

NETTLEFOLDS Pty. Ltd.

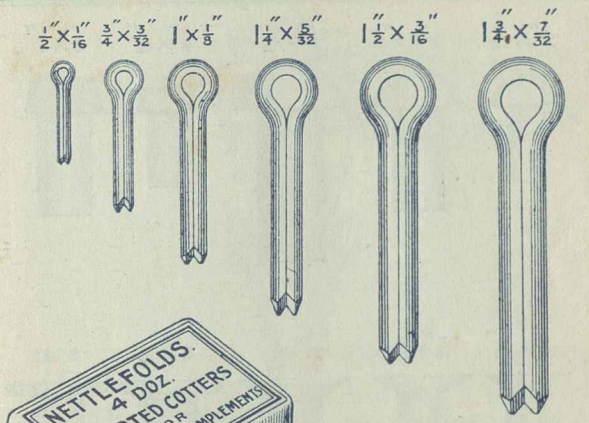


VIEW OF WAREHOUSE



VIEW OF SCREW MILL

NETTLEFOLDS
PATENT
COTTER PINS

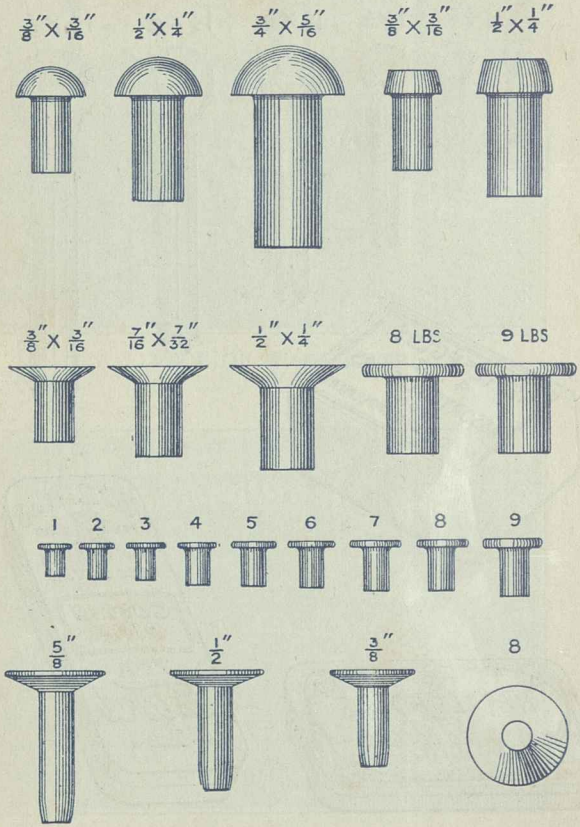






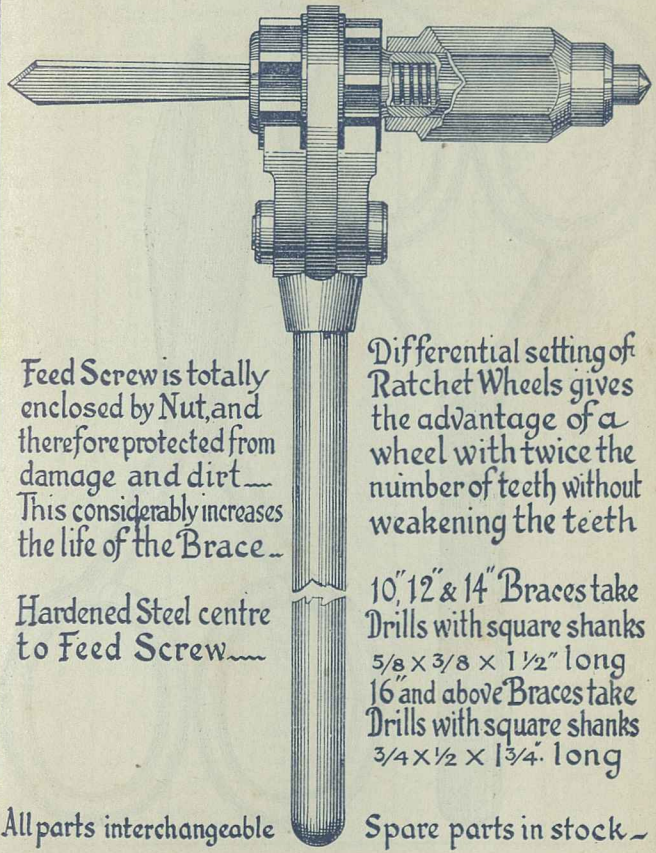


NETTLEFOLDS
RENOWNED
RIVETS



and even quality, is a Perfect Roofing Sheet.

NETTLEFOLDS
PATENT
RATCHET BRACES



Feed Screw is totally enclosed by Nut, and therefore protected from damage and dirt — This considerably increases the life of the Brace.

Hardened Steel centre to Feed Screw.

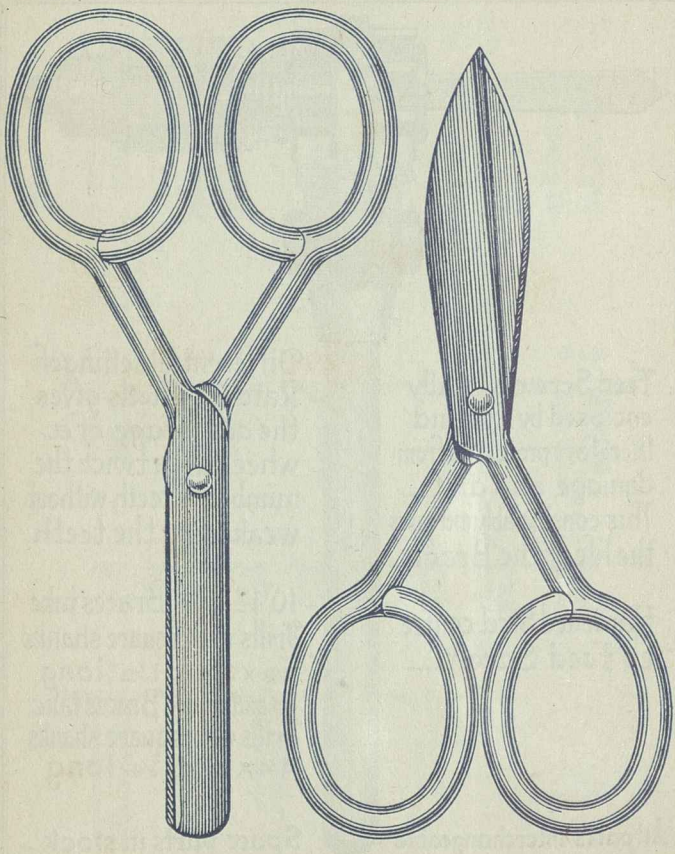
Differential setting of Ratchet Wheels gives the advantage of a wheel with twice the number of teeth without weakening the teeth

10", 12" & 14" Braces take Drills with square shanks 5/8 × 3/8 × 1½" long
16" and above Braces take Drills with square shanks 3/4 × ½ × 1¾" long

All parts interchangeable

Spare parts in stock.

NETTLEFOLDS SCISSORS



DECIMAL EQUIVALENTS.

SCREW GAUGE, IMPERIAL STANDARD WIRE GAUGE AND FRACTIONS OF AN INCH

SCREW GAUGE (S.G.)	IMPERIAL STANDARD WIRE GAUGE (W.G.)	FRACTIONS OF AN INCH	EQUIVALENTS IN DECIMALS OF AN INCH	SCREW GAUGE (S.G.)	IMPERIAL STANDARD WIRE GAUGE (W.G.)	FRACTIONS OF AN INCH	EQUIVALENTS IN DECIMALS OF AN INCH
		INCHES	INCHES			INCHES	INCHES
	30		·0124″	10	6		·192″
	29		·0136″			13/64″	·203125″
	28		·0148″	11			·206″
		1/64″	·015625		5		·212″
	27		·0164″			7/32″	·21875″
	26		·018″	12			·220″
	25		·020″		4		·232″
	24		·022″	13			·234″
	23		·024″			15/64″	·234375″
	22		·028″	14			·248″
		1/32″	·03125″			1/4″	·250″
	21		·032″		3		·252″
	20		·036″	15			·262″
	19		·040″	16	2		·276″
		3/64″	·046875″			9/32″	·28125″
	18		·048″	17			·290″
4/0			·054″		1		·300″
	17		·056″	18			·304″
3/0			·057″			5/16″	·3125″
2/0			·060″		0		·324″
		1/16″	·0625″	20			·332″
0			·063″			11/32″	·34375″
	16		·064″		2/0		·348″
1			·066″	22			·360″
	15		·072″		3/0		·372″
		5/64″	·078125″			3/8″	·375″
2	14		·080″	24			·388″
	13		·092″		4/0		·400″
		3/32″	·09375″			13/32″	·40625″
3			·094″	26			·416″
	12		·104″		5/0		·432″
4			·108″			7/16″	·4375″
		7/64″	·109375″	28			·444″
	11		·116″		6/0		·464″
5			·122″			15/32″	·46875″
		1/8″	·125″	30			·472″
	10		·128″	32	7/0	1/2″	·500″
6			·136″	36			·556″
		9/64″	·140625″			9/16″	·5625″
	9		·144″	40			·612″
7			·150″			5/8″	·625″
		5/32″	·15625″			11/16″	·6875″
	8		·160″			3/4″	·750″
8			·164″			13/16″	·8125″
		11/64″	·171875″			7/8″	·875″
	7		·176″			15/16″	·9375″
9			·178″			1″	1·000″
		3/16″	·1875″				



MILD STEEL COUNTERSUNK HEAD WOOD SCREWS

APPROX. WEIGHTS IN LBS. PER GROSS

ART. No. 1

DIA.	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	20	22	24	26	28	30	32	36
LGTH.																											
¼″	·027	·033	·044	·062	·092	·117	·151	·180	·220																		
5/16″	·040	·050	·050	·080	·100	·105	·190																				
⅜″	·038	·046	·065	·088	·123	·159	·202	·254	·300	·380	·440																
7/16″			·076	·100	·130	·190	·240	·290	·360																		
½″	·050	·060	·086	·123	·155	·200	·267	·295	·373	·457	·515	·640	·700		·930												
⅝″	·071	·073	·108	·141	·190	·250	·315	·382	·467	·552	·638	·707	·838		1·060		1·440										
¾″	·077	·088	·125	·161	·221	·295	·381	·458	·540	·660	·747	·840	·985	1·095	1·235	1·420	1·700		2·030								
⅞″		·103	·143	·190	·252	·332	·412	·505	·598	·730	·855	·952	1·115	1·235	1·482	1·580	1·780		2·300								
1″		·110	·160	·230	·292	·375	·466	·575	·701	·818	·975	1·072	1·230	1·420	1·600	1·880	2·100	2·480	2·570	2·930	3·451	4·120					
1⅛″					·330	·410	·530	·650	·780	·940	1·090	1·220	1·400		1·780		2·400										
1¼″			·210	·270	·370	·447	·607	·735	·880	1·030	1·230	1·300	1·492	1·745	1·960	2·290	2·470	2·770	3·090	3·710	4·290	5·070	6·270				
1⅜″			·230	·320	·430	·550	·700	·825	1·055	1·185	1·410	1·600	1·810	2·050	2·300	2·640	2·890	3·330	3·475	4·280	5·060	6·000	7·020	8·480	10·000	10·695	
1½″			·270	·370	·490	·650	·810	·947	1·180	1·435	1·690	1·790	2·100	2·490	2·770	3·000	3·350	3·980	4·090	4·940	5·880	6·870	8·000	9·760	11·660	12·900	
1⅝″			·350	·430	·570	·730	·920	1·090	1·383	1·590	1·815	2·053	2·340	2·700	3·080	3·500	3·750	4·440	4·740	5·680	6·490	7·590	9·260	10 440	12·840	13·800	
1¾″				·500	·640	·790	1·030	1·220	1·460	1·740	2·065	2·230	2·625	3·050	3·415	3·815	4·045	4·750	5·325	6·265	6·950	8·700	10·170	11·980	14·020	16·330	
1⅞″				·570	·720	·920	1·160	1·430	1·630	1·930	2·290	2·570	2·900	3·360	3·800	4·400	4·720	5·250	5·630	6·720	7·640	9·300	11·280	12·760	14·560	17·200	
2″							1,300	1·580	1·870	2·200	2·560	2·685	3·215	3·740	4·200	4·490	5·200	5·700	6·240	7·860	8·460	10·260	12·130	14·490	15·960	19·620	
2¼″					·870	1·170	1·420	1·620	2·060	2·350	2·750	3·030	3·310	4·110	4·550	5·095	5·540	6·390	6·600	8·290	9·765	10·920	13·440	14·580	16·860	19·680	27·910
2½″									2·100		2·950		3·700		4·500		5·900		7·350	8·700	10·350	11·850					
2¾″							1·690	1·960	2·300	2·740	3·200	3·520	4·130	4·750	5·210	5·860	6·600	7·120	7·740	9·430	11·250	12·890	15·030	16·320	19·680	22·260	
3″									2·550	3·150	3·650	4·050	4·500	5·350	5·560	6·800	7·640	8·490	8·840	10·770	12·490	15·030	17·660	19·440	21·960	24·690	34·360
3¼″									2·700	3·050	3·950	4·500	5·600	6·200	7·150		8·450		10·310	11·980	13·580	16·620	20·040	21·150	25·440	27·780	
3½″											4·550		5·550	6·600	7·300	8·000	9·220	10·250	11·430	13·470	15·600	18·180	22·080	23·680	27·360	31·280	
4″													6·400		8·100		9·550		11·950	15·100		21·300					
4½″											5·650		7·100		8·850		10·300		13·000	15·50	19·080	22·680	25·440	27·900	32·940	36·900	
5″																			15·750	17·50	21·850	26·000	29·900	33·100	40·050	46·550	

THE ABOVE ARE NET NAKED WEIGHTS

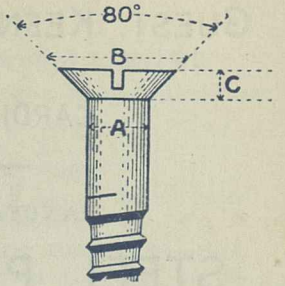
BRASS SCREWS. FOR WEIGHTS OF THE ABOVE SCREWS IN BRASS ADD 7¼% TO THE WEIGHTS AS SHOWN ABOVE IN MILD STEEL.

"ORB" IRON. You know it

at once by its appearance.

Standard Wood Screws

A Useful Table.



No. of Screw Gauge:	Diameter Dec.	"A" Inches Approx. Fraction.	"B" Inches Approx. Fraction.	"C" Inches Approx. Fraction.	SLOT. Width.	SLOT. Depth.
0	.05784	1/16	7/64	1/32	1/64	1/64
1	.07100	5/64	9/64	3/64	1/64	1/32
2	.08416	5/64	11/64	3/64	1/64	1/32
3	.09732	3/32	3/16	3/64	1/64	1/32
4	.11048	7/64	7/32	1/16	1/32	1/32
5	.12364	1/8	15/64	1/16	1/32	1/32
6	.13680	9/64	17/64	5/64	1/32	3/64
7	.14996	5/32	19/64	5/64	1/32	3/64
8	.16312	5/32	21/64	3/32	3/64	3/64
9	.17628	11/64	23/64	3/32	3/64	3/64
10	.18944	3/16	3/8	7/64	3/64	1/16
11	.20260	13/64	13/32	7/64	3/64	1/16
12	.21576	7/32	7/16	1/8	3/64	1/16
13	.22892	15/64	29/64	1/8	1/16	1/16
14	.24208	1/4	31/64	9/64	1/16	1/16
15	.25524	1/4	33/64	9/64	1/16	1/16
16	.26840	17/64	17/32	5/32	1/16	5/64
17	.28156	9/32	9/16	5/32	1/16	5/64
18	.29472	19/64	19/32	11/64	5/64	5/64
19	.30788	5/16	39/64	11/64	5/64	5/64
20	.32104	21/64	41/64	11/64	5/64	5/64
21	.33420	21/64	43/64	3/16	5/64	3/32
22	.34736	11/32	11/16	3/16	3/32	3/32
23	.36052	23/64	23/32	13/64	3/32	3/32
24	.37368	3/8	3/4	13/64	3/32	3/32

GUEST, KEEN & NETTLEFOLDS LTD.

CARDIFF WORKS

MANUFACTURERS OF

STEEL PLATES, ETC.

The finished products of these works are Steel Plates of every description, ¼in. TO 2in. THICK, from

OPEN HEARTH STEEL

ACID AND BASIC

of Boiler, Tank, Bridge and Ship Quality.

All Plates supplied to meet the requirements of

British Standard Specifications,

and subject to the tests of

Lloyd's Registry — British Corporation

Board of Trade — Bureau Veritas

British Admiralty — Boiler Insurance Corporation

Sole Distributing Agents throughout Australia:

JOHN LYSAGHT (AUST.) LTD.

SYDNEY, MELBOURNE, ADELAIDE, BRISBANE, PERTH

PRICES

JOHN LYSAGHT (Australia) LIMITED

will be pleased to quote upon application for any specifications on—

(a) C.I.F.E. BASIS,

(b) F.O.B. ENGLISH PORT,

subject to the usual extras, and will also, if desired, quote an OVERHEAD PRICE.

Maximum Dimension of Steel Plates that can be rolled, subject to Special Arrangements, and to Extras as per our List.

Thickness of plate (Inches)	Length (Feet)	Width (Inches)	Area (Sq. feet)	Remarks.
.25 to under .30	33	72	145	
.30 „ .35	33	76	160	
.35 „ .40	36	70	185	
.40 „ .45	40	90	210	
.45 „ .50	50	90	230	
.50 „ .60	50	96	250	
.60 „ .75	45	96	250	
.75 „ .85	45	96	240	
.85 „ 1.00	45	96	220	
1.00 „ 1.125	45	96	210	
1.125 to 1.25	40	96	200	
1.25 „ 2.00				

May be rolled up to 96ins. wide; weight of sheared plate not to exceed 80 cwts. If 90ins. wide or under, the weight of sheared plate may be 95 cwts.

No boiler plates rolled over 1in. thick.

Maximum Dimensions of Circular Plates.

Thickness of Plate (Inches).	Diameter of Plate. (Inches).
.25 and under .30	75
.30 „ .375	79
.375 „ .45	93
.45 „ .50	93
.50 „ .625	99
.625 „ 1.25	99
1.25 „ 2.00	99

Specify "QUEENS HEAD." It's bright and it lasts!

PIG IRON

GUEST, KEEN & NETTLEFOLDS LTD.

manufacture Hematite Pig Iron and Foundry Pig Iron to the following approximate analysis:—

HEMATITE PIG IRON

	No. 1 %	No. 2 %	No. 3 %	No. 4 %	No. 5 %	Mottled %	White %
Combined Carbon (about)	0.30	0.32	0.42	0.54	1.90	1.90	2.88
Graphite (about) .	3.75	3.50	3.20	2.84	2.52	1.0	0.20
Silicon	2.00 to 3.00	1.75 to 2.25	1.50 to 1.85	1.25 to 1.60	0.95 to 1.40	0.60 to 1.00	0.50 to 0.75.
Sulphur	.040 max.	.040 to .055 max.	.045 to .065 max.	.050 to .080 max.	.080 to .10 max.	.090 to .120 max.	.100 to .140 max.
Phosphorous.	.070 max.	.070 max.	.070 max.	.070 max.	.070 max.	.070 max.	.070 max.
Manganese	.80 to 1.2	.80 to 1.2	.70 to 1.0	.70 to 1.0	.60 to .90	.40 to .70	.30 to .50

FOUNDRY PIG IRON

	Special Low Phosphorous %	Special Medium Phosphorous %	Ordinary %
Silicon	2½ to 3½	2½ to 3½	2½ to 3½
Sulphur	.050 max.	.040 max.	.050
Phosphorous	.2 to .4	.5 to .7	.6 to .1
Manganese	.90 max.	.1 approx.	.1 approx.
		This is approximately the same as Scotch Iron.	

Quotations and further particulars obtainable from

JOHN LYSAGHT (Australia) LIMITED

Sydney, Melbourne, Adelaide, Brisbane, Perth.

TABLE

Showing Weight in Pounds

OF VARIOUS AREAS OF

Iron Plates of Different Thicknesses

Area in Feet.	Thickness in Fractions of an Inch.									
	1/8	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1
1	5	10	12.5	15	17.5	20	25	30	35	40
2	10	20	25.0	30	35.0	40	50	60	70	80
3	15	30	37.5	45	52.5	60	75	90	105	120
4	20	40	50.0	60	70.0	80	100	120	140	160
5	25	50	62.5	75	87.5	100	125	150	175	200
6	30	60	75.0	90	105.0	120	150	180	210	240
7	35	70	87.5	105	122.5	140	175	210	245	280
8	40	80	100.0	120	140.0	160	200	240	280	320
9	45	90	112.5	135	157.5	180	225	270	315	360
10	50	100	125.0	150	175.0	200	250	300	350	400
11	55	110	137.5	165	192.5	220	275	330	385	440
12	60	120	150.0	180	210.0	240	300	360	420	480
13	65	130	162.5	195	227.5	260	325	390	455	520
14	70	140	175.0	210	245.0	280	350	420	490	560
15	75	150	187.5	225	262.5	300	375	450	525	600
16	80	160	200.0	240	280.0	320	400	480	560	640
17	85	170	212.5	255	297.5	340	425	510	595	680
18	90	180	225.0	270	315.0	360	450	540	630	720
19	95	190	237.5	285	332.5	380	475	570	665	760
20	100	200	250.0	300	350.0	400	500	600	700	800
30	150	300	375.0	450	525.0	600	750	900	1050	1200
40	200	400	500.0	600	700.0	800	1000	1200	1400	1600
50	250	500	625.0	750	875.0	1000	1250	1500	1750	2000
60	300	600	750.0	900	1050	1200	1500	1800	2100	2400
70	350	700	875.0	1050	1225	1400	1750	2100	2450	2800
80	400	800	1000	1200	1400	1600	2000	2400	2800	3200
90	450	900	1087	1350	1575	1800	2250	2700	3150	3600
100	500	1000	1250	1500	1750	2000	2500	3000	3500	4000

Quotations and further particulars obtainable from

JOHN LYSAGHT (Australia) LIMITED

Sydney, Melbourne, Adelaide, Brisbane, Perth.

Weight of Round and Square Iron and Steel

Size (dia.)	IRON.		STEEL.	
	Round Weight per lineal foot	Square Weight per lineal foot	Round Weight per lineal foot	Square Weight per lineal foot
3/16	0.092	0.117	0.094	0.120
1/4	0.164	0.208	0.167	0.213
5/16	0.256	0.326	0.261	0.332
3/8	0.368	0.469	0.376	0.478
7/16	0.501	0.638	0.511	0.651
1/2	0.654	0.833	0.668	0.849
9/16	0.828	1.062	0.845	1.076
5/8	1.023	1.302	1.043	1.328
11/16	1.237	1.576	1.262	1.607
3/4	1.473	1.875	1.502	1.912
13/16	1.728	2.201	1.763	2.245
7/8	2.004	2.552	2.044	2.603
15/16	2.301	2.930	2.347	2.988
1	2.618	3.333	2.670	3.400
1 1/8	3.313	4.219	3.380	4.303
1 1/4	4.091	5.208	4.172	5 312
1 3/8	4.950	6.302	5.049	6.428
1 1/2	5.890	7.500	6.008	7.750
1 5/8	6.913	8.802	7.051	8.978
1 3/4	8.018	10.208	8.178	10.412
1 7/8	9.204	11.719	9.388	11.953
2	10.472	13.333	10.681	13.600
2 1/8	11.82	15.05	12.06	15.35
2 1/4	13.25	16.87	13.52	17.21
2 3/8	14.77	18.80	15.06	19.18
2 1/2	16.36	20.83	16.69	21.25
2 5/8	18.04	22.97	18.40	23.43
2 3/4	19.80	25.21	20.19	25.71
2 7/8	21.64	27.55	22.07	28.10
3	23.56	30.00	24 03	30.60
3 1/4	27.65	35.21	28.21	35.91
3 1/2	32.07	40.83	32,71	41.65
3 3/4	36.82	46.87	37.55	47.81
4	41.89	53.33	42.73	54.40
4 1/4	47.29	60.21	48.23	61.41
4 1/2	53.01	67.50	54.07	68.85
4 3/4	59.07	75.21	60.25	76.71
5	65.45	83.33	66.76	85.00
5 1/2	79.19	100.83	80.78	102.85
6	94.25	120.00	96.13	122.40

One Cubic Foot of Steel weighs 489·6 lbs.

Bar Iron—Flat

Approximate Weight per Lineal Foot.

	1/4	5/16	3/8	7/16	1/2	5/8	3/4	7/8	1
In.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.	Lb.
1	.83	1.04	1.25	1.45	1.66	2.08	2.50	2.91	3.33
1 1/8	.94	1.17	1.40	1.64	1.87	2.34	2.81	3.28	3.75
1 1/4	1.04	1.30	1.56	1.82	2.08	2.60	3.12	3.64	4.16
1 3/8	1.14	1.43	1.71	2.	2.29	2.86	3.43	4.01	4.58
1 1/2	1.25	1.56	1.87	2.18	2.50	3.12	3.75	4.37	5.
1 5/8	1.35	1.69	2.03	2.36	2.70	3.38	4.06	4.73	5.41
1 3/4	1.45	1.82	2.18	2.55	2.91	3.64	4.37	5.10	5.83
1 7/8	1.56	1.95	2.34	2.73	3.12	3.90	4.68	5.46	6.25
2	1.66	2.08	2.50	2.91	3.33	4.16	5.	5.83	6.66
2 1/8	1.77	2.21	2.65	3.09	3.54	4.42	5.31	6.19	7.08
2 1/4	1.87	2.34	2.81	3.28	3.75	4.68	5.62	6.56	7.50
2 3/8	1.97	2.47	2.96	3.46	3.95	4.94	5.93	6.92	7.91
2 1/2	2.08	2.60	3.12	3.64	4.16	5.20	6.25	7.29	8.33
2 5/8	2.18	2.73	3.28	3.82	4.37	5.46	6.56	7.65	8.75
2 3/4	2.29	2.86	3.43	4.01	4.58	5.72	6.87	8.02	9.16
2 7/8	2.39	2.99	3.59	4.19	4.79	5.98	7.18	8.38	9.58
3	2.50	3.12	3.75	4.37	5.	6.25	7.50	8.75	10.
3 1/4	2.70	3.38	4.06	4.73	5.41	6.77	8.12	9.47	10.83
3 1/2	2.91	3.64	4.37	5.10	5.83	7.29	8.75	10.20	11.66
3 3/4	3.12	3.90	4.68	5.46	6.25	7.81	9.37	10.93	12.50
4	3.33	4.16	5.	5.83	6.66	8.33	10.	11.66	13.33
4 1/4	3.54	4.42	5.31	6.19	7.08	8.85	10.62	12.39	14.16
4 1/2	3.75	4.68	5.62	6.56	7.50	9.37	11.25	13.12	15.
4 3/4	3.95	4.94	5.93	6.92	7.91	9.89	11.87	13.85	15.83
5	4.17	5.20	6.25	7.29	8.33	10.41	12.50	14.58	16.66
5 1/4	4.37	5.46	6.56	7.65	8.75	10.93	13.12	15.31	17.50
5 1/2	4.58	5.72	6.87	8.02	9.16	11.45	13.75	16.04	18.33
5 3/4	4.79	5.98	7.18	8.38	9.58	11.97	14.37	16.77	19.16
6	5.	6.26	7.50	8.75	10.	12.50	15.	17.50	20.

Weight of Steel is about 2 per cent. more than Iron.

STEEL JOISTS,—British Standard Sections.

A=Depth C=Thickness of Web
B=Width of Flange D=Thickness of Flange

Dimensions in Inches.				Weight lbs. per foot-run	Safe Load Tons distributed for Spans of					
A	B	C	D		6 ft.	10 ft.	12 ft.	16 ft.	20 ft.	30 ft.
3	1½	0.16	0.248	4.0	0.92	0.55	0.46	—	—	—
3	3	0.20	0.332	3.5	2.0	1.2	1.0	—	—	—
4	1¾	0.17	0.24	5.0	1.5	0.91	0.76	—	—	—
4	3	0.22	0.336	9.5	3.1	1.9	1.6	—	—	—
4¾	1¾	0.18	0.325	6.5	2.4	1.4	1.2	—	—	—
5	3	0.22	0.376	11.0	4.5	2.7	2.3	1.7	—	—
5	4½	0.29	0.448	18.0	7.6	4.5	3.8	2.8	—	—
6	3	0.26	0.348	12.0	5.6	3.4	2.8	2.1	—	—
6	4½	0.37	0.431	20.0	9.6	5.8	4.8	3.6	—	—
6	5	0.41	0.520	25.0	12.0	7.3	6.0	4.5	—	—
7	4	0.25	0.387	16.0	9.4	5.6	4.7	3.5	2.8	—
8	4	0.28	0.402	18.0	11.0	7.0	5.8	4.3	3.5	—
8	5	0.35	0.575	28.0	18.0	11.0	9.9	7.0	5.5	—
8	6	0.44	0.597	35.0	23.0	14.0	11.0	8.6	7.0	—
9	4	0.30	0.460	21.0	15.0	9.0	7.5	5.6	4.5	—
9	7	0.55	0.924	58.0	42.0	25.0	21.0	16.0	12.0	—
10	5	0.36	0.552	30.0	24.0	14.0	12.0	9.0	7.2	—
10	6	0.40	0.736	42.0	35.0	21.0	17.0	13.0	10.0	—
10	8	0.60	0.970	70.0	53.0	34.0	28.0	21.0	17.0	—
12	5	0.35	0.550	32.0	30.0	18.0	15.0	11.0	9.0	—
12	6	0.40	0.717	44.0	40.0	26.0	22.0	16.0	13.0	—
12	6	0.50	0.883	54.0	52.0	31.0	26.0	19.0	15.0	10.0
14	6	0.40	0.698	46.0	43.0	31.0	26.0	19.0	15.0	10.0
14	6	0.50	0.873	57.0	59.0	38.0	31.0	24.0	19.0	12.0
15	5	0.42	0.647	42.0	47.0	28.0	24.0	18.0	14.0	9.5
15	6	0.50	0.880	59.0	62.0	42.0	35.0	26.0	21.0	14.0
16	6	0.55	0.847	62.0	73.0	45.0	38.0	28.0	22.0	15.0
18	7	0.55	0.928	75.0	—	64.0	53.0	40.0	32.0	21.0
20	7½	0.60	1.01	89.0	—	83.0	69.0	52.0	41.0	27.0
24	7½	0.60	1.07	100.0	—	102.0	92.0	69.0	55.0	36.0

Span should not exceed 20 x A, or deflection will be excessive.

"ORB" IRON. You know it at once by its

beautiful appearance. It's bright and it lasts!

Galvanized Barb Wire Fencing

Approximate Weight.

Points	Pattern	Gauge	100 Yards	1 Mile	Length of 112 lbs. in Yards.
4	IOWA	12	25 lbs.	438 lbs.	460
4	,,	14	14 ,,	281 ,,	670
4	SPECIAL	12	16 ,,	303 ,,	620
4	,,	14	12 ,,	211 ,,	860
4	,, Long Distance	14	9 ,,	175 ,,	930

Description.	Weight 100 yds.	Weight 1 mile	Length of 112 lbs.
	Lbs.	Lbs.	Yards
4-point 12g. "Iowa" 3½in. spaces	25	438	460
4-point 12g. "Iowa" 5⅛in. spaces	20	352	560

WIRE NETTING

Estimated Weight, 24 inches wide.

(Other Widths may be estimated *pro rata.*)

The following is not to be regarded as a Standard, but is merely an approximate guide.

Size.	Weight per Mile.	Weight of Roll 50 yds.	Size.	Weight per Mile.	Weight of Roll 50 yds.
Inches.	cwt. qr. lb.	lbs.	Inches.	cwt. qr. lb.	lbs.
24 x ½ x 20	16 1 10	52	24 x 2 x 19	6 2 11	21
24 x ¾ x 19	17 1 4	55	24 x 2 x 18	8 1 26	27
24 x ¾ x 20	11 1 7	36	24 x 2 x 17	10 2 21	34
24 x 1 x 19	12 2 8	40	24 x 2 x 16	14 3 2	47
24 x 1 x 20	9 0 13	29	24 x 2½ x 18	6 2 18	22
24 x 1¼ x 19	10 0 6	32	24 x 2½ x 17	8 3 6	28
24 x 1¼ x 18	12 2 8	40	24 x 2½ x 16	11 3 22	38
24 x 1¼ x 17	17 3 18	57	24 x 3 x 18	5 2 18	18
24 x 1½ x 19	9 1 20	30	24 x 3 x 17	7 2 5	24
24 x 1½ x 18	11 1 7	36	24 x 3 x 16	9 2 27	31
24 x 1½ x 17	14 3 2	47	24 x 3 x 15	11 3 22	38
24 x 1⅝ x 19	7 2 5	24	24 x 3 x 14	15 0 10	48
24 x 1⅝ x 18	9 1 20	30	24 x 4 x 16	8 0 19	26
24 x 1⅝ x 17	12 3 15	41	24 x 4 x 15	10 0 6	32
			24 x 4 x 14	12 2 8	40

Rabbit-proof Wire Netting Weights

Size.	Grade.	Approximate weight per mile.			
		Tons.	Cwt.	Qrs.	Lbs.
42 x 1¼ x 17	A	1	12	0	0
42 x 1¼ x 17	B	1	8	3	0
42 x 1¼ x 18	A	1	3	1	0
42 x 1¼ x 18	B	1	1	0	0
42 x 1½ x 17	A	1	7	3	0
42 x 1½ x 17	B	1	4	3	0
42 x 1½ x 18	A	1	1	0	0
42 x 1½ x 18	B		18	2	0
36 x 1¼ x 17	A	1	8	0	0
36 x 1¼ x 17	B	1	5	0	0
36 x 1¼ x 18	A	1	0	1	0
36 x 1¼ x 18	B		18	2	0
36 x 1½ x 17	A	1	3	3	0
36 x 1½ x 17	B	1	1	2	0
36 x 1½ x 18	A		18	0	0
36 x 1½ x 18	B		16	0	0

Relative Value Based on Mile Measurements

Per Mile.	Per 100 Yards	Per Mile.	Per 100 Yards.
£40 0 0	£2 5 5	£22 0 0	£1 5 0
39 0 0	2 4 4	21 0 0	1 3 10
38 0 0	2 3 2	20 0 0	1 2 9
37 0 0	2 2 1	19 0 0	1 1 7
36 0 0	2 0 11	18 0 0	1 0 5
35 0 0	1 19 9	17 0 0	0 19 4
34 0 0	1 18 8	16 0 0	0 18 2
33 0 0	1 17 6	15 0 0	0 17 1
32 0 0	1 16 4	14 0 0	0 15 11
31 0 0	1 15 3	13 0 0	0 14 9
30 0 0	1 14 1	12 0 0	0 13 8
29 0 0	1 12 11	11 0 0	0 12 6
28 0 0	1 11 10	10 0 0	0 11 4
27 0 0	1 10 8	9 0 0	0 10 3
26 0 0	1 9 7	8 0 0	0 9 1
25 0 0	1 8 5	7 0 0	0 7 11
24 0 0	1 7 3	6 0 0	0 6 10
23 0 0	1 6 2	5 0 0	0 5 8

GALVANIZED WIRE NETTING.

TABLE OF GROSS PRICES at per Roll of 50 Yards.

Mesh.	G.	12 inches wide.	18 inches wide.	24 inches wide.	30 inches wide.	36 inches wide.	42 inches wide.	48 inches wide.	60 inches wide.	72 inches wide.	G.	Mesh.
½ inch	22	0 18 2	1 6 3	1 14 0	2 1 6	2 9 9	2 18 1	3 6 4	4 2 11	4 19 6	22	½ inch
,,	20	1 2 0	1 11 8	2 1 0	2 10 0	3 0 0	3 10 0	4 0 0	5 0 0	6 0 0	20	,,
,,	19	1 9 5	2 2 0	2 14 9	3 6 9	4 0 0	4 13 4	5 6 8	6 13 4	8 0 0	19	,,
¾ inch	22	0 10 8	0 15 2	0 19 3	1 3 6	1 7 6	1 12 1	1 16 8	2 5 10	2 15 0	22	¾ inch
,,	20	0 13 2	0 18 9	1 3 11	1 9 3	1 14 2	1 19 10	2 5 6	2 16 11	3 8 3	20	,,
,,	19	0 16 2	1 3 0	1 9 5	1 15 9	2 1 11	2 8 11	2 15 10	3 9 10	4 3 9	19	,,
,,	18	1 1 2	1 10 3	1 18 6	2 7 0	2 15 0	3 4 2	3 13 4	4 11 8	5 10 0	18	,,
1 inch	20	0 9 11	0 14 2	0 18 0	1 1 11	1 5 8	1 9 11	1 14 2	—	—	20	1 inch
,,	19	0 11 0	0 15 11	1 0 2	1 4 8	1 8 9	1 13 7	1 18 4	—	—	19	,,
,,	18	0 13 6	0 19 5	1 4 6	1 10 0	1 15 0	2 0 10	2 6 8	—	—	18	,,
,,	17	0 18 0	1 5 11	1 12 11	2 0 0	2 6 11	2 14 9	3 2 6	—	—	17	,,
1¼ inch	19	0 9 3	0 13 3	0 16 11	1 0 5	1 3 6	1 7 5	1 11 4	1 19 2	2 7 0	19	1¼ inch
,,	18	0 11 0	0 15 11	1 0 3	1 4 5	1 8 2	1 12 10	1 17 6	2 6 11	2 16 3	18	,,
,,	17	0 14 3	1 0 6	1 6 0	1 11 5	1 16 3	2 2 4	2 8 4	3 0 5	3 12 6	17	,,
,,	16	0 19 2	1 7 6	1 15 0	2 2 3	2 8 9	2 16 11	3 5 0	4 1 3	4 17 6	16	,,
1½ inch	19	0 7 9	0 11 2	0 14 3	0 17 2	0 19 9	1 3 1	1 6 4	1 12 11	1 19 6	19	1½ inch
,,	18	0 9 5	0 13 5	0 17 0	1 0 8	1 3 9	1 7 9	1 11 8	1 19 7	2 7 6	18	,,
,,	17	0 11 9	0 16 11	1 1 6	1 6 0	1 10 0	1 15 0	2 0 0	2 10 0	3 0 0	17	,,
,,	16	0 16 0	1 2 11	1 9 3	1 15 2	2 0 8	2 7 5	2 14 2	3 7 9	4 1 3	16	,,
1⅝ inch	19	0 7 0	0 10 0	0 12 8	0 15 3	0 17 8	1 0 7	1 3 6	1 9 5	1 15 3	19	1⅝ inch
,,	18	0 8 2	0 11 9	0 14 9	0 17 11	1 0 8	1 4 1	1 7 6	1 14 5	2 1 3	18	,,
,,	17	0 10 6	0 15 3	0 19 3	1 3 3	1 6 11	1 11 5	1 15 10	2 4 10	2 13 9	17	,,
,,	16	0 14 0	1 0 3	1 5 6	1 10 11	1 15 8	2 1 7	2 7 6	2 19 5	3 11 3	16	,,
2 inch	19	0 6 0	0 8 8	0 11 0	0 13 2	0 15 0	0 17 6	1 0 0	1 5 0	1 10 0	19	2 inch
,,	18	0 7 0	0 10 2	0 12 11	0 15 5	0 17 6	1 0 5	1 3 4	1 9 2	1 15 0	18	,,
,,	17	0 9 2	0 13 0	0 16 8	0 19 9	1 2 6	1 6 3	1 10 0	1 17 6	2 5 0	17	,,
,,	16	0 11 11	0 16 11	1 1 8	1 5 9	1 9 5	1 14 4	1 19 2	2 9 0	2 18 9	16	,,
,,	15	0 15 3	1 2 0	1 8 0	1 13 5	1 18 2	2 4 6	2 10 10	3 3 7	3 16 3	15	,,
,,	14	0 19 2	1 7 5	1 15 0	2 1 8	2 7 6	2 15 5	3 3 4	3 19 2	4 15 0	19	,,
2½ inch	19	0 5 6	0 7 11	0 10 0	0 11 11	0 13 6	0 15 9	0 18 0	1 2 6	1 7 0	18	2½ inch
,,	18	0 6 3	0 9 0	0 11 6	0 13 9	0 15 8	0 18 3	1 0 10	1 6 1	1 11 3	17	,,
,,	17	0 7 9	0 11 2	0 14 3	0 17 0	0 19 5	1 2 8	1 5 10	1 12 4	1 18 9	16	,,
,,	16	0 10 3	0 14 9	0 18 11	1 2 6	1 5 8	1 9 11	1 14 2	2 2 9	2 11 3	15	,,

"ORB" IRON is still the Best in the World.

GALVANIZED WIRE NETTING—Continued.

Mesh.	G.	12 inches wide.	18 inches wide.	24 inches wide.	30 inches wide.	36 inches wide.	42 inches wide.	48 inches wide.	60 inches wide.	72 inches wide.	G.	Mesh.
2½ inch	15	0 12 0	0 17 3	1 2 0	1 6 3	1 10 0	1 15 0	2 0 0	2 10 0	3 0 0	15	2½ inch
,,	14	0 15 0	1 1 7	1 7 6	1 12 10	1 17 6	2 3 9	2 10 0	3 2 6	3 15 0	14	,,
3 inch	19	0 4 5	0 6 3	0 7 11	0 9 6	0 10 11	0 12 9	0 14 6	0 18 2	1 1 9	19	3 inch
,,	18	0 5 2	0 7 5	0 9 5	0 11 3	0 12 9	0 14 11	0 17 6	1 1 3	1 5 6	18	,,
,,	17	0 7 3	0 9 6	0 12 2	0 14 6	0 16 6	0 19 3	1 2 0	1 7 6	1 13 0	17	,,
,,	16	0 8 9	0 11 11	0 15 2	0 18 2	1 0 8	1 4 1	1 7 6	1 14 5	2 1 3	16	,,
,,	15	0 10 3	0 14 2	0 18 0	1 1 5	1 4 5	1 8 6	1 12 6	2 0 8	2 8 9	15	,,
,,	14	0 12 5	0 17 2	1 1 9	1 6 0	1 9 8	1 14 7	1 19 6	2 9 5	2 19 3	14	,,
,,	13	—	1 1 0	1 6 9	1 11 11	1 16 3	2 2 4	2 8 4	3 0 5	3 12 6	13	,,
4 inch	18	0 4 5	0 6 3	0 7 11	0 9 6	0 10 10	0 12 7	0 14 5	0 18 0	1 1 8	18	4 inch
,,	17	0 7 6	0 8 0	0 10 3	0 12 0	0 13 9	0 16 1	0 18 4	1 2 11	1 7 6	17	,,
,,	16	0 8 6	0 9 9	0 12 3	0 14 3	0 16 6	0 19 3	1 2 0	1 7 6	1 13 0	16	,,
,,	15	0 9 10	0 12 3	0 15 6	0 18 3	1 1 0	1 4 6	1 8 0	1 15 0	2 2 0	15	,,
,,	14	0 11 8	0 14 0	0 18 0	1 1 0	1 4 3	1 8 4	1 12 4	2 0 5	2 8 6	14	,,

SHEEP NETTING, WITH 3-PLY STRAND WIRE SELVEDGES.

3 inch	16	0 8 9	0 12 3	0 15 9	0 18 9	1 1 3	1 4 10	1 8 4	1 15 5	2 2 6	16	3 inch
,,	15	0 10 9	0 15 0	0 18 11	1 2 6	1 5 8	1 9 11	1 14 2	2 2 9	2 11 3	15	,,
,,	14	0 13 3	0 18 0	1 3 0	1 7 6	1 11 3	1 16 6	2 1 8	2 12 1	3 2 6	14	,,
,,	13	0 16 3	1 2 5	1 8 6	1 14 0	1 18 9	2 5 3	2 11 8	3 4 7	3 17 6	13	,,
,,	12	1 1 3	1 8 9	1 16 9	2 3 9	2 10 0	2 18 4	3 6 8	4 3 4	5 0 0	12	,,
4 inch	17	0 8 5	0 8 11	0 11 2	0 13 0	0 14 9	0 17 3	0 19 8	1 4 7	1 9 6	17	4 inch
,,	16	0 9 6	0 10 6	0 13 2	0 15 3	0 17 5	1 0 4	1 3 2	1 9 0	1 14 9	16	,,
,,	15	—	0 13 5	0 16 9	0 19 6	1 2 3	1 6 0	1 9 8	1 17 1	2 4 6	15	,,
,,	14	—	0 15 3	0 19 3	1 2 3	1 5 6	1 9 9	1 14 0	2 2 6	2 11 0	14	,,
,,	13	—	0 17 6	1 2 0	1 6 3	1 10 0	1 15 0	2 0 0	2 10 0	3 0 0	13	,,
,,	12	—	1 3 6	1 10 0	1 15 6	2 0 8	2 7 5	2 14 2	3 7 9	4 1 3	12	,,

CENTRE STRAND—3 inch and 4 inch NETTING—17 and 16 gauge, 1/9; 15 gauge, 2/-; 14 and 13 gauge, 2/3; 12 gauge, 3/- extra per 50 yard roll gross. WIDTHS UNDER 12 inch are charged as 12 inch, INTERMEDIATE WIDTHS are charged the same rate as the next greater width up to 4 feet wide. INTERMEDIATE WIDTHS over 4 feet are charged by steps of 6 inches, viz:—54 inch at the mean between 48 inch and 60 inch, 56 inches would be charged as 60 inches. This applies to both ordinary and Sheep Netting.

NOTE.—A Special Tariff is issued from time to time for Rabbit-proof Sizes.

LYSAGHT'S Australian Iron is

3 TWIST—2 inch MESH NETTING

LYSAGHT BROS. & CO. LTD. are now making this Netting in all Listed gauges and widths with 3 twist meshes in place of the ordinary 2 twist.

Whilst their well-known standard quality Netting meets all ordinary requirements, any buyer preferring the additional rigidity given by the extra twist can obtain same from all Distributors at the prices shewn hereunder:—

WIDTH		12"	18"	24"	30"	36"	42"	48"	60"	72"
Mesh	Gauge									
2 INCH	19	0 6 4	0 9 1	0 11 7	0 13 10	0 15 9	0 18 5	1 1 0	1 6 3	1 11 6
	18	0 7 4	0 10 8	0 13 7	0 16 2	0 18 5	1 1 5	1 4 6	1 10 8	1 16 9
	17	0 9 8	0 13 8	0 17 6	1 0 9	1 3 8	1 7 7	1 11 6	1 19 5	2 7 3
	16	0 12 6	0 17 9	1 2 9	1 7 0	1 10 11	1 16 1	2 1 2	2 11 5	3 1 8
	15	0 16 0	1 3 1	1 9 5	1 15 1	2 0 1	2 6 9	2 13 5	3 6 9	4 0 1
	14	1 0 2	1 8 9	1 16 9	2 3 9	2 9 11	2 18 2	3 6 6	4 3 2	4 19 9

LYSAGHT'S AUSTRALIAN-MADE GALVANIZED IRON and **BLACK SHEETS.** Made at NEWCASTLE (N.S.W.) from Australian Steel, by Australian workmen.

By using **LYSAGHT'S AUSTRALIAN-MADE GALVANIZED IRON** you not only secure sheets equal to the best imported, but also help Australia by keeping the money in the country, and by assisting an industry which employs a large number of Australian workmen.

Every sheet of this Iron bears the word **"AUSTRALIA"** below the brand.

Ask your Merchants and Storekeepers for

LYSAGHT'S AUSTRALIAN-MADE GALVANIZED IRON.

guaranteed by the manufacturers.

COMPARISON TABLE for WIRES & CABLES

NEW STANDARD			Approx. Equivalents OLD STANDARD	
No. and diam of Wires forming Conductor	Nominal Area. Sq. in.	Sq. M/m.	No. and diam. of Wires forming Conductor	Area in Sq. ins.
1/.036	.0010	.66	1/20 s.w.g.	.0010
1/.044	.0015	.98	1/18 ,,	.0018
3/.029	.0020	1.25	3/22 ,,	.0018
3/.036	.0030	1.93	3/20 ,,	.0030
1/.064	.0030	2.08	1/16 ,,	.0032
7/.029	.0045	2.93	7/22 ,,	.0042
7/.036	.0070	4.52	7/20 ,,	.0070
7/.044	.0100	6.75	7/18 ,,	.0125
7/.052	.0145	9.43	7/17 ,,	.0170
7/.064	.0225	14.3	7/16 ,,	.0221
19/.052	.0400	25.5	19/17 ,,	.0459
19/.064	.0600	38.7	19/16 ,,	.0600
19/.072	.0750	49.0	19/15 ,,	.0750
19/.083	.1000	65.1	19/14 ,,	.0937
37/.064	.1200	75.4	37/16 ,,	.1168
37/.072	.1500	95.4	37/15 ,,	.1500
37/.083	.2000	127.0	37/14 ,,	.1820
37/.093	.2500	159.0	37/13 ,,	.2500
37/.103	.3000	195.0	37/12 ,,	.3000
61/.093	.5000	322.0	61/13 ,,	.4000
61/.103	.4000	262.0	61/12 ,,	.5000
91/.093	.6000	391.0	61/.112 ins.	.6000
91/.103	.7500	480.0	91/.101 ins.	.7500
127/.103	1.0000	669.0	127/.101 ins.	1.0000

STEEL WIRE.

Table showing quantity required per mile of fencing.

Gauge.	Length per cwt.	Weight Required per Mile.														
		1 Wire			2 Wires			3 Wires			4 Wires			5 Wires		
No.	yds.	C.	Q.	L.	C.	Q.	L.	C.	Q.	L.	C.	Q.	L.	C.	Q.	L.
4	269	6	2	4	13	0	8	19	2	12	26	0	16	32	2	20
5	322	5	1	24	10	3	20	16	1	16	21	3	12	27	1	12
6	393	4	1	26	8	3	24	13	1	22	17	3	20	22	1	18
7	467	3	3	2	7	2	4	11	1	6	15	0	8	18	3	10
8	566	3	0	12	6	0	24	9	1	8	12	1	20	15	2	4
9	700	2	2	2	5	0	4	7	2	6	10	0	8	12	2	10
10	882	1	3	27	3	3	26	5	3	25	7	3	24	9	3	23
11	1077	1	2	15	3	1	2	4	3	17	6	2	4	8	0	19
12	1333	1	1	8	2	2	16	3	3	24	5	1	4	6	2	12

Iron Wire is 2 per cent. less than steel.

SOMETHING ABOUT WALLPAPERS

EFFECT OF COLOUR ON LIGHT.

The question is often asked "What is the best colour for Wallpapers or Hangings?" The following Table will give the fullest particulars. Common Wallpapers tested in an Illuminating Laboratory for the light-absorbing qualities have given the following results:—

Colour of Wallpaper.	Percentage of Light absorbed.	Colour of Wallpaper.	Percentage of Light absorbed.
White	30	Emerald Green ..	82
Chrome Yellow ..	38	Dark Brown ..	87
Orange	50	Vermilion ..	88
Plain Deal ..	55	Blue-green ..	88
Yellow	60	Cobalt Blue ..	88
Light Pink ..	64	Deep Chocolate ..	96

This Table shows that if a room papered with dark green be repapered with Chrome Yellow, it will be four times as light with the same lamps and windows. In many cases householders pay too much for electricity and gas lighting because their light-absorbing wall coverings destroy the light rays.

Wallpaper is made in rolls 12 yards long, 21 inches wide.

APPROXIMATE SCALE FOR CALCULATING THE MEASUREMENT OF A WALL FOR WALL COVERINGS.

Quantity Guide for Wallpapers.

Measurement Around the Room.	Height of Picture Rail or Ceiling.					
	7ft. Rolls	8ft. Rolls	9ft. Rolls	10ft. Rolls	11ft. Rolls	12ft. Rolls
36ft. =	5	6	6	6	7	8
44ft. =	6	7	7	8	8	9
52ft. =	7	8	8	9	10	11
60ft. =	8	9	9	10	11	12
68ft. =	9	10	11	12	13	14
76ft. =	10	11	12	13	14	16
84ft. =	10	12	13	14	16	17
92ft. =	11	13	14	16	17	19
100ft. =	12	14	15	17	19	20

EXAMPLE.—Room 14ft x 12ft. x 10ft. high, measurement around room = 52ft., height 10ft. Quantity required, 9 Rolls Wallpaper and 18 yards Frieze.

SLATES (ROOFING). Approximate

Actual number of Slates required to cover one square (100 square feet).

Description.	Size.	2 in. Lap.	3 in. Lap	4 in. Lap.
Duchess ...	24 x 12	109	115	120
Countess ...	20 x 10	160	169	180
Vis-Countess	18 x 10	180	192	205
Ladies ...	16 x 8	257	277	300

Covering Capacity and Weight of Rosehill Tiles

131 Tiles cover 100 super feet of roof.
100 super feet of Tiling weighs 7 cwt.
95 lineal feet of 1½in. x 1in. battens to one square of roofing.
Half-pound of 19 gauge copper wire to one square of roofing.
Half-pound of 2in. x 12g. D.H. nails to one square of roofing.

CORRECT RAFTER MEASUREMENTS FOR ROSEHILL TILE ROOFS.

If rafters are cut to any of the following measurements it will not be necessary to cut Rosehill Tiles at the ridge.

Length of rafter	Number of Tile courses	Length of rafter	Number of Tile courses
1ft. 3 in.	1	14ft. 9 in.	13
2ft. 4½in.	2	15ft. 10½in.	14
3ft. 6 in.	3	17ft. 0 in.	15
4ft. 7½in.	4	18ft. 1½in.	16
5ft. 9 in.	5	19ft. 3 in.	17
6ft. 10½in.	6	20ft. 4½in.	18
8ft. 0 in.	7	21ft. 6 in.	19
9ft. 1½in.	8	22ft. 7½in.	20
10ft. 3 in.	9	23ft. 9 in.	21
11ft. 4½in.	10	24ft. 10½in.	22
12ft. 6 in.	11	26ft. 0 in.	23
13ft. 7½in.	12	27ft. 1½in.	24

Durabestos (Asbestos-Cement) Sheets

Thickness No. 1, approx. 5/32in.	Weight Lbs.
3ft. wide x 10ft. long	48
,, 9ft. ,,	44
,, 8ft. ,,	39
,, 7ft. ,,	34
,, 6ft. ,,	29
,, 5ft. ,,	24
,, 4ft. ,,	19
4ft. wide x 10ft. long	65
,, 9ft. ,,	58
,, 8ft. ,,	52
,, 7ft. ,,	45
,, 6ft. ,,	39
,, 5ft. ,,	32
,, 4ft. ,,	26

Thickness No. 2, approx. 3/16 in.	Weight Lbs.
3ft wide x 10ft. long	54
,, 9ft. ,,	49
,, 8ft. ,,	44
,, 7ft. ,,	38
,, 6ft. ,,	33
,, 5ft. ,,	27
,, 4ft. ,,	22
4ft. wide x 12ft. long	88
,, 11ft. ,,	80
,, 10ft. ,,	73
,, 9ft. ,,	65
,, 8ft. ,,	58
,, 7ft. ,,	51
,, 6ft. ,,	44
,, 5ft. ,,	36
,, 4ft. ,,	29

	Weight Lbs.
Thickness No. 3, approx. 1/4 in., 8ft. x 4ft. sheets, single face	83
,, ,, 4 ,, 5/16in. ,, ,, ,, double ,,	104
,, ,, 5 ,, 3/8 in. ,, ,, ,, ,, ,,	116
,, ,, 6 ,, 1/2 in. ,, ,, ,, ,, ,,	166

154 sq. yds. No. 1 material = 1 ton.
136 sq. yds. No. 2 material = 1 ton.

Specify "QUEEN'S HEAD." It's bright and it lasts!

ASBESTOS-CEMENT SLATES AND SHINGLES.

Materials Required per Square.

	Slate, 16 x 16 inches	Shingle 24 x 12 inches	Shingle 20 x 10 inches	Shingle 16 x 8 inches	Shingle 12 x 6 inches
Net Weight per Slate or Shingle	2¾ lbs.	3 lbs.	2½ lbs.	1⅜ lbs.	¾ lbs.
Quantity to one Square	100	115	170	280	535
Nail holes punched in each	2	nil	nil	nil	nil
1⅛in. x 13-g. galvd. slate nails, per square	1 lb.	1¼ lbs.	1¾ lbs.	2¾ lbs.	5¼ lbs.
Crampon Holes punched in each	1	1	1	nil	nil
Crampons required, per square	100	115	170	280	nil
2in. x 1in. oregon battens, per sq.	170 ft.	125 ft.	150 ft	200 ft.	280 ft.
2½in. x 12-g. D.H. batten nails, per square	1 lb.	¾ lb.	1 lb.	1 lb.	1½ lbs.
Weight of one square of roof ..	360 lbs.	400 lbs.	500 lbs.	485 lbs.	510 lbs.

The above particulars apply to Durabestos (Australian-Made), and is supplied by courtesy of Messrs. Wunderlich Ltd., Sydney.

Tank Makers should specify LYSAGHT'S "ORB" Brand Corrugated Iron—it will stand any and every possible test in curving or otherwise, being almost as tough as copper. It is obtainable up to 12 feet in length.

Useful Information

Approximate No. of Nails per lb.

Size.	Nails per lb.	Size.	Nails per lb.	Size.	Nails per lb.
1 in. x 16G	1080	2 in. x 11G	158	3 in. x 9G	67
1 x 15G	840	2 x 10G	120	3 x 8G	60
1 x 14G	723	2 x 9G	100	3 x 7G	48
1½ x 14G	460	2½ x 13G	200	3 x 6G	39
1½ x 13G	340	2½ x 12G	150	3½ x 8G	44
1½ x 12G	240	2½ x 11G	130	3½ x 7G	40
1½ x 11G	206	2½ x 10G	100	4 x 7G	35
2 x 14G	280	2½ x 9G	80	4 x 6G	30
2 x 13G	230	2½ x 8G	65	5 x 5G	21
2 x 12G	190	3 x 10G	81	6 x 4G	13

1 Gross 1¾in. Galvd. Screws = 2½lbs.
1 ,, Lead Washers = 3lbs.

The Price per cwt. at a given price per lb.

Price per lb. in pence.	Price per cwt.	Price per lb. in pence.	Price per cwt.	Price per lb. in pence.	Price per cwt.	Price per lb. in pence.	Price per cwt.
¼	2/4	3¼	30/4	6¼	58/4	9¼	86/4
½	4/8	3½	32/8	6½	60/8	9½	88/8
¾	7/-	3¾	35/-	6¾	63/-	9¾	91/-
1	9/4	4	37/4	7	65/4	10	93/4
1¼	11/8	4¼	39/8	7¼	67/8	10¼	95/8
1½	14/-	4½	42/-	7½	70/-	10½	98/-
1¾	16/4	4¾	44/4	7¾	72/4	10¾	100/4
2	18/8	5	46/8	8	74/8	11	102/8
2¼	21/-	5¼	49/-	8¼	77/-	11¼	105/-
2½	23/4	5½	51/4	8½	78/4	11½	107/4
2¾	25/8	5¾	53/8	8¾	81/8	11¾	109/8
3	28/-	6	56/-	9	84/-	1/-	112/-

For every ¼d. per lb. increase add 2/4 per cwt.

Wire

Number of Feet per lb. of Weight

Gauge.	Number of Feet per lb. Weight.	Gauge.	Number of Feet per lb. Weight.	Gauge.	Number of Feet per lb. Weight.
3	6 feet	9	16 feet	15	70 feet
4	7 ,,	10	20 ,,	16	102 ,,
5	8 ,,	11	28 ,,	17	121 ,,
6	9 ,,	12	33 ,,	18	150 ,,
7	11½ ,,	13	42 ,,	19	194 ,,
8	13 ,,	14	54 ,,	20	245 ,,

is its own best advertisement.

Average Weight and Lengths of Coils of
"FORSYTH'S" MANILA & N.Z. FLAX ROPES

SIZE Inches	WEIGHT. Cwt.	Qrs.	Lbs.	LENGTH Fathoms	BREAKING STRAIN Tons	Cwt.
½ ..	0	0	12	180	—	3
¾ ..	0	0	20	180	—	7
1 ..	0	1	4	180	—	10
1¼ ..	0	1	20	180	—	12
1½ ..	0	2	4	125	—	18
1¾ ..	0	2	10	125	1	5
2 ..	0	3	2	125	1	10
2¼ ..	0	3	25	125	2	0
2½ ..	1	0	17	120	2	10
2¾ ..	1	1	16	120	3	0
3 ..	1	2	25	120	3	10
3¼ ..	1	3	20	120		
3½ ..	2	1	0	120	4	10
3¾ ..	2	2	10	120		
4 ..	3	0	10	120	6	0
4¼ ..	3	1	14	120		
4½ ..	3	2	18	120	8	0
4¾ ..	4	0	18	120		
5 ..	4	3	10	120	9	10
5½ .	5	2	5	115	12	0
6 ..	7	0	0	115	14	0
6½ ..	7	3	5	115	16	10
7 ..	9	2	0	115	18	10
7½ ..	10	3	14	115		
8 ..	12	0	0	115		
9 ..	15	1	0	115	30	0

TO BUILDERS AND CONTRACTORS

BRICKWORK.

3800 9 x 4½ x 3 Bricks will build a rod of Brickwork.

816 sup. ft. of a 4½-inch Brick
408 „ „ 9 „ „
272 „ „ 14 „ „
204 „ „ 18 „ „
163 „ „ 22½ „ „

} Will make a rod of Brickwork.

A rod of Brickwork contains 306 cubic feet.
1000 Fire Bricks weigh 3 tons 5 cwt. to 3 tons 7 cwt.
1000 Ordinary Bricks weigh 3 tons 15 cwt. to 4 tons.
About 5 casks Cement are required to build a rod of Brickwork, 3 parts of Sand to 1 of Cement; 7 casks if 2 of Sand to 1 of Cement.
About 3½ bags of Lime will build 1 rod of Brickwork.
A cubic yard of Sydney Sand weighs about 1 ton 10 cwt.
A cubic yard of Sandstone weighs about 2 tons 5 cwt.
A cubic yard of Trachite weighs about 2 tons 10 cwt.

USEFUL INFORMATION

BRICKS.—About 1,000 bricks, with two bags of lime and one load of sand, are required for an ordinary Cottage Chimney; and 2,000 bricks, 3½ bags of lime and 1½ loads of sand for a Double Chimney. About 1,000 bricks on an average, go to 3½ tons weight.

LIME.—From 15 to 16 bags to 1 ton weight.

CEMENT.—About 3½ cwt. to one cask or barrel.

PLASTER OF PARIS.—Per barrel, weighs about 2¾ cwt.

LATH and PLASTER.—100 square yards require 4 bags of lime, 3 yards of sand, 16 bundles of 4ft. 6in. American laths, 8lbs. 1¼-inch nails, and half bag of hair.

LATHS.—A bundle of 4ft. 6in. American laths covers 6½ square yards; a bundle of 4ft. 6in. ceiling laths covers 5 square yards.

OIL.—Oil weighs about 56lbs. per 5-gallon drum.

PAINT.—One gallon of mixed paint weighs 18 to 20 lbs., and will cover from 40 to 50 square yards with one coat, according to surface; 1lb. mixed paint will cover one square yard, three coats, or 90lbs. to 100 square yards, three coats. Allow 4lbs. mixed paint to every foot run of 11ft. high walls for three coats. Paint materials required for 100 square yards: ½ cwt. white lead, 2 gallons of oil, 1 quart turps., 7lbs. dryers, 3lbs. putty, and colors as desired, for three coats. One gallon of Glassard Oil will cover 50 square yards, two coats, or 2 gallons per 100 square yards, two coats.

NAILS.—1lb. 2-inch brads, 1½lb. 2¼-inch, 2lbs. 2½-inch to every 100 feet of flooring; allow ½lb. 1½-inch nails to every 100 feet of lining; 1lb. of 2-inch nails to every 300 feet of weatherboards.

HOW TO MEASURE SPOUTING, RIDGING and DOWNPIPE.—Spouting: From back to front, inside head. Ridging: From one edge to the other. Downpipe: Actual diameter.

DRILLING GLASS.—Dr. Ryan, chemist, of the Polytechnic Institution, says:—"If a solution of camphor in turpentine be applied to the usual cutting instruments, to moisten, instead of emery or sulphate of copper, glass may be cut and bored just as easily as metals or other substances."

FIREWOOD.—The measurement of a Cord of wood is 4ft. x 4ft. x 8ft.=128 cubic feet.

word "AUSTRALIA" below the brand.

Useful Information

Table Showing Sustaining Degree of Best Mining Chain.

Size.	Weight per Fathom	Length in Cask.	Sustaining Degree T. c. q. lbs.
1/4	6½ lbs.	641 feet	0 18 0 0
5/16	7½ „	463 „	1 7 0 0
3/8	9 „	343 „	1 19 0 0
7/16	11 „	250 „	2 14 0 0
1/2	15 „	197 „	3 12 0 0
9/16	20 „	162 „	4 10 0 0
5/8	24 „	133 „	5 11 0 0
3/4	35 „	93 „	8 2 0 0
7/8	46 „	71 „	10 19 0 0
1	60 „	55 „	14 8 0 0

Table Showing Working Load and Tensile Strain of Best Mill Proof Chain.

Size.	Working Load. T. c. q. lbs.	Weight per Fathom.	Admiralty Tensile Strain. T. c. q. lbs.
1/8	0 2 2 0	2½ lbs.	0 5 0 0
5/32	0 3 0 0	3 „	0 6 0 0
3/16	0 4 0 7	3½ „	0 8 0 14
1/4	0 7 2 0	5¼ „	0 15 0 0
5/16	0 11 1 0	7 „	1 2 2 0
3/8	0 16 1 0	10 „	1 12 2 0
7/16	1 2 2 0	13 „	2 5 0 0
1/2	1 10 0 0	17 „	3 0 0 0
9/16	1 17 2 0	21 „	3 15 0 0
5/8	2 6 1 0	26 „	4 12 2 0
11/16	2 16 1 0	31 „	5 12 0 0
3/4	3 7 2 0	37 „	6 15 0 0
7/8	4 11 1 0	50 „	9 2 0 0
1	6 0 0 0	64 „	12 0 0 0

TIMBER, Etc.

Deals—				
as 9 x 3	No. of running feet	to	ton (20 cwt.)	350
Flooring—				
6 x 1⅛	,,	,,	,,	1557
6 x 1	,,	,,	,,	1750
6 x ⅞	,,	,,	,,	2000
6 x ¾	,,	,,	,,	2330
Matchboards—				
6 x ⅝	,,	,,	,,	2800
6 x ½	,,	,,	,,	3400
6 x ⅜	,,	,,	,,	4800
Weatherboards, single	,,	,,	,,	3100
Oregon	No. of Super. feet	,,	,,	790
V.D.L. Hardwood	,,	,,	,,	450
Jarrah	,,	,,	,,	400
Iron Bark	,,	,,	,,	310
Black Butt	,,	,,	,,	333
Shelving (American) 12 x ⅞		,,	,,	1050
6-feet Tasmanian Palings (Hobart)	No. to		,,	650
5-feet Tasmanian Palings	,,	,,	,,	800
6-feet Tasmanian Palings (Launceston)	,,	,,	,,	400
5-feet Tasmanian Palings	,,	,,	,,	500
Spruce Deals as 9 x 3	No. of running feet	to	,,	400
Kauri	No. of super feet	to	,,	600
Cedar	,,	,,	,,	600
Clear Pine	,,	,,	,,	900
Doors 6ft. 8in. x 2ft. 8in. x 1½in.			No. to ton	55
Doors 6ft. 8in. x 2ft. 8in. x 1¼in.			,,	70
Doors 6ft. 6in. x 2ft. 6in. x 1½in.			,,	58
Doors 6ft. 6in. x 2ft. 6in. x 1¼in.			,,	75

SUPERFICIAL FEET IN A BOARD OR PLANK

is known by multiplying the length by the breadth by the thickness in inches. 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.

British Weights and Measures

AVOIRDUPOIS WEIGHT.

27.344 Grains	equal	1 Dram
16 Drams	,,	1 Ounce (Oz.)
16 Ounces	,,	1 Pound (Lb.)
28 Pounds	,,	1 Quarter (Qr.)
4 Quarters	,,	1 Hundredweight (Cwt.)
20 Cwt. (112 lbs. each)	,,	1 Ton (2240 Lbs.)

The Avoirdupois Pound exceeds Troy in the proportion of 17 to 14 nearly, and the Troy Ounce is greater than the Avoirdupois in the proportion of 79 to 72 nearly.

TROY WEIGHT.

4 Grains	equal	1 Carat
24 Grains	,,	1 Pennyweight (Dwt.)
20 Pennyweights	,,	1 Ounce
12 Ounces	,,	1 Pound
25 Pounds	,,	1 Quarter
100 Pounds	,,	1 Hundredweight
20 Hundredweights	,,	1 Ton of Gold or Silver

By this weight, Gold, Silver, Platinum and Precious Stones (except Diamonds) are weighed. Diamonds and Pearls are weighed by Carats of 4 Grains each (equal only to 3.2 Grains Troy). The Troy Ounce is equal to 151½ Diamond Carats. Gold, when pure, is said to be 24 Carats fine; if it contains one part alloy, it is said to be 23 Carats fine, and so on.

Standard Gold (i.e., Gold of our coinage) is 22 Carats fine. 40lbs. (Troy) of Standard Gold are coined into 1869 Sovereigns.

APOTHECARIES WEIGHT.

20	Grains	equal	1 Scruple	8	Drachms	equal	1 Ounce
3	Scruples	,,	1 Drachm	12	Ounces	,,	1 Pound

The Pound and Ounce are the same as in Troy weight.

APOTHECARIES FLUID MEASURE.

60	Minims	equal	1 Drachm	20	Ounces	equal	1 Pint
8	Drachms	,,	1 Ounce	8	Pints	,,	1 Gallon

There are	437½	Grains in a Fluid Ounce.
,,	4	Drachms in one Tablespoonful.
,,	2	Ounces in one Wineglassful.
,,	3	Ounces in one Teacupful.

GRAIN AND PRODUCE.

	Weight per bushel	Bushels per bag.		Weight per bushel.	Bushels per bag.
Barley	50lb.	4	Oats	40lb.	4
Beans	60lb.	4	Wheat	60lb.	3
Bran	20lb.	8	Pollard	20lb.	9
Maize	56lb.	4	Peas	60lb.	4
Malt	40lb.	4			

A Bag of Flour:—Australian, 150lb.; English, 280lb.

British Weights and Measures—*Continued*

MEASURE OF CAPACITY.

4	Gills	equal 1	Pint	4	Pecks	equal 1	Bushel
2	Pints	,, 1	Quart	3	Bushels	,, 1	Bag
4	Quarts	,, 1	Gallon	8	Bushels	,, 1	Quarter
2	Gallons	,, 1	Peck	5	Quarters	,, 1	Load

MEASURE OF LENGTH.

12	Lines	equal	1	Inch
7.92	Inches	,,	1	Link
9	Inches	,,	1	Span
12	Inches	,,	1	Foot
18	Inches	,,	1	Cubit
36	Inch or 3 Feet	,,	1	Yard
5½	Yards	,,	1	Rod, Pole or Perch.
4	Poles,			
22	Yards, or	equal	1	Chain
100	Links			
40	Rods	,,	1	Furlong
8	Furlongs			
80	Chains,	,,	1	Mile
320	Rods, or			
1760	Yards			

MEASURE OF SURFACE.

144	Sq Inches	equal 1	Sq. Foot	40	Sq. Rods	equal 1	Rood
9	Sq. Feet	,, 1	Sq. Yard	4	Roods	,, 1	Acre
30¼	Sq. Yards	,, 1	Sq. Rod	10	Sq. Chains	,, 1	Acre
16	Sq. Rods	,, 1	Sq. Chain	640	Acres	,, 1	Sq. Mile

1 Acre contains 100,000 Sq. Links.
1 ,, ,, 4,840 Sq. Yards.

A square whose side is 69½ Yards is approximately 1 Acre.

GEOGRAPHICAL AND NAUTICAL MEASURE.

6	Feet	equal	1 Fathom
110	Fathoms or	,,	1 Furlong
660	Feet		
6,080	Feet	,,	1 Knot
3	Knots	,,	1 League
20	Leagues or	,,	1 Degree
60	Geographical Miles		
360	Degrees or	,,	The Earth's Circumference
24,856	Miles		

MEASURE OF SOLIDITY.

1,728	Cubic Inches	equal	1	Cubic Foot
27	,, Feet	,,	1	Cubic Yard
5	,, Feet	,,	1	Barrel Bulk Shipping
40	,, Feet	,,	1	Ton Shipping (Merchandise)
42	,, Feet	,,	1	Ton Shipping (Timber)

British Weights and Measures—*Continued*

MEASURE OF TIME.

60 Seconds	equal 1 Minute	7 Days	equal 1 Week
60 Minutes	,, 1 Hour	28 Days	,, 1 Lunar Month
24 Hours	,, 1 Day		
(23h. 56m. 4s.	equal 1 Sidereal Day)		
28, 29, 30, or 31 days		equal	1 Calendar Month
12 Calendar Months	}		
52 Weeks	}	,,	1 Year
365¼ Days		,,	1 Common Year
366 Days		,,	1 Leap Year
365d. 5h. 48m. 46s.		,,	1 Tropical Year

ELECTRICAL MEASURE.

The chief units, as generally accepted by Electricians, are as follow:—

Volt—Electromotive force is equal to about 92.6 per cent. of that given by one Daniell's Battery Cell.

Ohm—Resistance equals the resistance offered to the passage of a current of Electricity by a thread of Mercury 106 cm. long and 1 mm. cross-section at the temperature of melting ice.

Ampere—Current equals the current 1 Volt will drive through 1 ohm.

Watt—Power equals 44 ft. lbs. per minute.

Board of Trade Unit—Officially defined as "the energy contained in a current of 1,000 Amperes flowing under an electromotive force of 1 Volt during an hour.

Killowatt equals one Board of Trade Unit. One Board of Trade Unit will keep a 16-candle incandescent lamp alight for about 16 hours.

746 Watts equals 1 horse-power.

METRIC WEIGHTS AND MEASURES.

Lineal Measures.

The unit for length is the Metre.

	Yds.	Ft.	In.		
10 Millimetres or	0	0	0.3937	equal	1 Centimetre
10 Centimetres or	0	0	3.9370	,,	1 Decimetre
10 Decimetres or	1	0	3.3708	,,	1 METRE
10 Metres or	10	2	9.7079	,,	1 Decametre
10 Decametres or	109	1	1.079	,,	1 Hectometre
10 Hectometres or	1093	1	10.79	,,	1 Kilometre

Weight.

The unit for weight is the Gramme.

	Lb.	Oz.	Drams.		
10 Milligrammes or	0	0	0.0056438	equal	1 Centigram.
10 Centigrammes or	0	0	0.056438	equal	1 Decigramme.
10 Decigrammes or	0	0	0.56438	equal	1 Gramme.
10 Grammes or	0	0	5.6438	equal	1 Decagramme.
10 Decagrammes or	0	3	6.438	equal	1 Hectogramme.
10 Hectogrammes or	2	3	4.38	equal	1 Kilogramme.

A Milligramme measures .01543 of a Grain.

BRITISH EQUIVALENTS OF FOREIGN WEIGHTS & MEASURES.

For the purpose of easy and rapid calculations, the following may be regarded as the approximate equivalents:—

LINEAL MEASURE.

1 Millimetre=1/25 of an Inch.
2½ Centimetres = 1 Inch.
1 Metre = 39⅜ Ins. (3ft. 3⅜in.)
1 Kilometre = 5 Furlongs.
1⅜ Kilometre = 1 Mile.

AVOIRDUPOIS MEASURE.

1 Kilogramme = 2½ lbs.
1000 Kilogrammes = 1 ton.

SQUARE MEASURE.

6½ sq. Centimetres=1 sq. in.
1 sq. Metre = 10¾ sq. feet.

BRITISH AND FOREIGN CURRENCY.—Equivalent of £1 Sterling (English). Subject to Daily Fluctuation.

		Exchange-value at 15/8/27	Par.
America	dollars to £1	4.86⅛	4.866
France	francs to £1	124.03	25.225
Belgium	belgas to £1	34.93	35.
Italy	lire to £1	89.30	25.225
Spain	pesetas to £1	28.80	25.225
Switzerland	francs to £1	25.21	25.225
Holland	florins to £1	12.12	12.107
Sweden	kroner to £1	18.12	18.159
Norway	kroner to £1	18.80	18.159
Denmark	kroner to £1	18.14	18.159
Germany	reichsmarks to £1	20.44	20.43
India	pence to rupee	17.984⅜	18.

MENSURATION OF SURFACES AND SOLIDS.

The circumference of a circle = diameter $\times \frac{22}{7}$ (or 3.1416); area of circle = square of the diameter × 0.7854.

The area of a square, rhombus, or rhomboid = base × height.

The area of a triangle = ½ base × perpendicular height.

Area of trapezium = ½ sum of two parallel sides × height.

Area of any right-lined figure of four or more unequal sides is found by dividing it into triangles, finding area of each, and adding together.

For any regular polygon, inscribe a circle; then ½ radius of that circle × length of one side × number of sides = area.

The area of a parabola = base × height × 2/3rds.

The area of an ellipse = long axis × short axis × 0.7854.

Surface and cubic content of prism or cylinder—1st (area of two ends) + (length × perimeter) = surface; 2nd, area of base × height = content.

For a cone or pyramid—1st, ½ (slant height × perimeter of base) × area of base = surface; 2nd, 1/3rd (area of base × perpendicular height) = content.

For a cube or parallelepipedon—1st, sum of areas of all the sides = surface; 2nd, length × breadth × depth = content.

For a sphere—1st, square of diameter × 3.1416 = surface; 2nd, cube of diameter × 0.5236 = content.

Area of sector of circle = length of arc × ½ radius.

Area of segment of circle = area of sector, less area of triangle.

Side of square of area equal circle = diameter × 0.8852.

Diameter of circle equal in area to square = side × 1.1284.

COMMONWEALTH POSTAL RATES

PRINCIPAL POST OFFICE CHARGES.

Letters.—British Empire, 1½d. per oz. Foreign countries—3d. for first oz. and 1½d. each additional oz.

Letter Cards—British Empire—1½d. each. Foreign countries—3d. each.

Post Cards.—British Empire—1d. each. Foreign countries—1½d. each.

Commercial Papers.—Australia, N. Zealand and Fiji—1d. per 2oz. Other countries—1d. per 2 oz. (minimum 3d.).

Printed Papers.—British Empire—1d. per 4 oz. Foreign countries—1d. per 2 oz.

Patterns and Samples.—British Empire—1d. per 2 oz. Foreign countries—1d. per 2 oz. (minimum 2d.).

Merchandise.—Australia, N. Zealand and Fiji.—1d. per 2 oz. Other countries—parcels rates.

Magazines and Books (printed in Australia).—Australia—1d. per 8 oz. Other countries in British Empire—1d. per 4 oz. Foreign countries—1d. per 2 oz.

(Printed outside Australia).—British Empire—1d. per 4 oz. Foreign countries—1d. per 2 oz.

Newspapers (printed and published in Australia).—Australia. N. Zealand and Fiji—each newspaper 1d. per 10 oz. United Kingdom via France—1d. per 4 oz., 1½d. for 4 to 10 oz., 1d. for each additional 4 oz. Wholly by sea—each newspaper 1½d. per 16 oz. Via America—1d. per 4 oz. U.S.A.—Each newspaper 1d. per 4 oz. Other countries—1d. per 2 oz.

(Printed outside Australia).—British Empire—1d. per 4 oz. Foreign countries—1d. per 2 oz.

Parcels (up to 11 lb.).—Within State—6d. for first lb. and 3d. each additional lb. Interstate, Papua, N. Zealand and Fiji—8d. for first lb. and 6d. each additional lb. United Kingdom—1s. 4d. for first lb. and 6d. each additional lb. Other countries—Special rates (see "Post and Telgraph Guide").

MONEY ORDERS.

	£2 to £5	£5 to £7	£7 to £10	£10 to £12	£12 to £15	£15 to £17	£17 to £20
The Commonwealth ..	6d.	6d.	1/-	1/-	1/6	1/6	2/-	2/-
New Zealand and Fiji ..	6d.	1/-	1/6	2/-	2/6	3/-	3/6	4/-
Papua	9d.	9d.	1/6	1/6	2/3	2/3	3/-	3/-

United Kingdom and Foreign, 6d. for any amount up to £2, and 3d. for each additional pound or fraction of a pound.

POSTAL NOTES.

Payable throughout the Commonwealth: 1/-, 1/6, 2/-, 2/6, 1d.; 3/-, 3/6, 4/-, 4/6, 5/-, 1½d.; 5/6, 6/-, 7/6, 2d.; 10/-, 11/-, 15/-, 20/-, 3d.

TELEGRAPHIC—Including Address and Signature.

Town and Suburban—16 words, 9d. Each additional word 1d.
Country—16 words, 1/-. Each additional word, 1d.
Inter-State—16 words, 1/4. Each additional word, 1d.
New Caledonia—Per word, 9d. (Noumea).
New Zealand—Per word, 4½d. Norfolk Island—Per word, 3d.
United Kingdom—Per word, 3/-. Deferred, 1/6. Week-end, 9d., subject to a minimum charge of 15/-.
Suva, Fiji—Per word, 8d. Cape Colony—Per word, 2/3.
New York—Per word, 2/8.

Specify LYSAGHT'S Australian Iron, and

AREA AND POPULATION

State or Territory	Year of Formation into Separate Colony or Territory	Present Area in Square Miles	Population*	
			4th April 1921	31st March 1926
N.S.W.	1786	309,432	2,100,371	2,308,333
Tas.	1825	26,215	213,780	212,139
W.A.	1829	975,920	332,732	372,732
S.A.	1834	380,070	495,160	555,740
Vic.	1851	87,884	1,531,280	1,691,486
Q'ld.	1859	670,500	755,972	867,643
N. Ter.	1863	523,620	3,867	3,701
F.C.T.	1911	940	2,572	5,515
Total ..	—	2,974,581	5,435,734	6,017,289

Note.—The six States with their included Territories were federated under the name "Commonwealth of Australia" on the 1st January, 1901.

* Exclusive of full-blood Aboriginals.

POPULATION AND VITAL STATISTICS — AUSTRALIA, 1923 to 1925

Heading.		1923	1924	1925
Population (,000 omitted. Exclusive of full-blood Aboriginals.)	Males ..	2,930	2,997	3,060
	Females	2,820	2,877	2,932
	Total ..	5,750	5,874	5,992
Births	Males . .	69,365	68,800	69,542
	Females .	65,857	66,127	66,250
	Total ..	135,222	134,927	135,792
	Rate ..	23.77	23.24	22.89
Marriages	Number	44,541	45,869	46,899
	Rate ..	7.83	7.90	7.91
Deaths	Males .	31,622	31,103	31,134
	Females	24,614	23,877	23,434
	Total .	56,236	54,980	54,568
	Rate ..	9.89	9.47	9.20
Deaths of Children under one Year	Males .	4,617	4,276	4,090
	Females	3,567	3,425	3,161
	Total .	8,184	7,701	7,251
	Rate .	60.54	57.08	53.40

Note.—In the case of Births, Marriages and Deaths, the "Rate" is the number per 1,000 of mean population; in the case of Deaths of Children under one year, it is the number per 1,000 births.

POSTAL INFORMATION—Continued.

WIRELESS.

Messages can be transmitted to vessel within a coastal radius of 4 miles at 6d. to 11d. per word.

REGISTRATION FEE. Letters, 3d.

Late Fee on Unregistered articles, 1d.
Late Fee on Registered articles, 2d.

GOVERNMENT RAILWAYS

Government	Gauge			2ft. 6in. and under Miles	Total Mileage all Gauges	Cost of Construct'n & Equipment 1924—25
	5ft. 3in. Miles.	4ft 8½in Miles.	3ft. 6in. Miles.			
						£
Federal .	—	1,056.39	676.63	—	1,733.02	—
N.S.W. .	—	5,616.24	39.51	—	5,655.75	11.768
Vic. .	4,361.85	—	—	121.77	4,483.62	98,060
Q'ld. .	—	—	6,084.16	*30.26	6,114.42	67,136
S.A. .	1,190.46	—	1,261.24	—	2,451.70	49,454
W.A. . .	—	—	3,732.66	—	3,732.66	23,637
Tas. . .	—	—	648.07	*24.83	672.90	19,644
						6,416
Total .	5,552.31	6,672.63	12,442.27	†176.86	24,844.07	276,115

* Includes 2ft. gauge. † Includes 55.09 miles 2ft. gauge.

Distance by Rail Between State Capital Cities and Time of Journey

	Miles	Act'l time of journey Hrs. Mins.	Breaks en route	Hrs. Mins.
Adelaide-Perth ..	1,687	66 10	Terowee .	— 30
			Pt. Augusta	— 45
			Kalgoorlie .	3 37
Adelaide-Melbourne	483	16 33		
Adelaide-Sydney .	1,074	33 47	Melbourne	3 57
			Albury .	— 21
Adelaide-Brisbane	1,789	60 57	Melbourne	3 57
			Sydney .	4 55
			Albury .	— 21
Brisbane-Sydney .	715	26 58	Wallangarra	— 22
Brisbane-Melbourne	1,306	44 —	Wallangarra	— 22
			Sydney .	8 —
			Albury .	— 24
Brisbane-Perth ..	3,746	127 35	Wallangarra	— 22
			Sydney .	8 —
			Albury .	— 24
			Melbourne	3 39
			Adelaide .	— 50
			Terowee .	— 30
			Pt. Augusta	— 45
			Kalgoorlie	3 37
Melbourne-Sydney	591	17 14	Albury .	— 21
Melbourne-Perth .	2,170	83 35	Adelaide .	— 50
			Terowee .	— 30
			Pt. Augusta	— 45
			Kalgoorlie	3 37
Sydney-Perth ...	2,761	100 37	Albury .	— 24
			Melbourne	3 39
			Adelaide .	— 50
			Terowee .	— 30
			Pt. Augusta	— 45

All-Steel Railway Carriages and Waggons

IN all the progressive countries of the World it is becoming increasingly noticeable that the Railway Authorities are building new rolling stock entirely of steel.

Every collision or accident points to the fact that Wooden Railway Carriages are most dangerous to passengers, from the point of view of splintering and their liability to ignite, and it has been proved in accidents that passengers have a better chance of escape from injury or death in all-steel vehicles than in the old-fashioned wooden carriages.

For years past, **John Lysaght Limited, of Bristol (Eng.)** have specialized in the manufacture of steel panelling for carriages, and steel sheeting for waggons, all qualities being prepared dead flat, square, and exact to any specified size.

There are different qualities for the varying purposes and conditions, and particulars of these qualities can always be obtained from **John Lysaght (Aust.), Ltd.,** in the State Capitals of the Commonwealth.

Thousands of tons of such panels are in use in different countries (England, India, China, South America, Ceylon, Burma, &c., &c.), and are giving the very greatest satisfaction; and in nearly every instance Goods Trucks are roofed with **LYSAGHT'S CORRUGATED "ORB" IRON.**

(ADVT.)

AVERAGE DISTRICT RAINFALL THROUGHOUT AUSTRALIA

(100 points = 1 inch)

WESTERN AUSTRALIA

DISTRICT	Normal fall in points.	DISTRICT	Normal fall in points.
North Kimberley ..	2704	N. Coastal \ South-	1831
East Kimberley ..	2570	S. Coastal / West	3627
West Kimberley ..	2326	Central	1761
De Grey	1359	Eucla	1435
Fortescue	944	South-East	996
West Gascoyne ...	912	North-East	1023
East Gascoyne ...	939	Perth	3335

NORTHERN TERRITORY

Northern Rivers ..	4442	Northern Plateau .	1238
Port Darwin	6156		

SOUTH AUSTRALIA

North-West Interior	845	Central West	1707
Far North Interior	718	Central East	2377
Western	1317	Murray Valley ...	1308
Upper North	1330	South-East—Upper	1661
North-East	848	South-East—Lower	2551
Lower North	1753	Adelaide	2032

QUEENSLAND

Peninsula North ..	5780	Upper Western ..	1546
Peninsula South ..	3940	Lower Western ..	1346
Carpentaria—Lower	2761	Port Curtis	3699
Carpentaria—Upper	2626	Moreton	4969
Barron	6371	Brisbane	4836
Herbert	7701	East Darling Downs	2835
East Central Coast	4195	West Darling Downs	2482
West Central Coast	2433	Maranoa	2370
Central Highlands	2519	Warrego	1795
Central Lowlands .	1974	Far South-West ..	1402

NEW SOUTH WALES

DISTRICT	Normal fall in points
Trans-Darling North	916
Trans-Darling Sth.	1018
Cis-Darling North	1384
Cis-Darling South	1254
Upper Bogan	1764
Lower Macquarie	1794
West Gwydir	2020
East Gwydir	2356
Nandewars	2846
Liverpool Plains	2709
West New England	3133
East New England	3754
Clarence	5373
Orara	5177
Manning	4909
Hunter	3529
Cudgegong	2632
Central Plateau	3475
Warrumbungles Highlands	2750
Warrumbungles Lowlands	2202
Sydney	4812
Nepean	3187
Illawarra	3989
South Coast	3590
Upper Murrumbidgee	2531
Snowy Mountains	4060
Jugiong	3031
Tumut	2169
East Riverina	1790
West Riverina	1379

VICTORIA

Malee North	1275
Malee South	1385
Wimmera North	1626
Wimmera South	1986
Lower North	1697
Melbourne	2543
Upper North	1996
Lower North-East	2866
Upper North-East	4329
East Gippsland	3021
West Gippsland	3415
East Central	3392
West Central	2536
North Central	2615
Volcanic Plains	2381
West Coast	2953

TASMANIA

Northern	4115
East Coast	3226
Midland	2163
South-Eastern	2798
Derwent	2551
Central Plateau	3154
West Coast— Mountain Region	8512
King Island	3717
Flinders Island	2769
Maria Island	2493
Hobart	2329

Tables of Distances between Ports

Fremantle to Burketown

Fremantle.												
1378	**Adelaide**											
1886	508	**Melbourne**										
2450	1072	564	**Sydney**									
2960	1582	1074	510	**Brisbane**								
3310	1933	1424	860	350	**Keppel Bay**							
3500	2122	1614	1050	540	190	**Mackay**						
3605	2227	1719	1155	645	295	105	**Bowen**					
3708	2330	1822	1258	748	398	208	103	**Townsville**				
3868	2490	1982	1418	908	558	368	263	160	**Cairns**			
3903	2525	2017	1453	943	593	403	298	195	35	**Port Douglas**		
3968	2590	2082	1518	1008	658	468	363	260	100	65	**Cooktown**	
4408	3030	2522	1958	1448	1098	908	803	700	540	505	440	**Thursday Island**
4908	3530	3022	2458	1948	1598	1408	1303	1200	1040	1005	940	500 **Normanton**
5040	3668	3160	2596	2086	1736	1546	1441	1338	1178	1143	1078	638 138 **Burketown**

and even quality, is a Perfect Roofing Sheet.

FERTILIZERS

Description of Fertilizer.	Nitrogen in the form of Sulphate of Ammonia	Potash Pure	Phosph. Acid Water Soluble
22% Superphosphate = 48% Phos. Lime	—	—	20.5%
Basic Superphosphate	—	—	—
No. 2	2%	1%	10%
„ 3	3.5%	2%	5%
„ 4	4%	2%	8%
„ 5	3%	7%	10%
„ 6	3%	4%	10%
„ 8	4%	—	11%
„ 11	—	4%	12%
"Legume"	—	4%	6%
"Bana"	4%	10.4%	5%
"777" (Three Sevens)	7%	7%	—
"Howes"	9%	11%	—

Cabbage-growers who wish to mix Bonedust with one of the above should use No. 6.

The materials used for the above mixtures are Superphosphate, Sulphate of Ammonia, and Sulphate of Potash. Quotations given for buyers' own mixture in lots of 1 ton or more—not less.

Analysis of Fertilizers for different purposes, reprinted from pamphlet issued by Australian Fertilizers Pty., Ltd.

Phosph. Acid Citrate Soluble	Phosph. Acid Insoluble	Gypsum Lime Sulphate	Crops for which Fertilizers are intended under average conditions.
.5%	1%	40%	Wheat and Oats for Grain, Pastures, also Lucerne in soils rich in Potash.
17%	.5%	33%	Substitute for Super, in wet, sour soils.
.15%	.41%	20%	Wheaten and Oaten Hay, Turnips, Maize, Rape, Cotton.
10%	.5%	30%	Maize (poor soils), Cabbages, Cauliflowers, etc., etc.
.12%	.33%	15%	Green Fodder (not Lucerne), Flowers, Shrubs.
.15%	.41%	19%	Potatoes, Tomatoes, Citrus Fruits, Apples, Pears, Passions, Grapes, and Tobacco on poor soils.
.15%	.41%	19%	Stone Fruits, Strawberries, Sugar Cane, Onions, and Tobacco on good soils.
.16%	.45%	21%	Melons, Pumpkins, etc. Lawns. Also substitute for No. 4 for soils rich in potash.
.18%	.5%	23%	Lucerne, Peas, Beans, etc., on soils deficient in potash.
6%	.3%	20%	Peas, Beans, Lucerne & Green Manure Crops on soils deficient in lime.
5%	.25%	18%	Bananas.
7%	.1%	12%	Sugar Cane.
6%	.1%	11%	Special for Sugar Cane.

Bonedust, Blood and Bone, Bone and Super., Nitrate of Soda, Sulphate of Ammonia, Sulphate of Potash, etc., also supplied.

BROADCASTING

Australian Wireless Regulations

Wireless broadcasting is carried on in Australia, and is controlled by regulations gazetted under the Wireless Telegraphy Act 1905-1919, dated 17th day of July, 1924.

The broadcasting stations are conducted by private enterprise under license from the Commonwealth Government, provision being made for the granting of licenses enabling two classes of stations, "A" and "B" class, to operate. The former share in the revenue collected from license fees, while the latter do not receive any revenue.

The number of "A" class stations is limited to two in New South Wales, two in Victoria, and one in each of the other States.

Any person wishing to listen-in to a broadcast programme need only obtain a Broadcast Listener's License from any Post Office, and is then at liberty to tune in to the whole of the stations to which his set will respond. He may use any type of receiver, and may utilise any circuit, provided, of course, that by mishandling a receiver, he does not cause a disturbance in the ether surrounding his station, and so interfere with others who may be listening in.

The fees payable for licenses vary according to the district in which the prospective listener resides.

Each State is divided into zones as follows:—

Queensland, New South Wales, Victoria, and South Australia.

Zone 1.—The territory between the coastline approximately 250 miles north of Brisbane and 250 miles west of Adelaide, and a line running about 250 miles from the coast, with such local variations as it is expedient to introduce.

Zone 2.—The contiguous territory reaching about 150 miles further beyond Zone 1.

Zone 3.—The remaining territory in those States.

West Australia and Tasmania.

Zone 1.—The territory of the State embraced by a circle of approximately 250 miles' radius drawn from the centre of the town or city in which the broadcasting station is erected.

Zone 2.—Between the 250-mile circle and another concentric circle of approximately 400 miles' radius.

Zone 3.—The rest of the State outside the 400-mile boundary.

Three classes of licenses are issued—ordinary, temporary and special licenses.

An ordinary license is one which enables a person to operate a receiver in his own home or for his own use.

A temporary license is issued where temporary use of a receiver is required, such as at demonstrations in public, etc.

A special license is issued for use in hotels, restaurants, places of amusement, or other places where the reception is intended for public use.

FEES.

The fees which are payable for receiving licenses are as follows:—

Class of License.	Fees payable to Zone in which the Licensed Station is to be operated. (For definition of Zone see Regulation 83.)		
	Zone 1.	Zone 2	Zone 3
Ordinary License	27/6 per an.	22/6 per an.	17/6 per an.
Special License	£10 per an.	£9 per an.	£7/10 per an.
Temporary License	£1 per week	17/6 per week	15/- per week

STATIONS OPERATING.

Stations which are now operating in Australia are as follows:—

		"A" Class.	Metres	Watts
2	F.C.	Farmer & Company Limited, Sydney	442	5,000
2	B.L.	Broadcasters (Sydney) Limited, Sydney	353	5,000
3	L.O.	Broadcasting Company of Australia Pty., Ltd., Melbourne	371	5,000
3	A.R.	Associated Radio Company, Limited, Melbourne	484	1,600
4	Q.G.	Queensland Radio Service, Brisbane	385	5,000
5	C.L.	Central Broadcasters Ltd., Adelaide	395	5,000
6	W.F.	Westralian Farmers Ltd., Perth	1,250	5,000
7	Z.L.	Tasmanian Broadcasters Proprietary Limited, Hobart	535	3,000
		"B" Class.		
2	B.E.	Burgin Electric Company, Limited, Kent Street, Sydney	326	100
2	G.B.	Theosophical Broadcasting Station Limited, Sydney	326	3,000
2	K.Y.	Trades and Labour Council, Sydney	280	1,500
2	H.D.	H. A. Douglas, Newcastle	288	100
2	M.K.	Mockler Bros., Bathurst	275	250
2	U.E.	Electrical Utilities, South Randwick	297	250
2	U.W.	O. Sandel, 213 Elizabeth St., Sydney	263	500
2.	U.X.	Sandel's Broadcasting Service, Wagga	300	500
3	U.Z.	O. J. Nilsen & Company, Melbourne	319	100
4	G.R.	Gold Radio Electric Service, Toowoomba, Queensland	294	100
4	M.B.	Radio Manufacturers Ltd., Brisbane	337	100
4	R.N.	Queensland Government, Rockhampton	323	250
5	D.N.	5 D.N. Proprietary, Ltd., Parkside, S.A.	313	500
7	B.N.	Tasmanian Radio Proprietary Limited, Launceston	283	250
3	D.B.	C/- The Capitol Theatre, Swanston Street, Melbourne	255	500

DIRECT WIRELESS SERVICE

Between Australia and England

Work is now proceeding speedily and satisfactorily in connection with the construction of the Australian Beam Wireless Stations.

After careful investigation and experiment, the Beam Station sites were selected in the south-eastern portion of Australia.

At Ballan, 50 miles from Melbourne, a large beam transmitting station has been built; at Rockbank, 15 miles from Melbourne, a receiving station is nearing completion, at which the energy of the wireless beams from England and Canada will be collected and concentrated, and from there conveyed over a land wire into the city of Melbourne.

The two sites are 25 miles apart, sufficiently distant for technical purposes, i.e., to permit duplex working, but easily accessible for management.

Each transmitting and receiving station will have three masts 650 feet apart and 250 feet high. They have been constructed of lattice steel and each weighs 50 tons. In all 12 masts will be used for the four stations, the total weight being 600 tons.

The actual time of transmission between England and Australia of a wireless signal under the Beam System is approximately one-eighteenth of a second. The operating capacity of the entire system will range from 80 words a minute to at least 400 words a minute, because it will be possible to handle four messages simultaneously by two stations receiving and two transmitting.

With improvements that are now being tested, there are good prospects that this speed in any single direction will go up to 200 words a minute.

As in other countries, the transmission and reception will actually be operated from Central city offices by distant control—the work at the transmitting and receiving station will be automatic only.

One station will be capable of sending a concentrated beam of wireless energy direct to London over the north-western great circle or the south-eastern great circle at will; if this beam were sent in both directions simultaneously, it would form a sort of wireless ribbon completely encircling the earth. The other station will send a concentrated beam of wireless energy direct from Australia across the Pacific Ocean, over the whole of Canada, into a station near Montreal.

High speed automatic telegraph equipment will be installed at the Company's Melbourne office, and there the operators will work over the Beam System direct to London and Montreal, and also to the feeder stations in the other capital cities of Australia.

"Feeder" Stations will be established in each of the other capital cities communicating direct with the main trunk station, and as the relay will be automatic, there should be little delay compared with the handling of messages originating in Melbourne itself. As the system develops, there will probably be additional feeder stations linking up other parts of Australia more efficiently and speedily.

Rates for Beam Wireless messages for ordinary, deferred, and week-end traffic and any information required either on the Beam System or Wireless problems generally, will be gladly supplied by the offices or agencies of Amalgamated Wireless (A/asia) Limited. in the principal cities of the Commonwealth.

Iron, Copper and Brass Wires

	IRON			100 FEET.	
S.W.G. No.	Weight of 100 yards in Avoir. lbs.	Weight of 1 Statute Mile in Avoir. lbs.	Length of 1 cwt. in Yards.	Copper Wire in Lbs.	Brass Wire in Lbs.
7/0	193.4	3,404	58	76.576	72.006
6/0	166.5	2,930	67	65.947	62.010
5/0	144.4	2,541	78	57.104	53.752
4/0	123.8	2,179	91	49.009	46.083
3/0	107.1	1,885	105	42.388	39.858
2/0	93.7	1,649	120	37.095	34.88
0	81.2	1,429	138	32.155	30.235
1	69.6	1,225	161	27.5445	25.922
2	58.9	1,037	190	23.333	21.940
3	49.1	864	228	19.451	18.290
4	41.6	732	269	16.486	15.502
5	34.8	612	322	13.768	12.940
6	28.5	502	393	11.792	10.617
7	24.0	422	467	9.4882	8.921
8	19.8	348	566	7.8414	7.373
9	16.0	282	700	6.3516	5.972
10	12.7	223	882	5.0185	4.7189
11	10.4	183	1,077	4.1217	3.8756
12	8.4	148	1,333	3.313	3.1153
13	6.5	114	1,723	2.5926	2.4378
14	5.0	88	2,240	1.9603	1.8433
15	4.0	70	2,800	1.5879	1.4931
16	3.2	56	3,500	1.2546	1.1767
17	2.4	42	4,667	0.96058	0.9324
18	1.8	32	6,222	0.70573	0.6636
19	1.2	21	9,333	0.49000	0.46083
20	1.0	18	11,200	0.39698	0.37328
21	0.795	13.9	14,199	0.21366	0.29493
22	0.609	10.7	18,418	0.24014	0.22529
23	0.448	7.8	25,070	0.17643	0.1659
24	0.376	6.6	29,835	0.14826	0.1394
25	0.311	5.4	36,100	0.12252	0.1152
26	0.252	4.4	44,568	0.099243	0.093318

READY RECKONER for Calculating the Cost of Electric Light Wire.

From 2/6 to £100 per mile, at per 110 yards and per single yard.

Per mile	Per 110 yds	Per mile	Per 110 yds.	Per sgl. yd	Per mile	Per 110 yds.	Per sgl. yd.
s. d		£ s d	£ s d		£ s d	£ s d	s d
2 6	1 7/8	0 13 9	0 0 10 1/2		19 0 0	1 3 9	0 2 3/4
3 0	2 1/4	0 14 0	0 0 10 1/2		20 0 0	1 5 0	0 2 3/4
3 4	2 1/2	0 14 3	0 0 10 3/4		21 0 0	1 6 3	0 3
3 9	2 3/4	0 14 6	0 0 11		22 0 0	1 7 6	0 3 1/4
4 0	3	0 14 9	0 0 11		23 0 0	1 8 9	0 3 1/4
4 3	3 1/4	0 15 0	0 0 11 1/4		24 0 0	1 10 0	0 3 1/2
4 6	3 1/2	0 15 3	0 0 11 1/2		25 0 0	1 11 3	0 3 1/2
4 9	3 1/2	0 15 6	0 0 11 3/4		26 0 0	1 12 6	0 3 3/4
5 0	3 3/4	0 15 9	0 0 11 3/4		27 0 0	1 13 9	0 3 3/4
5 3	4	0 16 0	0 1 0		28 0 0	1 15 0	0 4
5 6	4 1/4	0 16 3	0 1 0 1/4		29 0 0	1 16 3	0 4
5 9	4 1/2	0 16 6	0 1 0 1/2		30 0 0	1 17 6	0 4 1/2
6 0	4 1/2	0 16 9	0 1 0 1/2		31 0 0	1 18 9	0 4 1/4
6 3	4 3/4	0 17 0	0 1 0 3/4		32 0 0	2 0 0	0 4 1/2
6 6	5	0 17 3	0 1 1		33 0 0	2 1 3	0 4 1/2
6 9	5	0 17 6	0 1 1 1/4		34 0 0	2 2 6	0 4 3/4
7 0	5 1/4	0 17 9	0 1 1 1/4		35 0 0	2 3 9	0 5
7 3	5 1/2	0 18 0	0 1 1 1/2		36 0 0	2 5 0	0 5
7 6	5 3/4	0 18 3	0 1 1 3/4	0 1/8	37 0 0	2 6 3	0 5 1/4
7 9	5 3/4	0 18 6	0 1 2		38 0 0	2 7 6	0 5 1/4
8 0	6	0 18 9	0 1 2		39 0 0	2 8 9	0 5 1/2
8 3	6 1/4	0 19 0	0 1 2 1/4		40 0 0	2 10 0	0 5 1/2
8 6	6 1/2	0 19 3	0 1 2 1/2		41 0 0	2 11 3	0 5 3/4
8 9	6 1/2	0 19 6	0 1 2 3/4		42 0 0	2 12 6	0 5 3/4
9 0	6 3/4	0 19 9	0 1 2 3/4		43 0 0	2 13 9	0 6
9 3	7	1 0 0	0 1 3	0 1/4	44 0 0	2 15 0	0 6
9 6	7 1/4	2 0 0	0 2 6	0 1/2	45 0 0	2 16 3	0 6 1/4
9 9	7 1/4	3 0 0	0 3 9	0 1/2	46 0 0	2 17 6	0 6 1/2
10 0	7 1/2	4 0 0	0 5 0	0 3/4	47 0 0	2 18 9	0 6 1/2
10 3	7 3/4	5 0 0	0 6 3	0 3/4	48 0 0	3 0 0	0 6 3/4
10 6	8	6 0 0	0 7 6	1	49 0 0	3 1 3	0 6 3/4
10 9	8	7 0 0	0 8 9	1	50 0 0	3 2 6	0 7
11 0	8 1/4	8 0 0	0 10 0	1 1/4	55 0 0	3 8 9	0 7 1/2
11 3	8 1/2	9 0 0	0 11 3	1 1/2	60 0 0	3 15 0	0 8 1/2
11 6	8 3/4	10 0 0	0 12 6	1 1/2	65 0 0	4 1 3	0 9
11 9	8 3/4	11 0 0	0 13 9	1 1/2	70 0 0	4 7 6	0 9 3/4
12 0	9	12 0 0	0 15 0	1 3/4	75 0 0	4 13 9	0 10 1/4
12 3	9 1/4	13 0 0	0 16 3	1 3/4	80 0 0	5 0 0	0 11
12 6	9 1/2	14 0 0	0 17 6	2	85 0 0	5 6 3	0 11 3/4
12 9	9 1/2	15 0 0	0 18 9	2 1/4	90 0 0	5 12 6	1 0 1/4
13 0	9 3/4	16 0 0	1 0 0	2 1/4	95 0 0	5 18 9	1 1
13 3	10	17 0 0	1 1 3	2 1/2	100 0 0	6 5 0	1 1 1/2
13 6	10 1/4	18 0 0	1 2 6	2 1/2			

Any odd fraction of a penny is here expressed by the nearest farthing above such an amount

Coils of 100 yards would be 1/11th less than above.

STOCK SIZES OF GEOMETRICAL FLOOR TILES.

SIZE	SHAPE	No.	No. PER YARD
6"×6"		637	36
½-6"		638	72
6"×3"		639	72
4¾"×4⅛"		640	72
½-4¾"		641	144
3"×3"		642	144
½-3"		643	288
2⅛"×2⅛"		644	288
½-2⅛"		645	576
1½"×1½"		646	576
½-1½"		647	1152
1⅛"×1⅛"		648	1152
½-1⅛"		649	2304
¼-1⅛"		650	4608
1"×1"		651	1296
½-1"		652	2592
3"×0½"		653	864
3"×0¾"		654	576
4¼"×1⅛"		655	288

SIZE	SHAPE	No.	No. PER YARD
6" OCTAGON		656	41
⅛ " " { short / half }		657	82
⅛ " " { long / half }		658	82
4¼" OCT.		659	82
½ " " short		660	164
3" OCT.		661	164
6"×3" HEX.		662	96
½ " "		663	192
4¼"×2⅛"		664	144
3"×1"		665	432
3"×1½"		666	288
6"×2"		667	108
6"×1½"		668	144
6"×1"		669	216
3" PENTAGON		670	115

SIZE	SHAPE	No.	No. PER YARD
3" HEXAGON		671	164
Long half "		672	328
Short half "		673	328
2" HEX.		674	374
Long half "		675	748
Short half "		676	748
1½" HEX.		677	658
Short half "		678	1316
Long half "		679	1316
3¼" HEX.		680	106
HEXAGON FISH 6⅛"×4¼"		681	72
4¼" PENT.		682	96
4¼"×2⅛" PENT.		683	128
3"×2"		684	216
4½"×1½"		685	192

"QUEEN'S HEAD" IRON branded Blue.

LYSAGHT'S IRON supplied to

CALENDAR 1928

JANUARY.

S	1	8	15	22	29	..
M	2	9	16	23	30	..
T	3	10	17	24	31	..
W	4	11	18	25	..	..
T	5	12	19	26	..	..
F	6	13	20	27	..	..
S	7	14	21	28	..	..

FEBRUARY.

..	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	..	..	..
3	10	17	24	..	..	..
4	11	18	25	..	..	..

MARCH.

..	4	11	18	25	..	..
..	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	31	..	..

APRIL.

1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	..	..	..
4	11	18	25	..	..	..
5	12	19	26	..	..	..
6	13	20	27	..	..	..
7	14	21	28	..	..	..

MAY.

S	..	6	13	20	27	..
M	..	7	14	21	28	..
T	1	8	15	22	29	..
W	2	9	16	23	30	..
T	3	10	17	24	31	..
F	4	11	18	25	..	..
S	5	12	19	26	..	..

JUNE.

..	3	10	17	24	..	..
..	4	11	18	25	..	..
..	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	30	..	..

JULY.

1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	31	..	..
4	11	18	25	..	..	..
5	12	19	26	..	..	..
6	13	20	27	..	..	..
7	14	21	28	..	..	..

AUGUST.

..	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	31	..	..
4	11	18	25	..	..	..

SEPTEMBER.

S	..	2	9	16	23	30
M	..	3	10	17	24	..
T	..	4	11	18	25	..
W	..	5	12	19	26	..
T	..	6	13	20	27	..
F	..	7	14	21	28	..
S	1	8	15	22	29	..

OCTOBER.

..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	31	..	..
4	11	18	25	..	..	..
5	12	19	26	..	..	..
6	13	20	27	..	..	..

NOVEMBER.

..	4	11	18	25	..	..
..	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	..	..	..

DECEMBER.

..	2	9	16	23	30	..
..	3	10	17	24	31	..
..	4	11	18	25	..	..
..	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	29	..	..

CALENDAR 1929

JANUARY.

S	.	6	13	20	27	..
M	..	7	14	21	28	..
T	1	8	15	22	29	..
W	2	9	16	23	30	..
T	3	10	17	24	31	..
F	4	11	18	25	..	..
S	5	12	19	26	..	..

FEBRUARY.

..	3	10	17	24	..	..
..	4	11	18	25	..	..
.	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	..	..	..
2	9	16	23	..	..	..

MARCH.

..	3	10	17	24	31	..
.	4	11	18	25	..	..
..	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	30	..	..

APRIL.

..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	..	..	..
4	11	18	25	..	..	..
5	12	19	26	..	..	..
6	13	20	27	..	..	..

MAY.

S	..	5	12	19	26	..
M	..	6	13	20	27	..
T	..	7	14	21	28	..
W	1	8	15	22	29	..
T	2	9	16	23	30	..
F	3	10	17	24	31	..
S	4	11	18	25	..	..

JUNE.

..	2	9	16	23	30	..
..	3	10	17	24	..	..
..	4	11	18	25	..	..
..	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	29	..	..

JULY.

..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	31	..	..
4	11	18	25	..	..	..
5	12	19	26	..	..	..
6	13	20	27	..	..	..

AUGUST.

..	4	11	18	25	..	..
..	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	31	..	..

SEPTEMBER.

S	1	8	15	22	29	..
M	2	9	16	23	30	..
T	3	10	17	24	.	..
W	4	11	18	25	.	..
T	5	12	19	26	.	..
F	6	13	20	27	.	..
S	7	14	21	28	.	..

OCTOBER.

..	6	13	20	27	..	..
..	7	14	21	28	..	..
1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	31	..	..
4	11	18	25	..	..	..
5	12	19	26	..	..	..

NOVEMBER.

..	3	10	17	24	.	..
.	4	11	18	25	..	..
..	5	12	19	26	..	..
..	6	13	20	27	..	..
..	7	14	21	28	.	..
1	8	15	22	29	..	..
2	9	16	23	30	.	..

DECEMBER.

1	8	15	22	29	..	..
2	9	16	23	30	..	..
3	10	17	24	31	..	..
4	11	18	25	..	..	..
5	12	19	26	..	..	..
6	13	20	27	..	..	..
7	14	21	28	..	..	..

The following Appendix (for which the Publisher accepts no responsibility) has been compiled from standard sources of information, and will, it is hoped, prove of value to residents in country districts who may be remote from medical aid.

First Aid to the Injured

Country residents desirous of forming a First-Aid Class in their district are invited to correspond with the Secretary, St. John's Ambulance Brigade, in the Capital City of the State in which they are resident.

LYSAGHT'S "ORB" is a Perfect Roofing Sheet.

WOUNDS.

Bleeding from Arteries.

Head.—Pad and bandage the wound.

Neck.—Place thumb in wound and press backward against spine.

ARMPIT.—Press thumb into wound, second person to press main artery behind middle of collar bone.

UPPER AND FOREARM.—Press with fingers, or apply tourniquet to inside of upper arm where pulsating. When below elbow, place pad in hollow or bend of elbow, and bend forearm against upper arm.

PALM OF HAND.—Bandage hand, closed over a piece of stick, or press arteries at front of wrist.

THIGH.—Hand pressure at centre of fold of groin, or by tourniquet on inside of thigh.

HAM OR BACK OF KNEE-JOINT.—Same as for a thigh, or press by hand or tourniquet in ham above wound.

FRONT OR BACK OF LEG.—Press by hand or tourniquet at back of knee-joint, or double the leg up against a pad placed in the ham.

A tourniquet can be made by placing a stone over the main artery, tieing a handkerchief loosely over it, and then twisting it tight with a stick.

Blood from an artery is bright red and flows in jets.
Blood from a vein is dark bluish, and flows slowly.
The flow of arteries is from heart to head, hands to feet.
The flow in veins is just the reverse.

INSTEP.—Pressure to the middle of front of ankle.

SOLE OF FOOT.—Bandage with pads behind inner ankle bones and middle of instep.

FOR ALL SITUATIONS.—Elevate the part and apply pad and bandages.

FLESH WOUNDS.—Wash, stop bleeding, fix parts in natural position without delay.

GUNSHOT WOUNDS OF CHEST OR BELLY.—Place patient on wounded side with knees drawn up; give complete rest; no stimulants.

BRUISED WOUNDS.—Wash, apply wet cloths; if about head, poultices.

SPECIAL NOTE.—VALUE OF IODINE AS A FIRST-AID DRESSING.—It is stated that, in the Franco-Prussian War, out of every 100 men wounded and operated upon, 75 died of blood-poisoning. In the South African War and in the Russo-Japanese War, only 2 per cent. died from this cause. The explanation of this marvellous improvement is cleanliness. In the interven ing period Scientists had discovered that an immediate application of Iodine to the wound removed all danger of septicaemia or blood-poisoning, so that unless a vital part was struck, the chances of recovery were greatly enhanced. Special phials of Iodine are now prepared, and the method of application is to break off the end of the phial, pour a little Iodine in and about the wound, and on the pad of lint, binding it closely together with a bandage.

BROKEN BONES.

LOWER JAW.—Bandage the lower to upper jaw with handkerchief.

COLLAR BONE.—Place pad in armpit, bandage elbow to side, sling forearm.

RIBS.—Apply bandage 6 inches wide, 8 yards long, round chest.

UPPER ARM.—Bend arm and apply roller bandage to hand and forearm, splints to back and front, and sling forearm.

FOREARM.—Apply padded splints to back and front from hand to elbow, holding the arm extended with thumb pointing upwards.

HAND.—Apply splint bandage, and support in sling.

THIGH.—Apply a long splint from armpit to outside of heel, and short one from fork to knee on inside, and bandage.

LEG.—Apply splints inside and outside and bandage.

STRETCHER DRILL.

1. Three men fall in, facing feet of injured man, and are numbered off from the right.
2. Place foot of stretcher at patient's head in a line continuous with the body.
3. Nos. 1 and 2 one at either side—locking hands underneath the shoulders and hips, raise the patient, carry him forward over the stretcher, and then lower him on it.
4. No. 3 takes charge of the injured portion (limb or head) and steadies it with a hand on either side of the wound.
5. Nos. 1 and 2 then take their places at the head and foot of the stretcher, lift, and carry off, while No. 3 walks at side of stretcher.

SIGNS OF BROKEN BONES.

Motion at the part; crackling sensation on moving broken ends; alteration in shape; often shortening. Always apply splints before lifting or carrying. Dangers are of pushing the end through flesh, blood vessels, nerves, or internal organs (lungs).

Splints may be formed of soldiers' weapons—rifles, swords and scabbards—umbrellas, walking-sticks, broom handles, folded newspapers, etc. Bandages from handkerchiefs, sheets and shirts. Stretchers from doors, ladders, or two rifles and a blanket.

GENERAL.

AGUE.—As a preventive, give five grains of quinine every morning. As a cure, act on the bowels, give ten grains of quinine three times a day, and a vapour bath every evening.

APPENDICITIS.—Pain and tenderness in lower right front of abdomen, often beginning in pit of stomach, accompanied at times by vomiting and fever. For temporary relief, apply hot fomentations. No purgatives. Slight sips of water may be taken. Await medical advice.

APOPLEXY.—Act on the bowels, apply wet cloths to the head, undo collar.

BITES.—Of snakes, mad dogs: Apply a ligature (a cord) on the side nearest the heart; suck the wound, scratch the edges with a penknife, and apply caustic or carbolic acid to the wound.

BURNS.—Place the part in a natural position, and apply cloths soaked in oil.

COLIC AND DIARRHOEA.—Give 20 drops of chlorodyne in a little brandy and water.

DYSENTERY.—A small teaspoonful of Ipecacuanha, and a powder every two hours.

DELIRIUM TREMENS.—Act on the bowels, beef-tea every half-hour, 20 grains of chloral in water as a sleeping draught.

DROWNING.—Also for Mild Asphyxiation, Electric Shock, etc. (Supplied by the Royal Life-Saving Society, N.S.W. Head Centre).—SEND FOR MEDICAL ASSISTANCE, IF POSSIBLE. Place the patient face downward, with left side of the face resting on the ground or floor. If no blanket or mat available, put a piece of paper under the face near mouth and nose. Examine the mouth for, and remove any foreign substance. Extend the arms sideways and upwards. Kneel beside and close to the thighs, place the hands just above the small of the back, little finger on lowest rib, others spread out, thumbs an inch apart parallel to one another and pointing to the head. Carry the body steadily forward until its weight is on both hands, thus compressing the patient's body towards the floor, then carry the body back again, releasing the pressure, but not removing the hands. Continue the movement fifteen times to the minute, or once every four seconds for an hour or two, or until the patient starts to breathe. Then remove any wet clothing, cover with blankets, and apply warmth by rubbing the body and insides of limbs, always towards the heart. Place hot-water bottles or bricks to soles of feet, inside thighs or armpits. Watch carefully for any cessation of breathing, and if such occur proceed as before.

EMETICS.—Substances which cause vomiting. A tablespoonful of salt, or mustard and water, an ounce of Ipecacuanha wine; 15 grains of sulphate of zinc in water.

FAINTING.—From loss of blood, weakness, or shock. Keep the body in the lying position, undo the dress, give plenty of air, sprinkle the face and chest with cold water; smelling salts to nostrils.

FITS.—Loosen the clothing about the neck; fresh air, and prevent patient from injuring himself.

MENINGITIS.—Violent headache, unusual irritability or drowsiness, frequent vomiting, tendency to curl up in bed on side, resisting interference, feverish tendencies. Keep in dark room until doctor comes.

POISONS.—1. Give an emetic in the case of poisons which do not stain the mouth, such as Arsenic, Phosphorus, Strychnine, Prussic Acid, Belladonna, and also in the case of Ptomaine Poisoning, Alcoholic Poisoning, Opium, Morphia, Laudanum, Paregoric, Chlorodyne, Syrup of Poppies, etc. (See Emetics above.)

provide employment for Australian Workmen.

2. DO NOT give an emetic for the following poisons, which burn or stain the mouth, viz.—

(a) Acids, i.e., Nitric Acid, Sulphuric Acid, Hydrochloric Acid, Muriatic Acid (Spirits of Salt), Carbolic Acid, Oxalic Acid, etc.

(b) Alkalies, i.e., Caustic Potash, Caustic Soda, and Ammonia, etc.

TREATMENT—

(a) Acid Poisoning: Give an alkali, i.e., Lime Water, Magnesia, Chalk, Whiting (and soda, except in the case of Oxalic Acid poisoning); also Oil (Olive, Salad, Cod Liver or Castor).

(b) Alkali Poisoning: Give an acid, i.e., Lemon Juice or Vinegar, diluted with an equal quantity of water, also Oil (Olive, Salad, Cod Liver or Castor).

NOTE.—STRONG TEA is a direct neutralizer of many poisons, and is always safe to take.

RHEUMATISM.—This painful malady is generally due to errors of diet or other causes, such as damp ground, wet clothes, or excess of alcohol, and before any cure can be attempted the cause must first be removed. TREATMENT—any good saline preparation, mineral water, etc., while for external application Eucalyptus or other warming and stimulating embrocation will be found to give good results.

RUPTURE.—The escape of a portion of the bowel from the belly at the groin. To return it, place the patient on his back, with the knees drawn up, and apply pressure to the swelling in an upward and outward direction.

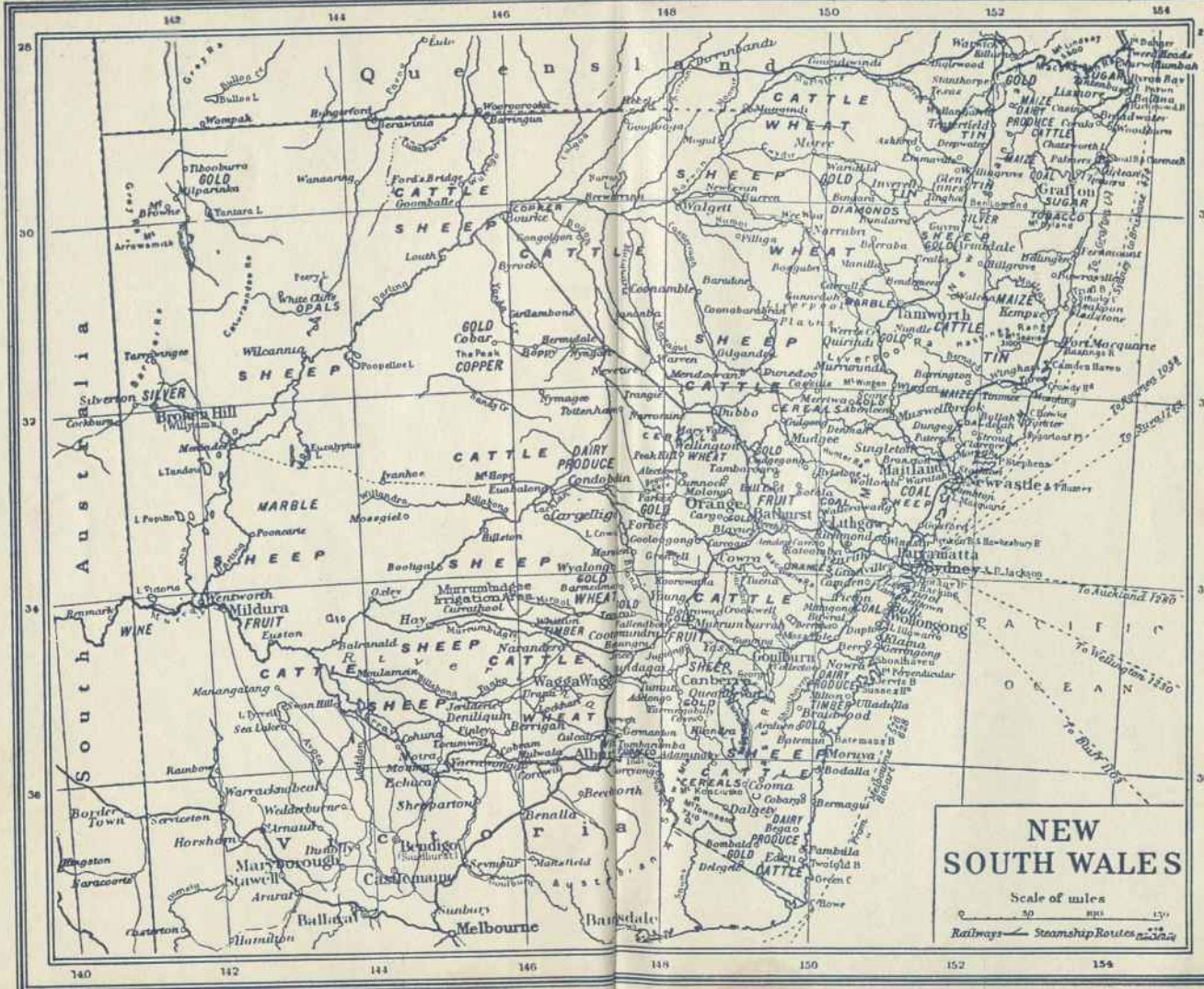
SORE FEET.—Anoint with oil or soap before marching, and harden the skin at night by washing with salt and water, or spirits.

SCALDS.—Smear with a solution of lime oil, and envelop in cotton wool.

SPRAINS.—Elevate and rest limbs, apply cold water cloths.

SUNSTROKE.—Loosen dress at neck, act on bowels, cold water at head.

Tank Makers should specify LYSAGHT'S "ORB" Brand Corrugated Iron—it will stand any and every possible test in curving or otherwise, being almost as tough as copper. It is obtainable up to 12 feet in length.


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TOBACCO
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Walgett
Moree
Glen Innes
Inverell
Armidale
Tamworth
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