

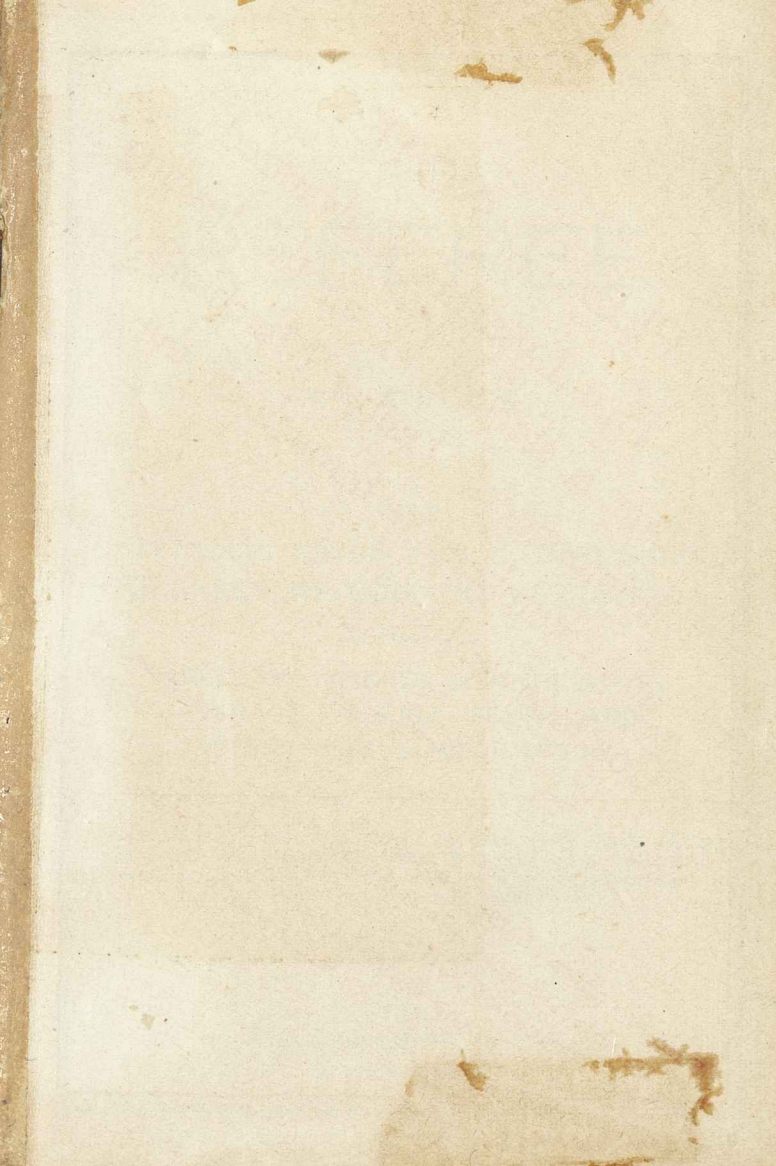
THE  
**REFEREE**

A HANDBOOK OF USEFUL  
INFORMATION



ELEVENTH EDITION  
(WITH APPENDIX)

*With the Compliments of*  
**JOHN LYSAGHT (Aust.) LTD.**



# PLEASE NOTE!

That Lysaght's Galvanized  
Iron is stocked by all the leading  
Ironmongers, Timber Merchants,  
and Storekeepers throughout the  
Commonwealth.



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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

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11<sup>TH</sup> EDITION

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BEING  
A GENERAL GUIDE FOR IRONWORKERS,  
STOREKEEPERS, COUNTRY RESIDENTS, &c.  
CONTAINING  
TABLES OF WEIGHTS, MEASUREMENTS,  
AVERAGE RAINFALL, POSTAL AND  
OTHER USEFUL INFORMATION

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Whether it be in Times of Peace or War, 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 more than half-a-century.

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Sydney:

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



The Best is the Cheapest. Quality is

# CALENDAR 1920

|      | JANUARY       | FEBRUARY       | MARCH          |
|------|---------------|----------------|----------------|
| SUN  | .. 4 11 18 25 | 1 8 15 22 29   | .. 7 14 21 28  |
| MON  | .. 5 12 19 26 | 2 9 16 23 ...  | 1 8 15 22 29   |
| TUES | .. 6 13 20 27 | 3 10 17 24 ... | 2 9 16 23 30   |
| WED  | .. 7 14 21 28 | 4 11 18 25 ... | 3 10 17 24 31  |
| TH   | 1 8 15 22 29  | 5 12 19 26 ... | 4 11 18 25 ... |
| FRI  | 2 9 16 23 30  | 6 13 20 27 ... | 5 12 19 26 ... |
| SAT  | 3 10 17 24 31 | 7 14 21 28 ... | 6 13 20 27 ... |

|      | APRIL          | MAY                                      | JUNE           |
|------|----------------|------------------------------------------|----------------|
| SUN  | .. 4 11 18 25  | .. 2 9 16 <sup>23</sup> / <sub>30</sub>  | .. 6 13 20 27  |
| MON  | .. 5 12 19 26  | .. 3 10 17 <sup>24</sup> / <sub>31</sub> | .. 7 14 21 28  |
| TUES | .. 6 13 20 27  | .. 4 11 18 25                            | 1 8 15 22 29   |
| WED  | .. 7 14 21 28  | .. 5 12 19 26                            | 2 9 16 23 30   |
| TH   | 1 8 15 22 29   | .. 6 13 20 27                            | 3 10 17 24 ... |
| FRI  | 2 9 16 23 30   | .. 7 14 21 28                            | 4 11 18 25 ... |
| SAT  | 3 10 17 24 ... | 1 8 15 22 29                             | 5 12 19 26 ... |

|      | JULY          | AUGUST         | SEPTEMBER      |
|------|---------------|----------------|----------------|
| SUN  | .. 4 11 18 25 | 1 8 15 22 29   | .. 5 12 19 26  |
| MON  | .. 5 12 19 26 | 2 9 16 23 30   | .. 6 13 20 27  |
| TUES | .. 6 13 20 27 | 3 10 17 24 31  | .. 7 14 21 28  |
| WED  | .. 7 14 21 28 | 4 11 18 25 ... | 1 8 15 22 29   |
| TH   | 1 8 15 22 29  | 5 12 19 26 ... | 2 9 16 23 30   |
| FRI  | 2 9 16 23 30  | 6 13 20 27 ... | 3 10 17 24 ... |
| SAT  | 3 10 17 24 31 | 7 14 21 28 ... | 4 11 18 25 ... |

|      | OCTOBER                                  | NOVEMBER       | DECEMBER       |
|------|------------------------------------------|----------------|----------------|
| SUN  | .. 3 10 17 <sup>24</sup> / <sub>31</sub> | .. 7 14 21 28  | .. 5 12 19 26  |
| MON  | .. 4 11 18 25                            | 1 8 15 22 29   | .. 6 13 20 27  |
| TUES | .. 5 12 19 26                            | 2 9 16 23 30   | .. 7 14 21 28  |
| WED  | .. 6 13 20 27                            | 3 10 17 24 ... | 1 8 15 22 29   |
| TH   | .. 7 14 21 28                            | 4 11 18 25 ... | 2 9 16 23 30   |
| FRI  | 1 8 15 22 29                             | 5 12 19 26 ... | 3 10 17 24 31  |
| SAT  | 2 9 16 23 30                             | 6 13 20 27 ... | 4 11 18 25 ... |

## The Evolution of Galvanized Iron

T 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 half-century which has 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.

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

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beautiful appearance. It's bright and it lasts!

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## ELEVENTH EDITION.

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 P.O. Box 52, Stock Exchange, Melbourne, or Box 196 G.P.O., Sydney.

Every Sheet of "ORB" IRON advertises itself.

## Galvanized Iron—Corrugated.

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

| Length. | Gauges. |    |    |    |     |     |
|---------|---------|----|----|----|-----|-----|
|         | 18      | 20 | 22 | 24 | 26  | 28  |
| 5 feet  | 42      | 53 | 66 | 83 | 116 | 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  |



BRANDS  
ALWAYS  
RELIABLE



Approximate weight per sheet in lbs. (based on above table) to nearest ¼lb.

| Gauge | 5 ft. | 6 ft. | 7 ft. | 8 ft. | 9 ft. | 10 ft. | 11 ft. | 12 ft.  |
|-------|-------|-------|-------|-------|-------|--------|--------|---------|
| 18    | 26½   | 32    | 37¼   | 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    | 9¾    | 11½   | 13½   | 15½   | 17¼   | 19¼    | 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.

# Galvanized Iron—Corrugated

Approximate price per sheet based on given rates per ton.

20 G.

| Price<br>per<br>Ton. | 106<br>Sheets.<br>5 ft. | 88<br>Sheets.<br>6 ft. | 76<br>Sheets.<br>7 ft. | 66<br>Sheets.<br>8 ft. | 58<br>Sheets.<br>9 ft. | 32<br>Sheets.<br>10 ft. |
|----------------------|-------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
| £40                  | 7/6½                    | 9/1                    | 10/6                   | 12/1½                  | 13/9½                  | 25/-                    |
| 41                   | 7/9                     | 9/4                    | 10/9½                  | 12/5                   | 14/1½                  | 25/7½                   |
| 42                   | 7/11                    | 9/6½                   | 11/0½                  | 12/8½                  | 14/5½                  | 26/3                    |
| 43                   | 8/1                     | 9/9                    | 11/4                   | 13/-                   | 14/10                  | 26/10½                  |
| 44                   | 8/3½                    | 10/-                   | 11/7                   | 13/4                   | 15/2                   | 27/6                    |
| 45                   | 8/6                     | 10/2½                  | 11/10                  | 13/7½                  | 15/6                   | 28/1½                   |
| 46                   | 8/8                     | 10/5½                  | 12/1                   | 13/11                  | 15/10                  | 28/9                    |
| 47                   | 8/10                    | 10/8                   | 12/4                   | 14/2½                  | 16/2½                  | 29/4½                   |
| 48                   | 9/0½                    | 10/11                  | 12/7                   | 14/6½                  | 16/6½                  | 30/-                    |
| 49                   | 9/3                     | 11/1½                  | 12/10½                 | 14/10                  | 16/10½                 | 30/7½                   |
| 50                   | 9/5                     | 11/4                   | 13/2                   | 15/2                   | 17/3                   | 31/3                    |
| 51                   | 9/7                     | 11/7                   | 13/5                   | 15/5½                  | 17/7                   | 31/10½                  |
| 52                   | 9/9½                    | 11/10                  | 13/8                   | 15/9                   | 17/11                  | 32/6                    |
| 53                   | 10/-                    | 12/0½                  | 13/11                  | 16/0½                  | 18/3                   | 33/1½                   |
| 54                   | 10/2½                   | 12/3                   | 14/2                   | 16/4                   | 18/7                   | 33/9                    |
| 55                   | 10/4                    | 12/6                   | 14/5½                  | 16/7½                  | 18/11                  | 34/4½                   |
| 56                   | 10/6½                   | 12/9                   | 14/8½                  | 16/11½                 | 19/3½                  | 35/-                    |
| 57                   | 10/9                    | 12/11½                 | 14/11½                 | 17/3                   | 19/7½                  | 35/7½                   |
| 58                   | 10/11                   | 13/2                   | 15/3                   | 17/7                   | 20/-                   | 36/3                    |
| 59                   | 11/1                    | 13/4½                  | 15/6                   | 17/10½                 | 20/4                   | 36/10½                  |
| 60                   | 11/3½                   | 13/7½                  | 15/9½                  | 18/2                   | 20/8                   | 37/6                    |
| 61                   | 11/6                    | 13/10                  | 16/0½                  | 18/5½                  | 21/-                   | 38/1½                   |
| 62                   | 11/8                    | 14/1                   | 16/3½                  | 18/9½                  | 21/4½                  | 38/9                    |
| 63                   | 11/10                   | 14/4                   | 16/6½                  | 19/0½                  | 21/8½                  | 39/4½                   |
| 64                   | 12/0½                   | 14/6½                  | 16/10                  | 19/4½                  | 22/-                   | 40/-                    |
| 65                   | 12/3                    | 14/9                   | 17/1                   | 19/8                   | 22/4½                  | 40/7½                   |
| 66                   | 12/5                    | 15/-                   | 17/4                   | 20/-                   | 22/8½                  | 41/3                    |
| 67                   | 12/7                    | 15/2½                  | 17/7                   | 20/3½                  | 23/1                   | 41/10½                  |
| 68                   | 12/9½                   | 15/5½                  | 17/10½                 | 20/7                   | 23/5                   | 42/6                    |
| 69                   | 13/-                    | 15/8                   | 18/1½                  | 20/10½                 | 23/9½                  | 43/1½                   |
| 70                   | 13/2                    | 15/11                  | 18/4                   | 21/2                   | 24/1½                  | 43/9                    |



# Galvanized Iron—Corrugated

Approximate price per sheet based on given rates per ton.

22 G.

| Price<br>per<br>Ton. | 132<br>Sheets.<br>5 ft. | 110<br>Sheets.<br>6 ft. | 94<br>Sheets.<br>7 ft. | 82<br>Sheets.<br>8 ft. | 72<br>Sheets.<br>9 ft. | 64<br>Sheets.<br>10 ft. |
|----------------------|-------------------------|-------------------------|------------------------|------------------------|------------------------|-------------------------|
| £40                  | 6/1                     | 7/3½                    | 8/6                    | 9/9                    | 11/1½                  | 12/6                    |
| 41                   | 6/2½                    | 7/5                     | 8/8½                   | 10/-                   | 11/4½                  | 12/10                   |
| 42                   | 6/4                     | 7/7½                    | 8/11                   | 10/3                   | 11/8                   | 13/1½                   |
| 43                   | 6/6                     | 7/10                    | 9/2                    | 10/6                   | 11/11                  | 13/5                    |
| 44                   | 6/8                     | 8/-                     | 9/4                    | 10/9                   | 12/2½                  | 13/9                    |
| 45                   | 6/10                    | 8/2                     | 9/7                    | 10/11½                 | 12/6                   | 14/1                    |
| 46                   | 7/-                     | 8/4                     | 9/9½                   | 11/2½                  | 12/9                   | 14/4½                   |
| 47                   | 7/1½                    | 8/6½                    | 10/-                   | 11/5½                  | 13/0½                  | 14/8                    |
| 48                   | 7/3                     | 8/8½                    | 10/2½                  | 11/8½                  | 13/4                   | 15/-                    |
| 49                   | 7/5                     | 8/11                    | 10/5                   | 11/11                  | 13/7½                  | 15/4                    |
| 50                   | 7/7                     | 9/1                     | 10/7½                  | 12/2                   | 13/10½                 | 15/7½                   |
| 51                   | 7/9                     | 9/3                     | 10/10                  | 12/5                   | 14/2                   | 15/11                   |
| 52                   | 7/10½                   | 9/5½                    | 11/1                   | 12/8                   | 14/5                   | 16/3                    |
| 53                   | 8/0½                    | 9/7½                    | 11/3                   | 12/11                  | 14/8½                  | 16/7                    |
| 54                   | 8/2                     | 9/10                    | 11/6                   | 13/2                   | 15/-                   | 16/10½                  |
| 55                   | 8/4                     | 10/-                    | 11/8½                  | 13/5                   | 15/3                   | 17/2                    |
| 56                   | 8/5½                    | 10/2                    | 11/11                  | 13/8                   | 15/6½                  | 17/6½                   |
| 57                   | 8/7½                    | 10/4                    | 12/1½                  | 13/11                  | 15/10                  | 17/9½                   |
| 58                   | 8/9½                    | 10/6½                   | 12/4                   | 14/1½                  | 16/1                   | 18/1½                   |
| 59                   | 8/11                    | 10/8½                   | 12/6½                  | 14/4½                  | 16/4½                  | 18/5                    |
| 60                   | 9/1                     | 10/11                   | 12/9                   | 14/7½                  | 16/8                   | 18/9                    |
| 61                   | 9/3                     | 11/1                    | 12/11½                 | 14/10½                 | 16/11                  | 19/0½                   |
| 62                   | 9/4½                    | 11/3                    | 13/2                   | 15/1½                  | 17/2½                  | 19/4½                   |
| 63                   | 9/6½                    | 11/5½                   | 13/5                   | 15/4½                  | 17/6                   | 19/8                    |
| 64                   | 9/8                     | 11/7½                   | 13/7½                  | 15/7                   | 17/9½                  | 20/-                    |
| 65                   | 9/10                    | 11/10                   | 13/10                  | 15/10                  | 18/0½                  | 20/4                    |
| 66                   | 10/-                    | 12/-                    | 14/0½                  | 16/1                   | 18/3½                  | 20/7½                   |
| 67                   | 10/1½                   | 12/2                    | 14/3                   | 16/4                   | 18/7                   | 20/11                   |
| 68                   | 10/3½                   | 12/4½                   | 14/5½                  | 16/7                   | 18/7½                  | 21/3                    |
| 69                   | 10/5½                   | 12/6½                   | 14/8                   | 16/10                  | 19/2                   | 21/7                    |
| 70                   | 10/7                    | 12/8½                   | 14/10½                 | 17/1½                  | 19/5                   | 21/11                   |

# Galvanized Iron—Corrugated

Price per sheet based (on weights and counts on page 8) on given rates per ton.

## 24 G.

| Price<br>per<br>Ton. | 166<br>Sheets.<br>5 ft. | 138<br>Sheets.<br>6 ft. | 119<br>Sheets.<br>7 ft. | 102<br>Sheets.<br>8 ft. | 90<br>Sheets.<br>9 ft. | 82<br>Sheets.<br>10 ft. |
|----------------------|-------------------------|-------------------------|-------------------------|-------------------------|------------------------|-------------------------|
| £40                  | 4/10                    | 5/9½                    | 6/9½                    | 7/10                    | 8/10½                  | 9/9½                    |
| 41                   | 4/11                    | 5/11                    | 6/11½                   | 8/0½                    | 9/1                    | 10/-                    |
| 42                   | 5/1                     | 6/1                     | 7/1½                    | 8/3                     | 9/4                    | 10/3                    |
| 43                   | 5/2                     | 6/3                     | 7/3½                    | 8/5                     | 9/7                    | 10/6                    |
| 44                   | 5/3½                    | 6/4½                    | 7/5½                    | 8/7½                    | 9/9                    | 10/9                    |
| 45                   | 5/5                     | 6/6                     | 7/7½                    | 8/10                    | 10/-                   | 11/-                    |
| 46                   | 5/6½                    | 6/8                     | 7/9½                    | 9/-                     | 10/2½                  | 11/3                    |
| 47                   | 5/8                     | 6/10                    | 7/11½                   | 9/2½                    | 10/5                   | 11/5½                   |
| 48                   | 5/9½                    | 6/11½                   | 8/1½                    | 9/5                     | 10/8                   | 11/8½                   |
| 49                   | 5/11                    | 7/1                     | 8/3½                    | 9/7                     | 10/10½                 | 11/11½                  |
| 50                   | 6/-                     | 7/3                     | 8/6                     | 9/9½                    | 11/1                   | 12/2                    |
| 51                   | 6/1½                    | 7/5                     | 8/7½                    | 10/-                    | 11/4                   | 12/5                    |
| 52                   | 6/3                     | 7/6½                    | 8/10                    | 10/2                    | 11/6½                  | 12/8                    |
| 53                   | 6/4½                    | 7/8                     | 9/-                     | 10/4½                   | 11/9                   | 12/11                   |
| 54                   | 6/6                     | 7/10                    | 9/2                     | 10/7                    | 12/-                   | 13/2                    |
| 55                   | 6/7½                    | 7/11½                   | 9/4                     | 10/9½                   | 12/2½                  | 13/5                    |
| 56                   | 6/9                     | 8/1½                    | 9/5                     | 10/11½                  | 12/5                   | 13/8                    |
| 57                   | 6/10½                   | 8/3                     | 9/7                     | 11/2                    | 12/8                   | 13/10½                  |
| 58                   | 7/-                     | 8/5                     | 9/9                     | 11/4½                   | 12/10½                 | 14/1½                   |
| 59                   | 7/1½                    | 8/6½                    | 9/11                    | 11/6½                   | 13/1                   | 14/4½                   |
| 60                   | 7/3                     | 8/8                     | 10/2                    | 11/9                    | 13/4                   | 14/7½                   |
| 61                   | 7/4½                    | 8/10                    | 10/4                    | 11/11½                  | 13/6½                  | 14/10½                  |
| 62                   | 7/6                     | 9/-                     | 10/6                    | 12/2                    | 13/9                   | 15/1½                   |
| 63                   | 7/7                     | 9/1½                    | 10/8                    | 12/4                    | 14/-                   | 15/4½                   |
| 64                   | 7/8½                    | 9/3                     | 10/10                   | 12/6½                   | 14/2½                  | 15/7                    |
| 65                   | 7/10                    | 9/5                     | 11/-                    | 12/9                    | 14/5                   | 15/10                   |
| 66                   | 7/11½                   | 9/6½                    | 11/2                    | 12/11½                  | 14/8                   | 16/1                    |
| 67                   | 8/1                     | 9/8½                    | 11/4*                   | 13/1½                   | 14/10½                 | 16/4                    |
| 68                   | 8/2½                    | 8/10                    | 11/6                    | 13/4                    | 15/1                   | 16/7                    |
| 69                   | 8/3½                    | 10/-                    | 11/8                    | 13/6½                   | 15/4                   | 16/10                   |
| 70                   | 8/5                     | 10/2                    | 11/10                   | 13/8½                   | 15/6½                  | 17/1                    |

# Galvanized Iron—Corrugated

Price per sheet based (on weights and counts on  
Page 8) on given rates per ton.

**26 G.**

| Price<br>per<br>Ton. |    |    | 236<br>Sheets<br>5 ft. | 196<br>Sheets<br>6 ft. | 168<br>Sheets<br>7 ft. | 146<br>Sheets<br>8 ft. | 130<br>Sheets<br>9 ft. | 116<br>Sheets<br>10 ft. |
|----------------------|----|----|------------------------|------------------------|------------------------|------------------------|------------------------|-------------------------|
| £                    | s. | d. |                        |                        |                        |                        |                        |                         |
| 40                   | 0  | 0  | 3/4½                   | 4/1                    | 4/9½                   | 5/6                    | 6/2                    | 6/10½                   |
| 41                   | 0  | 0  | 3/6                    | 4/2½                   | 4/10½                  | 5/7                    | 6/3½                   | 7/1                     |
| 42                   | 0  | 0  | 3/6½                   | 4/3½                   | 5/-                    | 5/9                    | 6/5½                   | 7/3                     |
| 43                   | 0  | 0  | 3/8                    | 4/5                    | 5/1½                   | 5/10½                  | 6/7                    | 7/5                     |
| 44                   | 0  | 0  | 3/9                    | 4/6                    | 5/3                    | 6/-                    | 6/9                    | 7/7                     |
| 45                   | 0  | 0  | 3/10                   | 4/7                    | 5/4                    | 6/2                    | 6/11                   | 7/9                     |
| 46                   | 0  | 0  | 3/11                   | 4/8½                   | 5/5½                   | 6/3½                   | 7/1                    | 7/11                    |
| 47                   | 0  | 0  | 4/-                    | 4/10                   | 5/7                    | 6/5                    | 7/3                    | 8/1                     |
| 48                   | 0  | 0  | 4/1                    | 4/11                   | 5/8½                   | 6/7                    | 7/4½                   | 8/3                     |
| 49                   | 0  | 0  | 4/2                    | 5/-                    | 5/10                   | 6/8½                   | 7/6                    | 8/5                     |
| 50                   | 0  | 0  | 4/3                    | 5/1½                   | 5/11½                  | 6/10                   | 7/8                    | 8/7                     |
| 51                   | 0  | 0  | 4/4                    | 5/2½                   | 6/1                    | 7/-                    | 7/10                   | 8/9½                    |
| 52                   | 0  | 0  | 4/5                    | 5/4                    | 6/2                    | 7/1                    | 8/-                    | 9/-                     |
| 53                   | 0  | 0  | 4/6                    | 5/5                    | 6/3½                   | 7/3                    | 8/2                    | 9/1½                    |
| 54                   | 0  | 0  | 4/7                    | 5/6½                   | 6/5                    | 7/5                    | 8/3½                   | 9/3½                    |
| 55                   | 0  | 0  | 4/8                    | 5/7½                   | 6/6½                   | 7/6                    | 8/5½                   | 9/6                     |
| 56                   | 0  | 0  | 4/9                    | 5/8½                   | 6/8                    | 7/8                    | 8/7                    | 9/8                     |
| 57                   | 0  | 0  | 4/10                   | 5/10                   | 6/9½                   | 7/9½                   | 8/9                    | 9/10                    |
| 58                   | 0  | 0  | 4/11                   | 5/11                   | 6/11                   | 7/11                   | 8/11                   | 10/-                    |
| 59                   | 0  | 0  | 5/-                    | 6/-                    | 7/-                    | 8/1                    | 9/1                    | 10/2                    |
| 60                   | 0  | 0  | 5/1                    | 6/2                    | 7/1½                   | 8/2½                   | 9/3                    | 10/4                    |
| 61                   | 0  | 0  | 5/2                    | 6/3                    | 7/3                    | 8/4                    | 9/5                    | 10/6                    |
| 62                   | 0  | 0  | 5/3                    | 6/4                    | 7/4½                   | 8/6                    | 9/6½                   | 10/8                    |
| 63                   | 0  | 0  | 5/4                    | 6/5                    | 7/6                    | 8/7½                   | 9/8                    | 10/10                   |
| 64                   | 0  | 0  | 5/5                    | 6/6                    | 7/7½                   | 8/9                    | 9/10                   | 11/-                    |
| 65                   | 0  | 0  | 5/6                    | 6/7½                   | 7/9                    | 8/11                   | 10/-                   | 11/2                    |
| 66                   | 0  | 0  | 5/7                    | 6/9                    | 7/10                   | 9/0½                   | 10/2                   | 11/4½                   |
| 67                   | 0  | 0  | 5/8                    | 6/10                   | 7/11                   | 9/2                    | 10/3½                  | 11/6½                   |
| 68                   | 0  | 0  | 5/9                    | 6/11                   | 8/-                    | 9/4                    | 10/5½                  | 11/9                    |
| 69                   | 0  | 0  | 5/10                   | 7/-                    | 8/2                    | 9/5½                   | 10/7                   | 11/11                   |
| 70                   | 0  | 0  | 5/11                   | 7/2                    | 8/4                    | 9/7                    | 10/9                   | 12/1                    |



and even quality, is a perfect Roofing Sheet.

# Galvanized Iron—Plain

Approximate price per sheet based on given rates per ton.

16 G

18 G

| Price<br>per<br>Ton. | 72<br>Sheets.<br>24 in. | 58<br>Sheets.<br>30 in. | 48<br>Sheets.<br>36 in. | 94<br>Sheets.<br>24 in. | 74<br>Sheets.<br>30 in. | 62<br>Sheets.<br>36 in. |
|----------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|-------------------------|
| £40                  | 11/1                    | 13/9½                   | 16/8                    | 8/6                     | 10/9½                   | 12/10½                  |
| 41                   | 11/4½                   | 14/1½                   | 17/1                    | 8/8½                    | 11/1                    | 13/2½                   |
| 42                   | 11/8                    | 14/5½                   | 17/6                    | 8/11                    | 11/4                    | 13/6                    |
| 43                   | 11/11                   | 14/9½                   | 17/11                   | 9/2                     | 11/7                    | 13/10                   |
| 44                   | 12/2½                   | 15/2                    | 18/4                    | 9/4                     | 11/10½                  | 14/2                    |
| 45                   | 12/6                    | 15/6                    | 18/9                    | 9/6½                    | 12/2                    | 14/6                    |
| 46                   | 12/9                    | 15/10                   | 19/2                    | 9/9½                    | 12/5                    | 14/10                   |
| 47                   | 13/-                    | 16/2                    | 19/7                    | 10/-                    | 12/8½                   | 15/2                    |
| 48                   | 13/4                    | 16/6                    | 20/-                    | 10/2½                   | 12/11½                  | 15/6                    |
| 49                   | 13/7                    | 16/10½                  | 20/5                    | 10/5                    | 13/3                    | 15/10                   |
| 50                   | 13/10½                  | 17/3                    | 20/10                   | 10/7½                   | 13/6                    | 16/1½                   |
| 51                   | 14/2                    | 17/7                    | 21/3                    | 10/10                   | 13/9                    | 16/5½                   |
| 52                   | 14/5                    | 17/11                   | 21/8                    | 11/0½                   | 14/-                    | 16/9½                   |
| 53                   | 14/8½                   | 18/3                    | 22/1                    | 11/3                    | 14/3½                   | 17/1                    |
| 54                   | 15/-                    | 18/7                    | 22/6                    | 11/6                    | 14/7                    | 17/5                    |
| 55                   | 15/3                    | 18/11                   | 22/11                   | 11/8½                   | 14/10                   | 17/9                    |
| 56                   | 15/6½                   | 19/4                    | 23/4                    | 11/11                   | 15/1½                   | 18/1                    |
| 57                   | 15/10                   | 19/8                    | 23/9                    | 12/1½                   | 15/4½                   | 18/5                    |
| 58                   | 16/1                    | 20/-                    | 24/2                    | 12/4                    | 15/8                    | 18/8½                   |
| 59                   | 16/4½                   | 20/4                    | 24/7                    | 12/6½                   | 15/11                   | 19/0½                   |
| 60                   | 16/8                    | 20/8                    | 25/-                    | 12/9                    | 16/2½                   | 19/4½                   |
| 61                   | 16/11                   | 21/-                    | 25/5                    | 12/11½                  | 16/6                    | 19/8                    |
| 62                   | 17/2½                   | 21/4½                   | 25/10                   | 13/2                    | 16/9                    | 20/-                    |
| 63                   | 17/6                    | 21/9                    | 26/3                    | 13/5                    | 17/-                    | 20/3½                   |
| 64                   | 17/9                    | 22/1                    | 26/8                    | 13/7                    | 17/3½                   | 20/7½                   |
| 65                   | 18/0½                   | 22/5                    | 27/1                    | 13/10                   | 17/7                    | 20/11½                  |
| 66                   | 18/4                    | 22/9                    | 27/6                    | 14/0½                   | 17/10                   | 21/3                    |
| 67                   | 18/7                    | 23/1                    | 27/11                   | 14/3                    | 18/1                    | 21/7                    |
| 68                   | 18/10½                  | 23/5                    | 28/4                    | 14/5½                   | 18/4½                   | 21/11                   |
| 69                   | 19/2                    | 23/10                   | 28/9                    | 14/8                    | 18/7½                   | 22/3                    |
| 70                   | 19/5                    | 24/2                    | 29/2                    | 14/10½                  | 18/11                   | 22/6                    |

# Galvanized Iron—Plain

Approximate price per sheet based on given rates per ton.

20 G

22 G

| Price<br>per<br>Ton. | 114<br>Sheets.<br>24 in. | 90<br>Sheets.<br>30 in. | 76<br>Sheets.<br>36 in. | 148<br>Sheets.<br>24 in. | 118<br>Sheets.<br>30 in. | 98<br>Sheets.<br>36 in. |
|----------------------|--------------------------|-------------------------|-------------------------|--------------------------|--------------------------|-------------------------|
| £40                  | 7/-                      | 8/10½                   | 10/6                    | 5/5                      | 6/9½                     | 8/2                     |
| 41                   | 7/2                      | 9/1                     | 10/9                    | 5/6½                     | 6/11½                    | 8/4½                    |
| 42                   | 7/4½                     | 9/3½                    | 11/0½                   | 5/8                      | 7/1½                     | 8/6½                    |
| 43                   | 7/6½                     | 9/6½                    | 11/4                    | 5/9½                     | 7/3½                     | 8/9                     |
| 44                   | 7/8½                     | 9/9                     | 11/8                    | 5/11                     | 7/5½                     | 8/11½                   |
| 45                   | 7/10½                    | 10/-                    | 11/10½                  | 6/1                      | 7/7½                     | 9/2                     |
| 46                   | 8/0½                     | 10/2½                   | 12/1                    | 6/2½                     | 7/9½                     | 9/4½                    |
| 47                   | 8/2                      | 10/5                    | 12/4                    | 6/4                      | 7/11½                    | 9/7                     |
| 48                   | 8/5                      | 10/7½                   | 12/7½                   | 6/6                      | 8/1½                     | 9/9½                    |
| 49                   | 8/7                      | 10/10½                  | 12/10½                  | 6/7½                     | 8/3½                     | 10/-                    |
| 50                   | 8/9                      | 11/1                    | 13/2                    | 6/9                      | 8/5½                     | 10/2½                   |
| 51                   | 8/11½                    | 11/4                    | 13/5                    | 6/11                     | 8/7½                     | 10/5                    |
| 52                   | 9/1½                     | 11/6½                   | 13/8                    | 7/0½                     | 8/10                     | 10/7                    |
| 53                   | 9/3½                     | 11/9                    | 13/11                   | 7/2                      | 9/-                      | 10/9½                   |
| 54                   | 9/5½                     | 11/11½                  | 14/2½                   | 7/3½                     | 9/2                      | 11/-                    |
| 55                   | 9/7½                     | 12/2                    | 14/5½                   | 7/5                      | 9/4                      | 11/2½                   |
| 56                   | 9/9½                     | 12/5                    | 14/9                    | 7/6½                     | 9/6                      | 11/5                    |
| 57                   | 10/-                     | 12/8                    | 15/-                    | 7/8½                     | 9/7½                     | 11/7½                   |
| 58                   | 10/2                     | 12/10½                  | 15/3                    | 7/10                     | 9/10                     | 11/10                   |
| 59                   | 10/4                     | 13/1                    | 15/6                    | 8/-                      | 10/-                     | 12/0½                   |
| 60                   | 10/6                     | 13/4                    | 15/9½                   | 8/1½                     | 10/2                     | 12/3                    |
| 61                   | 10/8                     | 13/6½                   | 16/0½                   | 8/3                      | 10/4                     | 12/5½                   |
| 62                   | 10/10½                   | 13/9                    | 16/4                    | 8/4½                     | 10/6                     | 12/8                    |
| 63                   | 11/0½                    | 13/11½                  | 16/7                    | 8/6                      | 10/8                     | 12/10½                  |
| 64                   | 11/2½                    | 14/2½                   | 16/10                   | 8/7½                     | 10/10                    | 13/1                    |
| 65                   | 11/4½                    | 14/5                    | 17/1                    | 8/9½                     | 11/-                     | 13/3½                   |
| 66                   | 11/6½                    | 14/8                    | 17/4½                   | 8/11                     | 11/2                     | 13/5½                   |
| 67                   | 11/8                     | 14/10½                  | 17/7½                   | 9/0½                     | 11/4                     | 13/8                    |
| 68                   | 11/10½                   | 15/1                    | 17/10½                  | 9/2                      | 11/6                     | 13/10½                  |
| 69                   | 12/1                     | 15/4                    | 18/1½                   | 9/3½                     | 11/8                     | 14/1                    |
| 70                   | 12/3                     | 15/6                    | 18/5                    | 9/5½                     | 11/10                    | 14/3½                   |

# Galvanized Iron—Plain.

Approximate price per sheet based on given rates  
per ton.

**24 G.**

**26 G.**

| Price<br>per<br>Ton. | 172<br>Sheets.<br>24 in. | 138<br>Sheets.<br>30 in. | 114<br>Sheets.<br>36 in. | 240<br>Sheets.<br>24 in. | 194<br>Sheets.<br>30 in. | 160<br>Sheets.<br>36 in. |
|----------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|--------------------------|
| £40                  | 4/8                      | 5/10                     | 7/0 $\frac{1}{2}$        | 3/4                      | 4/1 $\frac{1}{2}$        | 5/-                      |
| 41                   | 4/9                      | 5/11                     | 7/2                      | 3/5                      | 4/3                      | 5/1 $\frac{1}{2}$        |
| 42                   | 4/10 $\frac{1}{2}$       | 6/1                      | 7/4 $\frac{1}{2}$        | 3/6                      | 4/4                      | 5/3                      |
| 43                   | 5/-                      | 6/3                      | 7/6 $\frac{1}{2}$        | 3/7                      | 4/5                      | 5/4 $\frac{1}{2}$        |
| 44                   | 5/1                      | 6/4 $\frac{1}{2}$        | 7/8 $\frac{1}{2}$        | 3/8                      | 4/6 $\frac{1}{2}$        | 5/6                      |
| 45                   | 5/3                      | 6/6                      | 7/11                     | 3/9                      | 4/7 $\frac{1}{2}$        | 5/7 $\frac{1}{2}$        |
| 46                   | 5/4                      | 6/8                      | 8/1                      | 3/10                     | 4/9                      | 5/9                      |
| 47                   | 5/5 $\frac{1}{2}$        | 6/10                     | 8/3                      | 3/11                     | 4/10                     | 5/10 $\frac{1}{2}$       |
| 48                   | 5/7                      | 6/11 $\frac{1}{2}$       | 8/5                      | 4/-                      | 4/11                     | 6/-                      |
| 49                   | 5/8                      | 7/1                      | 8/7                      | 4/1                      | 5/0 $\frac{1}{2}$        | 6/1 $\frac{1}{2}$        |
| 50                   | 5/10                     | 7/3                      | 8/9                      | 4/2                      | 5/2                      | 6/3                      |
| 51                   | 5/11                     | 7/4 $\frac{1}{2}$        | 8/11                     | 4/3                      | 5/3                      | 6/4 $\frac{1}{2}$        |
| 52                   | 6/0 $\frac{1}{2}$        | 7/6 $\frac{1}{2}$        | 9/1                      | 4/4                      | 5/4                      | 6/6                      |
| 53                   | 6/2                      | 7/8                      | 9/3 $\frac{1}{2}$        | 4/5                      | 5/5 $\frac{1}{2}$        | 6/7 $\frac{1}{2}$        |
| 54                   | 6/3                      | 7/10                     | 9/5 $\frac{1}{2}$        | 4/6                      | 5/7                      | 6/9                      |
| 55                   | 6/5                      | 7/11 $\frac{1}{2}$       | 9/8                      | 4/7                      | 5/8                      | 6/10 $\frac{1}{2}$       |
| 56                   | 6/6                      | 8/1 $\frac{1}{2}$        | 9/10                     | 4/8                      | 5/9                      | 7/-                      |
| 57                   | 6/7 $\frac{1}{2}$        | 8/3                      | 10/-                     | 4/9                      | 5/10 $\frac{1}{2}$       | 7/1 $\frac{1}{2}$        |
| 58                   | 6/9                      | 8/4 $\frac{1}{2}$        | 10/2                     | 4/10                     | 5/11 $\frac{1}{2}$       | 7/3                      |
| 59                   | 6/11                     | 8/6 $\frac{1}{2}$        | 10/4                     | 4/11                     | 6/1                      | 7/4 $\frac{1}{2}$        |
| 60                   | 7/-                      | 8/8                      | 10/6                     | 5/-                      | 6/2                      | 7/6                      |
| 61                   | 7/1                      | 8/10                     | 10/8                     | 5/1                      | 6/3                      | 7/7 $\frac{1}{2}$        |
| 62                   | 7/2 $\frac{1}{2}$        | 8/11 $\frac{1}{2}$       | 10/10 $\frac{1}{2}$      | 5/2                      | 6/4 $\frac{1}{2}$        | 7/9                      |
| 63                   | 7/4                      | 9/1 $\frac{1}{2}$        | 11/0 $\frac{1}{2}$       | 5/3                      | 6/6                      | 7/10 $\frac{1}{2}$       |
| 64                   | 7/5 $\frac{1}{2}$        | 9/3                      | 11/2 $\frac{1}{2}$       | 5/4                      | 6/7                      | 8/-                      |
| 65                   | 7/6 $\frac{1}{2}$        | 9/5                      | 11/5                     | 5/5                      | 6/8 $\frac{1}{2}$        | 8/1 $\frac{1}{2}$        |
| 66                   | 7/8                      | 9/6 $\frac{1}{2}$        | 11/7                     | 5/6                      | 6/9 $\frac{1}{2}$        | 8/3                      |
| 67                   | 7/9 $\frac{1}{2}$        | 9/8 $\frac{1}{2}$        | 11/9                     | 5/7                      | 6/11                     | 8/4 $\frac{1}{2}$        |
| 68                   | 7/11                     | 9/10                     | 11/11                    | 5/8                      | 7/-                      | 8/6                      |
| 69                   | 8/-                      | 10/-                     | 12/1                     | 5/9                      | 7/1                      | 8/7 $\frac{1}{2}$        |
| 70                   | 8/1 $\frac{1}{2}$        | 10/2                     | 12/3                     | 5/10                     | 7/2 $\frac{1}{2}$        | 8/9                      |



**“ORB” IRON.** You know it at once by its

# Galvanized Iron—Plain

Approximate price per sheet based on given rates  
per ton.

**28 G.**

**30 G.**

| Price<br>per<br>Ton. | 280<br>Sheets. | 224<br>Sheets. | 184<br>Sheets. | 320<br>Sheets. | 260<br>Sheets. | 224<br>Sheets. |
|----------------------|----------------|----------------|----------------|----------------|----------------|----------------|
|                      | 24 in.         | 30 in.         | 36 in.         | 24 in.         | 30 in.         | 36 in.         |
| £40                  | 2/10½          | 3/7            | 4/4½           | 2/6            | 3/1            | 3/7            |
| 41                   | 2/11           | 3/8            | 4/5            | 2/6½           | 3/2            | 3/8            |
| 42                   | 3/-            | 3/9            | 4/7            | 2/7½           | 3/3            | 3/9            |
| 43                   | 3/1            | 3/10           | 4/8            | 2/8            | 3/3½           | 3/10           |
| 44                   | 3/2            | 3/11           | 4/9½           | 2/9            | 3/4½           | 3/11           |
| 45                   | 3/2½           | 4/-            | 4/10           | 2/9½           | 3/5½           | 4/-            |
| 46                   | 3/3½           | 4/1            | 5/-            | 2/10½          | 3/6½           | 4/1            |
| 47                   | 3/4            | 4/2            | 5/1            | 2/11           | 3/7            | 4/2½           |
| 48                   | 3/5            | 4/3½           | 5/2½           | 3/-            | 3/8            | 4/3½           |
| 49                   | 3/6            | 4/4½           | 5/4            | 3/0½           | 3/9            | 4/4½           |
| 50                   | 3/7            | 4/5½           | 5/5            | 3/1½           | 3/10           | 4/5½           |
| 51                   | 3/8            | 4/6½           | 5/6½           | 3/2            | 3/11           | 4/6½           |
| 52                   | 3/8½           | 4/7½           | 5/8            | 3/3            | 4/-            | 4/7½           |
| 53                   | 3/9            | 4/9            | 5/9            | 3/3½           | 4/1            | 4/8½           |
| 54                   | 3/10           | 4/10           | 5/10½          | 3/4½           | 4/2            | 4/9½           |
| 55                   | 3/11           | 4/11           | 6/-            | 3/5            | 4/2½           | 4/11           |
| 56                   | 4/-            | 5/-            | 6/1½           | 3/6            | 4/3½           | 5/-            |
| 57                   | 4/0½           | 5/1            | 6/2½           | 3/6½           | 4/4½           | 5/1            |
| 58                   | 4/1½           | 5/2            | 6/3            | 3/7½           | 4/6            | 5/2            |
| 59                   | 4/2½           | 5/3            | 6/4½           | 3/8            | 4/7            | 5/3            |
| 60                   | 4/3½           | 5/4            | 6/6            | 3/9            | 4/7½           | 5/4            |
| 61                   | 4/4            | 5/5            | 6/7½           | 3/9½           | 4/8            | 5/5            |
| 62                   | 4/5            | 5/6            | 6/9            | 3/10½          | 4/9            | 5/6            |
| 63                   | 4/6            | 5/7            | 6/10           | 3/11           | 4/10           | 5/7½           |
| 64                   | 4/6½           | 5/8            | 6/11½          | 4/-            | 4/11           | 5/8½           |
| 65                   | 4/7½           | 5/9½           | 7/1            | 4/0½           | 5/-            | 5/9½           |
| 66                   | 4/8½           | 5/10           | 7/2½           | 4/1½           | 5/1            | 5/10½          |
| 67                   | 4/9½           | 5/11½          | 7/4            | 4/2            | 5/2            | 6/-            |
| 68                   | 4/10           | 6/0½           | 7/5            | 4/3            | 5/3            | 6/1            |
| 69                   | 4/11           | 6/1            | 7/6            | 4/3½           | 5/3½           | 6/2            |
| 70                   | 5/-            | 6/3            | 7/7            | 4/4½           | 5/4½           | 6/3            |

beautiful appearance. It's bright and it lasts!

# Galvanized Iron—Plain

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

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

| Gauge | Width. |        |          | Gauge | Width.          |                 |                      |
|-------|--------|--------|----------|-------|-----------------|-----------------|----------------------|
|       | 24 in. | 30 in. | 36 in.   |       | 24 in.          | 30 in.          | 36 in.               |
| 16    | 36     | 29     | 24 shts. | 16    | 31              | $38\frac{3}{4}$ | $46\frac{2}{3}$ lbs. |
| 18    | 47     | 37     | 31 "     | 18    | 24              | $30\frac{1}{4}$ | 36 "                 |
| 20    | 57     | 45     | 38 "     | 20    | $19\frac{1}{2}$ | 25              | $29\frac{1}{2}$ "    |
| 22    | 74     | 59     | 49 "     | 22    | 15              | 19              | 23 "                 |
| 24    | 86     | 69     | 57 "     | 24    | 13              | $16\frac{1}{4}$ | $19\frac{3}{8}$ "    |
| 26    | 120    | 97     | 80 "     | 26    | $9\frac{1}{3}$  | $11\frac{1}{2}$ | 14 "                 |
| 28    | 140    | 112    | 92 "     | 28    | 8               | 10              | $12\frac{1}{4}$ "    |
| 30    | 160    | 130    | 112 "    | 30    | 7               | $8\frac{3}{4}$  | 10 "                 |

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



"QUEEN'S HEAD"

**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 Ironworkers everywhere. Obtainable also in Special sizes other than above, to order.

## LYSAGHT'S "Fleur de Lis"

Plain Iron is largely used for the manufacture of the lighter classes of guttering, down-pipe ridging, &c., its smoothness of surface and freedom from buckle being conspicuous features.



"FLEUR-DE-LIS"

# LYSAGHT'S GALVANIZED IRON used throughout

## Iron—Black Sheet.

### Weight and Thickness.

| Gauge | Lbs. per square foot | Thick-ness inches | Thick-ness mm | Gauge | Lbs. per square foot | Thick-ness inches | Thick-ness 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 in One Ton of Black Sheet Iron is as follows:—

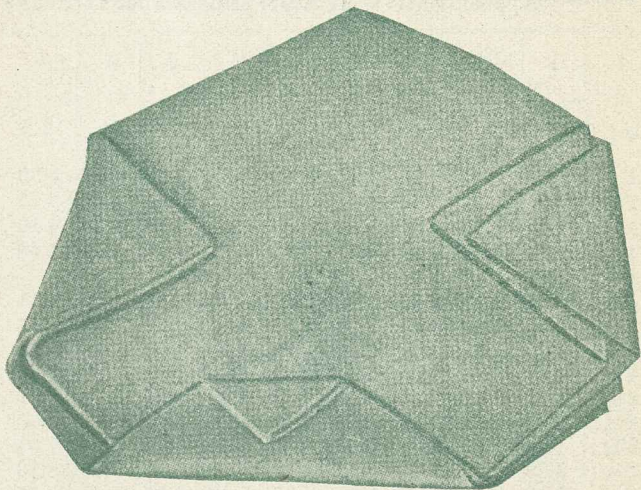
| Gauge | WIDTH |       |       |
|-------|-------|-------|-------|
|       | 24in. | 30in. | 36in. |
| 10g   | 37    | 29    | 24    |
| 12    | 47    | 37    | 31    |
| 14    | 59    | 47    | 39    |
| 16    | 74    | 59    | 49    |
| 18    | 94    | 75    | 62    |
| 20    | 119   | 95    | 79    |
| 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.



the world, universally admitted to be "The Best"

## Lysaght's Black Steel Sheets



1. **Charcoal Tenax, C.R.C.A.**—Very highest quality and finish. For purposes where a sheet of exceptional finish is required. It is sometimes used as a substitute for Copper.
2. **Queen's Head T. Crown, C.R.C.A.**—A specially prepared high-grade sheet, suitable for all working up purposes.
3. **Southern Cross, C.R.C.A.**—An excellent quality of sheet for the majority of purposes—cold rolled, close annealed, and specially flattened. Every sheet true to size and gauge. Guaranteed to seam and bend both ways of grain.

All the above qualities are obtainable in all gauges from 3/16 to 30-g and in widths up to 56 inches.

Every Sheet of "ORB" IRON advertises itself.

## Bar Iron—Flat.

Approximate Weight per Lineal Foot.

|                 | $\frac{1}{4}$ | 5/16 | $\frac{3}{8}$ | 7/16 | $\frac{1}{2}$ | $\frac{5}{8}$ | $\frac{3}{4}$ | $\frac{7}{8}$ | 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 $\frac{1}{8}$ | .94           | 1.17 | 1.40          | 1.64 | 1.87          | 2.34          | 2.81          | 3.28          | 3.75  |
| 1 $\frac{1}{4}$ | 1.04          | 1.30 | 1.56          | 1.82 | 2.08          | 2.60          | 3.12          | 3.64          | 4.16  |
| 1 $\frac{3}{8}$ | 1.14          | 1.43 | 1.71          | 2.   | 2.29          | 2.86          | 3.43          | 4.01          | 4.58  |
| 1 $\frac{1}{2}$ | 1.25          | 1.56 | 1.87          | 2.18 | 2.50          | 3.12          | 3.75          | 4.37          | 5.    |
| 1 $\frac{5}{8}$ | 1.35          | 1.69 | 2.03          | 2.36 | 2.70          | 3.38          | 4.06          | 4.73          | 5.41  |
| 1 $\frac{3}{4}$ | 1.45          | 1.82 | 2.18          | 2.55 | 2.91          | 3.64          | 4.37          | 5.10          | 5.83  |
| 1 $\frac{7}{8}$ | 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 $\frac{1}{8}$ | 1.77          | 2.21 | 2.65          | 3.09 | 3.54          | 4.42          | 5.31          | 6.19          | 7.08  |
| 2 $\frac{1}{4}$ | 1.87          | 2.34 | 2.81          | 3.28 | 3.75          | 4.68          | 5.62          | 6.56          | 7.50  |
| 2 $\frac{3}{8}$ | 1.97          | 2.47 | 2.96          | 3.46 | 3.95          | 4.94          | 5.93          | 6.92          | 7.91  |
| 2 $\frac{1}{2}$ | 2.08          | 2.60 | 3.12          | 3.64 | 4.16          | 5.20          | 6.25          | 7.29          | 8.33  |
| 2 $\frac{5}{8}$ | 2.18          | 2.73 | 3.28          | 3.82 | 4.37          | 5.46          | 6.56          | 7.65          | 8.75  |
| 2 $\frac{3}{4}$ | 2.29          | 2.86 | 3.43          | 4.01 | 4.58          | 5.72          | 6.87          | 8.02          | 9.16  |
| 2 $\frac{7}{8}$ | 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 $\frac{1}{4}$ | 2.70          | 3.38 | 4.06          | 4.73 | 5.41          | 6.77          | 8.12          | 9.47          | 10.83 |
| 3 $\frac{1}{2}$ | 2.91          | 3.64 | 4.37          | 5.10 | 5.83          | 7.29          | 8.75          | 10.20         | 11.66 |
| 3 $\frac{3}{4}$ | 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 $\frac{1}{4}$ | 3.54          | 4.42 | 5.31          | 6.19 | 7.08          | 8.85          | 10.62         | 12.39         | 14.16 |
| 4 $\frac{1}{2}$ | 3.75          | 4.68 | 5.62          | 6.56 | 7.50          | 9.37          | 11.25         | 13.12         | 15.   |
| 4 $\frac{3}{4}$ | 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 $\frac{1}{4}$ | 4.37          | 5.46 | 6.56          | 7.65 | 8.75          | 10.93         | 13.12         | 15.31         | 17.50 |
| 5 $\frac{1}{2}$ | 4.58          | 5.72 | 6.87          | 8.02 | 9.16          | 11.45         | 13.75         | 16.04         | 18.33 |
| 5 $\frac{3}{4}$ | 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.

# Weight of Round & Square Iron & Steel.

| Size.<br>(dia.) | IRON.                              |                                     | STEEL.                             |                                     |
|-----------------|------------------------------------|-------------------------------------|------------------------------------|-------------------------------------|
|                 | Round<br>Weight per<br>lineal foot | Square<br>Weight per<br>lineal foot | Round<br>Weight per<br>lineal foot | Square<br>Weight per<br>lineal foot |
| 3/16            | 0.092                              | 0.117                               | 0.094                              | 0.120                               |
| 1/4             | 0.164                              | 0.208                               | 0.157                              | 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                              |



TABLE

**Shewing Weight in Pounds**

OF VARIOUS AREAS OF

**Iron Plates of Different Thicknesses**

| Area in Feet. | Thickness in Fractions of an Inch. |               |                |               |                |               |               |               |               |      |
|---------------|------------------------------------|---------------|----------------|---------------|----------------|---------------|---------------|---------------|---------------|------|
|               | $\frac{1}{8}$                      | $\frac{1}{4}$ | $\frac{5}{16}$ | $\frac{3}{8}$ | $\frac{7}{16}$ | $\frac{1}{2}$ | $\frac{5}{8}$ | $\frac{3}{4}$ | $\frac{7}{8}$ | 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 |

# STEEL JOISTS.—British Standard Sections.

| Dimensions in Inches. |    |      |       |  | Weight<br>lbs. per<br>foot-run | Safe Load Tons distributed for Spans of |        |        |        |        | C=Thickness of Web.<br>D=Thickness of Flange |   |
|-----------------------|----|------|-------|--|--------------------------------|-----------------------------------------|--------|--------|--------|--------|----------------------------------------------|---|
| 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    | —      | —      | —                                            | — |
| 4½                    | 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    | —      | —      | —                                            | — |
| 5                     | 4½ | 0.29 | 0.448 |  | 18.0                           | 7.6                                     | 4.5    | 3.8    | 1.7    | —      | —                                            | — |
| 6                     | 3  | 0.26 | 0.348 |  | 12.0                           | 5.6                                     | 3.4    | 2.8    | 2.8    | —      | —                                            | — |
| 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                     | 6  | 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.

# Various Metals.

The Comparative Weight of a Superficial Foot.

| Thickness<br>in inches. | Wrought<br>Iron. | Cast<br>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   | 4.785  |
| 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 |



# Zinc Sheets.

| Gauge No. | Approximate weight<br>per sq. ft. | Thousandths of an<br>inch. | 7' x 2' 8"         |                            | 7' x 3'            |                            | 8' x 3'            |                            | Nearest Wire Gauge. |
|-----------|-----------------------------------|----------------------------|--------------------|----------------------------|--------------------|----------------------------|--------------------|----------------------------|---------------------|
|           |                                   |                            | Approximate        |                            | Approximate        |                            | Approximate        |                            |                     |
|           |                                   |                            | Weight<br>per sht. | No. of shts.<br>in 10 cwt. | Weight<br>per sht. | No. of shts.<br>in 10 cwt. | Weight<br>per sht. | No. of shts.<br>in 10 cwt. |                     |
|           | oz.                               |                            | lb. oz.            |                            | lb. oz.            |                            | lb. oz.            |                            |                     |
| 1         | 2 $\frac{1}{4}$                   | .004                       | 2 10               | 427                        | —                  | —                          | —                  | —                          | 41                  |
| 2         | 3 $\frac{1}{4}$                   | .006                       | 3 13               | 294                        | —                  | —                          | —                  | —                          | 38                  |
| 3         | 3 $\frac{3}{4}$                   | .007                       | —                  | —                          | 4 15               | 227                        | —                  | —                          | 37                  |
| 4         | 4 $\frac{3}{4}$                   | .008                       | —                  | —                          | 6 4                | 180                        | —                  | —                          | 34                  |
| 5         | 5 $\frac{3}{4}$                   | .010                       | —                  | —                          | 7 9                | 148                        | —                  | —                          | 31                  |
| 6         | 6 $\frac{3}{4}$                   | .011                       | 7 14               | 142                        | 8 14               | 126                        | 10 2               | 111                        | 30                  |
| 7         | 7 $\frac{3}{4}$                   | .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        | 11 $\frac{1}{2}$                  | .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                  |

# Tin Plates.

The Principal Denominations and Sizes with their Equivalent Thicknesses in Millimetres.

| Strength<br>or Gauge. | Size.                 | Sheets<br>per Box. | Weight<br>per Box. | Thicknesses<br>of Sheets. |        |
|-----------------------|-----------------------|--------------------|--------------------|---------------------------|--------|
|                       | in.                   |                    | lb.                | mm.                       | in.    |
| IC                    | 14 x 10               | 225                | 108                | 0.313                     | 0.0123 |
| IX                    | ”                     | ”                  | 136                | 0.395                     | 0.0155 |
| IXX                   | ”                     | ”                  | 156                | 0.453                     | 0.0179 |
| IXXX                  | ”                     | ”                  | 176                | 0.511                     | 0.0201 |
| IC                    | 20 x 14               | 112                | 108                | 0.315                     | 0.0123 |
| ICL                   | ”                     | ”                  | 100                | 0.292                     | 0.0114 |
| ICL                   | ”                     | ”                  | 95                 | 0.277                     | 0.0109 |
| ICL                   | ”                     | ”                  | 90                 | 0.262                     | 0.0103 |
| ICL                   | ”                     | ”                  | 85                 | 0.248                     | 0.0097 |
| ICL                   | ”                     | ”                  | 80                 | 0.233                     | 0.0091 |
| IX                    | ”                     | ”                  | 136                | 0.396                     | 0.0155 |
| IXX                   | ”                     | ”                  | 156                | 0.455                     | 0.0179 |
| IXXX                  | ”                     | ”                  | 176                | 0.513                     | 0.0201 |
| IXXXX                 | ”                     | ”                  | 196                | 0.571                     | 0.0223 |
| IC                    | 28 x 20               | ”                  | 216                | 0.315                     | 0.0124 |
| IX                    | ”                     | ”                  | 272                | 0.396                     | 0.0156 |
| IC                    | ”                     | 56                 | 108                | 0.315                     | 0.0123 |
| IX                    | ”                     | ”                  | 136                | 0.396                     | 0.0155 |
| IC                    | 20 x 10               | 225                | 154                | 0.313                     | 0.0123 |
| IX                    | ”                     | ”                  | 194                | 0.394                     | 0.0155 |
| IC                    | 14 x 18 $\frac{3}{4}$ | 124                | 110                | 0.309                     | 0.0122 |
| IC                    | 14 x 19 $\frac{1}{4}$ | 120                | 110                | 0.311                     | 0.0122 |
| IC                    | 30 x 21               | 112                | 243                | 0.315                     | 0.0124 |
| CL                    | ”                     | ”                  | 224                | 0.290                     | 0.0114 |
| CLL                   | ”                     | ”                  | 190                | 0.246                     | 0.0097 |
| CLLL                  | ”                     | ”                  | 176                | 0.228                     | 0.0090 |
| CLLLL                 | ”                     | ”                  | 160                | 0.207                     | 0.0081 |
| DC                    | 17 x 12 $\frac{1}{2}$ | 100                | 94                 | 0.404                     | 0.0160 |
| DX                    | ”                     | ”                  | 122                | 0.525                     | 0.0206 |
| DXX                   | ”                     | ”                  | 143                | 0.615                     | 0.0242 |
| DXXX                  | ”                     | ”                  | 164                | 0.706                     | 0.0278 |
| DXXXX                 | ”                     | ”                  | 185                | 0.796                     | 0.0313 |

# Tin Plates.

Thickness of Tinplates by Gauge.

| Tinplate. |     |     | Gauge.  | Tinplate. |     |  | Gauge.  |
|-----------|-----|-----|---------|-----------|-----|--|---------|
| IC        | ... | ... | 30      | DXXXX     | ... |  | 22      |
| IX        | ... | ... | 28      | DXXXXX    | ... |  | 21      |
| IXX       | ... | ... | 27      | DXXXXXX   | ... |  | 20      |
| IXXX      | ... | ... | 26      | S D C     | ... |  | 28 full |
| IXXXX     | ... | ... | 25      | S DX      | ... |  | 25 easy |
| IXXXXX    | ... | ... | 24      | S DXX     | ... |  | 25 full |
| IXXXXXX   | ... | ... | 22 easy | S DXXX    | ... |  | 24      |
| DC        | ... | ... | 28 full | S DXXXX   | ... |  | 24 full |
| DX        | ... | ... | 26      | S DXXXXX  | ... |  | 22 easy |
| DXX       | ... | ... | 25      | S DXXXXXX | ... |  | 22 full |
| DXXX      | ... | ... | 24      |           |     |  |         |

## 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  |           |    |    |    |



## 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.

## Sheet Copper—Weights of.

| No. | Per Square Foot. | No. | Per Square Foot. |
|-----|------------------|-----|------------------|
| 1   | 14 lbs. 0 oz.    | 16  | 3 lbs. 0 oz.     |
| 2   | 13 „ 0 „         | 17  | 2 „ 12 „         |
| 3   | 12 „ 0 „         | 18  | 2 „ 4 „          |
| 4   | 11 „ 0 „         | 19  | 2 „ 0 „          |
| 5   | 10 „ 2 „         | 20  | 1 „ 12 „         |
| 6   | 9 „ 8 „          | 21  | 1 „ 8 „          |
| 7   | 8 „ 8 „          | 22  | 1 „ 6 „          |
| 8   | 7 „ 10 „         | 23  | 1 „ 3 „          |
| 9   | 7 „ 0 „          | 24  | 1 „ 0 „          |
| 10  | 6 „ 4 „          | 25  | 0 „ 14 „         |
| 11  | 5 „ 8 „          | 26  | 0 „ 13 „         |
| 12  | 5 „ 0 „          | 27  | 0 „ 11½ „        |
| 13  | 4 „ 8 „          | 28  | 0 „ 10 „         |
| 14  | 4 „ 0 „          | 29  | 0 „ 9 „          |
| 15  | 3 „ 8 „          | 30  | 0 „ 8 „          |

## Gauges of Copper Sheets.

48 in. x 24 in. x 8 lbs. = 24 W G

|   |      |      |      |
|---|------|------|------|
| „ | 10 „ | 23 „ | full |
| „ | 12 „ | 21 „ | „    |
| „ | 14 „ | 20 „ | „    |
| „ | 16 „ | 19 „ | „    |
| „ | 18 „ | 18 „ | „    |
| „ | 24 „ | 16 „ | „    |

**Imitations. There is nothing "just as good"**

## ALUMINIUM.

| Gauge. | Weight per square foot in lbs. | Weight of Sheet 24 x 48 in., in lbs. |
|--------|--------------------------------|--------------------------------------|
| 16     | .875                           | 7                                    |
| 18     | .656                           | 5 $\frac{1}{4}$                      |
| 20     | .5                             | 4                                    |
| 22     | .375                           | 3                                    |

A cube foot of Aluminium weighs 166 lbs.

## 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.

## FLUXES—For Soldering.

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

## Fusing Temperature of Metals.

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

# 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 1½ lb.
- 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.

Example:—Circumference 20 ft., height 6 ft.

20 ft. x 20 ft. x 3 ft. 1,200 gals. approximate capacity.

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

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.



## Useful Information for Plumbers and Tankmakers.

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

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

**ALL ROUND THE WORLD you will find**

## Weight per Lineal Foot of Seamless Drawn Copper Tubes.

| Imp.<br>St'd<br>Gauge.    | Thickness of Copper.               |       |       |       |       |       |       |       |
|---------------------------|------------------------------------|-------|-------|-------|-------|-------|-------|-------|
|                           | 6                                  | 8     | 10    | 12    | 14    | 16    | 18    | 20    |
| Inches                    | 0.192                              | 0.160 | 0.128 | 0.104 | 0.080 | 0.064 | 0.048 | 0.036 |
| Inside<br>Diam.<br>Inches | Weight of a Lineal Foot in Pounds. |       |       |       |       |       |       |       |
|                           |                                    |       |       |       |       |       |       |       |
| $\frac{1}{4}$             | 1.03                               | 0.79  | 0.58  | 0.44  | 0.32  | 0.24  | 0.17  | 0.12  |
| $\frac{3}{8}$             | 1.32                               | 1.04  | 0.78  | 0.60  | 0.44  | 0.34  | 0.25  | 0.18  |
| $\frac{1}{2}$             | 1.61                               | 1.28  | 0.97  | 0.76  | 0.56  | 0.44  | 0.32  | 0.23  |
| $\frac{5}{8}$             | 1.90                               | 1.52  | 1.17  | 0.92  | 0.68  | 0.53  | 0.39  | 0.29  |
| $\frac{3}{4}$             | 2.19                               | 1.76  | 1.36  | 1.07  | 0.80  | 0.63  | 0.46  | 0.34  |
| $\frac{7}{8}$             | 2.48                               | 2.00  | 1.55  | 1.23  | 0.92  | 0.73  | 0.54  | 0.40  |
| 1                         | 2.77                               | 2.24  | 1.75  | 1.39  | 1.04  | 0.82  | 0.61  | 0.45  |
| $1\frac{1}{8}$            | 3.06                               | 2.49  | 1.94  | 1.55  | 1.17  | 0.92  | 0.68  | 0.51  |
| $1\frac{1}{4}$            | 3.35                               | 2.73  | 2.13  | 1.70  | 1.29  | 1.02  | 0.75  | 0.56  |
| $1\frac{3}{8}$            | 3.64                               | 2.97  | 2.33  | 1.86  | 1.41  | 1.11  | 0.83  | 0.61  |
| $1\frac{1}{2}$            | 3.93                               | 3.21  | 2.52  | 2.02  | 1.53  | 1.21  | 0.90  | 0.67  |
| $1\frac{5}{8}$            | 4.22                               | 3.45  | 2.71  | 2.17  | 1.65  | 1.31  | 0.97  | 0.72  |
| $1\frac{3}{4}$            | 4.51                               | 3.70  | 2.91  | 2.33  | 1.77  | 1.40  | 1.04  | 0.78  |
| $1\frac{7}{8}$            | 4.80                               | 3.94  | 3.10  | 2.49  | 1.89  | 1.50  | 1.12  | 0.83  |
| 2                         | 5.09                               | 4.18  | 3.29  | 2.65  | 2.01  | 1.60  | 1.19  | 0.89  |
| $2\frac{1}{8}$            | 5.38                               | 4.42  | 3.49  | 2.80  | 2.13  | 1.69  | 1.26  | 0.94  |
| $2\frac{1}{4}$            | 5.67                               | 4.66  | 3.68  | 2.96  | 2.25  | 1.79  | 1.33  | 1.00  |
| $2\frac{3}{8}$            | 5.96                               | 4.91  | 3.88  | 3.12  | 2.38  | 1.89  | 1.41  | 1.05  |
| $2\frac{1}{2}$            | 6.25                               | 5.15  | 4.07  | 3.28  | 2.50  | 1.98  | 1.48  | 1.10  |
| $2\frac{3}{4}$            | 6.83                               | 5.63  | 4.46  | 3.59  | 2.74  | 2.18  | 1.62  | 1.21  |

To ascertain the weight of a Seamless Tube of other metal, multiply the weight of a similar Copper Tube by 0.9626 for Brass (70 & 30 alloy)—by 0.86 for Wrought Iron—by 0.81 for Cast Iron—or by 1.28 for Lead.

The above weights are theoretically correct, but in practice a slight deviation from the theoretical weights must be expected.

# Lead Pipe—Water and Gas.

| Inside<br>Dia. | Strength. | Weight<br>per<br>Yard. | Average<br>Length | Inside<br>Dia. | Strength. | Weight<br>per<br>Yard. | Average<br>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 Gas, Water, and Steam Tubes

## TUBES

| Internal Diam. in inches.                           | $\frac{1}{8}$ & $\frac{1}{4}$ | $\frac{3}{8}$ | $\frac{1}{2}$         | $\frac{3}{4}$ | 1                 | $1\frac{1}{4}$    | $1\frac{1}{2}$ | $1\frac{3}{4}$ | 2   | $2\frac{1}{4}$ | $2\frac{1}{2}$ | 3    | $3\frac{1}{2}$ | 4    | $4\frac{1}{2}$ | 5    | 5 $\frac{1}{2}$ | 6     |
|-----------------------------------------------------|-------------------------------|---------------|-----------------------|---------------|-------------------|-------------------|----------------|----------------|-----|----------------|----------------|------|----------------|------|----------------|------|-----------------|-------|
| Tubes 2ft long & over per ft                        | -.31 $\frac{1}{2}$ -/4        | -.5           | -.6 $\frac{1}{2}$ -/9 | 1/1           | 1/4               | 1/8               | 1/0            | 2/6            | 2/9 | 2/6            | 2/9            | 3/3  | 4/3            | 4/9  | 5/6            | 6/-  | 6/9             | 7/6   |
| Pieces 12 to 23 $\frac{1}{2}$ in. long (each)       | -.9                           | 1/10          | 1/4                   | 2/6           | 3/4               | 4/3               | 4/9            | 6/9            | 8/- | 9/-            | 10/-           | 13/- | 15/6           | 21/- | 24/-           | 28/6 | 32/6            |       |
| Pieces 4 to 11 $\frac{1}{2}$ in. long (each)        | -.5 $\frac{1}{2}$ -/6         | -.8           | -/10                  | 1/2           | 1/6               | 2/7               | 3/-            | 4/3            | 5/3 | 6/-            | 6/9            | 9/3  | 10/9           | 15/6 | 18/-           | 21/9 | 25/3            |       |
| Long Screws, 12 to 23 $\frac{1}{2}$ in. long (each) | -.10                          | 1/2           | 1/5                   | 2/-           | 2/8               | 3/7               | 4/8            | 5/3            | 7/6 | 9/-            | 10/-           | 11/6 | 15/6           | 17/- | 23/-           | 26/6 | 31/6            | 35/6  |
| Long Screws, 3 to 11 $\frac{1}{2}$ in. long (each)  | -.6 $\frac{1}{2}$ -/7         | -.9           | -/11                  | 1/3           | 1/8               | 2/3               | 3/-            | 3/3            | 4/8 | 6/3            | 6/7            | 8/-  | 10/9           | 12/3 | 17/-           | 20/- | 24/-            | 28/-  |
| Barrel nipples (each)                               | -.5                           | /5            | -.6                   | -.7           | -.9               | 1/-               | 1/4            | 1/8            | 1/9 | 2/6            | 3/-            | 3/6  | 4/-            | 6/-  | 7/-            | 10/- | 12/6            | 15/-  |
| Bends (each)                                        | -.7                           | -.8           | -/10                  | 1/-           | 1/6               | 2/6               | 3/-            | 4/-            | 5/- | 8/6            | 12/-           | 15/- | 18/-           | 25/- | 32/6           | 80/- | 105/-           | 135/- |
| Springs, not socketed (each)                        | -.5                           | -.6           | -.7                   | -.9           | 1/1 $\frac{1}{2}$ | 2/3 $\frac{1}{2}$ | 3/1            | 3/11           | 6/9 | 9/6            | 12/-           | 14/6 | 20/-           | 26/6 | 70/-           | 93/- | 120/-           | 132/- |

# Trade Price List of Water and Steam Fittings

## FITTINGS

| Internal Diam. in inches. | $\frac{3}{8}$ & $\frac{1}{2}$ | $\frac{3}{4}$    | 1             | 1 $\frac{1}{4}$  | 1 $\frac{1}{2}$  | 1 $\frac{3}{4}$ | 2               | 2 $\frac{1}{4}$ | 2 $\frac{1}{2}$ | 2 $\frac{3}{4}$ | 3               | 3 $\frac{1}{2}$ | 4               | 4 $\frac{1}{2}$ | 5               | 5 $\frac{1}{2}$ | 6               |
|---------------------------|-------------------------------|------------------|---------------|------------------|------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Pipe Union .. each        | 2/-                           | 2/6              | $\frac{3}{4}$ | 1/-              | 1 $\frac{1}{4}$  | 1 $\frac{1}{2}$ | 1 $\frac{3}{4}$ | 2               | 2 $\frac{1}{4}$ | 2 $\frac{1}{2}$ | 2 $\frac{3}{4}$ | 3               | 3 $\frac{1}{2}$ | 4               | 4 $\frac{1}{2}$ | 5               | 5 $\frac{1}{2}$ |
| Elbows, square ..         | -84                           | -9               | 3/-           | 10/-             | 9/-              | 3/-             | 3/10            | 6/3             | 9/-             | 17/-            | 20/-            | 22/6            | 27/6            | 35/-            | 48/-            | 66/-            | 84/-            |
| Elbows, round ..          | -94                           | -11              | 1/-           | 1/10             | 2/5              | 3/-             | 3/10            | 6/9             | 9/-             | 17/-            | 20/-            | 22/6            | 27/6            | 35/-            | 48/-            | 66/-            | 84/-            |
| Tees ..                   | -9                            | -10              | 1/1           | 2/1              | 2/7              | 3/6             | 4/6             | 6/9             | 10/-            | 13/-            | 17/-            | 17/1            | 25/-            | 32/-            | 45/-            | 60/-            | 75/-            |
| Crosses ..                | 1/4                           | 1/6              | 1/11          | 4/-              | 4/10             | 6/-             | 7/9             | 14/-            | 21/4            | 28/-            | 40/-            | 56/-            | 66/8            | 78/-            | 98/-            | 125/-           | 155/-           |
| Sockets, plain ..         | -2                            | -2               | 3             | -6 $\frac{1}{2}$ | -8 $\frac{1}{2}$ | -11             | 1/1             | 1/9             | 2/6             | 3/-             | 3/6             | 5/-             | 7/-             | 9/-             | 12/-            | 15/-            | 18/-            |
| Sockets, diminished ..    | -3                            | -4               | 5             | -7               | -9               | -11             | 1/2             | 1/4             | 2/3             | 3/3             | 4/-             | 5/-             | 7/-             | 9/-             | 12/-            | 15/-            | 18/-            |
| Flanges ..                | -9                            | -10              | 1/-           | 1/2              | 1/9              | 2/-             | 2/3             | 2/9             | 4/-             | 5/-             | 6/9             | 8/6             | 10/-            | 11/6            | 16/-            | 23/-            | 27/-            |
| Caps ..                   | -31                           | -3 $\frac{1}{2}$ | 5             | -8               | 1/-              | 1/3             | 1/7             | 2/-             | 3/-             | 4/4             | 5/3             | 6/-             | 9/9             | 10/6            | 25/30           | 37/45           | 45/-            |
| Plugs ..                  | -3                            | -3               | 4             | -6               | -8               | -10             | 1/-             | 1/3             | 2/-             | 2/6             | 3/6             | 4/9             | 7/-             | 10/-            | 22/30           | 39/48           | 48/-            |
| Backnuts ..               | -2                            | -2               | 3             | -6               | -8               | -10             | 1/-             | 1/3             | 2/-             | 2/6             | 3/6             | 4/9             | 7/-             | 10/-            | 22/30           | 39/48           | 48/-            |
| Nipples ..                | -2                            | -2               | 3             | -6               | -8               | -10             | 1/-             | 1/3             | 2/-             | 2/6             | 3/6             | 4/9             | 7/-             | 10/-            | 22/30           | 39/48           | 48/-            |
| Main Cocks ..             | 2/3                           | 2/9              | 3/6           | 4/6              | 6/6              | 8/6             | 11/-            | 14/-            | 18/-            | 27/-            | 41/-            | 60/-            | 85/-            | 110/-           | 140/-           | 180/-           | 260/-           |
| Round way Cocks ..        | 3/6                           | 4/-              | 5/6           | 7/6              | 10/-             | 13/-            | 17/6            | 22/6            | 38/-            | 60/-            | 65/-            | 75/-            | 120/160         | 212/250         | 360/450         | 570/660         | 660/-           |
| with brass plugs ..       | 10/6                          | 12/-             | 16/6          | 22/6             | 30/-             | 39/-            | 52/6            | 6/-             | 114/-           | 180/195         | 225/255         | 360/480         | 570/660         | 750/840         | 1050/1260       | 1500/1800       | 2100/2520       |
| Cock Spanners, wrought .. | 1/-                           | 1/4              | 1/8           | 2/-              | 2/4              | 3/-             | 3/6             | 4/-             | 4/9             | 6/-             | 7/6             | 9/-             | 12/14           | 14/-            | 16/-            | 19/-            | 24/-            |
| Malleable cast ..         | 22/9                          | 23/-             | 23/4          | 24/-             | 24/6             | 25/2            | 26/6            | 28/6            | 32/6            | 35/6            | 38/6            | 42/6            | 55/6            | 61/6            | 67/6            | 75/6            | 84/6            |
| Syphon Boxes, 1 quart ..  | 27/-                          | 27/4             | 28/6          | 28/6             | 29/3             | 30/3            | 32/6            | 35/6            | 43/6            | 46/6            | 49/6            | 53/6            | 61/6            | 67/6            | 75/6            | 84/6            | 96/6            |
| 2 quarts ..               | 32/-                          | 32/4             | 33/6          | 33/6             | 34/2             | 35/3            | 37/6            | 40/6            | 43/6            | 46/6            | 49/6            | 53/6            | 61/6            | 67/6            | 75/6            | 84/6            | 96/6            |
| 3 quarts ..               | 38/-                          | 38/4             | 39/6          | 39/6             | 40/2             | 41/3            | 43/6            | 46/6            | 49/6            | 53/6            | 57/6            | 61/6            | 67/6            | 75/6            | 84/6            | 96/6            | 108/6           |
| 4 quarts ..               | 44/-                          | 44/4             | 45/6          | 45/6             | 46/2             | 47/3            | 49/6            | 52/6            | 55/6            | 59/6            | 63/6            | 67/6            | 75/6            | 84/6            | 96/6            | 108/6           | 120/6           |

## Composition Pipe

(INSIDE DIAMETER).

| Inch           | lbs. | oz. |          | Inch          | lbs. | oz. |          |
|----------------|------|-----|----------|---------------|------|-----|----------|
| $\frac{1}{4}$  | 0    | 13  | per yard | $\frac{5}{8}$ | 3    | 4   | per yard |
| $\frac{5}{16}$ | 1    | 0   | "        | $\frac{3}{4}$ | 4    | 4   | "        |
| $\frac{3}{8}$  | 1    | 5   | "        | $\frac{7}{8}$ | 4    | 12  | "        |
| $\frac{7}{16}$ | 1    | 10  | "        | 1             | 5    | 8   | "        |
| $\frac{1}{2}$  | 2    | 2   | "        |               |      |     |          |

Length of Coils up to  $\frac{1}{2}$  inch, usually 50 yards.

|                    |                    |                    |          |
|--------------------|--------------------|--------------------|----------|
| $\frac{5}{8}$ inch | $\frac{3}{4}$ inch | $\frac{7}{8}$ 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. |    |    |
|----------------|---------------|----|----|----------------|---------------|----|----|
|                | C.            | Q. | L. |                | C.            | Q. | L. |
| $\frac{1}{2}$  | 0             | 3  | 0  | $1\frac{1}{2}$ | 2             | 3  | 2  |
| $\frac{3}{4}$  | 1             | 0  | 5  | 2              | 4             | 0  | 6  |
| 1              | 1             | 1  | 22 | 3              | 6             | 0  | 8  |
| $1\frac{1}{4}$ | 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. |
|---------------------|-------------------------|---------------------|-------------------------|
| $\frac{1}{2}$       | $\frac{1}{2}$           | 60                  | 4                       |
| $\frac{3}{4}$       | $\frac{3}{4}$           | 100                 | 5                       |
| $1\frac{1}{2}$      | 1                       | 160                 | 6                       |
| 3                   | $1\frac{1}{4}$          | 220                 | 7                       |
| 5                   | $1\frac{1}{2}$          | 300                 | 8                       |
| 10                  | 2                       | 450                 | 9                       |
| 15                  | $2\frac{1}{2}$          | 500                 | 10                      |
| 20                  | 3                       | 800                 | 12                      |
| 40                  | $3\frac{1}{2}$          | 1000                | 14                      |

## ACETYLENE PIPE SERVICE.

| Number of half-foot Burners or equivalent of other sizes, to burn at $2\frac{1}{2}$ 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                                                                                    | $\frac{1}{8}$ inch |
| 5                                                                                                                             | 30 "                                                                                       | $\frac{1}{4}$ "    |
| 10                                                                                                                            | 40 "                                                                                       | $\frac{3}{8}$ "    |
| 20                                                                                                                            | 50 "                                                                                       | $\frac{1}{2}$ "    |
| 50                                                                                                                            | 100 "                                                                                      | $\frac{3}{4}$ "    |
| 70                                                                                                                            | 130 "                                                                                      | 1 "                |
| 100                                                                                                                           | 150 "                                                                                      | $1\frac{1}{4}$ "   |
| 150                                                                                                                           | 180 "                                                                                      | $1\frac{1}{2}$ "   |
| 270                                                                                                                           | 250 "                                                                                      | 2 "                |

Consumers of Galvanized Iron are respectively requested to note that every sheet of **LYSAGHT'S "ORB" IRON** has the Trade Mark stencilled thereon in blue, and is guaranteed. Beware of Imitations.

# Iron, Copper & Brass Wires.

| IRON          |                                             |                                                  |                                  | 100 FEET.              |                       |
|---------------|---------------------------------------------|--------------------------------------------------|----------------------------------|------------------------|-----------------------|
| S.W.G.<br>No. | Weight<br>of 100<br>yards in<br>Avoir. lbs. | Weight of<br>1 Statute<br>Mile in<br>Avoir. lbs. | Length<br>of 1 cwt.<br>in Yards. | Copper Wire<br>in Lbs. | Brass Wire<br>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              |

## 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 "  |

## 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% less than Steel.

## Galvanized Barbed Wire Fencing

| Description.                                          | Weight.  |        | Length of 112 lbs. |
|-------------------------------------------------------|----------|--------|--------------------|
|                                                       | 100 yds. | 1 mile |                    |
|                                                       | Lbs.     | Lbs.   | Yards              |
| 2-point ordinary round, one wire only, 5 in. apart .. | 19       | 335    | 598                |
| 2-point thick set, 2½ in. apart                       | 21       | 370    | 533                |
| 4-point ordinary, 6 in. apart                         | 20       | 352    | 560                |
| 4-point thick set, 3 in. apart                        | 25       | 440    | 448                |
| 4-point ordinary round, both wires 6 in. apart .. ..  | 20       | 352    | 560                |
| 4-point thick set, round, both wires 3 in. apart ..   | 25       | 440    | 448                |



## Galvanized Barb Wire Fencing.

Approximate Weight.

| Points | Marks.  | Gauge | 100 Yards | 1 Mile.  | Length of<br>112 lbs.<br>in Yards. |
|--------|---------|-------|-----------|----------|------------------------------------|
| 4      | IOWA    | 12    | 25 lbs.   | 438 lbs. | 450                                |
| 4      | "       | 14    | 16 "      | 281 "    | 700                                |
| 4      | SPECIAL | 12½   | 17 "      | 303 "    | 650                                |
| 4      | "       | 14    | 12 "      | 211 "    | 935                                |
| 2      | GLIDDEN | 12    | 21 "      | 375 "    | 525                                |
| 2      | "       | 14    | 13 "      | 225 "    | 875                                |

## 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<br>per<br>Mile. | Weight<br>of Roll<br>50 yds. | Size.        | Weight<br>per<br>Mile. | Weight<br>of Roll<br>50 yds. |
|--------------|------------------------|------------------------------|--------------|------------------------|------------------------------|
| Inches.      | cwt. qr. lb.           | lbs.                         | Inches.      | cwt. qr. lb.           | lbs.                         |
| 24 x ½ x 20  | 18 0 26                | 57                           | 24 x 2 x 19  | 6 1 21                 | 19                           |
| 24 x ¾ x 19  | 16 3 25                | 53                           | 24 x 2 x 18  | 8 1 12                 | 25                           |
| 24 x ¾ x 20  | 12 2 12                | 41                           | 24 x 2 x 17  | 12 0 14                | 35                           |
| 24 x 1 x 19  | 12 2 8                 | 36                           | 24 x 2 x 16  | 14 0 25                | 45                           |
| 24 x 1 x 20  | 9 3 17                 | 28                           | 24 x 2½ x 18 | 6 2 8                  | 22                           |
| 24 x 1¼ x 19 | 9 3 8                  | 32                           | 24 x 2½ x 17 | 9 3 17                 | 30                           |
| 24 x 1½ x 18 | 12 0 10                | 42                           | 24 x 2½ x 16 | 11 2 15                | 35                           |
| 24 x 1¾ x 17 | 16 2 19                | 54                           | 24 x 3 x 18  | 5 1 8                  | 16                           |
| 24 x 1¾ x 19 | 8 2 14                 | 26                           | 24 x 3 x 17  | 7 2 16                 | 22                           |
| 24 x 1½ x 18 | 11 1 1                 | 33                           | 24 x 3 x 16  | 9 2 18                 | 30                           |
| 24 x 1½ x 17 | 14 1 10                | 46                           | 24 x 3 x 15  | 13 0 14                | 38                           |
| 24 x 1½ x 19 | 7 0 17                 | 21                           | 24 x 3 x 14  | 15 0 12                | 47                           |
| 24 x 1½ x 18 | 8 2 7                  | 31                           | 24 x 4 x 16  | 7 2 22                 | 24                           |
| 24 x 1½ x 17 | 13 1 6                 | 42                           | 24 x 4 x 15  | 9 2 6                  | 30                           |
|              |                        |                              | 24 x 4 x 14  | 11 0 26                | 35                           |

the world, universally admitted to be **THE BEST**

## Rabbit-proof Wire Netting Weights

| Size.                     | Grade. | Approximate weight per mile. |       |      |      |
|---------------------------|--------|------------------------------|-------|------|------|
|                           |        | Tons.                        | Cwts. | Qrs. | Lbs. |
| 42 x 1 $\frac{1}{4}$ x 17 | A      | 1                            | 12    | 0    | 0    |
| 42 x 1 $\frac{1}{4}$ x 17 | B      | 1                            | 9     | 0    | 0    |
| 42 x 1 $\frac{1}{4}$ x 18 | A      | 1                            | 2     | 0    | 0    |
| 42 x 1 $\frac{1}{4}$ x 18 | B      | 1                            | 0     | 3    | 0    |
| 42 x 1 $\frac{1}{2}$ x 17 | A      | 1                            | 7     | 2    | 0    |
| 42 x 1 $\frac{1}{2}$ x 17 | B      | 1                            | 4     | 2    | 0    |
| 42 x 1 $\frac{1}{2}$ x 18 | A      |                              | 19    | 2    | 0    |
| 42 x 1 $\frac{1}{2}$ x 18 | B      |                              | 18    | 2    | 0    |
| 36 x 1 $\frac{1}{4}$ x 17 | A      | 1                            | 7     | 2    | 0    |
| 36 x 1 $\frac{1}{4}$ x 17 | B      | 1                            | 5     | 0    | 0    |
| 36 x 1 $\frac{1}{4}$ x 18 | A      |                              | 18    | 2    | 0    |
| 36 x 1 $\frac{1}{4}$ x 18 | B      |                              | 17    | 2    | 0    |
| 36 x 1 $\frac{1}{2}$ x 17 | A      | 1                            | 3     | 2    | 0    |
| 36 x 1 $\frac{1}{2}$ x 17 | B      | 1                            | 1     | 2    | 0    |
| 36 x 1 $\frac{1}{2}$ x 18 | A      |                              | 16    | 2    | 0    |
| 36 x 1 $\frac{1}{2}$ x 18 | B      |                              | 15    | 2    | 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<br>wide. | 18 inches<br>wide. | 24 inches<br>wide. | 30 inches<br>wide. | 36 inches<br>wide. | 42 inches<br>wide. | 48 inches<br>wide. | 60 inches<br>wide. | 72 inches<br>wide. | G. | Mesh.               |
|---------------------|----|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----|---------------------|
| $\frac{1}{2}$ inch  | 22 | 0 14 6             | 1 0 11             | 1 7 2              | 1 13 2             | 1 19 9             | 2 6 5              | 2 13 0             | 3 6 4              | 3 19 6             | 22 | $\frac{1}{2}$ inch  |
| "                   | 20 | 0 17 7             | 1 5 3              | 1 12 10            | 2 0 0              | 2 8 0              | 2 16 0             | 3 4 0              | 4 0 0              | 4 16 0             | 20 | "                   |
| $\frac{3}{4}$ inch  | 19 | 1 3 6              | 1 13 7             | 2 3 9              | 2 13 4             | 3 4 0              | 3 14 8             | 4 5 4              | 5 0 0              | 6 8 0              | 19 | "                   |
| "                   | 22 | 0 7 11             | 0 11 2             | 0 14 4             | 0 17 6             | 1 0 5              | 1 3 10             | 1 7 3              | 1 14 0             | 2 0 10             | 22 | $\frac{3}{4}$ inch  |
| "                   | 20 | 0 10 2             | 0 14 7             | 0 18 7             | 1 2 7              | 1 6 6              | 1 10 11            | 1 15 4             | 2 4 4              | 2 13 0             | 20 | "                   |
| "                   | 19 | 0 13 0             | 0 18 8             | 1 3 8              | 1 9 0              | 1 13 10            | 1 19 6             | 2 5 1              | 2 16 6             | 3 7 8              | 19 | "                   |
| "                   | 18 | 0 17 8             | 1 5 5              | 1 12 4             | 1 19 5             | 2 6 2              | 2 13 11            | 3 1 7              | 3 17 0             | 4 12 5             | 18 | "                   |
| 1 inch              | 20 | 0 7 5              | 0 10 7             | 0 13 5             | 0 16 5             | 0 19 2             | 1 2 4              | 1 5 6              |                    |                    | 20 | 1 inch              |
| "                   | 19 | 0 8 10             | 0 12 8             | 0 16 1             | 0 19 8             | 1 3 0              | 1 6 10             | 1 10 8             |                    |                    | 19 | "                   |
| "                   | 18 | 0 10 9             | 0 15 5             | 0 19 7             | 1 3 11             | 1 8 0              | 1 12 8             | 1 17 4             |                    |                    | 18 | "                   |
| "                   | 17 | 0 15 10            | 1 2 9              | 1 8 10             | 1 15 2             | 2 1 3              | 2 8 1              | 2 15 0             |                    |                    | 17 | "                   |
| $1\frac{1}{4}$ inch | 19 | 0 7 5              | 0 10 8             | 0 13 7             | 0 16 4             | 0 18 11            | 1 2 1              | 1 5 2              | 1 11 6             | 1 17 10            | 19 | $1\frac{1}{4}$ inch |
| "                   | 18 | 0 8 8              | 0 12 5             | 0 15 9             | 0 19 1             | 1 2 0              | 1 5 8              | 1 9 4              | 1 16 8             | 2 4 0              | 18 | "                   |
| "                   | 17 | 0 11 4             | 0 16 4             | 1 0 9              | 1 5 1              | 1 9 0              | 1 13 10            | 1 18 8             | 2 8 4              | 2 18 0             | 17 | "                   |
| $1\frac{1}{2}$ inch | 16 | 0 15 3             | 1 1 11             | 1 8 0              | 1 13 9             | 1 19 0             | 2 5 6              | 2 12 0             | 3 5 0              | 3 18 0             | 16 | "                   |
| "                   | 19 | 0 6 2              | 0 8 11             | 0 11 3             | 0 13 7             | 0 15 8             | 0 18 4             | 1 0 11             | 1 6 2              | 1 11 4             | 19 | "                   |
| "                   | 18 | 0 7 9              | 0 10 8             | 0 13 7             | 0 16 4             | 0 18 11            | 1 2 1              | 1 5 2              | 1 11 6             | 1 17 10            | 18 | "                   |
| "                   | 17 | 0 9 3              | 0 13 3             | 0 16 10            | 1 0 4              | 1 3 6              | 1 7 5              | 1 11 4             | 1 19 2             | 2 7 0              | 17 | "                   |
| "                   | 16 | 0 11 9             | 0 16 11            | 1 1 6              | 1 5 11             | 1 10 0             | 1 15 0             | 2 0 0              | 2 10 0             | 3 0 0              | 16 | "                   |
| $1\frac{3}{8}$ inch | 19 | 0 5 5              | 0 7 9              | 0 9 11             | 0 12 0             | 0 13 10            | 0 16 1             | 0 18 5             | 1 3 0              | 1 7 8              | 19 | $1\frac{3}{8}$ inch |
| "                   | 18 | 0 6 8              | 0 9 6              | 0 12 2             | 0 14 8             | 0 17 0             | 0 19 9             | 1 2 7              | 1 8 3              | 1 13 11            | 18 | "                   |
| "                   | 17 | 0 8 8              | 0 12 5             | 0 15 10            | 0 19 1             | 1 2 1              | 1 5 9              | 1 9 5              | 1 16 9             | 2 4 1              | 17 | "                   |
| "                   | 16 | 0 10 10            | 0 15 7             | 0 19 9             | 1 3 11             | 1 7 5              | 1 12 2             | 1 16 9             | 2 5 11             | 2 15 2             | 16 | "                   |
| 2 inch              | 19 | 0 4 5              | 0 6 4              | 0 8 1              | 0 9 8              | 0 11 0             | 0 12 10            | 0 14 8             | 0 18 4             | 1 2 0              | 19 | 2 inch              |
| "                   | 18 | 0 5 7              | 0 8 1              | 0 10 3             | 0 12 3             | 0 14 0             | 0 16 4             | 0 18 8             | 1 3 4              | 1 8 0              | 18 | "                   |
| "                   | 17 | 0 7 3              | 0 10 5             | 0 13 3             | 0 15 9             | 0 18 0             | 1 1 0              | 1 4 0              | 1 10 0             | 1 16 0             | 17 | "                   |
| "                   | 16 | 0 9 5              | 0 13 6             | 0 17 3             | 1 0 7              | 1 3 6              | 1 7 5              | 1 11 4             | 1 19 2             | 2 7 0              | 16 | "                   |
| "                   | 15 | 0 11 10            | 0 17 0             | 1 1 8              | 1 5 10             | 1 9 6              | 1 14 5             | 1 19 4             | 2 9 2              | 2 19 0             | 15 | "                   |
| $2\frac{1}{2}$ inch | 19 | 0 3 9              | 0 5 6              | 0 7 0              | 0 8 4              | 0 9 6              | 0 11 1             | 0 12 8             | 0 15 10            | 0 19 0             | 19 | $2\frac{1}{2}$ inch |
| "                   | 18 | 0 4 8              | 0 6 8              | 0 8 6              | 0 10 3             | 0 11 8             | 0 13 5             | 0 15 7             | 0 19 6             | 1 3 4              | 18 | "                   |
| "                   | 17 | 0 6 2              | 0 8 10             | 0 11 4             | 0 13 7             | 0 15 6             | 0 18 1             | 1 0 8              | 1 5 10             | 1 11 0             | 17 | "                   |
| "                   | 16 | 0 7 9              | 0 11 3             | 0 14 4             | 0 17 0             | 0 19 6             | 1 2 9              | 1 6 0              | 1 12 6             | 1 19 0             | 16 | "                   |
| "                   | 15 | 0 9 7              | 0 13 9             | 0 17 7             | 1 1 1              | 1 4 0              | 1 8 0              | 1 12 0             | 2 0 0              | 2 8 0              | 15 | "                   |



**GALVANIZED WIRE NETTING—Continued.**

| Mesh.  | G. | 12 inches<br>wide. | 18 inches<br>wide. | 24 inches<br>wide. | 30 inches<br>wide. | 36 inches<br>wide. | 42 inches<br>wide. | 48 inches<br>wide. | 60 inches<br>wide. | 72 inches<br>wide. | G. | Mesh.  |
|--------|----|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----|--------|
| 3 inch | 19 | 0 3 6              | 0 5 0              | 0 6 4              | 0 7 7              | 0 8 8              | 0 10 1             | 0 11 6             | 0 14 5             | 0 17 4             | 19 | 3 inch |
| "      | 18 | 0 4 1              | 0 5 10             | 0 7 5              | 0 8 11             | 0 10 2             | 0 11 10            | 0 13 6             | 0 16 11            | 1 0 4              | 18 | "      |
| "      | 17 | 0 5 8              | 0 7 7              | 0 9 8              | 0 11 7             | 0 13 2             | 0 15 4             | 0 17 6             | 1 1 11             | 1 6 4              | 17 | "      |
| "      | 16 | 0 6 11             | 0 9 6              | 0 12 1             | 0 14 5             | 0 16 6             | 0 19 3             | 1 2 0              | 1 7 6              | 1 13 0             | 16 | "      |
| "      | 15 | 0 8 0              | 0 11 3             | 0 14 4             | 0 17 1             | 0 19 6             | 1 2 9              | 1 6 0              | 1 12 6             | 1 19 0             | 15 | "      |
| "      | 14 | 0 10 0             | 0 13 8             | 0 17 4             | 1 0 9              | 1 3 8              | 1 7 7              | 1 11 6             | 1 19 5             | 2 7 4              | 14 | "      |
| 4 inch | 18 | 0 3 6              | 0 5 0              | 0 6 4              | 0 7 7              | 0 8 8              | 0 10 1             | 0 11 6             | 0 14 5             | 0 17 4             | 18 | 4 inch |
| "      | 17 | 0 5 10             | 0 6 3              | 0 8 1              | 0 9 7              | 0 11 0             | 0 12 8             | 0 14 5             | 0 18 3             | 1 2 0              | 17 | "      |
| "      | 16 | 0 6 9              | 0 7 7              | 0 9 8              | 0 11 4             | 0 13 2             | 0 15 3             | 0 17 5             | 1 2 0              | 1 6 4              | 16 | "      |
| "      | 15 | 0 7 6              | 0 9 8              | 0 12 4             | 0 14 6             | 0 16 9             | 0 19 5             | 1 2 4              | 1 8 2              | 1 13 10            | 15 | "      |
| "      | 14 | 0 8 6              | 0 11 1             | 0 14 3             | 0 16 9             | 0 19 5             | 1 2 6              | 1 5 9              | 1 12 4             | 1 18 10            | 14 | "      |

For Prices of Intermediate Widths, see Note below.

**SHEEP NETTING, WITH 3-PLY STRAND WIRE SELVAGES.**

| Mesh.  | G. | 12 inches<br>wide. | 18 inches<br>wide. | 24 inches<br>wide. | 30 inches<br>wide. | 36 inches<br>wide. | 42 inches<br>wide. | 48 inches<br>wide. | 60 inches<br>wide. | 72 inches<br>wide. | G. | Mesh.  |
|--------|----|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|----|--------|
| 3 inch | 16 | 0 8 6              | 0 9 9              | 0 12 6             | 0 14 11            | 0 17 0             | 0 19 10            | 1 2 8              | 1 8 4              | 1 14 0             | 16 | 3 inch |
| "      | 15 | 0 9 6              | 0 11 10            | 0 15 1             | 0 17 11            | 1 0 6              | 1 3 11             | 1 7 4              | 1 14 2             | 2 1 0              | 15 | "      |
| "      | 14 | 0 11 0             | 0 14 5             | 0 18 4             | 1 1 11             | 1 5 0              | 1 9 2              | 1 13 4             | 2 1 8              | 2 10 0             | 14 | "      |
| "      | 13 | 0 13 0             | 0 17 10            | 1 2 9              | 1 7 2              | 1 11 0             | 1 16 2             | 2 1 4              | 2 11 8             | 3 2 0              | 13 | "      |
| 4 inch | 16 | 0 7 6              | 0 8 4              | 0 10 5             | 0 12 1             | 0 13 11            | 0 16 3             | 0 18 7             | 1 3 3              | 1 7 10             | 16 | 4 inch |
| "      | 15 | 0 8 6              | 0 10 8             | 0 13 4             | 0 15 6             | 0 17 9             | 1 0 9              | 1 3 9              | 1 9 8              | 1 15 6             | 15 | "      |
| "      | 14 | 0 10 0             | 0 12 1             | 0 15 3             | 0 17 9             | 1 0 5              | 1 3 10             | 1 7 3              | 1 14 1             | 2 0 10             | 14 | "      |
| "      | 13 | 0 11 6             | 0 13 10            | 0 17 7             | 1 1 0              | 1 4 0              | 1 8 0              | 1 12 0             | 2 0 0              | 2 8 0              | 13 | "      |
| "      | 12 | 0 14 0             | 0 18 8             | 1 3 10             | 1 8 5              | 1 12 6             | 1 17 11            | 2 3 4              | 2 14 2             | 3 5 0              | 12 | "      |

3 and 4 inch only Centre Strands—17, 16, and 15 gauges, 1/9; 14 and 13 gauges, 2/-; 12 gauge, 2/6 each extra per roll gross.

**WIDTHS UNDER 12 inch** are charged as 12 inch, and **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 the extra for 4 feet and 5 feet. 56 inches would be charged as 60 inches. This applies to both Ordinary and Sheep Netting.

**BLACK OILED WIRE NETTING**, 10 per cent. less above prices.

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

## Definition of the "Imperial" Standard Wire Gauge.

| Approximate Inch | W.G. | Decimal of an Inch. | M/M   | Approximate Inch. | W.G. | Decimal of an Inch | M/M  |
|------------------|------|---------------------|-------|-------------------|------|--------------------|------|
| $\frac{1}{2}$    | 7/0  | .500                | 12.70 | $\frac{1}{16}$    | 13   | .092               | 2.33 |
|                  | 6/0  | .461                | 11.78 |                   | 14   | .080               | 2.03 |
|                  | 5/0  | .432                | 10.97 |                   | 15   | .072               | 1.83 |
|                  | 4/0  | .400                | 10.16 |                   | 16   | .064               | 1.62 |
| $\frac{3}{8}$    | 3/0  | .372                | 9.45  |                   | 17   | .056               | 1.42 |
|                  | 2/0  | .348                | 8.84  |                   | 18   | .048               | 1.22 |
|                  | 0    | .324                | 8.23  |                   | 19   | .040               | 1.01 |
|                  | 1    | .300                | 7.62  |                   | 20   | .036               | .914 |
| $\frac{1}{4}$    | 2    | .276                | 7.01  | $\frac{1}{32}$    | 21   | .032               | .813 |
|                  | 3    | .252                | 6.40  |                   | 22   | .028               | .711 |
|                  | 4    | .232                | 5.89  |                   | 23   | .024               | .610 |
|                  | 5    | .212                | 5.38  |                   | 24   | .022               | .559 |
| $\frac{3}{16}$   | 6    | .192                | 4.87  |                   | 25   | .020               | .508 |
|                  | 7    | .176                | 4.47  |                   | 26   | .018               | .457 |
|                  | 8    | .160                | 4.06  |                   | 27   | .0164              | .416 |
|                  | 9    | .144                | 3.65  | $\frac{1}{64}$    | 28   | .0148              | .376 |
| $\frac{1}{8}$    | 10   | .128                | 3.25  |                   | 29   | .0136              | .345 |
|                  | 11   | .116                | 2.94  |                   | 30   | .0124              | .315 |
| $\frac{1}{10}$   | 12   | .104                | 2.64  |                   |      |                    |      |

## Birmingham Wire Gauge.

Comparative Sizes.

| No. | .1   | 4             | 7    | 11            | 16   | 22   | gauges equal |
|-----|------|---------------|------|---------------|------|------|--------------|
|     | 5/16 | $\frac{1}{4}$ | 3/16 | $\frac{1}{8}$ | 1/16 | 1/32 | of an inch.  |

## American or U.S.A. Standard Wire Gauge.

| No.  | Diam.<br>in. | No. | Diam.<br>in. | No. | Diam.<br>in. | No. | Diam.<br>in. |
|------|--------------|-----|--------------|-----|--------------|-----|--------------|
| 0000 | .46          | 8   | .1285        | 19  | .0359        | 30  | .0100        |
| 000  | .4096        | 9   | .1144        | 20  | .0320        | 31  | .0089        |
| 00   | .3648        | 10  | .1019        | 21  | .0285        | 32  | .0079        |
| 0    | .3249        | 11  | .0907        | 22  | .0253        | 33  | .0071        |
| 1    | .2893        | 12  | .0808        | 23  | .0226        | 34  | .0063        |
| 2    | .2576        | 13  | .0720        | 24  | .0201        | 35  | .0056        |
| 3    | .2294        | 14  | .0641        | 25  | .0179        | 36  | .005         |
| 4    | .2043        | 15  | .0571        | 26  | .0159        | 37  | .0044        |
| 5    | .1819        | 16  | .0508        | 27  | .0142        | 38  | .0040        |
| 6    | .1620        | 17  | .0452        | 28  | .0126        | 39  | .0035        |
| 7    | .1443        | 18  | .0403        | 29  | .0112        | 40  | .0031        |

## United States Standard Gauge for Sheet and Plate Iron and Steel.

| No. | Decimals<br>of an in. | No. | Decimals<br>of an in. | No. | Decimals<br>of an in. | No. | Decimals<br>of an in. |
|-----|-----------------------|-----|-----------------------|-----|-----------------------|-----|-----------------------|
| 7/0 | .5                    | 6   | .2031                 | 17  | .0562                 | 28  | .0156                 |
| 6/0 | .4687                 | 7   | .1875                 | 18  | .05                   | 29  | .0141                 |
| 5/0 | .4375                 | 8   | .1719                 | 19  | .0437                 | 30  | .0125                 |
| 4/0 | .4062                 | 9   | .1562                 | 20  | .0375                 | 31  | .0109                 |
| 3/0 | .375                  | 10  | .1406                 | 21  | .0344                 | 32  | .0101                 |
| 2/0 | .3437                 | 11  | .125                  | 22  | .0312                 | 33  | .0094                 |
| 0   | .3125                 | 12  | .1094                 | 23  | .0281                 | 34  | .0086                 |
| 1   | .2812                 | 13  | .0937                 | 24  | .025                  | 35  | .0078                 |
| 2   | .2656                 | 14  | .0781                 | 25  | .0219                 | 36  | .0070                 |
| 3   | .25                   | 15  | .0703                 | 26  | .0187                 | 37  | .0066                 |
| 4   | .2344                 | 16  | .0625                 | 27  | .0172                 | 38  | .0063                 |
| 5   | .2187                 |     |                       |     |                       |     |                       |



**“ORB” IRON. You know it at once by its**

## 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.

## TABLE OF MEASUREMENTS FOR WALLPAPERS.

Approximate number of pieces of English Wallpaper required for any Room, allowance to be made for doors and windows.

### Number of Pieces Required.

| Measurement in<br>feet round walls. | Height of Room in Feet from Skirting to Cornice. |    |    |    |    |    |    |    |    |    |  |
|-------------------------------------|--------------------------------------------------|----|----|----|----|----|----|----|----|----|--|
|                                     | 6                                                | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |  |
| 32                                  | 4                                                | 4  | 5  | 5  | 6  | 6  | 7  | 7  | 8  | 8  |  |
| 36                                  | 4                                                | 5  | 5  | 6  | 6  | 7  | 7  | 8  | 9  | 9  |  |
| 40                                  | 4                                                | 5  | 6  | 6  | 7  | 8  | 8  | 9  | 9  | 10 |  |
| 44                                  | 5                                                | 5  | 6  | 7  | 8  | 8  | 9  | 10 | 10 | 11 |  |
| 48                                  | 5                                                | 6  | 7  | 7  | 8  | 9  | 10 | 10 | 11 | 12 |  |
| 52                                  | 6                                                | 6  | 7  | 8  | 9  | 10 | 10 | 11 | 12 | 13 |  |
| 56                                  | 6                                                | 7  | 8  | 8  | 9  | 10 | 11 | 12 | 13 | 14 |  |
| 60                                  | 6                                                | 7  | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 |  |
| 64                                  | 7                                                | 8  | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 16 |  |
| 68                                  | 7                                                | 8  | 9  | 10 | 11 | 12 | 13 | 15 | 16 | 17 |  |
| 72                                  | 7                                                | 9  | 10 | 11 | 12 | 13 | 14 | 15 | 17 | 18 |  |
| 76                                  | 8                                                | 9  | 10 | 11 | 13 | 14 | 15 | 16 | 17 | 19 |  |
| 80                                  | 8                                                | 9  | 11 | 11 | 13 | 15 | 16 | 17 | 18 | 20 |  |
| 84                                  | 9                                                | 10 | 11 | 12 | 14 | 15 | 17 | 18 | 19 | 21 |  |
| 88                                  | 9                                                | 10 | 12 | 12 | 14 | 16 | 17 | 19 | 20 | 22 |  |
| 92                                  | 9                                                | 11 | 12 | 13 | 15 | 17 | 18 | 19 | 21 | 22 |  |
| 96                                  | 10                                               | 11 | 13 | 13 | 16 | 17 | 19 | 20 | 22 | 23 |  |
| 100                                 | 10                                               | 12 | 13 | 13 | 16 | 18 | 20 | 21 | 24 | 24 |  |

beautiful appearance. It's bright and it lasts!

# HOOPS.

Weight of a Ten-foot length in Pounds.

| Width          | 16 WG | 18 WG | 19 WG | 20 WG | 21 WG | 22 WG |
|----------------|-------|-------|-------|-------|-------|-------|
| $\frac{1}{2}$  | 1.10  | .83   | .71   | .60   | .54   | .48   |
| $\frac{5}{8}$  | 1.38  | 1.04  | .89   | .74   | .68   | .60   |
| $\frac{3}{4}$  | 1.66  | 1.25  | 1.07  | .89   | .82   | .71   |
| $\frac{7}{8}$  | 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  |
| $1\frac{1}{8}$ | 5.26  | 4.10  | 2.92  | 2.34  | 2.04  | 1.75  |
| $1\frac{1}{4}$ | 5.85  | 4.56  | 3.25  | 2.60  | 2.27  | 1.93  |
| $1\frac{3}{8}$ | 6.43  | 5.01  | 3.57  | 2.86  | 2.49  | 2.13  |
| $1\frac{1}{2}$ | 7.02  | 5.47  | 3.90  | 3.12  | 2.72  | 2.32  |
| $1\frac{3}{4}$ | 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  |
| $2\frac{1}{4}$ | 10.53 | 8.20  | 5.85  | 4.68  | 4.08  | 3.50  |
| $2\frac{1}{2}$ | 11.71 | 9.12  | 6.50  | 5.20  | 4.54  | 3.87  |
| $2\frac{3}{4}$ | 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  |
| $3\frac{1}{4}$ | 15.10 | 11.80 | 8.40  | 6.70  | 5.80  | 5.00  |
| $3\frac{1}{2}$ | 16.30 | 12.70 | 9.10  | 7.20  | 6.30  | 5.40  |
| $3\frac{3}{4}$ | 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  |
| $4\frac{1}{4}$ | 19.19 | 15.50 | 11.05 | 8.84  | 7.70  | 6.60  |
| $4\frac{1}{2}$ | 21.07 | 16.40 | 11.70 | 9.36  | 8.17  | 7.00  |
| $4\frac{3}{4}$ | 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  |
| $5\frac{1}{2}$ | 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 & Strength.

“ORB” IRON—Owing to its extreme rigidity

| Circumference. | Diameter. | Weights in lbs. per fathom.  |                    |                    |                    | Breaking Strain in gross tons. |                      |                       |       |       | Circumference. |
|----------------|-----------|------------------------------|--------------------|--------------------|--------------------|--------------------------------|----------------------|-----------------------|-------|-------|----------------|
|                |           | Patent Steel Hoisting Ropes. | B.B. Wire Rigging. | Flexible Hawseers. | Patent Cast Steel. | Plough Quality Cast Steel.     | Galv'd B.B. Rigging. | Galv'd C.S. Hawseers. |       |       |                |
| 6              | 1 7/8     | 34 3/4                       | 32                 | 30                 | 115                | 170                            | 55                   | 88                    | 9     | 5 1/2 |                |
| 5 1/2          | 1 3/4     | 29                           | 26                 | 26                 | 95                 | 142                            | 42                   | 74                    | 5     | 4 3/4 |                |
| 5              | 1 5/8     | 24                           | 22                 | 21                 | 80                 | 120                            | 34                   | 59                    | 4 3/4 | 4 1/4 |                |
| 4 3/4          | 1 1/2     | 21 3/4                       | 20                 | 17                 | 71                 | 107                            | 32                   | 47                    | 4     | 4 1/4 |                |
| 4 1/4          | 1 3/8     | 17 1/2                       | 16                 | 12 1/2             | 57                 | 85                             | 26                   | 36                    | 3 1/2 | 3 1/2 |                |
| 4              | 1 1/4     | 15 1/2                       | 14                 | 11                 | 51                 | 75                             | 22                   | 33                    | 3     | 2 3/4 |                |
| 3 1/2          | 1 1/8     | 12                           | 11                 | 8                  | 39                 | 58                             | 16                   | 26                    | 2 1/2 | 2 1/4 |                |
| 3              | 1         | 8 3/4                        | 8                  | 6                  | 28                 | 42                             | 11                   | 18                    | 2     | 1 3/4 |                |
| 2 3/4          | 7/8       | 7                            | 7                  | 5                  | 24                 | 36                             | 8.55                 | 15 1/2                | 1 3/4 | 1 3/4 |                |
| 2 1/2          | 13/16     | 6                            | 6                  | 4                  | 20                 | 29                             | 7.4                  | 12                    | 1 1/2 | 1 1/2 |                |
| 2 1/4          | 11/16     | 5                            | 5                  | 3                  | 15 1/2             | 23                             | 6.35                 | 9 1/2                 | 1 1/4 | 1 1/4 |                |
| 2              | 5/8       | 4                            | 4                  | 2 1/2              | 12 1/2             | 18 1/2                         | 4.3                  | 7                     | 1 1/4 | 1 1/4 |                |
| 1 3/4          | 9/16      | 3                            | 3                  | 2                  | 9 1/2              | 14 1/2                         | 3.25                 | 5 1/2                 | 1 1/4 | 1 1/4 |                |
| 1 1/2          | 1/2       | 2                            | 2                  | 1 1/2              | 7                  | 10 1/2                         | 2.25                 | 3                     | 1 1/4 | 1 1/4 |                |
| 1 1/4          | 7/16      | 1 1/2                        | 1 1/2              | 1 1/8              | 4 1/2              | 7                              | 1.75                 | 1 3/4                 | 1 1/4 | 1 1/4 |                |
| 1              | 5/16      | 1                            | 1                  | 3/4                | 3                  | 4 1/2                          | 1                    | 1 3/4                 | 1     | 1     |                |



and even quality, is a perfect Roofing Sheet.

## MANILA ROPE

Approximate Weight for given Lengths.

### Coils of 800 Feet.

| Size<br>in.    | Weight<br>cwt. qrs. lbs. |   |    | Size<br>in.    | Weight<br>cwt. qrs. lbs. |   |    | Size<br>in.    | Weight<br>cwt. qrs. lbs. |   |    |
|----------------|--------------------------|---|----|----------------|--------------------------|---|----|----------------|--------------------------|---|----|
| $\frac{1}{2}$  | 0                        | 0 | 14 | $1\frac{1}{4}$ | 0                        | 1 | 20 | $2\frac{1}{4}$ | 1                        | 1 | 0  |
| $\frac{3}{4}$  | 0                        | 0 | 18 | $1\frac{1}{2}$ | 0                        | 2 | 10 | $2\frac{1}{2}$ | 1                        | 1 | 22 |
| 1              | 0                        | 1 | 0  | $1\frac{3}{4}$ | 0                        | 2 | 21 | $2\frac{3}{4}$ | 1                        | 2 | 20 |
| $1\frac{1}{8}$ | 0                        | 1 | 7  | 2              | 1                        | 0 | 5  | 3              | 2                        | 0 | 12 |

### Coils of 100 Feet.

| Size<br>in.    | Weight<br>cwt. qrs. lbs. |   |    | Size<br>in.    | Weight<br>cwt. qrs. lbs. |   |    | Size<br>in.    | Weight<br>cwt. qrs. lbs. |   |    |
|----------------|--------------------------|---|----|----------------|--------------------------|---|----|----------------|--------------------------|---|----|
| $3\frac{1}{2}$ | 0                        | 1 | 16 | 5              | 0                        | 3 | 4  | 6              | 1                        | 0 | 14 |
| 4              | 0                        | 2 | 0  | $5\frac{1}{2}$ | 0                        | 3 | 22 | $6\frac{1}{2}$ | 1                        | 1 | 8  |
| $4\frac{1}{2}$ | 0                        | 2 | 14 |                |                          |   |    |                |                          |   |    |

## Covering Capacity of Galvanized Corrugated Iron.

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

|              | 24g. 3in.<br>Cor. | 26g. 3in.<br>Cor. | 26g. 1 in.<br>Cor. | 28g. 1 in.<br>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.

## 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,  $3\frac{1}{2}$  bags of lime and  $1\frac{1}{2}$  loads of sand for a Double Chimney. About 1,000 bricks, on an average, go to  $3\frac{1}{2}$  tons weight.

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

**CEMENT.**—About  $3\frac{1}{2}$  cwt. to one cask or barrel.

**PLASTER OF PARIS.**—Per barrel, weighs about  $2\frac{3}{4}$  cwt.

**LATH and PLASTER.**—100 square yards require 4 bags of lime, 3 yards of sand, 16 bundles of 4ft. 6in. American laths, 8lbs.  $1\frac{1}{4}$ -inch nails, and half bag of hair.

**LATHS.**—A bundle of 4ft. 6in. American laths covers  $6\frac{1}{2}$  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:  $\frac{1}{2}$  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,  $1\frac{1}{2}$ lb.  $2\frac{1}{4}$ -inch, 2lbs.  $2\frac{1}{2}$ -inch to every 100 feet of flooring; allow  $\frac{1}{2}$ lb.  $1\frac{1}{2}$ -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.

## Useful Information.

### Approximate Number of Nails per lb.

| Size.     | Nails<br>per lb. | Size.     | Nails<br>per lb. | Size.    | Nails<br>per lb. |
|-----------|------------------|-----------|------------------|----------|------------------|
| 1 " x 16G | 1080             | 2 " x 11G | 158              | 3 " 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               |

## WIRE.

### Number of Feet per lb. of Weight.

| Gauge. | Number of<br>Feet per lb.<br>Weight. | Gauge. | Number of<br>Feet per lb.<br>Weight. | Gauge. | Number of<br>Feet per lb.<br>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 "                                |



## 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. |    |    |      | Weight per Fathom. | Admiralty Tensile Strain. |    |    |      |
|-------|---------------|----|----|------|--------------------|---------------------------|----|----|------|
|       | T.            | c. | q. | lbs. |                    | 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, &c.

## Deals—

as 9 x 3 No. of running feet to ton (20 cwt.) 350

## Flooring—

|        |   |   |   |      |
|--------|---|---|---|------|
| 6 x 1½ | " | " | " | 1557 |
| 6 x 1  | " | " | " | 1750 |
| 6 x ¾  | " | " | " | 2000 |
| 6 x ¾  | " | " | " | 2330 |

## Matchboards—

|       |   |   |   |      |
|-------|---|---|---|------|
| 6 x ⅝ | " | " | " | 2800 |
| 6 x ½ | " | " | " | 3400 |
| 6 x ¾ | " | " | " | 4800 |

## Weatherboards, single

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. 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.

## **Covering Capacity and Weight of French Tiles.**

127 Tiles cover 100 super feet of roof.

100 super feet of Tiling weigh 635 lbs.

90 lineal feet of 2 in. x 1 in. battens to one square of roofing.

## **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        |

## **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.



## Commonwealth Postal Rates

\***Letters**, including United Kingdom, Oversea Dominions, British Colonies, and Protectorates, 1d. half oz.

\***Letter Cards**, single, 1d. each; reply ( $\frac{1}{2}$ d. War tax each card) 1d. each half.

\***Post Cards**, single, 1d.; reply ( $\frac{1}{2}$ d. War tax each card), 1d. each half.

\***Printed Papers**, other than newspapers, as prescribed,  $\frac{1}{2}$ d. per 2 oz., or part of 2 oz. up to 5lbs.

\***Catalogues** (wholly set up and printed in Australia), 4 oz. or part of 4 oz.,  $\frac{1}{2}$ d.; every additional 4 oz.,  $\frac{1}{2}$ d.; where percentage of printed matter added, 1d. first 4 oz.

\***Books**, printed outside Australia,  $\frac{1}{2}$ d. per 4 oz., or part of 4 oz.

\***Books**, printed in Australia,  $\frac{1}{2}$ d. per 8 oz., or part of 8 oz.

\***Newspapers**, for places within the Commonwealth, or to New Zealand, Fiji, and Papua. Each newspaper (published and registered in the Commonwealth), for every 10 oz. or under,  $\frac{1}{2}$ d.

\***Newspapers** printed or published outside the Commonwealth, when posted in the Commonwealth,  $\frac{1}{2}$ d. per 4 oz. or part thereof, each newspaper.

\***United Kingdom**: Not exceeding 8 oz., 1d. each newspaper; exceeding 8 oz., but not exceeding 10 oz.,  $2\frac{1}{2}$ d., every additional 2 oz. or fraction thereof,  $\frac{1}{2}$ d. All Sea Route up to 16 oz., 1d. (one paper only to be enclosed in same wrapper). News under 2 ozs. not subject to War tax.

\***All other places**: Each newspaper, not exceeding 4 oz., 1d., and  $\frac{1}{2}$ d. for every additional 2 oz., or fraction thereof.

\***(a) Magazines**, reviews, serials, and other similar publications printed and published in Australia, in numbers at intervals not exceeding three months,  $\frac{1}{2}$ d. for 8 oz., or part of 8 oz.

\***(b) Magazines**, reviews, serials, and other similar publications (including newspapers), printed and published outside Australia, in numbers at intervals not exceeding three months,  $\frac{1}{2}$ d. per 4 oz., or part of 4 oz.

\***Commercial Papers**, patterns, samples, and merchandise, as prescribed, 1d. per 2 oz., or part of 2 oz.

**Parcels Post**, Inland, 1 lb. or under, 6d.; each additional 1 lb., 3d.

**Parcels Post**, inter-State, 1 lb. or under, 8d.; each additional 1 lb., 6d.

**REGISTRATION FEE.** Letters, 3d.

\* $\frac{1}{2}$ d. Additional War Tax on Each Article.

# Commonwealth Postal Rates

Continued.

## MONEY ORDERS.

|                                                                                                                   | £2  | £5  | £7  | £10 | £12 | £15 | £17 |
|-------------------------------------------------------------------------------------------------------------------|-----|-----|-----|-----|-----|-----|-----|
|                                                                                                                   | to  | to  | to  | to  | to  | to  | to  |
|                                                                                                                   | £2  | £5  | £7  | £10 | £12 | £15 | £17 |
|                                                                                                                   | £20 |     |     |     |     |     |     |
| The Commonwealth.                                                                                                 | 6d. | 6d. | 1/- | 1/- | 1/6 | 1/6 | 2/- |
| New Zealand & Fiji                                                                                                | 6d. | 1/- | 1/6 | 2/- | 2/6 | 3/- | 3/6 |
| Papua . . . . .                                                                                                   | 9d. | 9d. | 1/6 | 1/6 | 2/3 | 2/3 | 3/- |
| United Kingdom and Foreign, 6d. or 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, ½d.; 2/-, 2/6, 3/-, 3/6, 4/-, 4/6, 1d.; 5/-, 1½d.; 7/6, 2d.; 10/-, 10/6, 15/-, 20/-, 3d.

## TELEGRAPHIC.

Including Address and Signature.

Town and Suburban—16 words, 6d. Each additional word, 1d.  
 Country—16 words, 9d. Each additional word, 1d.  
 Inter-State—16 words, 1/-. Each additional word, 1d.  
 New Caledonia—Per word, 9d.  
 New Zealand—Per word, 4½d.  
 Norfolk Island—Per word, 3d.  
 United Kingdom—Per word, 3/-.  
 Suva, Fiji—Per word, 8d.  
 Cape Colony—Per word, 2/3.  
 New York—Per word, 2/8.

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**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.**

## 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  $151\frac{1}{2}$  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—cont.

## 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              | )     | " 1 Knot           |
| 6,080 Feet            | "     | 1 League           |
| 3 Knots               | "     | 1 Degree           |
| 20 Leagues or         | )     | " 1 Degree         |
| 60 Geographical Miles | )     | " The Earth's Cir- |
| 360 Degrees or        | )     | cumference         |
| 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 (Mer-    |
|                    |       | chandise)               |
| 42 " Feet          | "     | 1 Ton Shipping (Timber) |

## British Weights and Measures—*cont.*

### 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          |                  |
| 365 $\frac{1}{4}$ 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 and 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        | = | 39⅓ Inches (3ft. 3⅓in.) |
| 1 Kilometre    | = | 5 Furlongs              |
| 1⅔ „           | = | 1 Mile                  |

### AVOIRDUPOIS MEASURE.

|              |   |         |
|--------------|---|---------|
| 1 Kilogramme | = | 2½ lbs. |
| 1000 „       | = | 1 ton   |

### SQUARE MEASURE.

|                    |   |               |
|--------------------|---|---------------|
| 6½ sq. Centimetres | = | 1 sq. inch    |
| 1 sq. Metre        | = | 10¾ sq. feet. |

## British and Foreign Currency. Equivalent of £1 sterling (English)

|                        | pre-War<br>Value<br>at 1/6/1914. | Exchange<br>Value<br>at 1/11/1919. |
|------------------------|----------------------------------|------------------------------------|
| French Francs .. ..    | 25.18                            | 36.85                              |
| Belgian Francs .. ..   | 25.34                            | 36.20                              |
| Swiss Francs .. ..     | 25.20                            | 23.30                              |
| Italian Lire .. ..     | 25.27                            | 45.00                              |
| Russian Roubles .. ..  | 9.57                             | No Ex. Val.                        |
| U.S.A. Dollars .. ..   | 4.88                             | 4.17                               |
| German Marks .. ..     | 20.46                            | 131.0                              |
| Dutch Florin .. ..     | 12.13                            | 11.00                              |
| Austrian Kroner .. ..  | 24.13                            | 425.45                             |
| Swedish Kroner .. ..   | 18.24                            | 17.52                              |
| Danish Kroner .. ..    | 18.24                            | 19.62                              |
| Norwegian Kroner .. .. | 18.24                            | 18.35                              |
| Spanish Pesetas .. ..  | 26.47                            | 21.55                              |
| Indian Rupees .. ..    | 15.05                            | 10.02                              |



**There is nothing "just as good"**

From Commonwealth Year Book, Page 638.

# Federal Government Railways at 30/6/18

## Open for Traffic.

|                                              |              |
|----------------------------------------------|--------------|
| Darwin to Katherine (Northern Territory) ..  | Miles<br>199 |
| Pt. Augusta to Oodnadatta (South Australia)  | 478          |
| Canberra to Queanbeyan (Federal Territory)   | 5            |
| Transcontinental (Pt. Augusta to Kalgoorlie) | 1051         |

Miles, 1733

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## Mileage under Different Gauges.

|        |    |    |    |        |       |
|--------|----|----|----|--------|-------|
| 5' 3"  | .. | .. | .. | 5,150  | Miles |
| 4' 8½" | .. | .. | .. | 5,929  | "     |
| 3' 6"  | .. | .. | .. | 12,969 | "     |
| 3'     | .. | .. | .. | 15     | "     |
| 2' 6"  | .. | .. | .. | 138    | "     |
| 2'     | .. | .. | .. | 1,032  | "     |
| 1' 8"  | .. | .. | .. | 28     | "     |

25,261 Miles

## Distance by Rail between State Capital Cities.

|                         | Miles. | Approximate<br>Time of<br>Journey. |       |
|-------------------------|--------|------------------------------------|-------|
|                         |        | Hrs.                               | Mins. |
| Adelaide to Perth .. .. | 1684   | 64                                 | 11    |
| "    " Melbourne .. ..  | 482    | 16                                 | 59    |
| "    " Sydney .. ..     | 1072   | 34                                 | 25    |
| "    " Brisbane .. ..   | 1792   | 61                                 | 55    |
| Brisbane " Sydney .. .. | 720    | 26                                 | 58    |
| "    " Melbourne .. ..  | 1309   | 44                                 | 0     |
| "    " Perth .. ..      | 3476   | 126                                | 6     |
| Melb'ne " Sydney .. ..  | 582    | 17                                 | 26    |
| "    " Perth .. ..      | 2167   | 82                                 | 6     |
| Sydney " Perth .. ..    | 2756   | 99                                 | 8     |

From Commonwealth Year Book, Page 655.

## STATE GOVERNMENT RAILWAYS.

**Mileage and Cost to 30/6/18.**

|                      | Mileage Open<br>for Traffic. | Total Cost of<br>Construction and<br>Equipment. |
|----------------------|------------------------------|-------------------------------------------------|
| New South Wales ..   | 4679 Miles                   | £75,050,450                                     |
| Victoria .. ..       | 4151 "                       | 56,535,414                                      |
| Queensland .. ..     | 5295 "                       | 37,301,889                                      |
| South Australia ..   | 2242 "                       | 17,974,348                                      |
| Western Australia .. | 3491 "                       | 17,760,566                                      |
| Tasmania .. ..       | 588 "                        | 4,979,399                                       |
|                      | <u>20,446 Miles</u>          | <u>£209,602,066</u>                             |

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## Areas of States and Territories.

|                         | Date of<br>Creation. | Area.             |
|-------------------------|----------------------|-------------------|
| New South Wales ..      | 1786                 | 309,432 Sq. Miles |
| Victoria .. ..          | 1851                 | 87,884 "          |
| Queensland .. ..        | 1859                 | 670,500 "         |
| South Australia ..      | 1834                 | 380,070 "         |
| Western Australia ..    | 1829                 | 975,920 "         |
| Tasmania .. ..          | 1825                 | 26,215 "          |
| Northern Territory ..   | 1863                 | 523,620 "         |
| Fed'l Capital Territory | 1911                 | 940 "             |

Total Area of Commonwealth 2,974,581 Sq. Miles

From Commonwealth Year Book, Page 1202.

## Commonwealth Estimated Population

### June 30th, 1919.

|                        | Males.           | Females.         | Total.           |
|------------------------|------------------|------------------|------------------|
| New South Wales ..     | 984,839          | 978,150          | 1,962,989        |
| Victoria .. ..         | 716,168          | 751,020          | 1,467,188        |
| Queensland .. ..       | 366,053          | 346,773          | 712,826          |
| South Australia ..     | 215,593          | 240,351          | 455,944          |
| Western Australia ..   | 169,618          | 153,602          | 323,220          |
| Tasmania .. ..         | 108,287          | 102,594          | 210,881          |
| Northern Territory ..  | 3,805            | 1,116            | 4,921            |
| Federal Territory ..   | 1,416            | 1,157            | 2,573            |
|                        | <u>2,565,779</u> | <u>2,574,763</u> |                  |
| Total for Commonwealth |                  |                  | <u>5,140,542</u> |

## Vital Statistics (Commonwealth)

### 1918.

|            |          |     |         |           |
|------------|----------|-----|---------|-----------|
| BIRTHS ... | { Number | ... | 125,739 | per 1,000 |
|            | { Rate   | ... | 25.25   |           |
| MARRIAGES  | { Number | ... | 33,141  | per 1,000 |
|            | { Rate   | ... | 6.65    |           |
| DEATHS ... | { Number | ... | 50,249  | per 1,000 |
|            | { Rate   | ... | 10.09   |           |



# FERTILIZERS.

Analysis of fertilizers for different purposes, reprinted from pamphlet issued by Messrs. George Shirley Limited, Sydney:—

|                                                                         | Phosphoric Acid (soluble in water) | Equal to Tri-calcic phosphate (soluble in water). | Nitrogen. | Equal to Ammonia (fixed). | Sulphate of Potash. | Equal to Pure Potash. |
|-------------------------------------------------------------------------|------------------------------------|---------------------------------------------------|-----------|---------------------------|---------------------|-----------------------|
| <b>SUPERPHOSPHATE for WHEAT</b>                                         | 17.                                | 36/38                                             | —         | —                         | —                   | —                     |
| Mangold, Turnips, Carrots, etc. . . .                                   | 15.                                | 33                                                | 1.6       | 2                         | 1.80                | 1                     |
| Cabbages, Hay, Crops, Maize, Sorghum<br>Millets, Pumpkins, Oats . . . . | 13.                                | 28                                                | 3.3       | 4                         | 3.70                | 2                     |
| Potatoes, Tomatoes, Citrus Fruits, Apples,<br>Pears, Tobacco . . . .    | 12.                                | 26                                                | 3.3       | 4                         | 12.95               | 7                     |
| Top-dressing Pastures— <b>Rape</b> . . . .                              | 11.4                               | 25                                                | 1.6       | 2                         | 1.85                | 1                     |
| Onions, Stone Fruits, Sugar Cane, Flowers,<br>Strawberries . . . .      | 6.5                                | 14                                                | 4.1       | 5                         | 7.40                | 4                     |
| Peas, Beans, Clover, Lucerne (for Top-<br>dressing Lucerne) . . . .     | 11.4                               | 25                                                | —         | —                         | 12.95               | 7                     |

# 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 638 128 Burketown |

# AVERAGE RAINFALL IN AUSTRALIA

This Information is compiled from Official  
Year Book of the Commonwealth.

## VICTORIA

|                   | Inches |                   | Inches |
|-------------------|--------|-------------------|--------|
| Bairnsdale .....  | 29.01  | Omeo .....        | 25.73  |
| Ballarat .....    | 28.45  | Outtrim .....     | 45.69  |
| Bendigo .....     | 21.53  | Portland .....    | 32.87  |
| Casterton .....   | 25.60  | Port Albert ..... | 25.48  |
| Castlemaine ..... | 23.86  | Sale .....        | 23.74  |
| Cape Otway ....   | 34.15  | Swan Hill .....   | 13.43  |
| Colac .....       | 26.28  | Wodonga .....     | 26.58  |
| Echuca .....      | 17.05  | Warracknabeal ..  | 14.68  |
| Geelong .....     | 16.74  | Warragul .....    | 39.76  |
| Hopetoun .....    | 11.74  | Warrnambool ....  | 25.03  |
| Horsham .....     | 17.30  | Wilson's Promty.  | 42.45  |
| Melbourne .....   | 25.43  | Yarrawonga .....  | 19.98  |
| Mildura .....     | 11.01  |                   |        |

## TASMANIA

|                  | Inches |               | Inches |
|------------------|--------|---------------|--------|
| Hobart .....     | 23.29  | Stanley ..... | 33.17  |
| Launceston ..... | 27.72  | Waratah ..... | 84.53  |



## NORTHERN TERRITORY

|                        | Inches |                     | Inches |
|------------------------|--------|---------------------|--------|
| Alice Springs . . . .  | 10.78  | Port Darwin . . . . | 61.56  |
| Charlotte Waters . . . | 5.38   | Tennant's Creek . . | 15.18  |
| Daly Waters . . . .    | 27.14  |                     |        |

## WEST AUSTRALIA

|                      | Inches |                     | Inches |
|----------------------|--------|---------------------|--------|
| Broome . . . . .     | 23.41  | Laverton . . . . .  | 10.43  |
| Bunbury . . . . .    | 36.56  | Lawlers . . . . .   | 8.68   |
| Carnarvon . . . . .  | 8.81   | Magnet . . . . .    | 7.20   |
| Coolgardie . . . . . | 9.08   | Nullagine . . . . . | 13.69  |
| Derby . . . . .      | 27.25  | Northampton . . . . | 20.74  |
| Eucla . . . . .      | 10.11  | Onslow . . . . .    | 8.13   |
| Eyre . . . . .       | 10.89  | Perth . . . . .     | 33.35  |
| Esperance . . . . .  | 25.13  | Peak Hill . . . . . | 10.60  |
| Geraldton . . . . .  | 17.25  | Southern Cross . .  | 9.06   |
| Hall's Creek . . . . | 21.40  | Walebing . . . . .  | 18.55  |
| Katanning . . . . .  | 17.49  | Wyndham . . . . .   | 28.08  |
| Kellerberrin . . . . | 11.86  | York . . . . .      | 17.05  |

## SOUTH AUSTRALIA

|                      | Inches |                      | Inches |
|----------------------|--------|----------------------|--------|
| Adelaide . . . . .   | 20.32  | Oodnadatta . . . . . | 4.67   |
| Blinman . . . . .    | 12.94  | Ororoo . . . . .     | 13.33  |
| Cape Borda . . . . . | 24.80  | Port Augusta . . .   | 9.14   |
| Cowell . . . . .     | 11.70  | Streaky Bay . . . .  | 15.11  |
| Koorunga . . . . .   | 17.64  | Wilgena . . . . .    | 6.81   |
| Mount Gambier . . .  | 31.80  | William Creek . . .  | 5.32   |

## NEW SOUTH WALES

|                  | Inches |                  | Inches |
|------------------|--------|------------------|--------|
| Armidale .....   | 31.85  | Lismore .....    | 53.69  |
| Bathurst .....   | 23.95  | Maitland .....   | 33.79  |
| Bourke .....     | 15.29  | Moulamein .....  | 14.60  |
| Broken Hill .... | 9.25   | Mudgee .....     | 26.26  |
| Condobolin ..... | 17.82  | Mungindi .....   | 20.45  |
| Cobar .....      | 14.81  | Manilla .....    | 26.09  |
| Deniliquin ..... | 16.58  | Moree .....      | 23.61  |
| Delegate .....   | 26.70  | Newcastle .....  | 47.33  |
| Dubbo .....      | 22.23  | Narrandera ..... | 17.45  |
| Eden .....       | 34.45  | Orange .....     | 36.71  |
| Forbes .....     | 20.28  | Parramatta ..... | 36.67  |
| Grafton .....    | 38.62  | Sydney .....     | 48.80  |
| Goulburn .....   | 25.95  | Walgett .....    | 18.88  |
| Hay .....        | 14.50  | Wagga .....      | 21.87  |
| Hungerford ..... | 12.70  | Wentworth .....  | 11.84  |
| Kempsey .....    | 48.65  | Wilcannia .....  | 10.46  |
| Kiama .....      | 52.26  |                  |        |

## QUEENSLAND

|                   | Inches |                   | Inches |
|-------------------|--------|-------------------|--------|
| Adavale .....     | 15.73  | Georgetown ....   | 31.77  |
| Brisbane .....    | 48.36  | Geraldton .....   | 145.71 |
| Burketown .....   | 29.03  | Isisford .....    | 20.01  |
| Birdsville .....  | 6.38   | Longreach .....   | 17.28  |
| Boulia .....      | 11.09  | Mackay .....      | 69.42  |
| Banana .....      | 28.50  | Maryborough ....  | 46.58  |
| Cooktown .....    | 65.92  | Mein .....        | 44.33  |
| Charters Towers   | 26.66  | Normanton .....   | 37.97  |
| Cloncurry .....   | 19.93  | St. George .....  | 21.70  |
| Clermont .....    | 25.99  | Thursday Island . | 60.30  |
| Charleville. .... | 20.32  | Taroom .....      | 27.36  |
| Fairview .....    | 38.07  | Winton .....      | 14.91  |

## All-Steel Railway Carriages and Waggon

**I**N 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 waggon, 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.)



## Lysaght's Trade Marks



### "ORB" Galvanized

Corrugated Iron is favorably 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.



### "REDCLIFFE"

Corrugated Iron—A brand of well-established repute and in large demand, occupying a premier position in those markets in which price is a primary consideration.



### "WEIGHT BEARING"

Iron. Lysaght's "ORB" brand used for building purposes, maintains the maker's reputation, and may be specified by Architects and Engineers in the full confidence that it will justify their preference for British Manufacturers.

# Lysaght's Trade Marks

## **"ORB" Tenax Flat Sheet**

Iron, for working up, is of the finest possible quality, suitable for special high-class work, and is, in many instances used as a substitute for copper.



## **"QUEEN'S HEAD"**

**Galvanized Tinned Special Flat Sheets.**

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



**"QUEEN'S HEAD"**

## **"BLACK SHEETS"**

of the same brand are extensively used by manufacturers of ventilating and other Pipes, Trunks, Stoves, Fender Bottoms, Ovens, Stamping, Perforating, &c., and the many other purposes where a reliable quality is necessary.

## **"FLEUR-DE-LIS"**

**Galvanized Tinned Flat Sheets** 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.



**"FLEUR-DE-LIS"**

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



## 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 collarbone.

**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, tying 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 intervening period Scientists had discovered that an immediate application of Iodine to the wound removed all danger of septicæmia 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 preventative, 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).

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 neutraliser 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 envelope in cotton wool.

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

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

# CALENDAR 1921

|      | JANUARY                               | FEBRUARY       | MARCH          |
|------|---------------------------------------|----------------|----------------|
| SUN  | 2 9 16 <sup>23</sup> / <sub>30</sub>  | 6 13 20 27     | 6 13 20 27     |
| MON  | 3 10 17 <sup>24</sup> / <sub>31</sub> | 7 14 21 28     | 7 14 21 28     |
| TUES | 4 11 18 25                            | 1 8 15 22 ...  | 1 8 15 22 29   |
| WED  | 5 12 19 26                            | 2 9 16 23 ...  | 2 9 16 23 30   |
| TH   | 6 13 20 27                            | 3 10 17 24 ... | 3 10 17 24 31  |
| FRI  | 7 14 21 28                            | 4 11 18 25 ... | 4 11 18 25 ... |
| SAT  | 1 8 15 22 29                          | 5 12 19 26 ... | 5 12 19 26 ... |

|      | APRIL        | MAY            | JUNE           |
|------|--------------|----------------|----------------|
| SUN  | 3 10 17 24   | 1 8 15 22 29   | 5 12 19 26     |
| MON  | 4 11 18 25   | 2 9 16 23 30   | 6 13 20 27     |
| TUES | 5 12 19 26   | 3 10 17 24 31  | 7 14 21 28     |
| WED  | 6 13 20 27   | 4 11 18 25 ... | 1 8 15 22 29   |
| TH   | 7 14 21 28   | 5 12 19 26 ... | 2 9 16 23 30   |
| FRI  | 1 8 15 22 29 | 6 13 20 27 ... | 3 10 17 24 ... |
| SAT  | 2 9 16 23 30 | 7 14 21 28 ... | 4 11 18 25 ... |

|      | JULY                                  | AUGUST         | SEPTEMBER      |
|------|---------------------------------------|----------------|----------------|
| SUN  | 3 10 17 <sup>24</sup> / <sub>31</sub> | 7 14 21 28     | 4 11 18 25     |
| MON  | 4 11 18 25                            | 1 8 15 22 29   | 5 12 19 26     |
| TUES | 5 12 19 26                            | 2 9 16 23 30   | 6 13 20 27     |
| WED  | 6 13 20 27                            | 3 10 17 24 31  | 7 14 21 28     |
| TH   | 7 14 21 28                            | 4 11 18 25 ... | 1 8 15 22 29   |
| FRI  | 1 8 15 22 29                          | 5 12 19 26 ... | 2 9 16 23 30   |
| SAT  | 2 9 16 23 30                          | 6 13 20 27 ... | 3 10 17 24 ... |

|      | OCTOBER                               | NOVEMBER       | DECEMBER      |
|------|---------------------------------------|----------------|---------------|
| SUN  | 2 9 16 <sup>23</sup> / <sub>30</sub>  | 6 13 20 27     | 4 11 18 25    |
| MON  | 3 10 17 <sup>24</sup> / <sub>31</sub> | 7 14 21 28     | 5 12 19 26    |
| TUES | 4 11 18 25                            | 1 8 15 22 29   | 6 13 20 27    |
| WED  | 5 12 19 26                            | 2 9 16 23 30   | 7 14 21 28    |
| TH   | 6 13 20 27                            | 3 10 17 24 ... | 1 8 15 22 29  |
| FRI  | 7 14 21 28                            | 4 11 18 25 ... | 2 9 16 23 30  |
| SAT  | 1 8 15 22 29                          | 5 12 19 26 ... | 3 10 17 24 31 |

