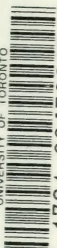


UNIVERSITY OF TORONTO



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# TABLES

ADAPTED TO THE USE OF

## FARMERS AND GRAZIERS;

CALCULATED

TO ASCERTAIN THE QUANTITY OF LAND WHICH MAY BE  
WORKED WITH AGRICULTURAL IMPLEMENTS OF VARIOUS  
DIMENSIONS, IN A GIVEN SPACE OF TIME;

AFFORDING IMPORTANT ASSISTANCE, BOTH TO EMPLOYERS AND  
LABOURERS;

ALSO,

## TABLES

FOR REDUCING MEASURES, OF VARIOUS CAPACITY, TO THE  
STANDARD OF THE WINCHESTER BUSHEL:

TOGETHER, WITH

*Tables shewing, on New Principles,*

## THE NET PROFITABLE WEIGHT OF CATTLE

OF EVERY SORT, BY MERELY WEIGHING THEM ALIVE:

TO WHICH ARE ADDED,

TABLES, SHEWING THE RELATIVE PROPORTION

OF

*ENGLISH AND SCOTCH WEIGHTS AND MEASURES:*

WITH MANY OTHERS,

WHICH WILL BE FOUND OF GREAT UTILITY TO AGRICULTURISTS OF EVERY  
DENOMINATION.

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DEDICATED, BY PERMISSION,

TO

THE RIGHT HONOURABLE LORD SOMERVILLE,

BY

LAYTON COOKE,

LAND AGENT, &c.

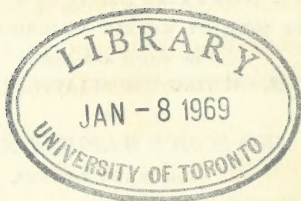
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TO

THE RIGHT HONOURABLE

**LORD SOMERVILLE.**



MY LORD,

Many of the greatest and best men, in every age, have paid attention to Agriculture. The Husbandmen of the present day, can bear ample and grateful testimony to the national benefits derived from your Lordship's personal exertions in promoting Agricultural Science. Every thing that could have been hoped, from ample munificence and most liberal encouragement,—from profound theory, and enlightened practice,—calling the attention of the United Kingdom to improved modes of cultivating the soil, and managing cattle, has already been accomplished by Lord Somerville, to a degree once rather to be wished for, than seriously expected.



Your Lordship's patronage has put the public in possession of a prodigious fund of useful knowledge, the result of private experiment.

No department of your Lordship's favourite pursuit seems too humble for your Lordship's notice, if it shall conduce to general utility ; and, therefore, I presume to place the following Work under your Lordship's powerful protection ; impressed with the deepest sensations of gratitude for the honor done me, by indulging me with the permission to dedicate it to your Lordship.

I am, my Lord,

Your Lordship's

Most devoted

And most faithful humble Servant,

LAYTON COOKE.

33, Haymarket, February 24, 1813.



## PREFACE.

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HAVING frequently experienced, in the course of my agricultural pursuits, the want of a work like the present, it is natural to suppose that many others may sometimes have felt a similar inconvenience. Impressed with this idea, I have been induced to give publicity to the following Tables, which were originally intended only for my private reference.

The first, second, and third, were calculated with a view to lessen the expences attending the cultivation of the soil, and to improve the condition of the servants in husbandry by reducing several agricultural operations to fixed principles, thereby enabling the labourer to execute his work by measure instead of by the day.

I have omitted no opportunity of acquiring the necessary information to enable me to compose the Tables, shewing the net profitable weight of animals. The live and dead weights of those exhibited at Christmas Spring meetings in London, which are very properly made public, have, in part, furnished me with data to calculate the proportion, that the carcasses of animals, in a perfectly ripe state, bear to the gross live weight.

To William Mellish, Esq. I am much indebted, for the very handsome manner in which he permitted me to ascertain the necessary particulars of the animals slaughtered at his yard. I also feel myself considerably obliged to Wm. Bowring, Esq. of the Victualling-yard, at Deptford, for the ready assistance he afforded me, and for the information he communicated.

To numerous other individuals I beg to tender my acknowledgements, for their kind attention, and the ingenuous manner in which they favoured me with the results of various experiments relating to this subject.

I dare not flatter myself that I have explained the Tables in such a manner as will meet with the approbation of every person who may do me the honor to consult them. To some, the Explanations may appear to require farther illustration and detail; while others may consider them to be treated in a style of unnecessary prolixity. It has been my study to avoid both extremes; but without forgetting, that, in a Work like the present, unnecessary prolixity is a fault of much less moment, than to leave any matter of importance insufficiently explained to readers of common capacity and information.

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*Machines upon a simple construction, for weighing cattle alive, and Agricultural Implements on the most approved principles, forwarded by the Author to any part of the kingdom.*

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# EXPLANATION

OF THE

## *TABLES.*



### INTRODUCTION.

IT is observable, that, amidst the general zeal for agricultural improvement, to which some of the most distinguished characters in this country have condescended to turn their attention, the knowledge of the operative department, so essentially necessary to a profitable practice of the science, should have been almost wholly neglected.

The nature of the subject admitting very few opportunities of indulging the warmth of fancy, or colouring of imagination; the characteristics of many works on agricultural subjects may, in some measure, account for its having been so little attended to: but the principal cause of the slow progress that has been made in this branch of rural science, may perhaps be attributed to the

aversion that many practical farmers have to commit the result of their experience to paper, particularly when calculations are indispensable for the illustration of their ideas.

The art of acquiring the greatest proportion of labour, more especially of manual labour, at the least expense, has by no means met with the attention it merits; neither has the comparative quantity of work, that ought to be performed with implements of different kinds, in fields of various sizes, ever been attempted to be ascertained with any degree of accuracy.

That the expenses attending the cultivation of the soil are enormous, and that the public burthen bears heavily upon the landed interest, will be granted by the majority of persons conversant with the subject: but that the most effectual plan to reduce the expenses of the farmer, would be to allow the labourers to earn greater wages than they do at present, is an hypothesis that probably may not at first be so readily admitted, though upon reflection, it will be found indisputably correct.

Self-interest is the predominant principle that influences human action. It consequently follows, that the greatest proportion of manual labour will be obtained, wherever the wages in-



crease in the same proportion as the labour. But every circumstance that tends to degrade or depress the spirit of the labourer, will likewise tend to weaken his ability, and lessen his inclination for useful exertion.

The change of character in the peasantry (a source of frequent complaint and universal regret) is, doubtless, attributable to the diminution of their domestic comforts. It would be idle to expect a miserable care-worn being to go to his daily employment with the same energy that he would do, had he an opportunity, by any extra exertion or attention, to procure the necessaries of life for his family, and a sufficiency of wholesome nourishment to enable him to undergo the fatigue of his laborious occupation:—suitable encouragement should be afforded to the industrious; which would be the likeliest mode of reclaiming the dissolute. If the same privileges be allowed to the latter which are enjoyed by the former, there will be but little hope of any amendment in the conduct of those who are idly inclined. And if it be considered, that, in four-fifths of South Britain, the daily wages of the labourers in husbandry are not more than barely sufficient to enable them to prolong a miserable existence, it will cease to be a matter of surprise,



that they should be supine in their manner, or appear indifferent to the interests of their employers: neither will it require more than a common share of sagacity to discover, that the effect produced by the sufferings of the labourer must ultimately prove inimical to the interest of the agriculturist; for the total incapacity of the former to perform a proper quota of work, must be the inevitable consequence of his inability to procure an adequate proportion of food and other necessaries to support him in a state of useful vigour, and relieve his mind from the misery occasioned by the sufferings of a wretched family.

In order to alleviate the distresses of the labouring class, and lessen their own expenses, agriculturists are most strenuously recommended to allow their men, as far as it is practicable, to execute all their work by MEASURE:—they will find, if the labourers earn four or five shillings a day by the piece, it will be cheaper than compelling them to work by the day at two shillings. There are very few operations that might not be executed by measure, though there has hitherto been no regular mode of ascertaining the value of manual labour attending those in which the aid of horses or oxen is necessary, as

plowing, harrowing, rolling, drilling, &c. The following Tables were calculated with the idea of simplifying those operations, and to render them applicable to fixed rules.

### EXPLANATION OF TABLE I.

TABLE I. shews the space, in miles and decimal parts of a mile, over which any implement or machine, from 8 inches to 20 feet wide, requires to pass in plowing, harrowing, rolling, or otherwise working an acre of land, in fields of various dimensions. In the first column may be found the different widths of the implements, from 8 inches to 20 feet. The second column shews the space over which implements of each different width would respectively require to be moved, if the field were large enough to admit of an acre being worked without turning the implement. The third column shews the space over which the implement must be moved, if the field admit of furrows only half a chain long. The fourth column shews how far each implement must be moved, when the field admits of furrows  $1\frac{1}{2}$  chain in length; and so on to 20 chains.

It is estimated, that each implement is moved statute poles at every turn, or lands-end; therefore, the smaller the field, the greater the space

over which an implement requires to be moved in working an acre.

EXAMPLE.

*Question.*—How many miles must the plough be moved, to plow an acre with furrows 9 inches wide, in a field admitting them to be 10 chains long?

*Solution.*—Parallel to 9 inches wide, and under 10 chains long, will be found 11·816: meaning 11 miles and ·816 thousandth parts of a mile, which is the distance that it would be required to be moved to plow an acre with furrows of those dimensions.

To facilitate the calculation by decimals, the following Tables are subjoined :

Table VI. shewing the decimal corresponding to every pole in the mile.

Table VII. shewing the decimal corresponding to every pole in the acre.

Table VIII. shewing the decimal corresponding to every farthing in the shilling, or  $\frac{1}{4}$  inch in the foot.

Table IX. shewing the decimal corresponding to every farthing in the pound.

Table X. shewing the decimal corresponding to every day in the year.

Table XI. shewing the decimal corresponding to every pound in the stone of 8 lb.

Table XII. shewing the decimal corresponding to every pound in the stone of 14 lb.

Table XIII. shewing the decimal corresponding to every pound in the score, or 20 lb.

Table XIV. shewing the decimal corresponding to every pound in the stone, trone weight.

By Table VII. the nearest number to  $\cdot 816$  (see the above example) is  $\cdot 815$ , the decimal corresponding to 6F. 21P.; therefore 11 $\cdot$ 816 is equal to 11M. 6F. 21P.

*Question.*—If 3 harrows be 12 feet wide; what distance must they be moved to harrow an acre in a field, admitting of their being drawn 8 chains before they turn?

*Solution.*—In the column under 8 chains, and parallel to 12 feet wide, will be found  $\cdot 749$ —By Table VI.  $\cdot 749$  is the decimal corresponding to 6 furlongs.

If the proper number of horses or oxen be applied to each implement, so that they may all be worked with equal ease to the animals drawing them; the proportionate number of acres that ought to be worked by each implement, may be found as follows:

## EXAMPLE.

Required the number of acres a person with an implement 5 feet 6 inches wide, ought to work in a field admitting of furrows 9 chains long,—while another plows an acre with furrows 8 inches wide, in a field that admits of their being only 7 chains long.—By Table I. the number of miles the plough must be moved to plow an acre with furrows 8 inches wide and 7 chains long, is 13·691, and the space over which the implement 5 feet 6 inches wide requires to be moved in a field admitting of furrows 9 chains long, is 1·615 mile:—then, as the latter number is to one acre, so is the former number to the answer in acres.—

Or, as  $\begin{array}{cccc} \text{Mile.} & \text{Acre.} & \text{Miles.} & \text{Acres.} \\ 1\cdot615 & : 1 & :: 13\cdot691 & : 8\cdot471. \end{array}$

By Table VII. the nearest number to ·471 is ·468; the decimal corresponding to 1R. 35P.: therefore  $8\cdot471 = 8\text{A. } 1\text{R. } 35\text{P.}$

Should the number of acres that ought to be worked with an implement, in travelling a given number of miles, be required; divide the given number of miles by the distance in miles that the implement is required to be moved to work one acre: and the quotient will be the answer in acres.

## EXAMPLE.

Suppose one horse, or more, travel 14 miles with an implement 6 feet 6 inches wide, in a field admitting the length of furrows to be 16 chains:—By Table I. it will work an acre, by moving 1.361 miles: then, as  $1.361 : 1 :: 14 : 10.286 = 10. 1. 6.$  (see *Table VII.*)

## EXPLANATION OF TABLE II.

THE value of the manual labour in working an acre with implements of different widths, in fields of various sizes, may be found by Table II. which is given in shillings and decimal parts of a shilling, and is calculated upon the supposition that the pay of a man attending upon his horses in the usual manner, and travelling 12 miles with a plough, or any other implement, is equal to the wages of a day-labourer; and that he will be entitled to receive in a like proportion for the distance he may go with the implement beyond 12 miles. 10

It is to be observed, that the Table is calculated at one shilling *per* day: so if two shillings be the usual pay of a labourer, the sum found by the Table must be multiplied by 2 for the sum required:—and if two shillings and sixpence be the usual pay



of a labourer, the sum found by the Table must be multiplied by 2·5 ;—·5 being the decimal part of a shilling corresponding to 6*d.* (*see Table VIII.*) If three shillings be the usual pay of a labourer, the sum must be multiplied by 3 ; and so on for any other price *per* day.

#### EXAMPLE.

Required the expence of the manual labour of plowing a field of 12 acres in furrows 9 inches wide, admitting that, upon an average, the furrows might be 14 chains long ;—the usual pay of a daily labourer being two shilling ?

By Table II. parallel to 9 inches, and under 14 chains, is ·9650 ; which being multiplied by 2, gives 1·930, the price of the manual labour of plowing an acre ; multiplied by 12, the contents of the field will produce 23·160 the answer.—By Table VIII. the nearest number to ·160 is ·166, the decimal corresponding to two-pence : therefore  $23·160 = 1l. 3s. 2d.$

Again ; what ought be paid for the manual labour of plowing a field containing 10 acres, in furrows  $8\frac{1}{2}$  inches wide, admitting them to be 16 chains long ;—the price of a daily labourer being two shillings and sixpence ?

By Table II. parallel with  $8\frac{1}{2}$ , and under 16



chains will be found 1·0153; which, multiplied by 2·5, is equal to 2·5372, the expense of the manual labour of plowing 1 acre, multiplied by 10 (the number of acres in the field) will produce 25·372 = 1*l.* 5*s.* 4½*d.*; the answer.

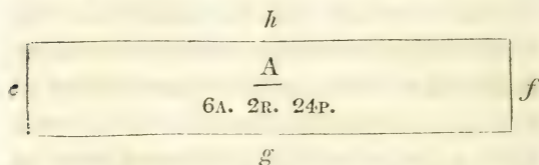
It is not recommended, that the horses should be suffered to remain longer than the usual time in the field:—but it is expected, that better use will be made of the time than is sometimes the case, when working by the day;—which, it is presumed, would make a difference of at least two days in ten: thus, in the above instance, the plowman would receive 1*l.* 5*s.* 4½*d.* for eight instead of ten days, and the farmer would have one fifth more work done by his horses.

Plowing by the acre is not a new idea; it has been partially practised many years in a county particularly distinguished for liberal and enlightened agriculturists.

It is a prevailing idea, that an acre is a proper day's work for a man with a plough: the size of the field, or the width of the furrow, is seldom taken into the account: notwithstanding, it is evident, (*see Table I.*) that a plough requires to be moved more than double the distance, in plowing an acre with furrows 8 inches wide, in a corner or narrow part of a field admitting of their being only 1½

chain long, that it would be required to be moved to plow an acre with furrows 12 inches wide and 9 chains long.

Occupiers of the soil would do well to lay the arable part of their farms into large square fields. Small or narrow fields add considerably to the expense of cultivation; as may be seen by the following example :



Suppose the above diagram to represent field A, containing 6A. 2R. 24P. being 19 chains from the hedge *e* to the hedge *f*, and  $3\frac{1}{2}$  chains from the hedge *g* to the hedge *h*; the width from each hedge to the inner side of each headland being 50 links; if double the width of the headland be deducted from the length of the side of the field, the remainder will be the length of the furrow: then, if one chain be deducted for the two headlands, the length of furrow from *e* to *f* would be 18 chains. To plow an acre in furrows 8 inches wide and 18 chains long (*see Table I.*) the plough requires to be moved 12.881 miles: multiplied by 6.65 (6.65 being the decimal corresponding to

2R. 24P.—see Table VII.) will produce 85·658, the space in miles and decimal parts, over which the plough would be required to pass to plow field A from *e* to *f*. The expense of the manual labour in plowing an acre in furrows of the above dimensions, viz. 18 feet by 8 inches, at the rate of two shillings and sixpence per day, may be found as follows. By Table II. the expense at one shilling *per* day is 1·0734, multiplied by 2·5 produces 2·6835, the expense of the manual labour in plowing one acre; which being multiplied by 6A·65, the contents of the field equal 17·845; which is the expense of the manual labour in plowing field A from *e* to *f*.

Should the same field be required to be plowed from *g* to *h*, in furrows 8 inches wide, deduct one chain for headlands, &c. and the furrows will be only  $2\frac{1}{2}$  chains in length. By Table I. the number of miles the plough must be moved to plow an acre in furrows  $2\frac{1}{2}$  chains long and 8 inches wide, is 16·077: multiplied by 6·65 (the contents of the field) equal 104·500 miles; and by Table II. the value of the manual labour at one shilling *per* day would be 1·3397 multiplied by 2·5 equal 3·349, the value of the manual labour in plowing one acre, multiplied by 6·65

equal 22·238 the value of the manual labour in plowing field A from *g* to *h*.

### RECAPITULATION.

To plow field A from <i>g</i> to <i>h</i> in furrows 8 inches wide, the plough requires to be moved . . . . .	} miles. 104·500	Expence of ma- nual labour in plowing field A from <i>g</i> to <i>h</i> }	s. 22·236
To plow field A from <i>e</i> to <i>f</i> in furrows 8 inches wide, the plough requires to be moved . . . . .	} 35·658	Expence of ma- nual labour in plowing field A from <i>e</i> to <i>f</i> }	17·845
Difference	18·842 = 18	M. F. P. 6 30	s. d. 4·393 = 4 4 $\frac{1}{2}$

Hence it appears, that to plow field A from *g* to *h*, the man, &c. must travel 18M. 6F. 30P. farther than it would be requisite for them to travel to plow the same field in furrows of a similar width from *e* to *f*; and the manual labour alone would amount to four shillings and four pence three farthings more.

It also appears, that it would be necessary to have two prices for executing the different operations in each field; which, though the most correct plan, would be attended with more trouble than most people would be inclined to bestow. Another method, more simple and perhaps sufficiently accurate for practical purposes, is, by finding the mean length of furrow that the arable fields on a farm will admit; and to apportion the price of each operation by the mean length found,

It would sometimes be in favour of the labourer, and at other times against him, but, in the long-run, nearly equal.

### EXPLANATION OF TABLE III.

TABLE III. shews the square root (or mean length of the sides) of fields containing from one quarter to forty acres. From which double the mean width of the headlands being deducted, will give the mean length of furrow.

#### EXAMPLE.

Field A is 6·65; say 6·50: by referring to the Table, the square root, or mean length of the side, is 8 chains 06 links: deduct 1 chain (double the width of the headland), and the remainder will be 7 chains, the mean length of furrow in field A.

To find the mean length of furrow of several fields. Add the contents together, divide the total number of acres by the number of fields; and the quotient will be the average number of acres: which compare with the Table for the square root. Deduct double the mean width of the headland from the square root, and the re-

mainder will be the mean length of furrow in the fields.

## EXAMPLE.

Fields.	Contents in acres.
A . . . . .	6.65
B . . . . .	16.00
C . . . . .	21.50
D . . . . .	34.00
E . . . . .	17.43
F . . . . .	5.19
G . . . . .	19.26

7 | 120.03 | 17.14

By Table III. the square root of 17.43 acres is . . . . . 13.04 chains. links.

Deduct double the supposed mean width of headland . . . . . 1.04

The mean length of furrow in fields A, B, C, D, E, F, G . . . . . 12.

The mean length of furrow being found; the number of miles that each implement requires to be moved, to work an acre, may be found in the column under the length of the furrow in Table I.: and in the column under the mean length of furrow in Table II. will be found the expense, at one shilling *per* day, of the manual labour of

working an acre with implements of different widths : which sum being multiplied by the usual pay of a labourer, as before described, will shew the value of the manual labour of performing the different operations.

Yearly servants might be paid weekly for the extra work performed by them.

The advantages arising from this plan, were it generally adopted, would be, that each man might execute an additional quantity of work, and thus be enabled to support his family without parochial aid ;—a spirit of industry would be disseminated throughout the great body of provincial poor,—highly beneficial to the community at large; and the benefits, hence more immediately derivable by the farmer, would be the consequent depression of the poor-rates,—and the saving in many agricultural operations, in the proportion, that the expence a man and the number of horses used with each implement bear, to the expence of a man alone.

#### EXPLANATION OF TABLE IV.

##### *For Manuring Land.*

Most occupiers of land know, after manuring a field, how many loads they laid upon it : but few



take the trouble previously to calculate the proper distance to lay the heaps apart, so as to have a given number of loads applied to each acre.

The late Rev. H. Close, Rector of Hordle, Hants, calculated a table for this purpose: but it applied merely to those cases where the rows of manure and the heaps in the rows were equidistant; which will seldom occur when manuring arable land, as the distances of the rows will in most instances depend upon the width of the lands. A table for the same purpose was also published by Mr. J. Cullyer, of Wicklewood, in the county of Norfolk. Both these tables are useful as far as they go, but appear to have been calculated more with a view to ascertain the number of loads *per* acre after the manure has been laid on, than to direct the husbandman at what distances to lay the heaps, and how many to make of a load, in order to have a given number of loads applied to each acre.

Table IV. is calculated to shew the necessary particulars at sight.

#### EXAMPLE.

Suppose the lands to be 10 yards wide, or that the rows of manure are required to be 10 yards apart; and that it is proposed to lay 17 loads

upon an acre: find 10 in the first column, then look down the fourth column for 17; and parallel to 17·2 in the second and third columns, will be found  $5\frac{1}{2}$ , 5; implying that the heaps in the rows must be  $5\frac{1}{2}$  yards apart, and each load made into 5 heaps.

Again.—If the rows be required to be 9 yards apart, and 15 loads to be laid upon an acre: find 9 in the first column, and, on casting the eye down the fourth column, it will be found that it may be done in two ways: (the farmer may adopt which best suits his convenience:) that is to say, by laying the heaps in rows 7 yards apart, and making 5 heaps of each load; or by making each load into 7 heaps, and laying the heaps 5 yards apart.

Filling, emptying, and spreading manure, will be most expeditiously done by the cubic yard.

It may not be amiss here to notice a very simple contrivance, adopted by many farmers who aim at regularity in the distribution of their manure. It is a light chain, about nine or ten yards long; having a wooden clog fastened to one end, and a ring at the other end, large enough to be easily hung on a hook driven into the axle-tree close to the near wheel of each cart: there is also a ring instead of a link at the distance of every half-yard from the end—one to the middle of the chain, to admit

of its being attached to the cart at any required length. When hung on at the length, the heaps of manure are intended to be laid apart; a heap is dropped; the horses are then suffered to move on till the clog is drawn opposite to the heap; they are then stopped, and another heap dropped; they are afterwards moved on till the clog is drawn opposite to the last heap: and in this manner they proceed till the field is finished; observing always to unship the chain from the empty cart, and to hang it on the full cart.

#### EXPLANATION OF TABLE V.

*Shewing the Expence of making new Ditches of various Dimensions, according to the Tenacity of the Soil.*

IN every district, custom seems to have established a certain width and depth for a ditch; the price of which is pretty generally known throughout that district. But should a person wish to make a ditch, varying in any particular from the customary dimensions of those in the neighbourhood, he would find a difficulty in ascertaining the price of making one.

This Table is calculated on the statute pole of  $5\frac{1}{2}$  yards or  $16\frac{1}{2}$  feet, and also upon the supposition that the farmer is aware of the value of digging a cubic yard of the soil where the ditch is to be made.

EXAMPLE.

What should be given *per* pole for making a ditch 5 feet wide at top, 2 feet wide at bottom, and 4 feet deep; where the value of digging a cubic yard is  $3d.$ ?

On a line with 5 feet in the first column, 3 feet in the second, and 4 feet in the third, and under  $3d.$  *per* cubic yard, will be found  $2.450 = 2s. 5\frac{1}{2}d.$ : the answer.

But should the person wishing to make the ditch, be ignorant of the value of digging a cubic yard of the soil; this Table will, notwithstanding, enable him to ascertain the expence of making the intended ditch. His plan will be to procure the dimensions of the ditch usually made in the country where he resides; and also the price; then, by comparing those dimensions with the Table, and having found similar dimensions, by looking through the columns to the right, he will probably find the price given for digging a pole. The column in which he may find the price, will assist him also in finding the value of digging a ditch of any other dimensions.

## EXAMPLE.

A person wishes to find the expence *per* pole of making a ditch 6 feet wide at top, 2 feet wide at bottom, and 5 feet deep;—having no other criterion to judge from, than the ditches of the country for which, on soils similar to that where he wishes to make the new ditch 1s. 10d. = 1·833, is given for a ditch 4 feet wide at top, 2 feet wide at bottom, and 3 feet deep.—Find 4, 2, and 3, in the Table; then direct the eye along the same line of figures; and 1·833 corresponding to 1s. 10d. will be found under 4d. *per* cubic yard: and in the same column (under 4d. *per* cubic yard) on a line with 6, 2, 5, (the dimensions of the intended new ditch,) will be found 4·062, corresponding to 4s. 0 $\frac{3}{4}$ d. which is the value of digging a pole of the required ditch. Or it may be found as follows: By Table V. the usual ditch of the country, 4, 2, 3, for which 1·833 *per* pole is given, requires 5·5 cubic yards of soil to be moved, (*see the second column*;) and the intended ditch 6, 2, 5, requires 12·2 cubic yards of soil to be moved: then,

$$\text{As } \begin{array}{c} \text{Cub. yds.} \\ 5\cdot5 \end{array} : \begin{array}{c} \text{s.} \\ 1\cdot833 \end{array} :: \begin{array}{c} \text{Cub. yds.} \\ 12\cdot2 \end{array} : \begin{array}{c} \text{s.} \\ 4\cdot066 \end{array} = 4 \text{ } 0\frac{3}{4}.$$

*Directions for ascertaining the Amount due for Rent, Wages, or Work, at any Sum per Annum, or per Acre.*

To find the amount of money due for wages or rent, multiply the decimal corresponding with the number of weeks and days (*see Table X.*) by the sum *per annum*; and the product will be the answer.

EXAMPLE.

What sum is due for 37 weeks and 4 days wages at 20*l.* *per annum*?

By Table X. 37 <sup>Wks. Days</sup> 4 is equal to .723 part of a year multiplied by the an. sum of 20  
 produces  $\frac{\quad}{\quad}$  the answer.  
 $14.460 = 14*l.* 9*s.* 2\frac{1}{2}*d.*$   
 (*See Table IX.*)

EXAMPLE.

What sum is due for 29 weeks rent at 80 guineas *per annum*?

By Table X. 29 weeks = .558

80 guineas = 84*l.*      84

$\frac{\quad}{\quad}$   
 2232

4464

$\frac{\quad}{\quad}$  the answer.  
 produces  $46.872 = 46*l.* 17*s.* 5\frac{1}{4}*d.*$



## EXAMPLE.

What sum is due for 1 year and 32 weeks rent at 340*l.* *per annum*?

$$\begin{array}{r}
 1 \text{ year } 32 \text{ weeks} = 1.615 \\
 \text{Annual rent} \quad \quad 340 \cdot \\
 \hline
 64600 \\
 4845 \\
 \hline
 \text{the answer.} \\
 549 \cdot 100 = 549 \text{ } l. \text{ } 2s. \text{ } Od.
 \end{array}$$

The money due *per* acre may be found by Tables VII. and VIII. if the product be required in shillings, &c.; and by Tables VII. and IX. when the products are required in pounds.

## EXAMPLE.

How much is due for hoeing 3R. 27P. of turnips at 7*s.* *per* acre?

$$\begin{array}{r}
 \text{By Table VII. } \begin{array}{c} R. \quad P. \\ 3 \quad 27 \end{array} = .318 \text{ parts of an acre} \\
 \text{multiplied by } \quad 7 \cdot \\
 \hline
 \text{the answer.} \\
 \text{produces } \quad \quad \quad \begin{array}{c} s. \quad d. \\ 6 \cdot 426 = 6 \quad 5 \end{array}
 \end{array}$$

(See Table VIII.)

## EXAMPLE.

How much is due for reaping 23A. 2R. 13P. of wheat, at 14*s.* 9*d.* *per* acre?

$$\begin{array}{r}
 \text{By Table VII. } \begin{array}{c} A. \quad R. \quad P. \\ 23 \quad 2 \quad 13 \end{array} = 23 \cdot 29 \\
 \text{By Table IX. } 14s. \text{ } 9d. = .737
 \end{array}$$

$$\begin{array}{r}
 \hline
 16303 \\
 6987 \\
 16303 \\
 \hline
 \text{the answer.} \\
 17 \cdot 16472 = 17 \text{ } l. \text{ } 3s. \text{ } 3 \frac{1}{2} d.
 \end{array}$$

EXPLANATION OF TABLES XV. XVI.  
XVII. and XVIII.

*Shewing the dead profitable Weight of Neat Cattle,  
Calves, Sheep; and Swine.*

IT has frequently been remarked, that those who are the most skilful, in general manage their concerns with the least trouble. A person having an article to dispose of, would be more likely to meet with a purchaser by offering it at a fair market-price. To ask wide of the value, either betrays ignorance of the subject, or an opinion that the intended purchaser is unacquainted with his business. And on the other hand, if a fair price be demanded for goods, and the person desiring to purchase bids considerably under the value for them, he manifests either a want of knowledge, or thinks contemptibly of the judgment of the seller.

These observations are not inapplicable to many cases that occur in disposing of the produce of the soil.

In selling corn or hay, the measure or weight is usually known: and the only question to be determined is the market-price; which will of course

vary according to the quality. But in dealing for fat cattle, the weight is separately computed by each party, and the price per stone calculated according to their respective computations of the weight and estimation of the quality: which frequently occasions a material difference in the estimated value, particularly where one or both of the parties happen to be inexperienced.

Nothing but continual practice will enable any one to guess the weight of animals with accuracy. If the attention of a person, deemed expert in this art, have been for a length of time diverted from it to other objects, he will not, on resuming the subject, immediately feel that confidence in his own opinion that he used to do when in the exercise of it. It must necessarily follow, that those who have only occasionally a few fat animals to dispose of, with no other opportunity of acquiring information than from their own concerns, will meet a purchaser upon very unequal terms; it being the principal study of the latter, who have the additional advantage of weighing the animals when dead: the only sure criterion to form a correct judgment upon.

If a person unacquainted with the value of an article he may wish to dispose of, should ask about the real value for it, this must be purely acci-

dental: for he would be as likely to demand considerably above or below: but in valuing fat animals, several causes might combine to induce him to put too high a price upon them.

To remedy these inconveniences, a set of tables was calculated by Mr. Fenton, of Northumberland, for ascertaining the dead weight of the four quarters, by measuring the animal while alive: and if it be moderately fat, of perfect symmetry, and carry its weight regularly throughout, these tables may afford a tolerably accurate idea of the truth: but when an animal varies in any degree from these essential qualities, they must inevitably err. The tables are calculated upon the supposition that the animals are perfectly cylindrical; and each cubic foot is supposed to weigh 42lb.: “the girth is taken just behind the shoulder-blade; and the length, from the fore-part of the shoulder-blade, to the bone in the tail that plumbs the line with the hind-part of the buttock.” The dimensions may be worked by the rule for finding the contents of a cylinder by the circumference; that is, by squaring the girth, multiplying the product by  $\cdot 07958$  for the area of unity, or (which will be near enough for the present purpose) by  $\cdot 08$  and multiplying the last product by the length for the solid contents.

## EXAMPLE.

Suppose an animal measured, according to the foregoing directions, girth 6 feet 9 inches, length 5 feet: what will be the weight of the quarters when dead, in stones of 14 lb. supposing each solid or cubic foot to weigh 42 lb. = 3 stones?

By Table VIII. the decimal part of a foot corresponding to 9 inches is .75: therefore the

girth .....	6.75	
multiplied by	6.75	
	<hr style="width: 50px; margin: 0 auto;"/>	
	3375	
	4725	
	4050	
	<hr style="width: 50px; margin: 0 auto;"/>	
produces	45.5625	the square
multiplied by	.08	
	<hr style="width: 50px; margin: 0 auto;"/>	
produces	36.45	the area of the circle
multiplied by	.5	the length
	<hr style="width: 50px; margin: 0 auto;"/>	
gives	18.225	the contents in cub. feet
multiplied by	3.	the No. of stones in 42 lb.
	<hr style="width: 50px; margin: 0 auto;"/>	
produces	54.675	<small>stones lb.</small> = 54 9 the answer.

When animals are heavy before (where the girth is taken), and light in the hind-quarters, they will measure so as to appear to weigh more than they will turn out; and if light before and heavy behind, they will not measure, by the ostensible

weight, so much as they will actually be found to do.

In order to ascertain the real weight with greater precision, and thereby enable a seller to meet a purchaser upon equitable terms, Tables are subjoined, shewing the proportion that the carcase or quarters of an animal dead, bears to the gross live weight: the accuracy of which has been ascertained by experiments made upon almost every breed of cattle, sheep, &c. this country produces, and of various degrees of condition.

In each of the Tables are separate columns for the different state of fatness, *viz.* for those only just marketable,—for fat, and extra fat, or such as have arrived at a perfect state of ripeness.

Taking an ox alive as 1, the proportionate weight of the carcase or quarters will vary from  $\cdot 6$  to  $\cdot 7$ ; that is to say, the carcase of an ox merely marketable, will weigh about 6-tenths of the whole; the quarters of a fat ox will be  $\cdot 65$  or 6-tenths, and 500 parts of the gross weight; and the carcase of a perfectly ripe ox will be 7-tenths of the live weight.—Consequently, the offal of a marketable ox will be  $\cdot 4$ , of a fat ox  $\cdot 35$ , and of a ripe ox  $\cdot 3$ .



The component parts of a ripe ox (fasted) have been found to correspond nearly to the following proportions:

{	Cold	Carcase or quarters, skirts and kidneys: meat $\cdot 6$ , bone $\cdot 1$ .....	$\cdot 7000$
		Loose fat .....	$\cdot 0900$
		Hide and horns .....	$\cdot 0550$
		Head, brains, and tongue.....	$\cdot 0230$
		Feet .....	$\cdot 0140$
		Heart, lights, sweetbread, and bladder	$\cdot 0084$
		Tripe (without fat) feck, reed, liver, gall, and melt .....	$\cdot 0256$
		Entrails and contents .....	$\cdot 0362$
		Blood .....	$\cdot 0278$
		Heat given out .....	$\cdot 0200$
	$1\cdot 0000$		

So if the live weight of a ripe ox (fasted) be multiplied by the proportional number opposite to either of the respective parts, the product will be the weight of that component part.

#### EXAMPLE.

If 200 stone, the supposed weight of a ripe ox alive, be multiplied by  $\cdot 7$ , it will produce 140

stones, which is the weight of the carcase ; 120 stones of meat, and 20 stones of bone ;

that is,  $200 \times \cdot 6 = 120$  of meat

$200 \times \cdot 1 = 20$  bone

—  
 $200 \times \cdot 7 = 240$  the carcase.

The carcase of an ox merely marketable, bears a proportion of  $\cdot 6$  to the gross live weight; about  $\cdot 5$  of which is meat, and  $\cdot 1$  bone.

To find the dead profitable weight of NEAT CATTLE by Table XV. it will be necessary to ascertain the live weight; which being done, and the weight found in the first column, look to the right, and in the second, third, or fourth columns, (according to the condition of the animal) will be found the weight of the quarters.

#### EXAMPLE.

If an ox, alive, fasted about the usual time, weigh 14cwt. 1qr. 4lb. the proportional weight of the carcase, if barely marketable, will be 120 stone; if fat, 130 stone; if ripe, 140 stone; and if more than moderately fat, but not quite ripe, the mean between the two; namely, 135 stones, &c. &c.

The proportional weight of hide and tallow is given in the fifth column: and it will in most cases be found, if the carcase exceed the weight found by the Tables, (according to the degree of fatness of the animal as before explained), that there will be a deficiency in the weight of the hide and tallow; and when the carcase does not weigh so much, it may safely be concluded that there is an excess of hide and tallow. This may arise from different causes; but, perhaps, nothing contributes to produce this variation more than the age of the animal: young animals seldom having so large a proportion of loose fat as those which are older; or, to speak technically, “they never die so well.”

It will however occur to the reader, that the Tables will, in either case, shew the dead profitable weight—allowing the buyer a fair proportion of offal.

If the gross weight of a SHEEP (fasted) be expressed by 1, the proportion that the carcase bears to the whole, will vary from  $\cdot 58$  to  $\cdot 68$ .

To find the dead profitable weight of sheep by Table XVI. it will be necessary to deduct the esti-

mated weight of the wool, and any extraneous matter adhering thereto, from the gross weight ; and seek in the Table for the remainder only.

#### EXAMPLE.

Suppose a sheep moderately fat weighs 1 cwt. 2 qrs. 0 lb. and the wool, &c. is estimated at 6 lb. ; deduct 6 lb. from 1 cwt. 2 qrs. 0 lb. and refer to the Table for the remainder ; namely, 1 cwt. 1 qr. 22 lb. and parallel to it, in the third column, will be found 12 stone 7-10ths. = 12 stone 6 lb. the weight of the carcase or quarters.

The proportion that the sides, head, feet, and flae of SWINE, bear to the gross weight if expressed by 1, varies from  $\cdot 75$  to  $\cdot 85$  ; and the method of finding the dead weight by Table XVII. is similar to that before explained for ascertaining the dead profitable weight of cattle and sheep.

If the gross weight of a CALF be expressed by 1, the proportional weight of the carcase will be found to vary from  $\cdot 56$  to  $\cdot 64$ .

The live weight of CALVES should be taken about noon, previous to their being suckled ; and the weight of the carcase may be found by Table XVIII.

according to the directions given above, for ascertaining the weight of other animals.

The live weights are to be taken in hundred-weights, quarters, and pounds;—and the proportional dead weights are given in London stones of 8lb. and tenths of stones. But in order to render these Tables more generally useful, Table XIX. (for the equalization of weights) is annexed, from a tenth, to 300 London stones of 8lb.;—shewing the corresponding number of stones of 14lb. scores of 20lb. stones trone weight—(consisting of 16lb., each pound being 20 ounces Amsterdam weight, equal to 21 lb. 7-tenths avoirdupoise weight)—and also the proportional number of hundred-weights, quarters, and pounds.

## EXPLANATION OF THE TABLES OF WEIGHTS AND MEASURES.

THE variety of weights and measures is a source of perplexity to agriculturists in general, and particularly to those whose inclination may induce them to quit their native place to pursue the profession of a farmer in a distant part of the kingdom. They need no other obstacles than what nature presents, to deter them from embark-

ing their capitals in distant concerns: the difference of soil and climate, however, are not the only obstacles they have to contend with;—they have innumerable difficulties to surmount, of which those who never ventured beyond the limits of their native county can have only a faint idea.

The jealous reception which fresh faces sometimes meet with from native inhabitants, and the unwillingness of the latter, in many instances, to afford that kind of information which every person in civilized society has a right to expect from another, tends materially to increase the difficulties of the stranger. In order to diminish those difficulties, and render the inhabitants of different districts more intelligible to each other, Tables of Scotch and English Weights and Measures are subjoined; and also a Table for making MEASURES *equal in capacity to the STANDARD WINCHESTER BUSHEL*, but of various depths and diameters.

### ENGLISH WEIGHTS.

TROY, the original weight of the realm, is now used chiefly in weighing gold, silver, and precious stones; and for ascertaining the strength of spirituous liquors.



Apothecaries weight is merely a different subdivision of the pound troy: this weight is only used in compounding medicines.

Avoirdupoise weight was first used in the reign of Henry the Eighth.—By this weight are weighed all kinds of flesh, corn, hay, straw, bread, wool, cheese, butter, hemp, flax, tallow, pitch, tar, wax, and all metals, except gold and silver; grocery, drugs, and all commodities which are garbled, and upon which any refuse is made.

### SCOTCH WEIGHTS.

HAY, wool, Scotch lint, hemp, butter, cheese, tallow, &c. are always sold in Scotland by trone weight.

A London-load of hay (that is, 18 cwt.) makes of trone weight, nearly 93 stones, (reckoning 20 lb. Amsterdam weight to the stone.) Therefore,

	<i>s.</i>	<i>d.</i>		<i>£.</i>	<i>s.</i>	<i>d.</i>
Hay at	0	5	<i>per st.</i>	=	1	18 9
	0	6	.....		2	6 6
	0	7	.....		2	14 3
	0	8	.....		3	2 0

} *per load.*

	<i>s.</i>	<i>d.</i>		<i>£.</i>	<i>s.</i>	<i>d.</i>
Hay at	0	9	<i>per st.</i>	=	3	9 9
	0	10	.....		3	17 6
	0	11	.....		4	5 3
	1	0	.....		4	13 0
	1	6	.....		6	19 6
	2	0	.....		9	6 0
	2	6	.....		11	12 0

} *per load.*

### ENGLISH MEASURES.

THE origin of long or lineal measure was taken from a grain of barley: of which three selected out of the middle of the ear, and well dried, make one inch. But the legal standard to which all are now referred, is preserved in the Exchequer.

Square measure is used to estimate all kinds of superficies; such as land, paving, plastering, roofing, tiling, thatching, and every thing that has length and breadth.

By cubic or solid measure, are found the contents or capacities of all bodies having length, breadth, and depth.

Measures of capacity have been explained by several statutes:

By an Act passed in the 13th and 14th of King William the Third, chap. 5. sect. 28, every round bushel with a plain bottom, being made  $18\frac{1}{2}$  inches throughout, and 8 inches deep, is to be esteemed a legal Winchester bushel, according to the standard in the Exchequer.

By Magna Charta, 9th Henry Third, chap. 25, one measure of corn shall be used throughout the realm; viz. the legal Winchester bushel *only*.

By 15th Richard Second, chap. 4th, none shall buy corn but by the Winchester bushel, upon forfeiture of the corn so bought.

By 22d Charles Second, chap. 8, none shall sell corn by any other than the Winchester bushel, under penalty of forty shillings to the poor.

If any mayor, or constable, shall suffer any other measure to be used, (or if upon complaint of this statute, they shall not endeavour to punish the same), they shall forfeit five pounds; one moiety to the informer, the other to the poor.

By 22d and 23d Charles Second, chap. 12, every person who shall buy or sell corn by any other measure, shall forfeit (besides the penalty of the former act), all corn bought or sold contrary to this Act, to the person informing.—Upon a complaint being made to any magistrate, it will rest with the defendant to prove that he has not sold by any other than the legal standard.

By 1st of Queen Anne, statute 1, chap. 1, the bushel water-measure, for fruit, is to be round, and in diameter  $18\frac{1}{2}$  inches within the hoop, and 8 inches deep; and so in proportion for any greater or lesser measure, and is to be heaped as usual.

By 12th of Queen Anne, statute 2, chap. 27, the coal-bushel is to be round, with a plain and even bottom, and to be *nineteen inches and a half* from *outside to outside*, and to contain *one Winchester bushel and one quart of water*, according to the standard of the Winchester bushel.

It hence appears, that three different sorts of bushels are now used as standard measures; viz. the Winchester bushel for corn and grain, which

is to be stricken (with a round strike); the bushel water-measure for fruit, which is to be heaped; and the coal-bushel, which is also to be heaped.

Corn-bushels, made according to the dimensions of the standard, viz.  $18\frac{1}{2}$  inches diameter, and 8 inches deep, have been considered inconvenient for general purposes; being too wide for the sacks commonly used by farmers. Narrower, and deeper measures have therefore been substituted, and adopted by most persons in the corn-trade.

The innumerable errors that are committed, in attempting to make measures of different dimensions, but to contain the same quantity of corn as the legal Winchester bushel, has produced much unpleasant controversy; and the feelings of many persons have suffered, more frequently through a want of information on the subject, than from being influenced by motives to which errors of this description are generally attributed.

For instance. Suppose a measure differing in dimensions, but containing the exact number of cubical inches as the legal standard bushel, be taken to the Exchequer, Guildhall, or any other

place where a standard is preserved, the officer attending would not hesitate to stamp it as a legal bushel : and the person to whom it might belong, would feel confident of its being a just measure.— Yet the contrary is demonstrable ; for though its cubical contents be equal to, it would not contain the same quantity of corn as the standard. This may at first appear paradoxical ; but will easily be comprehended, if it be considered that in striking off the superfluous corn, a pressure is produced, which occasions a greater quantity to be contained within the limits of the bushel, than would otherwise happen, if the corn above the edge of the measure were taken off while in its light state : and the effect of the pressure being more immediately felt near the surface, it will be obvious, that any deviation from the specific diameter, will produce a corresponding difference in the quantity that will be contained within the measure.

The pressure in striking, causes an increase of corn nearly equal to the cubical contents of three sixteenths of an inch in depth, upon the surface exposed.

The surface of the legal bushel  $18\frac{1}{2}$  inches diameter, is 268·8 superficial inches, multiplied by ·1875, (the decimal corresponding to three six-



(cenths of an inch) will produce 50·4 cubic inches;—the increase of corn occasioned by the pressure in striking: but a measure 14 inches diameter, exposes a surface of only 153·9 superficial inches, multiplied by  $\cdot 1875 = 28\cdot 8$  cubic inches, the increase occasioned by pressure in striking.

	In.	Cub. In.
Increase by striking a measure	$18\frac{1}{2}$ diameter	50·4
Increase by striking a measure	14 diameter	28·8
		—
Difference		21·6

Hence it follows, that it will be necessary to increase the depth of the latter measure, in order that it may *exceed* the contents of the Winchester bushel by 21·6 cubic inches:—which would then contain an equal quantity of corn with the standard measure, allowing for the increase occasioned by the pressure in striking.

#### EXAMPLE.

What ought to be the depth of a measure  $13\frac{1}{4}$  inches diameter, in order that it might contain the same quantity of corn as the legal bushel: supposing that the pressure in striking produces an increase equal to the cubical contents of

three sixteenths of an inch, on the surface exposed?

By Table XX. the contents of a measure  $13\frac{1}{4}$  inches diameter, (see the first column) and 15 inches  $5$ -eighths deep, (see second column) exceeds the contents of the standard bushel by 2 cubic inches, (see third column). But the area of a circle  $13\frac{1}{4}$  inches diameter, being only 137·8 superficial inches,—the increase occasioned by the pressure in striking, will only amount to 25·8, (see fourth column), being 24·6 cubic inches less than the increase by striking the standard.—To make up this deficiency, it will be necessary to add as much to the depth of the measure,  $13\frac{1}{4}$  inches diameter, as will make its contents exceed the contents of the Winchester bushel, by 24·6 cubic inches : which may be done as follows.—In the fifth column it will be found, that every eighth of an inch in depth, of a measure  $13\frac{1}{4}$  inches diameter, contains 17·22 cubic inches ; therefore, if  $3$ -sixteenths of an inch be added to the depth, it will then contain nearly the same quantity of corn as the standard.

Cubical contents of the Winchester		
bushel .....	2150·4	
Increase by striking .....	50·4	
	<hr/>	2200·8

Brought over .....	Cub. In. 2200·8
Cubical contents of Measure $13\frac{1}{4}$	
inches diameter, and 15 inches	
5-eighths deep (2 cubic inches	
more than the legal standard)... 2152·4	
Increase by striking .....	25·8
Add to the depth $\frac{3}{16}$ of an inch	
$\left\{ \begin{array}{l} \frac{1}{8} \dots\dots 17\cdot21 \\ \frac{1}{16} \dots\dots 8\cdot6 \end{array} \right\}$	..... 25·8 <hr style="width: 100px; margin-left: auto; margin-right: 0;"/> 2204·0
Difference... 3·2	

Thus it will be necessary to make the latter measure 15 inches  $13\frac{1}{16}$  deep, instead of 15 inches  $5\frac{5}{8}$ , which would then contain 3· cubic inches more corn than the standard bushel. It will, in most cases, be difficult to make measures, varying in dimensions, to correspond precisely with the contents of the standard: the best plan, however, in all such cases, will be to err on the safe side.

The liability to error by deviating from the precise dimensions, as established by law, in making corn measures, it is presumed has been sufficiently elucidated: and it will require but little attention to perceive, that a strict adherence to the legal dimensions, in the construction of fruit and coal measures, is indispensable: for it will be obvious

to every person, that a larger heap will lay upon the area of a circle  $19\frac{1}{4}$  inches diameter, than will lay upon a circle of any lesser diameter. To prevent any excuse respecting the inconvenience of these measures, the dimensions of the coal-sacks have been particularly described.

By 3d of King George the Second, chap. 26, sect. 11, coal-sacks are to be full 4 feet 2 inches in length, and 26 inches in breadth after they are made: and dealers in coals are to use no others.

It was further enacted, That no sacks used for the carriage of coals are to be less than four feet in length, and full two feet in breadth within side the sack.

Sixty solid or cubic feet of Newcastle coal make one London chaldron; a cubic foot of ditto generally weighs 50lb. avoirdupoise; a heaped bushel thereof weighs 83lb. avoirdupoise; and 36 bushels (or 1 chaldron) weigh 26.67 hundred-weight; that is, 2988lb. avoirdupoise.

It would be productive of much good to the community, were corn of all kinds, as well as coal, &c. to be sold by weight instead of measure.

By 5th of Queen Anne, chap. 27, any round vessel, commonly called a cylinder, having an even bottom and being *seven inches* diameter throughout, and six inches deep from the top of the inside to the bottom, or any vessel containing 231 cubical inches and no more, is to be deemed a lawful wine-gallon; and 252 of such gallons shall be deemed a tun of wine: 126 a butt or pipe; and 63 a hogshead of wine.

Beer-measure for London is 36 gallons to the barrel. Ale-measure for ditto is 32 gallons to the barrel; beer and ale for the country is a mean between the two, being 34 gallons to the barrel.

Every city, borough, or market-town, is to have one of every weight and measure, of brass or other metal, according to the standard in the Exchequer; there to remain in the keeping of the mayor, bailiff, or other head-officer of such city, borough, or market-town, as the king's standard; and the inhabitants are to cause common weights and measures to be made according to the said standard weights and measures of such city, borough, or market-town: which are to be examined and marked by such mayor, bailiff, or other officer, in whose possession such standard shall

remain: and no inhabitant is to sell, buy, keep, or make use of, any other weight or measure whatever, than according to such standards.

### SCOTCH MEASURES.

THE Stirling jug (containing one Scotch pint) is the original standard of all liquid and dry measures, and of all weights, in Scotland: it contains 103·404 cubic inches:—when filled with the water of Leith (with the greatest accuracy) the water weighed 3lb. 7oz. of Scots troy, or Amsterdam weight.

By the Act of Union, the barrel for English country-measure of 34 gal- lons, making .....	Cub. In. 9588
Is reckoned equal to 12 Scots gallons; making.....	9626·7
Difference...	<hr/> 338·7

*Scotch gallons.*

*English gallons.*

	Beer.	Wine.
16 ... = ...	46·935	57·3
18·4 ... = ...	54·	65·922
17·6 ... = ...	51·6	63·



Amsterdam and Trone, being the weights commonly used in Scotland, have been inserted here, and the local weights omitted; because it was considered, that the variety would tend rather to perplex than afford any useful information.

Were an universal standard of weights and measures to be established, it would greatly facilitate the transacting of every description of business: but this unfortunately, at present, appears an object more to be desired than likely to be speedily accomplished.

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**T A B L E S.**

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TABLE I.—(See page 5).

*Showing the Space in Miles, and Decimal Parts of a Mile, over which any Implement from Eight Inches to Twenty Feet Wide requires to pass for Plowing, Harrowing, Rolling, or otherwise Working an Acre of Land in Fields of various Sizes.*

For the Furlongs and Poles, Corresponding to the Decimal Parts of a Mile, see Table VI.

Width of Implement.		$\frac{1}{2}$ chain.	1 chain.	$1\frac{1}{2}$ ch.	$1\frac{3}{4}$ ch.	2 ch.	$2\frac{1}{4}$ ch.	$2\frac{1}{2}$ ch.
ft.	in.							
0	3	12·374	20·821	21·615	18·536	17·676	17·604	16·487
0	3 $\frac{1}{2}$	11·647	20·198	20·372	17·459	16·630	16·008	15·529
0	9	11·009	27·491	19·241	16·490	15·765	15·116	14·657
0	9 $\frac{1}{2}$	16·421	20·048	18·227	15·621	14·877	14·319	13·889
0	10	9·900	24·673	17·316	14·841	14·134	13·596	13·191
0	10 $\frac{1}{2}$	9·425	23·561	16·490	14·133	13·469	12·954	12·561
0	11	9·000	22·485	15·741	13·491	12·847	12·324	11·991
0	11 $\frac{1}{2}$	8·613	21·523	15·063	12·895	12·295	11·833	11·475
1	0	8·250	20·300	14·423	12·321	11·776	11·334	10·999
1	2	7·071	17·668	12·346	10·597	10·092	9·714	9·418
1	4	6·187	15·415	10·807	9·268	8·835	8·502	8·242
1	6	5·500	13·745	9·620	8·245	7·852	7·558	7·328
2	0	4·125	10·758	7·214	6·160	5·868	5·667	5·499
2	6	3·300	8·196	5·760	4·941	4·714	4·524	4·390
3	0	2·750	6·866	4·893	4·110	3·920	3·771	3·657
3	6	2·357	5·863	4·115	3·527	3·357	3·231	3·143
4	0	2·062	5·379	3·607	3·030	2·944	2·833	2·749
4	6	1·835	4·578	3·194	2·742	2·612	2·514	2·438
5	0	1·650	4·098	2·883	2·470	2·357	2·262	2·195
5	6	1·509	3·741	2·616	2·241	2·122	2·053	1·990
6	0	1·375	3·433	2·401	2·050	1·960	1·880	1·823
6	6	1·309	3·263	2·261	1·950	1·861	1·787	1·735
7	0	1·178	2·941	2·052	1·763	1·679	1·615	1·571
7	6	1·106	2·741	1·916	1·640	1·562	1·506	1·457
8	0	1·031	2·689	1·803	1·540	1·472	1·416	1·374
8	6	·971	2·418	1·689	1·448	1·386	1·326	1·295
9	0	·917	2·289	1·597	1·321	1·306	1·257	1·219
9	6	·867	2·158	1·507	1·291	1·230	1·194	1·147
10	0	·825	2·049	1·441	1·235	1·178	1·131	1·097
11	0	·734	1·870	1·368	1·129	1·061	1·026	·995
12	0	·687	1·716	1·299	1·025	·980	·949	·914
13	0	·632	1·631	1·140	·977	·930	·893	·867
14	0	·587	1·470	1·026	·881	·839	·807	·785
15	0	·546	1·376	·958	·820	·781	·753	·728
16	0	·516	1·344	·901	·770	·736	·708	·687
17	0	·485	1·209	·844	·724	·693	·663	·647
18	0	·458	1·144	·798	·660	·633	·628	·609
19	0	·432	1·078	·653	·645	·615	·597	·573
20	0	·412	1·024	·620	·617	·589	·565	·548

TABLE I.—*continued.*

Width of Imple- ment.		$2\frac{1}{4}$ ch.	3 ch.	$3\frac{1}{4}$ ch.	$3\frac{1}{2}$ ch.	4 ch.	$4\frac{1}{2}$ ch.	5 ch.	$5\frac{1}{2}$ ch.
0	8	15·740	15·458	15·221	15·026	14·685	14·427	14·220	14·052
0	$8\frac{1}{2}$	14·824	14·549	14·323	14·134	13·822	13·579	13·385	13·226
0	9	13·991	13·740	13·527	13·347	13·053	12·674	12·641	12·491
0	$9\frac{1}{2}$	13·263	13·017	12·825	12·648	12·366	12·149	11·975	11·832
0	10	12·591	12·366	12·175	12·012	11·746	11·541	11·376	11·241
0	$10\frac{1}{2}$	11·990	11·775	11·594	11·439	11·187	10·989	10·833	10·704
0	11	11·445	11·141	11·063	10·920	10·678	10·491	10·341	10·218
0	$11\frac{1}{2}$	10·953	10·756	10·591	10·449	10·221	10·039	9·880	9·778
1	0	10·451	10·296	10·144	10·009	9·787	9·616	9·474	9·366
1	2	9·004	8·805	8·694	8·577	8·388	8·241	8·122	8·026
1	4	7·870	7·729	7·610	7·513	7·362	7·213	7·110	7·026
1	6	6·995	6·870	6·764	6·673	6·526	6·337	6·320	6·245
2	0	5·225	5·148	5·072	5·004	4·898	4·808	4·737	4·683
2	6	4·191	4·116	4·053	3·997	3·909	3·840	3·786	3·741
3	0	3·491	3·428	3·375	3·330	3·266	3·200	3·153	3·116
3	6	2·991	2·937	2·892	2·853	2·790	2·732	2·702	2·669
4	0	2·616	2·574	2·536	2·502	2·454	2·404	2·368	2·341
4	6	2·327	2·285	2·258	2·228	2·167	2·132	2·100	2·076
5	0	2·095	2·058	2·026	1·998	1·954	1·920	1·893	1·870
5	6	1·891	1·866	1·837	1·821	1·771	1·740	1·716	1·695
6	0	1·745	1·714	1·682	1·665	1·633	1·600	1·576	1·558
6	6	1·657	1·627	1·601	1·589	1·546	1·517	1·496	1·478
7	0	1·495	1·468	1·446	1·426	1·395	1·366	1·351	1·334
7	6	1·391	1·374	1·346	1·326	1·296	1·274	1·256	1·241
8	0	1·306	1·287	1·268	1·251	1·227	1·202	1·184	1·170
8	6	1·227	1·205	1·185	1·174	1·143	1·124	1·107	1·094
9	0	1·163	1·142	1·129	1·114	1·083	1·066	1·050	1·038
9	6	1·095	1·074	1·057	1·044	1·020	1·011	·988	·976
10	0	1·047	1·029	1·013	·999	·977	·960	·946	·935
11	0	·995	·933	·918	·910	·885	·870	·858	·847
12	0	·872	·857	·841	·832	·816	·800	·788	·779
13	0	·828	·813	·800	·789	·773	·758	·748	·739
14	0	·747	·734	·723	·713	·697	·683	·675	·667
15	0	·695	·687	·673	·663	·648	·637	·628	·620
16	0	·653	·643	·634	·625	·613	·604	·592	·585
17	0	·613	·602	·592	·587	·571	·562	·553	·547
18	0	·586	·571	·564	·557	·541	·533	·525	·519
19	0	·547	·537	·528	·522	·510	·505	·494	·488
20	0	·523	·514	·506	·499	·488	·480	·473	·467

TABLE I.—*continued.*

Width of Imple- ment.		6 ch.	7 ch.	8 ch.	9 ch.	10 ch.	11 ch.	12 ch.	13 ch.
ft.	in.								
0	3	13·911	13·691	13·524	13·404	13·293	13·209	13·139	13·079
0	8 <sup>1</sup> / <sub>2</sub>	13·091	12·886	12·739	12·603	12·511	12·440	12·365	12·319
0	9	12·366	12·170	12·021	11·907	11·816	11·741	11·678	11·627
0	9 <sup>1</sup> / <sub>2</sub>	11·712	11·528	11·388	11·280	11·193	11·123	11·063	11·013
0	10	11·121	10·951	10·819	10·723	10·642	10·566	10·509	10·462
0	10 <sup>1</sup> / <sub>2</sub>	10·593	10·428	10·305	10·212	10·125	10·061	10·003	9·943
0	11	10·161	9·955	9·835	9·751	9·666	9·640	9·553	9·492
0	11 <sup>1</sup> / <sub>2</sub>	9·681	9·625	9·421	9·322	9·250	9·190	9·142	9·100
1	0	9·273	9·124	9·015	8·923	8·863	8·812	8·757	8·716
1	2	7·945	7·829	7·725	7·651	7·592	7·538	7·503	7·470
1	4	6·955	6·845	6·762	6·701	6·646	6·604	6·569	6·539
1	6	6·183	6·085	6·010	5·953	5·403	5·870	5·839	5·813
2	0	4·636	4·562	4·507	4·434	4·431	4·406	4·378	4·358
2	6	3·696	3·645	3·600	3·574	3·547	3·510	3·499	3·461
3	0	3·084	3·035	2·999	2·970	2·948	2·928	2·913	2·900
3	6	2·642	2·600	2·579	2·544	2·525	2·503	2·496	2·484
4	0	2·318	2·231	2·253	2·232	2·215	2·203	2·189	2·170
4	6	2·055	2·022	1·993	1·985	1·964	1·950	1·941	1·932
5	0	1·848	1·822	1·800	1·787	1·773	1·758	1·749	1·740
5	6	1·678	1·653	1·632	1·615	1·603	1·593	1·584	1·573
6	0	1·542	1·517	1·499	1·485	1·474	1·464	1·456	1·450
6	6	1·463	1·439	1·423	1·408	1·397	1·388	1·382	1·375
7	0	1·321	1·300	1·289	1·272	1·262	1·254	1·243	1·242
7	6	1·229	1·209	1·194	1·182	1·173	1·166	1·160	1·154
8	0	1·159	1·140	1·126	1·116	1·109	1·101	1·094	1·084
8	6	1·083	1·065	1·053	1·043	1·035	1·028	1·022	1·017
9	0	1·027	1·011	·999	·992	·982	·975	·970	·966
9	6	·966	·951	·939	·932	·925	·916	·912	·907
10	0	·924	·911	·900	·893	·886	·879	·874	·870
11	0	·869	·876	·816	·807	·801	·796	·792	·789
12	0	·771	·758	·749	·742	·737	·732	·728	·725
13	0	·731	·719	·711	·704	·698	·694	·691	·687
14	0	·660	·640	·644	·636	·631	·627	·622	·620
15	0	·614	·604	·597	·591	·586	·583	·580	·577
16	0	·579	·570	·563	·558	·554	·550	·547	·542
17	0	·541	·532	·526	·521	·512	·514	·511	·503
18	0	·513	·505	·499	·496	·491	·487	·485	·483
19	0	·482	·475	·469	·466	·462	·458	·456	·453
20	0	·462	·455	·450	·446	·443	·439	·437	·435

TABLE I.—*continued.*

Width of Imple- ment.		14 ch.	15 ch.	16 ch.	17 ch.	18 ch.	19 ch.	20 ch.
ft.	in.							
0	8	13·028	12·983	12·944	12·911	12·881	12·854	12·827
0	8½	12·262	12·220	12·184	12·151	12·122	12·097	12·074
0	9	11·580	11·541	11·507	11·477	11·450	11·424	11·403
0	9½	10·970	10·932	10·899	10·871	10·845	10·823	10·803
0	10	10·420	10·383	10·354	10·327	10·308	10·281	10·261
0	10½	9·924	9·890	9·860	9·836	9·813	9·791	9·757
0	11	9·472	9·441	9·412	9·387	9·366	9·346	9·323
0	11½	9·066	9·034	9·007	8·983	8·962	8·944	8·926
1	0	8·683	8·652	8·628	8·605	8·584	8·566	8·550
1	2	7·411	7·416	7·393	7·374	7·356	7·341	7·322
1	4	6·514	6·491	6·472	6·455	6·440	6·427	6·413
1	6	5·790	5·770	5·753	5·738	5·725	5·712	5·701
2	0	4·341	4·326	4·314	4·302	4·292	4·283	4·275
2	6	3·468	3·451	3·445	3·436	3·429	3·424	3·414
3	0	2·888	2·879	2·870	2·862	2·856	2·850	2·844
3	6	2·474	2·465	2·459	2·451	2·445	2·441	2·436
4	0	2·170	2·163	2·157	2·151	2·146	2·141	2·137
4	6	1·925	1·917	1·911	1·907	1·902	1·898	1·895
5	0	1·734	1·725	1·722	1·718	1·714	1·712	1·707
5	6	1·572	1·566	1·561	1·557	1·554	1·549	1·546
6	0	1·444	1·439	1·435	1·431	1·428	1·425	1·422
6	6	1·370	1·366	1·361	1·354	1·352	1·351	1·349
7	0	1·237	1·232	1·229	1·225	1·222	1·220	1·218
7	6	1·149	1·146	1·142	1·139	1·136	1·133	1·131
8	0	1·085	1·081	1·078	1·075	1·073	1·070	1·068
8	6	1·014	1·010	1·007	1·004	1·001	·999	·998
9	0	·962	·958	·955	·953	·951	·949	·947
9	6	·904	·901	·898	·896	·894	·892	·890
10	0	·867	·862	·861	·859	·857	·855	·854
11	0	·786	·783	·780	·778	·777	·774	·773
12	0	·722	·719	·717	·715	·714	·712	·711
13	0	·685	·683	·680	·677	·676	·675	·674
14	0	·618	·616	·614	·612	·611	·610	·609
15	0	·574	·573	·571	·568	·566	·566	·565
16	0	·542	·540	·539	·538	·536	·535	·534
17	0	·507	·505	·503	·502	·500	·499	·498
18	0	·481	·479	·477	·476	·475	·474	·473
19	0	·452	·450	·449	·448	·447	·446	·445
20	0	·433	·431	·430	·429	·428	·427	·426



TABLE II.—(See page 9.)

For ascertaining the Expence, (in Shillings and Decimal Parts of a Shilling,) of the manual Labour attending Plowing, Harrowing, Rolling, or otherwise working an Acre, with Implements of different Widths, in Fields of various Sizes.

For the Pence corresponding to the Decimal Parts of a Shilling see Table VIII.

Width of Implement		$\frac{1}{2}$ chain.	1 chain.	$1\frac{1}{2}$ ch.	$1\frac{3}{4}$ ch.	2 ch.	$2\frac{1}{2}$ ch.	$2\frac{3}{4}$ ch.	
ft.	in.								
0	8	1.0312	2.5692	1.8012	1.5446	1.4725	1.4170	1.3736	1.3397
0	8 $\frac{1}{2}$	.9718	2.4256	1.6976	1.4549	1.3858	1.3336	1.2992	1.2660
0	9	.9166	2.2909	1.6034	1.3741	1.3067	1.2596	1.2214	1.1906
0	9 $\frac{1}{2}$	.8654	2.1702	1.5189	1.3017	1.2397	1.1932	1.1574	1.1231
0	10	.8252	2.0560	1.4430	1.2307	1.1778	1.1336	1.0992	1.0717
0	10 $\frac{1}{2}$	.7856	1.9634	1.3741	1.1777	1.1224	1.0795	1.0467	1.0206
0	11	.7500	1.8742	1.3117	1.1242	1.0706	1.0270	.9992	.9742
0	11 $\frac{1}{2}$	.7177	1.7936	1.2552	1.0747	1.0246	.9877	.9522	.9223
1	0	.6875	1.6971	1.2026	1.0684	.9813	.9445	.9166	.8930
1	2	.5892	1.4723	1.0290	.8823	.8410	.8095	.7848	.7652
1	4	.5156	1.2806	.9006	.7723	.7362	.7035	.6868	.6693
1	6	.4583	1.1454	.8017	.6879	.6543	.6298	.6107	.5954
2	0	.3437	.8485	.6011	.5342	.4906	.4722	.4583	.4465
2	6	.2756	.6830	.4865	.4117	.3923	.3770	.3653	.3567
3	0	.2291	.5727	.4008	.3435	.3271	.3140	.3053	.2977
3	6	.1964	.4902	.3429	.2939	.2797	.2692	.2619	.2550
4	0	.1718	.4242	.3005	.2671	.2453	.2361	.2291	.2232
4	6	.1529	.3816	.2661	.2285	.2176	.2095	.2031	.1980
5	0	.1375	.3415	.2402	.2058	.1964	.1885	.1829	.1783
5	6	.1259	.3117	.2179	.1867	.1769	.1710	.1658	.1617
6	0	.1145	.2863	.2004	.1717	.1635	.1574	.1526	.1483
6	6	.1090	.2719	.1900	.1628	.1550	.1489	.1445	.1410
7	0	.0982	.2451	.1714	.1469	.1398	.1346	.1309	.1275
7	6	.0916	.2284	.1596	.1366	.1301	.1255	.1214	.1184
8	0	.0859	.2121	.1502	.1335	.1226	.1180	.1145	.1116
8	6	.0809	.2015	.1408	.1206	.1155	.1105	.1079	.1044
9	0	.0764	.1903	.1330	.1142	.1083	.1047	.1025	.0990
9	6	.0722	.1793	.1255	.1075	.1025	.0995	.0955	.0930
10	0	.0687	.1707	.1201	.1029	.0982	.0942	.0914	.0891
11	0	.0625	.1553	.1089	.0933	.0884	.0855	.0829	.0808
12	0	.0572	.1431	.1002	.0854	.0817	.0787	.0763	.0741
13	0	.0545	.1359	.0950	.0814	.0775	.0744	.0722	.0705
14	0	.0491	.1225	.0857	.0734	.0699	.0673	.0654	.0637
15	0	.0458	.1142	.0798	.0683	.0650	.0627	.0607	.0591
16	0	.0429	.1069	.0751	.0667	.0613	.0590	.0572	.0553
17	0	.0404	.1007	.0704	.0663	.0577	.0552	.0539	.0522
18	0	.0382	.0954	.0665	.0571	.0544	.0523	.0512	.0495
19	0	.0361	.0939	.0627	.0537	.0512	.0497	.0477	.0465
20	0	.0334	.0853	.0680	.0514	.0491	.0471	.0457	.0445

TABLE II.—(continued.)

Width of Imple- ment.		$2\frac{1}{4}$ ch.	3 ch.	$3\frac{1}{4}$ ch.	$3\frac{1}{2}$ ch.	4 ch.	$4\frac{1}{2}$ ch.	5 ch.	$5\frac{1}{2}$ ch.
0	8	1·3116	1·2881	1·2684	1·2521	1·2237	1·2019	1·1933	1·1710
0	$8\frac{1}{3}$	1·2354	1·2124	1·1936	1·1778	1·1518	1·1310	1·1154	1·1021
0	9	1·1659	1·1450	1·1272	1·1122	1·0877	1·0561	1·0534	1·0409
0	$9\frac{1}{3}$	1·1952	1·0847	1·0687	1·0540	1·0305	1·0124	·9979	·9860
0	10	1·0492	1·0305	1·0146	1·0010	·9788	·9617	·9480	·9367
0	$10\frac{1}{3}$	·9991	·9812	·9661	·9532	·9322	·9157	·9027	·8920
0	11	·9539	·9284	·9223	·9100	·8898	·8742	·8617	·8515
0	$11\frac{1}{3}$	·9130	·8963	·8826	·8707	·8518	·8366	·8233	·8148
1	0	·8709	·8580	·8453	·8340	·8156	·8013	·7895	·7805
1	2	·7503	·7334	·7245	·7147	·6990	·6867	·6763	·6683
1	4	·6558	·6440	·6342	·6260	·6118	·6009	·5906	·5855
1	6	·5829	·5725	·5636	·5561	·5438	·5186	·5267	·5204
2	0	·4354	·4290	·4226	·4170	·4078	·4006	·3947	·3902
2	6	·3492	·3430	·3377	·3331	·3257	·3200	·3155	·2117
3	0	·2914	·2862	·2813	·2780	·2719	·2640	·2635	·2602
3	6	·2492	·2447	·2410	·2378	·2325	·2276	·2251	·2224
4	0	·2177	·2145	·2113	·2085	·2039	·2003	·1973	·1951
4	6	·1939	·1904	·1881	·1856	·1816	·1777	·1750	·1730
5	0	·1746	·1715	·1688	·1665	·1628	·1600	·1577	·1558
5	6	·1576	·1555	·1530	·1517	·1476	·1450	·1430	·1412
6	0	·1457	·1431	·1409	·1390	·1309	·1320	·1316	·1301
6	6	·1380	·1355	·1334	·1324	·1288	·1364	·1246	·1231
7	0	·1246	·1223	·1205	·1189	·1162	·1138	·1125	·1112
7	6	·1159	·1145	·1121	·1105	·1030	·1061	·1046	·1034
8	0	·1083	·1072	·1056	·1042	·1029	·1001	·0986	·0975
8	6	·1022	·1004	·0987	·0978	·0952	·0936	·0922	·0911
9	0	·0969	·0952	·0940	·0928	·0903	·0888	·0875	·0865
9	6	·0912	·0895	·0880	·0870	·0850	·0842	·0823	·0813
10	0	·0873	·0857	·0844	·0832	·0814	·0800	·0783	·0779
11	0	·0783	·0777	·0765	·0753	·0738	·0725	·0715	·0706
12	0	·0728	·0715	·0704	·0695	·0754	·0660	·0653	·0650
13	0	·0690	·0677	·0667	·0662	·0644	·0632	·0623	·0615
14	0	·0621	·0611	·0602	·0599	·0581	·0569	·0562	·0556
15	0	·0579	·0572	·0560	·0552	·0549	·0530	·0523	·0517
16	0	·0544	·0536	·0528	·0521	·0514	·0500	·0493	·0487
17	0	·0511	·0502	·0493	·0489	·0476	·0468	·0461	·0455
18	0	·0484	·0475	·0470	·0469	·0451	·0444	·0437	·0432
19	0	·0456	·0447	·0440	·0435	·0425	·0421	·0411	·0406
20	0	·0436	·0428	·0422	·0416	·0407	·0400	·0394	·0389

TABLE II.—*continued.*

Width of Imple- ment.		6 ch.	7 ch.	8 ch.	9 ch.	10 ch.	11 ch.	12 ch.	13 ch.
ft.	in.								
0	8	1·1592	1·1410	1·1270	1·1170	1·1077	1·1007	1·0949	1·0899
0	8½	1·0911	1·0738	1·0616	1·0506	1·0426	1·0366	1·0304	1·0266
0	9	1·9395	1·0141	1·0017	1·9922	·9846	·9784	·9731	·9689
0	9½	·9743	·9606	·9490	·9430	·9327	·9269	·9219	·9177
0	10	·9267	·9126	·9075	·8936	·8868	·8805	·8757	·8718
0	10½	·8831	·8690	·8587	·8510	·8437	·8384	·8340	·8286
0	11	·8467	·8290	·8196	·8126	·8055	·8003	·7960	·7910
0	11½	·8067	·7937	·7850	·7768	·7708	·7658	·7618	·7583
1	0	·7727	·7603	·7512	·7440	·7386	·7343	·7297	·7263
1	2	·6621	·6576	·6437	·6376	·6327	·6281	·6252	·6225
1	4	·5796	·5705	·5635	·5585	·5538	·5503	·5474	·5449
1	6	·5152	·5020	·5008	·4961	·4923	·4892	·4865	·4844
2	0	·3863	·3801	·3756	·3720	·3693	·3671	·3648	·3631
2	6	·3080	·3037	·3000	·2978	·2956	·2930	·2916	·2900
3	0	·2526	·2510	·2504	·2480	·2461	·2446	·2432	·2422
3	6	·2201	·2175	·2149	·2126	·2101	·2090	·2080	·2070
4	0	·1931	·1900	·1878	·1860	·1846	·1835	·1824	·1815
4	6	·1714	·1685	·1665	·1654	·1636	·1625	·1617	·1610
5	0	·1540	·1513	·1500	·1489	·1478	·1465	·1458	·1450
5	6	·1398	·1377	·1360	·1346	·1336	·1327	·1320	·1315
6	0	·1268	·1255	·1252	·1240	·1230	·1223	·1216	·1211
6	6	·1219	·1199	·1185	·1173	·1164	·1156	·1151	·1145
7	0	·1100	·1087	·1074	·1060	·1050	·1045	·1040	·1035
7	6	·1024	·1007	·0995	·0985	·0977	·0971	·0966	·0961
8	0	·0965	·0950	·0939	·0930	·0923	·0917	·0912	·0907
8	6	·0902	·0887	·0877	·0869	·0862	·0856	·0851	·0847
9	0	·0857	·0842	·0832	·0827	·0818	·0812	·0808	·0805
9	6	·0805	·0792	·0782	·0776	·0770	·0763	·0760	·0755
10	0	·0770	·0759	·0750	·0744	·0739	·0732	·0729	·0725
11	0	·0699	·0688	·0680	·0673	·0668	·0663	·0660	·0657
12	0	·0631	·0627	·0626	·0620	·0615	·0611	·0608	·0605
13	0	·0609	·0599	·0592	·0586	·0582	·0578	·0575	·0572
14	0	·0550	·0543	·0539	·0530	·0525	·0522	·0520	·0517
15	0	·0512	·0503	·0497	·0492	·0488	·0485	·0483	·0480
16	0	·0482	·0475	·0469	·0465	·0460	·0458	·0456	·0453
17	0	·0451	·0443	·0438	·0434	·0431	·0428	·0425	·0423
18	0	·0423	·0421	·0416	·0413	·0409	·0406	·0404	·0403
19	0	·0402	·0396	·0391	·0388	·0385	·0381	·0380	·0377
20	0	·0385	·0379	·0375	·0372	·0369	·0366	·0364	·0362

TABLE II.—*continued.*

Width of Imple- ment.		14 ch.	15 ch.	16 ch.	17 ch.	18 ch.	19 ch.	20 ch.
ft.	in.							
0	8	1·0856	1·0819	1·0736	1·0759	1·0734	1·0711	1·0690
0	8½	1·0218	1·0183	1·0153	1·0126	1·0101	1·0080	1·0061
0	9	·9650	·9617	·9590	·9564	·9541	·9520	·9502
0	9½	·9141	·9110	·9082	·9059	·9037	·9019	·9002
0	10	·8683	·8655	·8628	·8606	·8590	·8567	·8550
0	10½	·8270	·8241	·8216	·8196	·8177	·8159	·8139
0	11	·7893	·7867	·7843	·7822	·7805	·7788	·7773
0	11½	·7555	·7528	·7506	·7486	·7468	·7453	·7438
1	0	·7236	·7210	·7190	·7170	·7153	·7138	·7125
1	2	·6261	·6180	·6161	·6145	·6130	·6117	·6102
1	4	·5428	·5409	·5393	·5379	·5367	·5355	·5345
1	6	·4825	·4808	·4795	·4782	·4770	·4760	·4751
2	0	·3613	·3605	·3595	·3585	·3576	·3569	·3562
2	6	·2890	·2876	·2870	·2863	·2857	·2852	·2845
3	0	·2412	·2404	·2397	·2341	·2385	·2380	·2375
3	6	·2061	·2054	·2049	·2042	·2037	·2034	·2030
4	0	·2809	·1802	·1797	·1792	·1788	·1784	·1781
4	6	·1604	·1597	·1592	·1589	·1585	·1581	·1579
5	0	·1445	·1438	·1435	·1431	·1428	·1426	·1422
5	6	·1310	·1305	·1300	·1297	·1295	·1290	·1288
6	0	·1206	·1202	·1198	·1194	·1192	·1190	·1187
6	6	·1141	·1138	·1134	·1128	·1126	·1125	·1124
7	0	·1030	·1027	·1024	·1021	·1018	·1017	·1015
7	6	·0957	·0956	·0954	·0949	·0946	·0944	·0942
8	0	·0904	·0901	·0893	·0869	·0894	·0892	·0890
8	6	·0845	·0841	·0839	·0836	·0834	·0832	·0831
9	0	·0802	·0798	·0796	·0794	·0792	·0790	·0789
9	6	·0753	·0750	·0748	·0746	·0745	·0743	·0741
10	0	·0722	·0719	·0717	·0715	·0714	·0713	·0711
11	0	·0655	·0652	·0650	·0648	·0647	·0645	·0644
12	0	·0603	·0601	·0599	·0597	·0596	·0595	·0593
13	0	·0570	·0568	·0567	·0565	·0564	·0563	·0562
14	0	·0515	·0513	·0512	·0510	·0509	·0508	·0507
15	0	·0473	·0477	·0475	·0474	·0473	·0472	·0471
16	0	·0452	·0450	·0449	·0448	·0447	·0446	·0445
17	0	·0422	·0420	·0419	·0418	·0417	·0416	·0415
18	0	·0401	·0399	·0398	·0397	·0396	·0395	·0394
19	0	·0376	·0375	·0374	·0373	·0372	·0371	·0370
20	0	·0361	·0359	·0358	·0357	·0356	·0356	·0354

## TABLE III.

*Shewing the Square Root (or Mean Length of the Side) of Fields containing from  $\frac{1}{4}$  to 40 Acres.—(See page 15.)*

Contents of Fields.		Square Root, or Side.	Contents of Fields.		Square Root, or Side.
Acres.		chains. links.	Acres.		chains. links.
.25		1 58	18.5		13 60
.50		2 23	19.		13 78
1.		3 16	19.5		13 82
1.25		3 53	20.		14 14
1.50		3 87	20.5		14 31
.75		4 18	21.		14 49
2.		4 47	21.5		14 66
.25		4 74	22.		14 96
.50		5 00	22.5		15 00
.75		5 25	23.		15 19
3.		5 47	23.5		15 32
.25		5 70	24.		15 49
.50		5 91	24.5		15 65
.75		6 12	25.		15 81
4.		6 32	25.5		15 96
.25		6 51	26.		16 12
.5		6 70	26.5		16 27
.75		6 89	27.		16 46
5.		7 07	27.5		16 58
5.5		7 41	28.		16 73
6.		7 73	28.5		16 88
6.5		8 06	29.		17 03
7.		8 36	29.5		17 17
7.5		8 66	30.		17 32
8.		8 94	30.5		17 46
8.5		9 22	31.		17 60
9.		9 48	31.5		17 74
9.5		9 74	32.		17 83
10.		10 00	32.5		18 03
10.5		10 24	33.		18 16
11.		10 48	33.5		18 30
11.5		10 72	34.		18 43
12.		10 95	34.5		18 57
12.5		11 18	35.		18 70
13.		11 40	35.5		18 84
13.5		11 61	36.		18 92
14.		11 83	36.5		19 10
14.5		12 04	37.		19 23
15.		12 24	37.5		19 36
15.5		12 45	38.		19 49
16.		12 68	38.5		19 62
16.5		12 84	39.		19 74
17.		13 04	39.		19 89
17.5		13 26	40.		20 00
18.		13 43			



TABLE IV.—(See page 17.)

*For Manuring Land.*

Distance of Rows.	Distance of Heaps in the Rows.	No. of Heaps made of a Load.	No. of Loads per Acre.	Distance of Rows.	Distance of Heaps in the Rows.	No. of Heaps made of a Load.	No. of Loads per Acre.
yards.	yards.	heaps.	lds. 10 <sup>th</sup>	yards.	yards.	heaps.	lds. 10 <sup>th</sup>
10	8	8	7.5	9	8	8	8.4
..	..	7	8.6	..	..	7	9.6
..	..	6	10.	..	..	6	11.2
..	..	5	12.1	..	..	5	13.4
..	7½	8	8.	..	7½	8	8.9
..	..	7	9.2	..	..	7	10.2
..	..	6	10.7	..	..	6	11.2
..	..	5	12.9	..	..	5	14.3
..	7	8	8.6	..	7	8	9.6
..	..	7	9.8	..	..	7	10.9
..	..	6	11.5	..	..	6	12.8
..	..	5	13.8	..	..	5	15.3
..	6½	8	9.2	..	6½	8	10.
..	..	7	10.6	..	..	7	11.4
..	..	6	12.4	..	..	6	13.3
..	..	5	11.8	..	..	5	16.
..	6	8	10.	..	6	8	11.2
..	..	7	11.5	..	..	7	12.8
..	..	6	13.4	..	..	6	14.9
..	..	5	16.1	..	..	5	17.9
..	5½	8	11.	..	5½	8	12.2
..	..	7	12.5	..	..	7	13.9
..	..	6	14.6	..	..	6	16.2
..	..	5	17.2	..	..	5	19.5
..	5	8	12.1	..	5	8	13.4
..	..	7	13.8	..	..	7	15.3
..	..	6	16.1	..	..	6	17.9
..	..	5	19.2	..	..	5	21.5

TABLE IV.—*continued.*

Distance of Heaps of Rows. in the Rows.		No. of Heaps made of a Load.	No. of Loads per Acre.	Distance of Rows.	Distance of Heaps in the Rows.	No. of Heaps made of a Load.	No. of Loads per Acre.
yards.	yards.	heaps.	lds. 10 <sup>ths</sup>	yards.	yards.	heaps.	lds. 10 <sup>ths</sup>
8	8	8	9·4	7	8	8	10·8
..	..	7	10·8	..	..	7	12·3
..	..	6	12·6	..	..	6	14·3
..	..	5	15·1	..	..	5	17·3
..	7½	8	10·	..	7½	8	11·5
..	..	7	11·5	..	..	7	13·2
..	..	6	13·4	..	..	6	15·3
..	..	5	16·1	..	..	5	18·4
..	7	8	10·8	..	7	8	12·3
..	..	7	12·3	..	..	7	14·1
..	..	6	14·4	..	..	6	16·4
..	..	5	17·3	..	..	5	19·7
..	6½	8	11·6	..	6½	8	13·2
..	..	7	13·2	..	..	7	15·2
..	..	6	15·	..	..	6	17·7
..	..	5	18·6	..	..	5	21·3
..	6	8	12·6	..	6	8	14·4
..	..	7	14·1	..	..	7	16·4
..	..	6	16·8	..	..	6	19·2
..	..	5	20·1	..	..	5	23·
..	5½	8	13·7	..	5½	8	15·7
..	..	7	16·1	..	..	7	18·
..	..	6	18·3	..	..	6	20·9
..	..	5	22·	..	..	5	25·2
..	5	8	15·1	..	5	8	17·2
..	..	7	17·2	..	..	7	19·7
..	..	6	20·1	..	..	6	23·
..	..	5	24·2	..	..	5	27·7



TABLE IV.—*continued.*

Distance of Rows.	Distance of Heaps in the Rows.	No. of Heaps made of a Load.	No. of Loads per Acre.	Distance of Rows.	Distance of Heaps in the Rows.	No. of Heaps made of a Load.	No. of Loads per Acre.
yards.	yards.	heaps.	lds. 10 <sup>ths</sup>	yards.	yards.	heaps.	lds. 10 <sup>ths</sup>
6	8	8	12·6	5	8	8	15·5
..	..	7	14·4	..	..	7	17·3
..	..	6	17·	..	..	6	20·
..	..	5	20·	..	..	5	24·2
..	7½	8	13·4	..	7½	8	16·1
..	..	7	15·3	..	..	7	18·4
..	..	6	16·9	..	..	6	21·5
..	..	5	21·5	..	..	5	26·
..	7	8	14·4	..	7	8	17·3
..	..	7	16·	..	..	7	19·7
..	..	6	19·2	..	..	6	23·
..	..	5	23·	..	..	5	27·6
..	6½	8	15·4	..	6½	8	18·6
..	..	7	17·7	..	..	7	21·3
..	..	6	20·6	..	..	6	24·9
..	..	5	24·8	..	..	5	29·8
..	6	8	16·4	..	6	8	20·
..	..	7	19·2	..	..	7	23·
..	..	6	22·4	..	..	6	26·8
..	..	6	26·8	..	..	5	32·2
..	5½	8	18·3	..	5½	8	22·
..	..	7	21·9	..	..	7	25·2
..	..	6	27·1	..	..	6	29·3
..	..	5	29·3	..	..	5	36·
..	5	8	20·1	..	5	8	24·2
..	..	7	23·	..	..	7	27·6
..	..	6	26·8	..	..	6	32·2
..	..	5	32·2	..	..	5	38·7

TABLE V.—(See page 20.)

*Shewing the Expence of making New Ditches of various Dimensions, on Soils of different Kinds.*

For the Pence and Farthings corresponding to the Decimal Part of a Shilling, see Table VIII.

Width at Top.		Width at Bottom.		Depth.	No. of Cub. Yds.	1 $\frac{1}{4}$ d. per Cubic Yard.		2 $\frac{1}{4}$ d. per Cubic Yard.		3 $\frac{1}{4}$ d. per Cubic Yard.		4d. per Cubic Yard.		5d. per Cubic Yard.		6d. per Cubic Yard.	
ft.	ft.	ft.	ft.			ft.	yds. dec.	s.	s.	s.	s.	s.	s.	s.	s.	s.	s.
6	3	6	16.5	2.062	2.742	3.433	4.125	4.804	5.494	6.187	6.867	7.550	8.235	8.920	9.605	10.290	10.975
		5	13.7	1.712	2.281	2.853	3.425	3.993	4.562	5.130	5.700	6.268	6.837	7.405	7.973	8.541	9.109
		4	11.	1.375	1.831	2.290	2.750	3.206	3.663	4.119	4.576	5.032	5.488	5.944	6.400	6.856	7.312
		3	8.2	1.025	1.365	1.707	2.050	2.390	2.730	3.070	3.410	3.750	4.090	4.430	4.770	5.110	5.450
	2 $\frac{1}{2}$	6	15.5	1.937	2.530	3.202	3.875	4.547	5.219	5.891	6.563	7.235	7.907	8.579	9.251	9.923	10.595
		5	12.9	1.612	2.147	2.686	3.225	3.759	4.295	4.830	5.365	5.900	6.435	6.970	7.505	8.040	8.575
		4	10.3	1.287	1.714	2.144	2.575	3.001	3.429	3.857	4.285	4.712	5.140	5.568	5.995	6.423	6.850
		3	7.7	0.962	1.287	1.606	1.925	2.249	2.575	2.900	3.225	3.550	3.875	4.200	4.525	4.850	5.175
	2	6	14.6	1.825	2.431	3.040	3.650	4.256	4.862	5.468	6.073	6.678	7.283	7.888	8.493	9.098	9.703
		5	12.2	1.525	2.031	2.540	3.050	3.556	4.062	4.568	5.073	5.578	6.083	6.588	7.093	7.598	8.103
		4	9.8	1.225	1.631	2.040	2.450	2.856	3.263	3.670	4.076	4.483	4.890	5.296	5.703	6.110	6.517
		3	7.3	0.912	1.215	1.520	1.825	2.127	2.431	2.735	3.039	3.343	3.647	3.951	4.255	4.559	4.863
	1 $\frac{1}{2}$	6	13.7	1.712	2.281	2.853	3.425	3.993	4.562	5.130	5.700	6.268	6.837	7.405	7.973	8.541	9.109
		5	11.4	1.425	1.898	2.374	2.850	3.323	3.796	4.274	4.748	5.220	5.693	6.165	6.637	7.109	7.581
		4	9.1	1.137	1.515	1.895	2.275	2.652	3.030	3.408	3.786	4.164	4.542	4.920	5.298	5.676	6.054
		3	6.9	0.862	1.148	1.436	1.725	2.010	2.297	2.583	2.870	3.156	3.443	3.729	4.016	4.302	4.589
	1	6	12.8	1.600	2.131	2.615	3.200	3.731	4.262	4.793	5.324	5.855	6.386	6.917	7.448	7.979	8.510
		5	10.7	1.337	1.781	2.228	2.675	3.118	3.563	4.008	4.453	4.898	5.343	5.788	6.233	6.678	7.123
		4	8.5	1.062	1.365	1.745	2.125	2.427	2.730	3.033	3.336	3.639	3.942	4.245	4.548	4.851	5.154
		3	6.4	0.800	1.065	1.332	1.600	1.865	2.131	2.396	2.661	2.926	3.191	3.456	3.721	3.986	4.251
	5	3	5	12.2	1.525	2.031	2.540	3.050	3.556	4.062	4.568	5.073	5.578	6.083	6.588	7.093	7.598
		4	9.8	1.225	1.631	2.040	2.450	2.856	3.263	3.670	4.076	4.483	4.890	5.296	5.703	6.110	6.517
		3	7.3	0.687	1.215	1.295	1.375	1.902	2.431	2.596	3.125	3.654	4.183	4.712	5.241	5.770	6.299
	2 $\frac{1}{2}$	5	11.4	1.420	1.898	2.374	2.850	3.318	3.796	4.274	4.748	5.220	5.693	6.165	6.637	7.109	7.581
		4	9.1	1.137	1.515	1.895	2.275	2.652	3.030	3.408	3.786	4.164	4.542	4.920	5.298	5.676	6.054
		3	6.8	0.850	1.132	1.416	1.700	1.982	2.264	2.546	2.828	3.110	3.392	3.674	3.956	4.238	4.520
	2	5	10.7	1.337	1.781	2.228	2.675	3.118	3.563	4.008	4.453	4.898	5.343	5.788	6.233	6.678	7.123
		4	8.5	1.062	1.415	1.775	2.125	2.467	2.830	3.183	3.536	3.889	4.242	4.595	4.948	5.301	5.654
		3	6.4	0.800	1.065	1.332	1.600	1.865	2.131	2.396	2.661	2.926	3.191	3.456	3.721	3.986	4.251
	1 $\frac{1}{2}$	5	9.9	1.232	1.648	2.061	2.475	2.880	3.296	3.712	4.128	4.544	4.960	5.376	5.792	6.208	6.624
		4	7.9	0.987	1.315	1.645	1.975	2.302	2.630	2.958	3.286	3.614	3.942	4.270	4.598	4.926	5.254
		3	5.9	0.737	0.982	1.228	1.475	1.719	1.964	2.209	2.454	2.699	2.944	3.189	3.434	3.679	3.924
	1	5	9.2	1.150	1.531	1.915	2.300	2.681	3.063	3.445	3.827	4.209	4.591	4.973	5.355	5.737	6.119
		4	7.3	0.937	1.215	1.545	1.875	2.152	2.431	2.710	2.989	3.268	3.547	3.826	4.105	4.384	4.663

TABLE V.—*continued.*

Width at Top.		Width at Bottom.		Depth.	No. of Cub. Yds.	Cubic Yards.					
ft.	ft.	ft.	ft.			1 $\frac{1}{2}$ d.	2d.	2 $\frac{1}{2}$ d.	3d.	3 $\frac{1}{2}$ d.	4d.
5	1	3	5.5	.687	.915	1.145	1.375	1.602	1.831	2.290	2.75
4	2 $\frac{1}{2}$	4	7.9	.987	1.315	1.645	1.975	2.302	2.630	3.290	3.95
		3	5.9	.737	.982	1.228	1.475	1.719	1.961	2.457	2.95
		2	4.5	.562	.749	.937	1.125	1.311	1.498	1.874	2.25
	2	4	7.3	.912	1.215	1.520	1.825	2.127	2.430	3.040	3.65
		3	5.5	.687	.915	1.145	1.375	1.602	1.831	2.290	2.75
		2	3.6	.450	.549	.724	.900	.999	1.198	1.449	1.80
	1 $\frac{1}{2}$	4	6.6	.825	1.098	1.371	1.650	1.923	2.197	2.748	3.20
		3	5.0	.625	.832	1.041	1.250	1.457	1.665	2.082	2.50
		2	3.3	.412	.494	.659	.825	.906	.988	1.319	1.65
	1	4	5.1	.636	.849	1.060	1.272	1.485	1.698	2.121	2.55
		3	4.6	.575	.772	.961	1.150	1.347	1.544	1.922	2.30
		2	3.0	.375	.499	.624	.750	.874	.999	1.249	1.50
	3	2	3.4	.575	.766	.958	1.150	1.341	1.532	1.916	2.30
		2	3.0	.275	.499	.644	.750	.774	.999	1.249	1.50
		1	1.5	.187	.249	.312	.375	.436	.499	.624	0.75
	1 $\frac{1}{2}$	3	4.1	.512	.632	.828	1.025	1.144	1.365	.657	2.05
		2	2.7	.337	.449	.562	.675	.786	.899	1.124	1.35
		1	1.4	.175	.233	.241	.350	.408	.466	.583	0.70
	1	3	3.7	.462	.616	.770	.925	1.078	1.232	1.541	1.85
		2	2.4	.309	.399	.499	.600	.699	.799	.909	1.20
		1	1.2	.150	.169	.234	.300	.319	.339	.469	0.60
	0 $\frac{1}{2}$	3	3.2	.400	.532	.666	.800	.932	1.065	1.332	1.60
		2	2.1	.251	.349	.425	.502	.600	.699	.851	1.05
		1	1.0	.125	.166	.208	.250	.292	.333	.416	0.50

TABLE VI.

*Showing the Decimal corresponding to every Pole in the Mile.*

Furlongs.	Poles.	Corresponding Decimal.	Furlongs.	Poles.	Corresponding Decimal.	Furlongs.	Poles.	Corresponding Decimal.	Furlongs.	Poles.	Corresponding Decimal.
0	1	·003	1	0	·125	2	0	·249	3	0	·375
0	2	·006	1	1	·128	2	1	·252	3	1	·378
0	3	·009	1	2	·131	2	2	·255	3	2	·381
0	4	·012	1	3	·134	2	3	·259	3	3	·384
0	5	·015	1	4	·137	2	4	·262	3	4	·387
0	6	·019	1	5	·140	2	5	·265	3	5	·390
0	7	·022	1	6	·143	2	6	·268	3	6	·394
0	8	·025	1	7	·146	2	7	·272	3	7	·397
0	9	·028	1	8	·149	2	8	·275	3	8	·400
0	10	·031	1	9	·152	2	9	·278	3	9	·403
0	11	·034	1	10	·155	2	10	·281	3	10	·406
0	12	·037	1	11	·159	2	11	·284	3	11	·409
0	13	·040	1	12	·162	2	12	·287	3	12	·412
0	14	·043	1	13	·165	2	13	·290	3	13	·415
0	15	·045	1	14	·168	2	14	·294	3	14	·419
0	16	·049	1	15	·172	2	15	·297	3	15	·422
0	17	·052	1	16	·175	2	16	·300	3	16	·425
0	18	·055	1	17	·178	2	17	·303	3	17	·428
0	19	·059	1	18	·181	2	18	·306	3	18	·431
0	20	·062	1	19	·184	2	19	·309	3	19	·434
0	21	·065	1	20	·187	2	20	·312	3	20	·437
0	22	·068	1	21	·190	2	21	·315	3	21	·440
0	23	·072	1	22	·194	2	22	·319	3	22	·443
0	24	·075	1	23	·197	2	23	·322	3	23	·446
0	25	·078	1	24	·200	2	24	·325	3	24	·449
0	26	·081	1	25	·203	2	25	·328	3	25	·452
0	27	·084	1	26	·206	2	26	·331	3	26	·455
0	28	·087	1	27	·209	2	27	·334	3	27	·459
0	29	·090	1	28	·212	2	28	·337	3	28	·462
0	30	·094	1	29	·215	2	29	·340	3	29	·465
0	31	·097	1	30	·219	2	30	·343	3	30	·468
0	32	·100	1	31	·222	2	31	·346	3	31	·472
0	33	·103	1	32	·225	2	32	·349	3	32	·475
0	34	·106	1	33	·228	2	33	·352	3	33	·478
0	35	·109	1	34	·231	2	34	·355	3	34	·481
0	36	·112	1	35	·234	2	35	·359	3	35	·484
0	37	·115	1	36	·237	2	36	·362	3	36	·487
0	38	·119	1	37	·240	2	37	·365	3	37	·490
0	39	·122	1	38	·243	2	38	·368	3	38	·494
1			1	39	·246	2	39	·372	3	39	·497

TABLE VI.—*continued.*

Furlongs.	Poles.	Corresponding Decimal.	Furlongs.	Poles.	Corresponding Decimal.	Furlongs.	Poles.	Corresponding Decimal.	Furlongs.	Poles.	Corresponding Decimal.
4	0	·500	5	0	·625	6	0	·749	7	0	·875
4	1	·503	5	1	·628	6	1	·752	7	1	·878
4	2	·506	5	2	·631	6	2	·755	7	2	·881
4	3	·509	5	3	·634	6	3	·759	7	3	·884
4	4	·512	5	4	·637	6	4	·762	7	4	·887
4	5	·515	5	5	·640	6	5	·765	7	5	·890
4	6	·519	5	6	·643	6	6	·768	7	6	·894
4	7	·522	5	7	·646	6	7	·772	7	7	·897
4	8	·525	5	8	·649	6	8	·775	7	8	·900
4	9	·528	5	9	·652	6	9	·778	7	9	·903
4	10	·531	5	10	·655	6	10	·781	7	10	·906
4	11	·534	5	11	·659	6	11	·784	7	11	·909
4	12	·537	5	12	·662	6	12	·787	7	12	·912
4	13	·540	5	13	·665	6	13	·790	7	13	·915
4	14	·543	5	14	·668	6	14	·794	7	14	·919
4	15	·546	5	15	·672	6	15	·797	7	15	·922
4	16	·549	5	16	·675	6	16	·800	7	16	·925
4	17	·552	5	17	·678	6	17	·803	7	17	·928
4	18	·555	5	18	·681	6	18	·806	7	18	·931
4	19	·559	5	19	·684	6	19	·809	7	19	·934
4	20	·562	5	20	·687	6	20	·812	7	20	·937
4	21	·565	5	21	·690	6	21	·815	7	21	·940
4	22	·568	5	22	·694	6	22	·819	7	22	·943
4	23	·572	5	23	·697	6	23	·822	7	23	·946
4	24	·575	5	24	·700	6	24	·825	7	24	·949
4	25	·578	5	25	·703	6	25	·828	7	25	·952
4	26	·581	5	26	·706	6	26	·831	7	26	·955
4	27	·584	5	27	·709	6	27	·834	7	27	·959
4	28	·587	5	28	·712	6	28	·837	7	28	·962
4	29	·590	5	29	·715	6	29	·840	7	29	·965
4	30	·594	5	30	·719	6	30	·843	7	30	·968
4	31	·597	5	31	·722	6	31	·846	7	31	·972
4	32	·600	5	32	·725	6	32	·849	7	32	·975
4	33	·603	5	33	·728	6	33	·852	7	33	·978
4	34	·606	5	34	·731	6	34	·855	7	34	·981
4	35	·609	5	35	·734	6	35	·859	7	35	·984
4	36	·612	5	36	·737	6	36	·862	7	36	·887
4	37	·615	5	37	·740	6	37	·865	7	37	·990
4	38	·619	5	38	·743	6	38	·868	7	38	·994
4	39	·622	5	39	·746	6	39	·872	7	39	·997
									8	40	1·000

TABLE VII.

*Shewing the Decimal corresponding to every Pole in the Arc.*

Rds.	Poles.	Dec.	Rds.	Poles.	Dec.	Rds.	Poles.	Dec.	Rds.	Poles.	Dec.
0	1	·006	1	1	·256	2	1	·506	3	1	·756
0	2	·012	1	2	·262	2	2	·512	3	2	·762
0	3	·018	1	3	·268	2	3	·518	3	3	·768
0	4	·025	1	4	·275	2	4	·525	3	4	·775
0	5	·031	1	5	·281	2	5	·531	3	5	·781
0	6	·037	1	6	·287	2	6	·537	3	6	·787
0	7	·043	1	7	·293	2	7	·543	3	7	·793
0	8	·050	1	8	·300	2	8	·550	3	8	·800
0	9	·056	1	9	·306	2	9	·556	3	9	·806
0	10	·062	1	10	·312	2	10	·562	3	10	·812
0	11	·068	1	11	·318	2	11	·568	3	11	·818
0	12	·075	1	12	·325	2	12	·575	3	12	·825
0	13	·081	1	13	·331	2	13	·581	3	13	·831
0	14	·087	1	14	·337	2	14	·587	3	14	·837
0	15	·093	1	15	·343	2	15	·593	3	15	·843
0	16	·100	1	16	·350	2	16	·600	3	16	·850
0	17	·106	1	17	·356	2	17	·606	3	17	·856
0	18	·112	1	18	·362	2	18	·612	3	18	·862
0	19	·118	1	19	·368	2	19	·618	3	19	·868
0	20	·125	1	20	·375	2	20	·625	3	20	·875
0	21	·131	1	21	·381	2	21	·631	3	21	·881
0	22	·137	1	22	·387	2	22	·637	3	22	·887
0	23	·143	1	23	·393	2	23	·643	3	23	·893
0	24	·150	1	24	·400	2	24	·650	3	24	·900
0	25	·156	1	25	·406	2	25	·656	3	25	·916
0	26	·162	1	26	·412	2	26	·662	3	26	·912
0	27	·168	1	27	·418	2	27	·668	3	27	·918
0	28	·175	1	28	·425	2	28	·675	3	28	·925
0	29	·181	1	29	·431	2	29	·681	3	29	·931
0	30	·187	1	30	·437	2	30	·687	3	30	·937
0	31	·193	1	31	·443	2	31	·693	3	31	·943
0	32	·200	1	32	·450	2	32	·700	3	32	·950
0	33	·206	1	33	·456	2	33	·706	3	33	·956
0	34	·212	1	34	·462	2	34	·712	3	34	·962
0	35	·218	1	35	·468	2	35	·718	3	35	·968
0	36	·225	1	36	·475	2	36	·725	3	36	·975
0	37	·231	1	37	·481	2	37	·731	3	37	·981
0	38	·237	1	38	·487	2	38	·737	3	38	·987
0	39	·243	1	39	·493	2	39	·743	3	39	·993
1	40	·250	2	40	·500	3	40	·750	4	40	1·000



## TABLE VIII.

*Showing the Decimal corresponding to every Farthing in the Shilling, and every Quarter of an Inch in the Foot.*

Pence or Feet.	Decimal.	Pence or Feet.	Decimal.	Pence or Feet.	Decimal.	Pence or Feet.	Decimal.
0 $\frac{1}{4}$	·012	3 $\frac{1}{4}$	·273	6 $\frac{1}{4}$	·521	9 $\frac{1}{4}$	·773
0 $\frac{2}{4}$	·041	3 $\frac{2}{4}$	·292	6 $\frac{2}{4}$	·541	9 $\frac{2}{4}$	·792
0 $\frac{3}{4}$	·062	3 $\frac{3}{4}$	·312	6 $\frac{3}{4}$	·562	9 $\frac{3}{4}$	·812
1	·083	4	·333	7	·583	10	·833
1 $\frac{1}{4}$	·104	4 $\frac{1}{4}$	·354	7 $\frac{1}{4}$	·604	10 $\frac{1}{4}$	·854
1 $\frac{2}{4}$	·125	4 $\frac{2}{4}$	·375	7 $\frac{2}{4}$	·625	10 $\frac{2}{4}$	·875
1 $\frac{3}{4}$	·145	4 $\frac{3}{4}$	·396	7 $\frac{3}{4}$	·645	10 $\frac{3}{4}$	·896
2	·166	5	·417	8	·666	11	·917
2 $\frac{1}{4}$	·199	5 $\frac{1}{4}$	·437	8 $\frac{1}{4}$	·699	11 $\frac{1}{4}$	·937
2 $\frac{2}{4}$	·208	5 $\frac{2}{4}$	·458	8 $\frac{2}{4}$	·708	11 $\frac{2}{4}$	·958
2 $\frac{3}{4}$	·230	5 $\frac{3}{4}$	·479	8 $\frac{3}{4}$	·730	11 $\frac{3}{4}$	·979
3	·250	6	·500	9	·750	12	1·000



TABLE IX.

*Shewing the Decimal corresponding to every Farthing in the Pound.*

s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.
0	0	1	001	0	10	1	043	1	8	1	084	2	6	1	126	3	4	1	168
	0	2	002		10	2	044		8	2	085		6	2	127		4	2	169
	0	3	003		10	3	045		8	3	086		6	3	128		4	3	170
	1	0	004		11	0	046		9	0	087		7	0	129		5	0	171
	1	1	005		11	1	047		9	1	088		7	1	130		5	1	172
	1	2	006		11	2	048		9	2	089		7	2	131		5	2	173
	1	3	007		11	3	049		9	3	090		7	3	132		5	3	174
	2	0	008	1	0	0	050		10	0	092		8	0	133		6	0	175
	2	1	009		0	1	051		10	1	093		8	1	134		6	1	176
	2	2	010		0	2	052		10	2	094		8	2	135		6	2	177
	2	3	011		0	3	053		10	3	095		8	3	136		6	3	178
	3	0	012		1	0	054		11	0	096		9	0	137		7	0	179
	3	1	013		1	1	055		11	1	097		9	1	138		7	1	180
	3	2	014		1	2	056		11	2	098		9	2	139		7	2	181
	3	3	015		1	3	057		11	3	099		9	3	140		7	3	182
	4	0	017		2	0	058	2	0	0	100		10	0	142		8	0	184
	4	1	018		2	1	059		0	1	101		10	1	143		8	1	185
	4	2	019		2	2	060		0	2	102		10	2	144		8	2	186
	4	3	020		2	3	061		0	3	103		10	3	145		8	3	187
	5	0	021		3	0	062		1	0	104		11	0	146		9	0	187
	5	1	022		3	1	063		1	1	105		11	1	147		9	1	183
	5	2	023		3	2	064		1	2	106		11	2	148		9	2	184
	5	3	024		3	3	065		1	3	107		11	3	149		9	3	190
	6	0	025		4	0	067		2	0	108	3	6	0	150		10	0	192
	6	1	026		4	1	068		2	1	109		0	1	151		10	1	193
	6	2	027		4	2	069		2	2	110		0	2	152		10	2	194
	6	3	028		4	3	070		2	3	111		0	3	153		10	3	195
	7	0	029		5	0	071		3	0	112		1	0	154		11	0	196
	7	1	030		5	1	072		3	1	113		1	1	155		11	1	197
	7	2	031		5	2	073		3	2	114		1	2	156		11	2	198
	7	3	032		5	3	074		3	3	115		1	3	157		11	3	199
	8	0	033		6	0	075		4	0	117		2	0	158	4	0	0	200
	8	1	034		6	1	076		4	1	118		2	1	159		0	1	201
	8	2	035		6	2	077		4	2	119		2	2	160		0	2	202
	8	3	036		6	3	078		4	3	120		2	3	161		0	3	203
	9	0	037		7	0	079		5	0	121		3	0	162		1	0	204
	9	1	038		7	1	080		5	1	122		3	1	163		1	1	205
	9	2	039		7	2	081		5	2	123		3	2	164		1	2	206
	9	3	040		7	3	082		5	3	124		3	3	165		1	3	207
	10	0	042		8	0	083		6	0	125		4	0	167		2	0	208

TABLE IX.—*continued.*

s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.
4	21		209	5	01		251	5	101		293	6	81		334	7	61		376
	22		210		02		252		102		294		82		335		62		377
	23		211		03		253		103		295		83		336		63		378
	30		212		10		254		110		296		90		337		70		379
	31		213		11		255		111		297		91		338		71		380
	32		214		12		256		112		298		92		339		72		381
	33		215		13		257		113		299		93		340		73		382
	40		217		20		258	6	00		300		100		342		80		383
	41		218		21		259		01		301		101		343		81		384
	42		219		22		260		02		302		102		344		82		385
	43		220		23		261		03		303		103		345		83		386
	50		221		30		262		10		304		110		346		90		387
	51		222		31		263		11		305		111		347		91		388
	52		223		32		264		12		306		112		348		92		389
	53		224		33		265		13		307		113		349		93		390
	60		225		40		267		20		308	7	00		350		100		392
	61		226		41		268		21		309		01		351		101		393
	62		227		42		269		22		310		02		352		102		394
	63		228		43		270		23		311		03		353		103		395
	70		229		50		271		30		312		10		354		110		396
	71		230		51		272		31		313		11		355		111		397
	72		231		52		273		32		314		12		356		112		398
	73		232		53		274		33		315		13		357		113		399
	80		233		60		275		40		317		20		358	8	00		400
	81		234		61		276		41		318		21		359		01		401
	82		235		62		277		42		319		22		360		02		402
	83		236		63		278		43		320		23		361		03		403
	90		237		70		279		50		321		30		362		10		404
	91		238		71		280		51		322		31		363		11		405
	92		239		72		281		52		323		32		364		12		406
	93		240		73		282		53		324		33		365		13		407
	100		242		80		283		60		325		40		367		20		408
	101		243		81		284		61		326		41		368		21		409
	102		244		82		285		62		327		42		369		22		410
	103		245		83		286		63		328		43		370		23		411
	110		246		90		287		70		329		50		371		30		412
	111		247		91		288		71		330		51		372		31		413
	112		248		92		289		72		331		52		373		32		414
	113		249		93		290		73		332		53		374		33		415
5	00		250		100		292		80		335		60		375		40		417

TABLE IX.—continued.

s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.
8	41		418	9	21		459	10	01		501	10	10	1	543
	42		419		22		460		02		502		10	2	544
	43		420		23		461		03		503		10	3	545
	50		421		30		462		10		504		11	0	546
	51		422		31		463		11		505		11	1	547
	52		423		32		464		12		506		11	2	548
	53		424		33		465		13		507		11	3	549
	60		425		40		467		20		508	11	00		550
	61		426		41		468		21		509		01		551
	62		427		42		469		22		510		02		552
	63		428		43		470		23		511		03		553
	70		429		50		471		30		512		10		554
	71		430		51		472		31		513		11		555
	72		431		52		473		32		514		12		556
	73		432		53		474		33		515		13		557
	80		433		60		475		40		517		20		558
	81		434		61		476		41		518		21		559
	82		435		62		477		42		519		22		560
	83		436		63		478		43		520		23		561
	90		437		70		479		50		521		30		562
	91		438		71		480		51		522		31		563
	92		439		72		481		52		523		32		564
	93		440		73		482		53		524		33		565
	100		442		80		483		60		525		40		567
	101		443		81		484		61		526		41		568
	102		444		82		485		62		527		42		569
	103		445		83		486		63		528		43		570
	110		446		90		487		70		529		50		571
	111		447		91		488		71		530		51		572
	112		448		92		489		72		531		52		573
	113		449		93		490		73		532		53		574
9	00		450		100		492		80		533		60		575
	01		451		101		493		81		534		61		576
	02		452		102		494		82		535		62		577
	03		453		103		495		83		536		63		578
	10		454		110		496		90		537		70		579
	11		455		111		497		91		538		71		580
	12		456		112		498		92		539		72		581
	13		457		113		499		93		540		73		582
	20		458	10	00		500		100		542		80		583

TABLE IX.—continued.

s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.
12	61		626	13	41		668	14	21		700	15	01		751	15	101		793
	62		627		42		669		22		710		02		752		102		794
	63		628		43		670		23		711		03		753		103		795
	70		629		50		671		30		712		10		754		110		796
	71		630		51		672		31		713		11		755		111		797
	72		631		52		673		32		714		12		756		112		798
	73		632		53		674		33		715		13		757		113		799
	80		633		60		675		40		717		20		758	16	00		800
	81		634		61		676		41		718		21		759		01		801
	82		635		62		677		42		719		22		760		02		802
	83		636		63		678		43		720		23		761		03		803
	90		637		70		679		50		721		30		762		10		804
	91		638		71		680		51		722		31		763		11		805
	92		639		72		681		52		723		32		764		12		806
	93		640		73		682		53		724		33		765		13		807
	100		642		80		683		60		725		40		767		20		809
	101		643		81		684		61		726		41		768		21		809
	102		644		82		685		62		727		42		769		22		810
	103		645		83		686		63		728		43		770		23		811
	110		646		90		687		70		729		50		771		30		812
	111		647		91		688		71		730		51		772		31		813
	112		648		92		689		72		731		52		773		32		814
	113		649		93		690		73		732		53		774		33		815
13	00		650		100		692		80		733		60		775		40		817
	01		651		101		693		81		734		61		776		41		818
	02		652		102		694		82		735		62		777		42		819
	03		653		103		695		83		736		63		778		43		820
	10		654		110		696		90		737		70		779		50		821
	11		655		111		697		91		738		71		780		51		822
	12		656		112		698		92		739		72		781		52		823
	13		657		113		699		93		740		73		782		53		824
	20		658	14	00		700		100		742		80		783		60		825
	21		659		01		701		101		743		81		784		61		826
	22		660		02		702		102		744		82		785		62		827
	23		661		03		703		103		745		83		786		63		828
	30		662		10		704		110		746		90		787		70		829
	31		663		11		705		111		747		91		788		71		830
	32		664		12		706		112		748		92		789		72		831
	33		665		13		707		113		749		93		790		73		832
	40		667		20		708	15	00		750		100		792		80		833

TABLE IX.—*continued.*

s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.	s.	d.	q.	dec.
16	81		'834	17	41		'868	18	01		'901	18	81		'934	19	41		'968
	82		'835		42		'869		02		'902		82		'935		42		'969
	83		'836		43		'870		03		'903		83		'936		43		'970
	90		'837		50		'871		10		'904		90		'937		50		'971
	91		'838		51		'872		11		'905		91		'938		51		'972
	92		'839		52		'873		12		'906		92		'939		52		'973
	93		'840		53		'874		13		'907		93		'940		53		'974
	100		'842		60		'875		20		'908		100		'942		60		'975
	101		'843		61		'876		21		'909		101		'943		61		'976
	102		'844		62		'877		22		'910		102		'944		62		'977
	103		'845		63		'878		23		'911		103		'945		63		'978
	110		'846		70		'879		30		'912		110		'946		70		'979
	111		'847		71		'880		31		'913		111		'947		71		'980
	112		'848		72		'881		32		'914		112		'948		72		'981
	113		'849		73		'882		33		'915		113		'949		73		'982
17	00		'850		80		'883		40		'917	19	00		'950		80		'983
	01		'851		81		'884		41		'918		01		'951		81		'984
	02		'852		82		'885		42		'919		02		'952		82		'985
	03		'853		83		'886		43		'920		03		'953		83		'986
	10		'854		90		'887		50		'921		10		'954		90		'987
	11		'855		91		'888		51		'922		11		'955		91		'988
	12		'856		92		'889		52		'923		12		'956		92		'989
	13		'857		93		'890		53		'924		13		'957		93		'990
	20		'858		100		'892		60		'825		20		'858		100		'992
	21		'859		101		'893		61		'926		21		'959		101		'993
	22		'860		102		'894		62		'927		22		'960		102		'994
	23		'861		103		'895		63		'928		23		'961		103		'995
	30		'862		110		'896		70		'929		30		'962		110		'996
	31		'863		111		'897		71		'930		31		'963		111		'997
	32		'864		112		'898		72		'931		32		'964		112		'998
	33		'865		113		'899		73		'932		33		'965		113		'999
	40		'867	18	00		'900		80		'933		40		'967	20	00		1'000

TABLE X.

*Shewing the Decimal corresponding to every Day in the Year.*

Weeks	Days.	Dec'	Weeks	Days.	Dec'	Weeks	Days.	Dec'	Weeks	Days.	Dec'
	1	.002	7	1	.137	14	1	.272	21	1	.407
	2	.005		2	.140		2	.275		2	.410
	3	.008		3	.143		3	.278		3	.412
	4	.011		4	.146		4	.280		4	.415
	5	.014		5	.148		5	.283		5	.418
	6	.016		6	.151		6	.286		6	.420
1		.019	8		.154	15		.288	22		.423
	1	.022		1	.157		1	.291		1	.426
	2	.025		2	.160		2	.294		2	.429
	3	.028		3	.162		3	.297		3	.431
	4	.030		4	.165		4	.299		4	.434
	5	.033		5	.168		5	.302		5	.437
	6	.036		6	.170		6	.305		6	.439
2		.038	9		.173	16		.308	23		.442
	1	.041		1	.176		1	.310		1	.445
	2	.044		2	.179		2	.313		2	.448
	3	.047		3	.181		3	.316		3	.451
	4	.049		4	.184		4	.319		4	.453
	5	.052		5	.187		5	.321		5	.456
	6	.055		6	.189		6	.324		6	.459
3		.058	10		.192	17		.327	24		.461
	1	.060		1	.195		1	.330		1	.464
	2	.063		2	.198		2	.332		2	.467
	3	.066		3	.201		3	.335		3	.470
	4	.069		4	.203		4	.338		4	.473
	5	.071		5	.206		5	.341		5	.475
	6	.074		6	.209		6	.343		6	.478
4		.077	11		.211	18		.346	25		.481
	1	.080		1	.214		1	.349		1	.484
	2	.082		2	.217		2	.351		2	.486
	3	.085		3	.220		3	.354		3	.489
	4	.088		4	.223		4	.357		4	.492
	5	.091		5	.225		5	.360		5	.494
	6	.093		6	.228		6	.362		6	.497
5		.096	12		.231	19		.365	26		.500
	1	.099		1	.234		1	.368		1	.503
	2	.101		2	.236		2	.371		2	.505
	3	.104		3	.239		3	.374		3	.508
	4	.107		4	.242		4	.376		4	.511
	5	.110		5	.244		5	.379		5	.514
	6	.112		6	.247		6	.382		6	.516
6		.115	13		.250	20		.385	27		.519
	1	.118		1	.253		1	.387		1	.522
	2	.121		2	.255		2	.390		2	.525
	3	.124		3	.258		3	.393		3	.528
	4	.126		4	.261		4	.396		4	.530
	5	.129		5	.264		5	.398		5	.533
	6	.132		6	.267		6	.401		6	.536
7		.135	14		.270	21		.403	28		.538



TABLE X.—continued.

Weeks	Days.	Dec'	Weeks	Days.	Dec'	Weeks	Days.	Dec'	Weeks	Days.	Dec'
28	1	·541	34	1	·657	40	1	·772	46	1	·887
	2	·544		2	·660		2	·775		2	·890
	3	·547		3	·662		3	·778		3	·893
	4	·549		4	·665		4	·780		4	·896
	5	·552		5	·668		5	·783		5	·898
	6	·555		6	·670		6	·786		6	·901
29		·558	35		·673	41		·788	47		·904
	1	·560		1	·676		1	·791		1	·907
	2	·563		2	·679		2	·794		2	·910
	3	·566		3	·681		3	·797		3	·912
	4	·569		4	·684		4	·799		4	·915
	5	·871		5	·687		5	·802		5	·918
30	6	·574	36	6	·689	42	6	·805	48	6	·920
		·577			·692			·808			·923
	1	·580		1	·695		1	·810		1	·926
	2	·582		2	·698		2	·813		2	·929
	3	·585		3	·701		3	·816		3	·931
	4	·588		4	·703		4	·819		4	·934
31	5	·591	37	5	·706	43	5	·821	49	5	·937
	6	·593		6	·709		6	·824		6	·939
		·596			·711			·827			·942
	1	·599		1	·714		1	·830		1	·945
	2	·601		2	·717		2	·832		2	·948
	3	·604		3	·720		3	·835		3	·951
32	4	·607	38	4	·723	44	4	·838	50	4	·953
	5	·610		5	·725		5	·841		5	·956
	6	·612		6	·728		6	·843		6	·959
		·615			·731			·846			·961
	1	·618		1	·734		1	·849		1	·964
	2	·621		2	·736		2	·851		2	·967
33	3	·624	39	3	·739	45	3	·854	51	3	·970
	4	·626		4	·742		4	·857		4	·973
	5	·629		5	·744		5	·860		5	·975
	6	·632		6	·747		6	·862		6	·978
		·635			·750			·865			·981
	1	·637		1	·753		1	·868		1	·984
34	2	·640	40	2	·755	46	2	·871	52	2	·986
	3	·643		3	·758		3	·874		3	·989
	4	·646		4	·761		4	·876		4	·992
	5	·648		5	·764		5	·879		5	·994
	6	·651		6	·766		6	·882		6	·997
		·654			·769			·885			1·000



TABLE XI.

*Shewing the Decimal corresponding to every Pound in the Stone of 8 lb.*

Pounds.	Decimals.	Pounds.	Decimals.
1	·125	5	·625
2	·250	6	·750
3	·375	7	·875
4	·500	8	1·000

TABLE XII.

*Shewing the Decimal corresponding to every Pound in the Stone of 14 lb.*

lbs.	Dec.	lbs.	Dec.	lbs.	Dec.
1	·074	6	·429	11	·786
2	·143	7	·500	12	·887
3	·214	8	·574	13	·929
4	·286	9	·643	14	1·000
5	·357	10	·714		

TABLE XIII.

*Shewing the Decimal corresponding to every Pound in the Score, or 20 lb.*

lbs. Dec.	lbs. Dec.	lbs. Dec.
1 .050	8 .400	15 .750
2 .100	9 .450	16 .800
3 .150	10 .500	17 .850
4 .200	11 .550	18 .900
5 .250	12 .600	19 .950
6 .300	13 .650	20 1.000
7 .350	14 .700	

TABLE XIV.

*Shewing the Decimal corresponding to every Pound in the Stone, Trone Weight, consisting of 16 lb. each Pound being 20 oz. Amsterdam.*

lbs. Dec.	lbs. Dec.	lbs. Dec.	lbs. Dec.
1 .062	5 .312	9 .562	13 .812
2 .125	6 .375	10 .625	14 .875
3 .189	7 .437	11 .689	15 .937
4 .250	8 .500	12 .750	16 1.000

TABLE XV.—(See page 31.)

*Showing the Dead Profitable Weight of Neat Cattle.*

When Oxen are weighed alive, without being fasted, deduct 10 Stones from the Dead Weight found by this Table.

Live weight fasted.			Dead Weight.					
			Carcass, marketable.	Carcass, fat.	Carcass, extra fat.	Hide and Tallow.		
cwt.	qrs.	lbs.	st.	10ths.	st.	10ths.	st.	10ths.
5	2	24	48·0	52·0	56·0	11·6		
5	3	4	48·6	52·6	56·7	11·7		
5	3	12	49·2	53·3	57·4	11·8		
5	3	20	49·8	53·9	58·1	12·0		
6	0	0	50·4	54·6	58·8	12·1		
6	0	8	51·0	55·2	59·5	12·3		
6	0	16	51·6	55·9	60·2	12·4		
6	0	24	52·2	56·5	60·9	12·6		
6	1	4	52·8	57·2	61·6	12·7		
6	1	12	53·4	57·8	62·3	12·9		
6	1	20	54·0	58·5	63·0	13·0		
6	2	0	54·6	59·1	63·7	13·1		
6	2	8	55·2	59·8	64·4	13·3		
6	2	16	55·8	60·4	65·1	13·4		
6	2	24	56·4	61·1	65·8	13·6		
6	3	4	57·0	61·7	66·5	13·7		
6	3	12	57·6	62·4	67·2	13·9		
6	3	20	58·2	63·0	67·9	14·0		
7	0	0	58·8	63·7	68·6	14·2		
7	0	8	59·4	64·3	69·3	14·3		
7	0	16	60·0	65·0	70·0	14·5		
7	0	24	60·6	65·6	70·7	14·6		
7	1	4	61·2	66·3	71·4	14·7		
7	1	12	61·8	66·9	72·1	14·9		
7	1	20	62·4	67·6	72·8	15·0		
7	2	0	63·0	68·2	73·5	15·2		
7	2	8	63·6	68·9	74·2	15·3		
7	2	16	64·2	69·5	74·9	15·5		
7	2	24	64·8	70·2	75·6	15·6		
7	3	4	65·4	70·8	76·3	15·8		
7	3	12	66·0	71·5	77·0	15·9		
7	3	20	66·6	72·1	77·7	16·1		
8	0	0	67·2	72·8	78·4	16·2		
8	0	8	67·8	73·4	79·1	16·3		
8	0	16	68·4	74·1	79·8	16·5		
8	0	24	69·0	74·7	80·5	16·6		
8	1	4	69·6	75·4	81·2	16·8		
8	1	12	70·2	76·0	81·9	16·9		
8	1	20	70·8	76·7	82·6	16·1		

TABLE XV.—*continued.*

Live weight, fasted.	Dead Weight.			
	Carcass, marketable.	Carcass, fat.	Carcass, extra fat.	Hide and Tallow.
cwt. qrs. lbs.	st. 10ths.	st. 10ths.	st. 10ths.	st. 10ths.
8 2 0	71.4	77.3	83.3	16.2
8 2 3	72.0	78.0	84.0	17.4
8 2 16	72.6	78.6	84.7	17.5
8 2 24	73.2	79.3	85.4	17.6
8 3 4	73.8	79.9	86.1	17.8
8 3 12	74.4	80.6	86.8	17.9
8 3 20	75.0	81.2	87.5	17.1
9 0 0	75.6	81.9	88.2	18.2
9 0 3	76.2	82.5	88.9	18.4
9 0 16	76.8	83.2	89.6	18.5
9 0 24	77.4	83.8	90.3	18.6
9 1 4	78.0	84.5	91.0	18.8
9 1 12	78.6	85.1	91.7	19.0
9 1 20	79.2	85.8	92.4	19.1
9 2 0	79.8	86.4	93.1	19.2
9 2 3	80.4	87.1	93.8	19.4
9 2 10	81.0	87.7	94.5	19.5
9 2 24	81.6	88.4	95.2	19.7
9 3 4	82.2	89.0	95.9	19.8
9 3 12	82.8	89.7	96.6	20.0
9 3 20	83.4	90.3	97.3	20.1
10 0 0	84.0	91.0	98.0	20.3
10 0 3	84.6	91.6	98.7	20.4
10 0 16	85.2	92.3	99.4	20.5
10 0 24	85.8	92.9	100.1	20.7
10 1 4	86.4	93.6	100.8	20.8
10 1 12	87.0	94.2	101.5	21.0
10 1 20	87.6	94.9	102.2	21.1
10 2 0	88.2	95.5	102.9	21.3
10 2 3	88.8	96.2	103.6	21.4
10 2 16	89.4	96.8	104.3	21.6
10 2 24	90.0	97.5	105.0	21.7
10 3 4	90.6	98.1	105.7	21.9
10 3 12	91.2	98.8	106.4	22.0
10 3 20	91.8	99.4	107.1	22.1
11 0 0	92.4	100.1	107.8	22.3
11 0 3	93.0	100.7	108.5	22.4
11 0 16	93.6	101.4	109.2	22.6
11 0 24	94.2	102.0	109.9	22.7
11 1 4	94.8	102.7	110.6	22.9
11 1 12	95.4	103.3	111.3	22.0

TABLE XV.—*continued.*

Live Weight, fasted.	Dead Weight.			
	Carcass, marketable.	Carcass, fat.	Carcass, extra fat.	Hide and Tallow.
	st. 10ths.	st. 10ths.	st. 10ths.	st. 10ths.
11 1 20	96·0	104·0	112·0	23·2
11 2 0	96·6	104·6	112·7	23·3
11 2 8	97·2	105·3	113·4	23·5
11 2 16	97·8	105·9	114·1	23·6
11 2 24	98·4	106·6	114·8	23·8
11 3 4	99·0	107·2	115·5	23·9
11 3 12	99·6	107·9	116·2	24·1
11 3 20	100·2	108·5	116·9	24·2
12 0 0	100·8	109·2	117·6	24·4
12 0 8	101·4	109·8	118·3	24·5
12 0 16	102·0	110·5	119·0	24·6
12 0 24	102·6	111·1	119·7	24·8
12 1 4	103·2	111·8	120·4	24·9
12 1 12	103·8	112·4	121·1	25·1
12 1 20	104·4	113·1	121·8	25·2
12 2 0	105·0	113·7	122·5	25·4
12 2 8	105·6	114·4	123·2	25·5
12 2 16	106·2	115·0	123·9	25·7
12 2 24	106·8	115·7	124·6	25·8
12 3 4	107·4	116·3	125·3	25·9
12 3 12	108·0	117·0	126·0	26·1
12 3 20	108·6	117·6	126·7	26·2
13 0 0	109·2	118·3	127·4	26·4
13 0 8	109·8	118·9	128·1	26·5
13 0 16	110·4	119·6	128·8	26·7
13 0 24	111·0	120·2	129·5	26·8
13 1 4	111·6	120·9	130·2	27·0
13 1 12	112·2	121·5	130·9	27·1
13 1 20	112·8	122·2	131·6	27·3
13 2 0	113·4	122·8	132·3	27·4
13 2 8	114·0	123·5	133·0	27·5
13 2 16	114·6	124·1	133·7	27·6
13 2 24	115·2	124·8	134·4	27·8
13 3 4	115·8	125·4	135·1	27·9
13 3 12	116·4	126·1	135·8	28·1
13 3 20	117·0	126·7	136·5	28·2
14 0 0	117·6	127·4	137·2	28·4
14 0 8	118·2	128·0	137·9	28·5
14 0 16	118·8	128·7	138·6	28·7
14 0 24	119·4	129·3	139·3	28·8
14 1 4	120·0	130·0	140·0	29·0

TABLE XV.—*continued.*

Live Weight, fasted.			Dead Weight.			
			Carcass, marketable.	Carcass, fat.	Carcass, extra fat.	Hide and Tallow.
cwt.	qrs.	lbs.	st. 10ths.	st. 10ths.	st. 10ths.	st. 10ths.
14	1	12	120·6	130·6	140·7	29·1
14	1	20	121·2	131·3	141·4	29·2
14	2	0	121·8	131·9	142·1	29·4
14	2	8	122·4	132·6	142·8	29·5
14	2	16	123·0	133·2	143·5	29·7
14	2	24	123·6	133·9	144·2	29·8
14	3	4	124·2	134·5	144·9	30·0
14	3	12	124·8	135·2	145·6	30·1
14	3	20	125·4	135·8	146·3	30·3
15	0	0	126·0	136·5	147·0	30·4
15	0	8	126·6	137·1	147·7	30·5
15	0	16	127·2	137·8	148·4	30·7
15	0	24	127·8	138·4	149·1	30·8
15	1	4	128·4	139·1	149·8	31·0
15	1	12	129·0	139·7	150·5	31·1
15	1	20	129·6	140·4	151·2	31·3
15	2	0	130·2	141·0	151·9	31·4
15	2	8	130·8	141·7	152·6	31·6
15	2	16	131·4	142·3	153·3	31·7
15	2	24	132·0	143·0	154·0	31·9
15	3	4	132·6	143·6	154·7	32·0
15	3	12	133·2	144·3	155·4	32·1
15	3	20	133·8	144·9	156·1	32·3
16	0	0	134·4	145·6	156·8	32·4
16	0	8	135·0	146·2	157·5	32·6
16	0	16	135·6	146·9	158·2	32·7
16	0	24	136·2	147·5	158·9	32·9
16	1	4	136·8	148·2	159·6	33·0
16	1	12	137·4	148·8	160·3	33·2
16	1	20	138·0	149·5	161·0	33·3
16	2	0	138·6	150·1	161·7	33·4
16	2	8	139·2	150·8	162·4	33·6
16	2	16	139·8	151·4	163·1	33·7
16	2	24	140·4	152·1	163·8	33·9
16	3	4	141·0	152·7	164·5	34·0
16	3	12	141·6	153·4	165·2	34·2
16	3	20	142·2	154·0	165·9	34·3
17	0	0	142·8	154·7	166·6	34·5
17	0	8	143·4	155·3	167·3	34·6
17	0	16	144·0	156·0	168·0	34·8
17	0	24	144·6	156·6	168·7	34·9

TABLE XV.—*continued.*

Live Weight, fasted.			Dead Weight.			
			Carcass, marketable.	Carcass, fat.	Carcass, extra fat.	Hide and Tallow.
cwt.	qrs.	lbs.	st. 10ths.	st. 10ths.	st. 10ths.	st. 10ths.
17	1	4	145·2	157·3	169·4	35·0
17	1	12	145·8	157·9	170·1	35·2
17	1	20	146·4	158·6	170·8	35·3
17	2	0	147·0	159·2	171·5	35·5
17	2	8	147·6	159·9	172·2	35·6
17	2	16	148·2	160·5	172·9	35·8
17	2	24	148·8	161·2	173·6	35·9
17	3	4	149·4	161·8	174·3	36·1
17	3	12	150·0	162·5	175·0	36·2
17	3	20	150·6	163·1	175·7	36·3
18	0	0	151·2	163·8	176·4	36·5
18	0	8	151·8	164·4	177·1	36·6
18	0	16	152·4	165·1	177·8	36·8
18	0	24	153·0	165·7	178·5	36·9
18	1	4	153·6	166·4	179·2	37·1
18	1	12	154·2	167·0	179·9	37·2
18	1	20	154·8	167·7	180·6	37·4
18	2	0	155·4	168·3	181·3	37·5
18	2	8	156·0	169·0	182·0	37·7
18	2	16	156·6	169·6	182·7	37·8
18	2	24	157·2	170·3	183·4	37·9
18	3	4	157·8	170·9	184·1	38·1
18	3	12	158·4	171·6	184·8	38·2
18	3	20	159·0	172·2	185·5	38·4
19	0	0	159·6	172·9	186·2	38·5
19	0	8	160·2	173·5	186·9	38·7
19	0	16	160·8	174·2	187·6	38·8
19	0	24	161·4	174·8	188·3	39·0
19	1	4	162·0	175·5	189·0	39·1
19	1	12	162·6	176·1	189·7	39·2
19	1	20	163·2	176·8	190·4	39·4
19	2	0	163·8	177·4	191·1	39·5
19	2	8	164·4	178·1	191·8	39·7
19	2	16	165·0	178·7	192·5	39·8
19	2	24	165·6	179·4	193·2	40·0
19	3	4	166·2	180·0	193·9	40·1
19	3	12	166·8	180·7	194·6	40·3
19	3	20	167·4	181·3	195·3	40·4
20	0	0	168·0	182·0	196·0	40·6
20	0	8	168·6	182·6	196·7	40·7
20	0	16	169·2	183·3	197·4	40·8



TABLE XV.—*continued.*

Live Weight, fasted			Dead Weight.			
			Carcass, marketable.	Carcass, fat.	Carcass, extra fat.	Hide and Tallow
cwt.	qrs.	lbs.	st. 10ths.	st. 10ths.	st. 10ths.	st. 10ths.
20	0	24	169·8	183·9	198·1	41·0
20	1	4	170·4	184·6	198·3	41·1
20	1	12	171·0	185·2	199·5	41·3
20	1	20	171·6	185·9	200·2	41·4
20	2	0	172·2	186·5	200·9	41·6
20	2	8	172·8	187·2	201·6	41·7
20	2	16	173·4	187·8	202·3	41·9
20	2	24	174·0	188·5	203·0	42·0
20	2	4	174·6	189·1	203·7	42·1
20	3	12	175·2	189·8	204·4	42·3
20	3	20	175·8	190·4	205·1	42·4
21	0	0	176·4	191·1	205·8	42·6
21	0	8	177·0	191·7	206·5	42·7
21	0	16	177·6	192·4	207·2	42·9
21	0	24	178·2	193·0	207·9	43·0
21	1	4	178·8	193·7	208·6	43·2
21	1	12	179·4	194·3	209·3	43·3
21	1	20	180·0	195·0	210·0	43·5
21	2	0	180·6	195·6	210·7	43·6
21	2	8	181·2	196·3	211·4	43·7
21	2	16	181·8	196·9	212·1	43·9
21	2	24	182·4	197·6	212·8	44·0
21	3	4	183·0	198·2	213·5	44·2
21	3	12	183·6	198·9	214·2	44·3
21	3	20	184·2	199·5	214·9	44·5
22	0	0	184·8	200·2	215·6	44·6
22	0	8	185·4	200·8	216·3	44·8
22	0	16	186·0	201·5	217·0	44·9
22	0	24	186·6	202·4	217·7	45·0
22	1	4	187·2	202·8	218·4	45·2
22	1	12	187·8	203·4	219·1	45·3
22	1	20	188·4	204·1	219·8	45·5
22	2	0	189·0	204·7	220·5	45·6
22	2	8	189·6	205·4	221·2	45·8
22	2	16	190·2	206·0	221·9	45·9
22	2	24	190·8	206·7	222·6	46·1
22	3	4	191·4	207·3	223·3	46·2
22	3	12	192·0	208·0	224·0	46·4
22	3	20	192·6	208·6	224·7	46·5
23	0	0	193·2	209·3	225·4	46·6
23	0	8	193·8	209·9	226·1	46·8

TABLE XV.—*continued.*

Live Weight, fasted.			Dead Weight.			
			Carcass, marketable.	Carcass, fat.	Carcass, extra fat.	Hide and Tallow.
cwt.	qrs.	lbs.	st. 10lbs.	st. 10lbs.	st. 10lbs.	st. 10lbs.
23	0	16	194.4	210.6	226.8	46.9
23	0	24	195.0	211.2	227.5	47.1
23	1	4	195.6	211.9	228.2	47.2
23	1	12	196.2	212.5	228.9	47.4
23	1	20	196.8	213.2	229.6	47.5
23	2	0	197.4	213.8	230.3	47.6
23	2	8	198.0	214.5	231.0	47.8
23	2	16	198.6	215.1	231.7	47.9
23	2	24	199.2	215.8	232.4	48.1
23	3	4	199.8	216.4	233.1	48.2
23	3	12	200.4	217.1	233.6	48.4
23	3	20	201.0	217.7	234.5	48.5
24	0	0	201.6	218.4	235.2	48.7
24	0	8	202.2	219.0	235.9	48.8
24	0	16	202.8	219.7	236.6	49.0
24	0	24	203.4	220.3	237.3	49.1
24	1	4	204.0	221.0	238.0	49.3
24	1	12	204.6	221.6	238.7	49.4
24	1	20	205.2	222.3	239.4	49.5
24	2	0	205.8	222.9	240.1	49.7
24	2	8	206.4	223.6	240.8	49.8
24	2	16	207.0	224.2	241.5	50.0
24	2	24	207.6	224.9	242.2	50.1
24	3	4	208.2	225.5	242.9	50.3
24	3	12	208.8	226.2	243.6	50.4
24	3	20	209.4	226.8	244.3	50.6
25	0	0	210.0	227.5	245.0	50.7
25	0	8	210.6	228.1	245.7	50.8
25	0	16	211.2	228.8	246.4	51.0
25	0	24	211.8	229.4	247.1	51.1
25	1	4	212.4	230.1	247.8	51.3
25	1	12	213.0	230.7	248.5	51.4
25	1	20	213.6	231.4	249.2	51.6
25	2	0	214.2	232.0	249.9	51.7
25	2	8	214.8	232.7	250.6	51.9
25	2	16	215.4	233.3	251.3	52.0
25	2	24	216.0	234.0	252.0	52.2
25	3	4	216.6	234.6	252.7	52.3
25	3	12	217.2	235.3	253.4	52.4
25	3	20	217.8	235.9	254.1	52.6
26	0	0	218.4	236.6	254.8	52.7

TABLE XV.—*continued.*

Live Weight, fasted.			Dead Weight.			
			Carcass, marketable.	Carcass, fat.	Carcass, extra fat.	Hide and Tallow.
cwt.	qrs.	lbs.	st. 10ths.	st. 10ths.	st. 10ths.	st. 10ths.
26	0	8	219·0	237·2	255·5	52·9
26	0	16	219·6	237·9	256·2	53·0
26	0	24	220·2	238·5	256·9	53·2
26	1	4	220·8	239·0	257·6	53·3
26	1	12	221·4	239·8	258·3	53·5
26	1	20	222·0	240·5	259·0	53·6
26	2	0	222·6	241·1	259·7	53·7
26	2	8	223·2	241·8	260·4	53·9
26	2	16	223·8	242·4	261·1	54·0
26	2	24	224·4	243·1	261·8	54·2
26	3	4	225·0	243·7	262·5	54·3
26	3	12	225·6	244·4	263·2	54·5
26	3	20	226·2	245·0	263·9	54·6
27	0	0	226·8	245·7	264·6	54·8
27	0	8	227·4	246·3	265·3	54·9
27	0	16	228·0	247·0	266·0	55·1
27	0	24	228·6	247·6	266·7	55·2
27	1	4	229·2	248·3	267·4	55·3
27	1	12	229·8	248·9	268·1	55·5
27	1	20	230·4	249·6	268·8	55·6
27	2	0	231·0	250·2	269·5	55·8
27	2	8	231·6	250·9	270·2	55·9

TABLE XVI.—(See page 33.)

*Showing the dead profitable Weight of Sheep.*

If Sheep be Weighed without being Fasted, deduct 5 Pounds from the Dead Weight found in this Table.

Live weight fasted.	Dead Weight.		
	Carcase, marketable.	Carcase, fat.	Carcase, extra fat.
cwt. qrs. lbs.	st. 10ths.	st. 10ths.	st. 10ths.
0 3 12	6·9	7·5	8·1
0 3 14	7·1	7·7	8·3
0 3 16	7·2	7·8	8·5
0 3 18	7·3	8·0	8·6
0 3 20	7·5	8·1	8·8
0 3 22	7·6	8·3	9·0
0 3 24	7·8	8·5	9·1
0 3 26	7·9	8·6	9·3
1 0 0	8·1	8·8	9·5
1 0 2	8·2	8·9	9·6
1 0 4	8·4	9·1	9·8
1 0 6	8·5	9·2	10·0
1 0 8	8·7	9·4	10·2
1 0 10	8·8	9·6	10·3
1 0 12	8·9	9·7	10·5
1 0 14	9·1	9·9	10·7
1 0 16	9·2	10·0	10·8
1 0 18	9·4	10·2	11·0
1 0 20	9·5	10·3	11·2
1 0 22	9·7	10·5	11·3
1 0 24	9·8	10·7	11·5
1 0 26	10·0	10·8	11·7
1 1 0	10·1	11·0	11·9
1 1 2	10·2	11·1	12·0
1 1 4	10·4	11·3	12·2
1 1 6	10·5	11·4	12·4
1 1 8	10·7	11·6	12·5
1 1 10	10·8	11·8	12·7
1 1 12	11·0	11·9	12·9
1 1 14	11·1	12·1	13·0
1 1 16	11·3	12·2	13·2
1 1 18	11·4	12·4	13·4
1 1 20	11·6	12·6	13·6
1 1 22	11·7	13·7	13·7
1 1 24	11·8	12·9	13·9
1 1 26	12·0	13·0	14·1
1 2 0	12·1	13·2	14·2
1 2 2	12·3	13·3	14·4
1 2 4	12·4	13·5	14·6

TABLE XVI.—*continued.*

Live weight fasted.	Dead Weight.		
	Carcass, marketable.	Carcass, fat.	Carcass, extra fat.
cwt. qrs. lbs.	st. 10ths.	st. 10ths.	st. 10ths.
1 2 6	12·6	13·7	14·7
1 2 8	12·7	13·8	14·9
1 2 10	12·9	14·0	15·1
1 2 12	13·0	14·1	15·3
1 2 14	13·1	14·3	15·4
1 2 16	13·3	14·4	15·6
1 2 18	13·4	14·6	15·8
1 2 20	13·6	14·8	15·9
1 2 22	13·7	14·9	16·1
1 2 24	13·9	15·1	16·3
1 2 26	14·0	15·2	16·4
1 3 0	14·2	15·4	16·6
1 3 2	14·3	15·5	16·8
1 3 4	14·5	15·7	17·0
1 3 6	14·6	15·9	17·1
1 3 8	14·7	16·0	17·3
1 3 10	14·9	16·2	17·5
1 3 12	15·0	16·3	17·6
1 3 14	15·2	16·5	17·8
1 3 16	15·3	16·6	18·0
1 3 18	15·5	16·8	18·1
1 3 20	15·6	17·0	18·3
1 3 22	15·8	17·1	18·5
1 3 24	15·9	17·3	18·7
1 3 26	16·0	17·4	18·8
2 0 0	16·2	17·6	19·0
2 0 2	16·3	17·7	19·2
2 0 4	16·5	17·9	19·3
2 0 6	16·6	18·1	19·5
2 0 8	16·8	18·2	19·7
2 0 10	16·9	18·4	19·8
2 0 12	17·1	18·5	20·0
2 0 14	17·2	18·7	20·2
2 0 16	17·4	18·8	20·4
2 0 18	17·5	19·0	20·5
2 0 20	17·6	19·2	20·7
2 0 22	17·8	19·3	20·9
2 0 24	17·9	19·5	21·0
2 0 26	18·1	19·6	21·2
2 1 0	18·2	19·8	21·4

TABLE XVII.—(See page 33.)

*Shewing the dead profitable Weight of Swine.*

Live weight fasted.	Dead Weight.		
	Marketable.	Fat.	Extra fat.
cwt. qrs. lbs.	st. 10ths.	st. 10ths.	st. 10ths.
0 2 8	6·0	6·4	6·8
0 2 16	6·7	7·2	7·6
0 2 24	7·5	8·0	8·5
0 3 4	8·2	8·8	9·3
0 3 12	9·0	9·6	10·2
0 3 20	9·7	10·2	11·0
1 0 0	10·5	11·2	11·9
1 0 8	11·2	12·0	12·7
1 0 16	12·0	12·8	13·6
1 0 24	12·7	13·6	14·4
1 1 4	13·5	14·4	15·3
1 1 12	14·2	15·2	16·1
1 1 20	15·0	16·0	17·0
1 2 0	15·7	16·8	17·8
1 2 8	16·5	17·6	18·7
1 2 16	17·2	18·4	19·5
1 2 24	18·0	19·2	20·4
1 3 4	18·7	20·0	21·2
1 3 12	19·5	20·8	22·1
1 3 20	20·2	21·6	22·9
2 0 0	21·0	22·4	23·8
2 0 8	21·7	23·2	24·6
2 0 16	22·5	24·0	25·5
2 0 24	23·2	24·8	26·3
2 1 4	24·0	25·6	27·2
2 1 12	24·7	26·4	28·0
2 1 20	25·5	27·2	28·7
2 2 0	26·2	28·0	29·7
2 2 8	27·0	28·8	30·6
2 2 16	27·7	29·6	31·4
2 2 24	28·5	30·4	32·3
2 3 4	29·2	31·2	33·1
2 3 12	30·0	32·0	34·0
2 3 20	30·7	32·8	34·8
3 0 0	31·5	33·6	35·7
3 0 8	32·2	34·4	36·5
3 0 16	33·0	35·2	37·4
3 0 24	33·7	36·0	38·2

TABLE XVII.—*continued.*

Live weight fasted.			Dead Weight.		
			marketable.	fat.	extra fat.
cwt.	qrs.	lbs.	st. 10ths.	st. 10ths.	st. 10ths.
3	1	4	34·5	36·8	39·1
3	1	12	35·2	37·6	39·9
3	1	20	36·0	38·4	40·8
3	2	0	36·7	39·2	41·6
3	2	8	37·5	40·0	42·5
3	2	16	38·3	40·8	43·3
3	2	24	39·0	41·6	44·2
3	3	4	39·7	42·4	45·0
3	3	12	40·5	43·2	45·9
3	3	20	41·2	44·0	46·7
4	0	0	42·0	44·8	47·6
4	0	8	42·7	45·6	48·4
4	0	12	43·5	46·4	49·3
4	0	16	44·2	47·2	50·1
4	0	24	45·0	48·0	51·0
4	1	4	45·7	48·8	51·8
4	1	12	46·5	49·6	52·7
4	1	20	47·2	50·4	53·5
4	2	0	48·0	51·2	54·4
4	2	8	48·7	52·0	55·2
4	2	16	49·5	52·8	56·1
4	2	24	50·2	53·6	56·9
4	3	4	51·0	54·4	57·8
4	3	12	51·7	55·2	58·6
4	3	20	52·5	56·0	59·5
5	0	0	53·2	56·8	60·3
5	0	8	54·0	57·6	61·2
5	0	16	54·7	58·4	62·0
5	0	24	55·5	59·2	62·9
5	1	4	56·2	60·0	63·7
5	1	12	57·0	60·8	64·6
5	1	20	57·7	61·6	65·4
5	2	0	58·5	62·4	66·3
5	2	8	59·2	63·2	67·1
5	2	16	60·0	64·0	68·0
5	2	24	60·7	64·8	68·8
5	3	4	61·5	65·6	69·7
5	3	12	62·2	66·4	70·5
5	3	20	63·0	67·2	71·4
6	0	0	63·7	68·0	72·2



TABLE XVIII.—(See page 33.)

*Shewing the Dead Profitable Weight of Calves.*

Live weight.			Dead Weight:		
			marketable.	fat.	extra fat.
cwt.	qrs.	lbs.	st. 10ths.	st. 10ths.	st. 10ths.
1	1	20	11·2	12·0	12·8
1	1	24	11·4	12·3	13·1
1	2	0	11·7	12·6	13·4
1	2	4	12·0	12·9	13·7
1	2	8	12·3	13·2	14·0
1	2	12	12·6	13·5	14·4
1	2	16	12·8	13·8	14·7
1	2	20	13·1	14·1	15·0
1	2	24	13·4	14·4	15·3
1	3	0	13·7	14·7	15·6
1	3	4	14·0	15·0	16·0
1	3	8	14·2	15·3	16·3
1	3	12	14·5	15·6	16·6
1	3	16	14·8	15·9	16·9
1	3	20	15·1	16·2	17·2
1	3	24	15·4	16·5	17·6
2	0	0	15·6	16·8	17·9
2	0	4	15·9	17·1	18·2
2	0	8	16·2	17·4	18·5
2	0	12	16·5	17·7	18·8
2	0	16	16·8	18·0	19·2
2	0	20	17·0	18·3	19·5
2	0	24	17·3	18·6	19·8
2	1	0	17·6	18·9	20·1
2	1	4	17·9	19·2	20·4
2	1	8	18·2	19·5	20·8
2	1	12	18·4	19·8	21·1
2	1	16	18·7	20·1	21·4
2	1	20	19·0	20·4	21·7
2	1	24	19·3	20·7	22·1
2	2	0	19·6	21·0	22·4
2	2	4	19·8	21·3	22·7
2	2	8	20·1	21·6	23·0
2	2	12	20·4	21·9	23·3
2	2	16	20·7	22·2	23·7
2	2	20	21·0	22·5	24·0
2	2	24	21·2	22·8	24·3
2	3	0	21·5	23·1	24·6
2	3	4	21·8	23·4	24·9
2	3	8	22·1	23·7	25·3
2	3	12	22·4	24·0	25·6

TABLE XVIII.—*continued.*

Live weight.			Dead Weight.		
			marketable.	fat.	extra fat.
cwt.	qrs.	lbs.	st. 10ths.	st. 10ths.	st. 10ths.
2	3	16	22·6	24·3	25·9
2	3	20	22·9	24·6	26·2
2	3	24	23·2	24·9	26·5
3	0	0	23·5	25·2	26·9
3	0	4	23·8	25·5	27·2
3	0	8	24·0	25·8	27·5
3	0	12	24·3	26·1	27·8
3	0	16	24·6	26·4	28·1
3	0	20	24·9	26·7	28·5
3	0	24	25·2	27·0	28·8
3	1	0	25·4	27·3	29·1
3	1	4	25·7	27·6	29·4
3	1	8	26·0	27·9	29·7
3	1	12	26·3	28·2	30·1
3	1	16	26·6	28·5	30·4
3	1	20	26·8	28·8	30·7
3	1	24	27·1	29·1	31·0
3	2	0	27·4	29·4	31·3
3	2	4	27·7	29·7	31·7
3	2	8	28·0	30·0	32·0

TABLE XIX.

For the Equalization of different Weights of Cattle, &amp;c.

Stones of 8 lb.	Stones of 14 lb.	Scores of 20 lb.	Stones Trone Wt.	Cwt. q. lb.			Stones of 8 lb.	Stones of 14 lb.	Scores of 20 lb.	Stones Trone Wt.	Cwt. q. lb.		
0.1	0.05	0.04	0.03	0	0	0	28	16	11.2	10.3	2	0	0
0.2	0.11	0.08	0.07	0	0	0	29	16.5	11.6	10.6	2	0	3
0.3	0.17	0.02	0.11	0	0	0	30	17.1	12.0	11.0	2	0	16
0.4	0.22	0.16	0.14	0	0	0	31	17.7	12.4	11.4	2	0	24
0.5	0.28	0.20	0.18	0	0	4	32	18.2	12.8	11.7	2	1	4
0.6	0.34	0.24	0.22	0	0	0	33	18.8	13.2	12.1	2	1	12
0.7	0.40	0.28	0.25	0	0	0	34	19.4	13.6	12.5	2	1	20
0.8	0.45	0.32	0.29	0	0	0	35	20.	14.0	12.9	2	2	0
0.9	0.51	0.36	0.33	0	0	0	36	20.5	14.4	13.2	2	2	8
1.	0.57	0.4	0.36	0	0	8	37	21.1	14.8	13.6	2	2	16
1.5	0.85	0.6	0.54	0	0	12	38	21.7	15.2	14.	2	2	24
2.	1.1	0.8	0.7	0	0	16	39	22.2	15.6	14.3	2	3	4
2.5	1.4	1.0	0.9	0	0	20	40	22.8	16.0	14.7	2	3	12
3.	1.7	1.2	1.1	0	0	24	41	23.4	16.4	15.1	2	3	20
3.5	1.9	1.4	1.2	0	1	0	42	24.	16.8	15.4	3	0	0
4.	2.2	1.6	1.4	0	1	4	43	24.5	17.2	15.8	3	0	8
4.5	2.4	1.8	1.6	0	1	8	44	25.1	17.6	16.2	3	0	16
5.	2.8	2.0	1.8	0	1	12	45	25.7	18.0	16.5	3	0	24
5.5	3.1	2.2	2.0	0	1	16	46	26.2	18.4	16.9	3	1	4
6.	3.4	2.4	2.2	0	1	20	47	26.8	18.8	17.3	3	1	12
6.5	3.7	2.6	2.3	0	1	24	48	27.4	19.2	17.7	3	1	20
7.	4.	2.8	2.5	0	2	0	49	28.	19.6	18.0	3	2	0
7.5	4.2	3.0	2.7	0	2	4	50	28.5	20.0	18.4	3	2	8
8.	4.5	3.2	2.9	0	2	8	51	29.1	20.4	18.8	3	2	16
8.5	4.8	3.4	3.1	0	2	12	52	29.7	20.8	19.1	3	2	24
9.	5.1	3.6	3.3	0	2	16	53	30.2	21.2	19.5	3	3	4
9.5	5.4	3.8	3.4	0	2	20	54	30.8	21.6	19.9	3	3	12
10.	5.7	4.0	3.6	0	2	24	55	31.4	22.0	20.2	3	3	20
10.5	6.0	4.2	3.8	0	3	0	56	32.	22.4	20.6	4	0	0
11.	6.2	4.4	4.0	0	3	4	57	32.5	22.8	21.0	4	0	8
11.5	6.5	4.6	4.2	0	3	8	58	33.1	23.2	21.3	4	0	16
12.	6.8	4.8	4.4	0	3	12	59	33.7	23.6	21.7	4	0	24
12.5	7.1	5.0	4.5	0	3	16	60	34.2	24.0	22.1	4	1	4
13.	7.4	5.2	4.7	0	3	20	61	34.8	24.4	22.4	4	1	12
13.5	7.7	5.4	4.9	0	3	24	62	35.4	24.8	22.8	4	1	20
14.	8.	5.6	5.1	1	0	0	63	36.	25.2	23.2	4	2	0
14.5	8.2	5.8	5.3	1	0	4	64	36.5	25.6	23.5	4	2	8
15.	8.5	6.0	5.5	1	0	8	65	37.1	26.0	23.9	4	2	16
15.5	8.8	6.2	5.7	1	0	12	66	37.7	26.4	24.3	4	2	24
16.	9.1	6.4	5.9	1	0	16	67	38.2	26.8	24.7	4	3	4
16.5	9.4	6.6	6.0	1	0	20	68	38.8	27.2	25.0	4	3	12
17.	9.7	6.8	6.2	1	0	24	69	39.4	27.6	25.4	4	3	20
17.5	10.0	7.0	6.4	1	1	0	70	40.	28.0	25.8	5	0	0
18.	10.2	7.2	6.6	1	1	4	71	40.5	28.4	26.1	5	0	8
18.5	10.4	7.4	6.8	1	1	8	72	41.1	28.8	26.5	5	0	16
19.	10.8	7.6	7.0	1	1	12	73	41.7	29.2	26.9	5	0	24
19.5	11.1	7.8	7.1	1	1	16	74	42.2	29.6	27.2	5	1	4
20.	11.4	8.0	7.3	1	1	20	75	42.8	30.0	27.6	5	1	12
21.	12.	8.4	7.7	1	2	0	76	43.4	30.4	28.0	5	1	20
22.	12.5	8.8	8.1	1	2	8	77	44.	30.8	28.3	5	2	0
23.	13.1	9.2	8.4	1	2	16	78	44.5	31.2	28.7	5	2	8
24.	13.7	9.6	8.8	1	2	24	79	45.1	31.6	29.1	5	2	16
25.	14.2	10.0	9.2	1	3	4	80	45.7	32.0	29.4	5	2	24
26.	14.8	10.4	9.5	1	3	12	81	46.2	32.4	29.8	5	3	4
27.	15.4	10.8	9.9	1	3	20	82	46.8	32.8	30.2	5	3	12

TABLE XIX.—*continued.*

Stones of 8 lb.	Stones of 14 lb.	Scores of 20 lb.	Stones Trone Wt.	Cwt. q. lb.	Stones of 8 lb.	Stones of 14 lb.	Scores of 20 lb.	Stones Trone Wt.	Cwt. q. lb.
83	47·4	33·2	30·5	5 3 20	138	78·8	55·2	50·8	9 3 12
84	48·	33·6	30·9	6 0 0	139	79·4	55·6	51·2	9 3 20
85	48·5	34·0	31·3	6 0 8	140	80·	56·0	51·6	10 0 0
86	49·1	34·4	31·7	6 0 16	141	80·5	56·4	51·9	10 0 8
87	49·7	34·8	32·0	6 0 24	142	81·1	56·8	52·3	10 0 16
88	50·2	35·2	32·4	6 1 4	143	81·7	57·2	52·7	10 0 24
89	50·8	35·6	32·8	6 1 12	144	82·2	57·6	53·0	10 1 4
90	51·4	36·0	33·1	6 1 20	145	82·8	58·0	53·4	10 1 12
91	52·	36·4	33·5	6 2 0	146	83·4	58·4	53·8	10 1 20
92	52·5	36·8	33·9	6 2 8	147	84·	58·8	54·1	10 2 0
93	53·1	37·2	34·2	6 2 16	148	84·5	59·2	54·5	10 2 8
94	53·7	37·6	34·6	6 2 24	149	85·1	59·6	54·9	10 2 16
95	54·2	38·0	35·0	6 3 4	150	85·7	60·0	55·2	10 2 24
96	54·8	38·4	35·3	6 3 12	151	86·2	60·4	55·6	10 3 4
97	55·4	38·8	35·7	7 0 20	152	86·8	60·8	56·0	10 3 12
98	56·	39·2	36·1	7 0 0	153	87·4	61·2	56·3	10 3 20
99	56·5	39·6	36·4	7 0 8	154	88·	61·6	56·7	11 0 0
100	57·1	40·0	36·8	7 0 16	155	88·5	62·0	57·1	11 0 8
101	57·7	40·4	37·2	7 0 24	156	89·1	62·4	57·6	11 0 16
102	58·2	40·8	37·5	7 1 4	157	89·7	62·8	57·8	11 0 24
103	58·8	41·2	37·9	7 1 12	158	90·2	63·2	58·2	11 1 4
104	59·4	41·6	38·3	7 1 20	159	90·8	63·6	58·6	11 1 12
105	60·	42·0	38·7	7 2 0	160	91·4	64·0	58·9	11 1 20
106	60·5	42·4	39·0	7 2 8	161	92·0	64·4	59·3	11 2 0
107	61·1	42·8	39·4	7 2 16	162	92·5	64·8	59·7	11 2 8
108	61·7	43·2	39·8	7 2 24	163	93·1	65·2	60·0	11 2 16
109	62·2	43·6	40·1	7 3 4	164	93·6	65·6	60·4	11 2 24
110	62·8	44·0	40·5	7 3 12	165	94·2	66·0	60·8	11 3 4
111	63·4	44·4	40·9	7 3 20	166	94·8	66·4	61·1	11 3 12
112	64·	44·8	41·2	8 0 0	167	95·4	66·8	61·5	11 3 20
113	64·5	45·2	41·6	8 0 8	168	96·0	67·2	61·9	12 0 0
114	65·1	45·6	42·0	8 0 16	169	96·5	67·6	62·2	12 0 8
115	65·7	46·0	42·3	8 0 24	170	97·1	68·0	62·6	12 0 16
116	66·2	46·4	42·7	8 1 4	171	97·7	68·4	63·0	12 0 24
117	67·8	46·8	43·1	8 1 12	172	98·2	68·8	63·4	12 1 4
118	67·4	47·2	43·4	8 1 20	173	98·8	69·2	63·7	12 1 12
119	68·	47·6	43·8	8 2 0	174	99·4	69·6	64·1	12 1 20
120	68·5	48·0	44·2	8 2 8	175	100·	70·0	64·5	12 2 0
121	69·1	48·4	44·6	8 2 16	176	100·5	70·4	64·8	12 2 8
122	69·7	48·8	44·9	8 2 24	177	101·1	70·8	65·2	12 2 16
123	70·2	49·2	45·3	8 3 4	178	101·7	71·2	65·6	12 2 24
124	70·8	49·6	45·7	8 3 12	179	102·2	71·6	65·9	13 3 4
125	71·4	50·0	46·0	8 3 20	180	102·8	72·0	66·3	13 3 12
126	72·	50·4	46·4	9 0 0	181	103·4	72·4	66·7	13 3 20
127	72·5	50·8	46·8	9 0 8	182	104·	72·8	67·0	13 0 0
128	73·1	51·2	47·1	9 0 16	183	104·5	73·2	67·4	13 0 8
129	73·7	51·6	47·5	9 0 24	184	105·1	73·6	67·8	13 0 16
130	74·2	52·0	47·9	9 1 4	185	105·7	74·0	68·1	13 0 24
131	74·8	52·4	48·2	9 1 12	186	106·2	74·4	68·5	13 1 4
132	75·4	52·8	48·6	9 1 20	187	106·8	74·8	68·9	13 1 12
133	76·	53·2	49·0	9 2 0	188	107·4	75·2	69·3	13 1 20
134	76·5	53·6	49·3	9 2 8	189	108·	75·6	69·6	13 2 0
135	77·1	54·0	49·7	9 2 16	190	108·5	76·0	70·0	13 2 8
136	77·7	54·4	50·1	9 2 24	191	109·1	76·4	70·4	13 2 16
137	78·2	54·8	50·5	9 3 4	192	109·7	76·8	70·7	13 2 24

TABLE XIX.—*continued.*

Stones of 8 lb.	Stones of 14 lb.	Scores of 20 lb.	Stones Trone Wt.	Cwt. q. lb.			Stones of 8 lb.	Stones of 14 lb.	Scores of 20 lb.	Stones Trone Wt.	Cwt. q. lb.		
193	110.2	77.2	71.1	13	3	4	247	141.1	98.8	91.0	17	2	16
194	110.8	77.6	71.5	13	3	12	248	141.7	99.2	91.4	17	2	24
195	111.4	78.0	71.8	13	3	20	249	142.2	99.6	91.7	17	3	4
196	112.	78.4	72.2	14	0	0	250	142.8	100.0	92.1	17	3	12
197	112.5	78.8	72.6	14	0	8	251	143.4	100.4	92.5	17	3	20
198	113.1	79.2	72.9	14	0	16	252	144.	100.8	92.8	18	0	0
199	113.7	79.6	73.3	14	0	24	253	144.5	101.2	93.2	18	0	8
200	114.2	80.0	73.7	14	1	4	254	145.1	101.6	93.6	18	0	16
201	114.8	80.4	74.0	14	1	12	255	145.7	102.0	93.9	18	0	24
202	115.4	80.8	74.4	14	1	20	256	146.2	102.4	94.3	18	1	4
203	116.	81.2	74.8	14	2	0	257	146.8	102.8	94.7	18	1	12
204	116.5	81.6	75.1	14	2	8	258	147.4	103.2	95.1	18	1	20
205	117.1	82.0	75.5	14	2	16	259	148.	103.6	95.4	18	2	0
206	117.7	82.4	75.9	14	2	24	260	148.5	104.0	95.8	18	2	8
207	118.2	82.8	76.3	14	3	4	261	149.1	104.4	96.2	18	2	16
208	118.8	83.2	76.6	14	3	12	262	149.7	104.8	96.5	18	2	24
209	119.4	83.6	77.0	14	3	20	263	150.2	105.2	96.9	18	3	4
210	120.	84.0	77.4	15	0	0	264	150.8	105.6	97.3	18	3	12
211	120.5	84.4	77.7	15	0	8	265	151.4	106.0	97.6	18	3	20
212	121.1	84.8	78.1	15	0	16	266	152.	106.4	98.0	19	0	0
213	121.7	85.2	78.5	15	0	24	267	152.5	106.8	98.4	19	0	8
214	122.2	85.6	78.8	15	1	4	268	153.1	107.2	98.7	19	0	16
215	122.8	86.0	79.2	15	1	12	269	153.7	107.6	99.1	19	0	24
216	123.4	86.4	79.6	15	1	20	270	154.2	108.0	99.5	19	1	4
217	124.	86.8	79.9	15	2	0	271	154.8	108.4	99.8	19	1	12
218	124.5	87.2	80.3	15	2	8	272	155.4	108.8	100.2	19	1	20
219	125.1	87.6	80.7	15	2	16	273	156.	109.2	100.6	19	2	0
220	125.7	88.0	81.0	15	2	24	274	156.5	109.6	100.9	19	2	8
221	126.2	88.4	81.4	15	3	4	275	157.1	110.	101.3	19	2	16
222	126.8	88.8	81.8	15	3	12	276	157.7	110.4	101.7	19	2	24
223	127.4	89.2	82.1	15	3	20	277	158.2	110.8	102.1	19	3	4
224	128.	89.6	82.5	16	0	0	278	158.8	111.2	102.4	19	3	12
225	128.5	90.0	82.9	16	0	8	279	159.4	111.6	102.8	19	3	20
226	128.1	90.4	83.3	16	0	16	280	160.	112.0	103.2	20	0	0
227	129.7	90.8	83.6	16	0	24	281	160.5	112.4	103.5	20	0	8
228	130.2	91.2	84.0	16	1	4	282	161.1	112.8	103.9	20	0	16
229	130.8	91.6	84.4	16	1	12	283	161.7	113.2	104.3	20	0	24
230	131.4	92.0	84.7	16	1	20	284	162.2	113.6	104.6	20	1	4
231	132.	92.4	85.1	16	2	0	285	162.8	114.0	105.0	20	1	12
232	132.5	92.8	85.5	16	2	8	286	163.4	114.4	105.4	20	1	20
233	133.1	93.2	85.8	16	2	16	287	164.	114.8	105.7	20	2	0
234	133.7	93.6	86.2	16	2	24	288	164.5	115.2	106.1	20	2	8
235	134.2	94.0	86.6	16	3	4	289	165.1	115.6	106.5	20	2	16
236	134.8	94.4	86.9	16	3	12	290	165.7	116.0	106.8	20	2	24
237	135.4	94.8	87.3	16	3	20	291	166.2	116.4	107.2	20	3	4
238	136.	95.2	87.7	17	0	0	292	166.8	116.8	107.6	20	3	12
239	136.5	95.6	88.1	17	0	8	293	167.4	117.2	108.0	20	3	20
240	137.1	96.0	88.4	17	0	16	294	168.	117.6	108.3	21	0	2
241	137.7	96.4	88.1	17	0	24	295	168.5	118.0	108.7	21	0	8
242	138.2	96.8	89.2	17	1	4	296	169.1	118.4	109.1	21	0	16
243	138.8	97.2	89.5	17	1	12	297	169.7	118.8	109.4	21	0	24
244	139.4	97.6	89.9	17	1	20	298	170.2	119.2	109.8	21	1	4
245	140.	98.0	90.3	17	2	0	299	170.8	119.6	110.2	21	1	12
246	140.5	98.4	90.6	17	2	8	300	171.4	120.0	110.5	21	1	20

## ENGLISH WEIGHTS.

*Troy.*

24 Grains	-	-	-	-	1 Pennyweight.
20 Pennyweights	-	-	-	-	1 Ounce.
12 Ounces	-	.	-	-	1 Pound.

*Apothecaries' Weight.*

20 Grains	-	-	-	-	1 Scruple.
3 Scruples	-	-	-	-	1 Drachm.
8 Drachms	-	-	-	-	1 Ounce.

*Avoirdupoise.*

27 $\frac{1}{2}$ Grains	-	-	-	-	1 Drachm.
16 Drachms	-	-	-	-	1 Ounce.
16 Ounces	-	-	-	-	1 Pound.
14 Pounds	-	-	-	-	1 Stone.
2 Stones	-	-	-	-	1 Quarter of a Hundred.
4 Quarters	-	-	-	-	1 Hundred Weight, or 112 lb.
20 Hundred Weights	-	-	-	-	1 Ton.

14 oz. 11 dwt. 20 gr. troy make 1 pound avoirdupoise.

13 $\frac{1}{4}$  oz. avoirdupoise make 1 pound troy.

*Bread and Flour.*

	lb.	oz.
A peck loaf weighs	-	17 6
A half peck ditto	-	8 11
A quarter peck ditto	-	4 5 $\frac{1}{2}$
A peck of flour	-	14 0
A bushel	-	56 0
A sack	-	280 0



*Wool.*

14 Pounds	-	-	-	1 Stone,
2 Stones, or 28 lb.	•	-	-	1 Tod.
6½ Tods or 13 stones	•	-	-	1 Wey or Weigh.
2 Weys	-	-	-	1 Sack.
12 Sacks	-	-	-	1 Last.

*Hay and Straw.*

56 Pounds of old hay	}	-	-	1 Truss,
60 Pounds of new ditto		-	-	
36 Trusses	-	-	-	1 Load.
36 Pounds of Straw	-	-	-	1 Truss.
36 Trusses	-	-	-	1 Load.

## SCOTCH WEIGHTS.

*Amsterdam.*

20 $\frac{11}{16}$ Grains	•	-	-	1 Drop.
16 Drops	-	-	-	1 Ounce.
16 Ounces	-	-	-	1 Pound.
16 Pounds	-	-	-	1 Stone.

*Trone.*

20 Ounces	-	•	-	1 Pound.
16 Pounds	-	-	-	1 Stone.



## PROPORTIONAL TABLE OF ENGLISH AND SCOTCH WEIGHTS.

	Troy.	Avoirdupoise.	Amsterdam.	Trone, of 20 Am- sterdam ounces to the pound.
	dec.	dec.	dec.	dec.
Grains in one ounce	480	437.75	475	
Grains in one pound	5760	7004	7600	9500
Ounces	1.000	= 1.095	= 1.010	
	.912	= 1.000	= .921	
	.990	= 1.085	= 1.000	
Pounds	1.000	= .823	= .757	= .606
	1.215	= 1.000	= .921	= .737
	1.319	= 1.085	= 1.000	= .800
	1.649	= 1.356	= 1.250	= 1.000

	Avoirdupoise.	Amsterdam,	Trone.
	lb. dec.	st. lb. dec.	st. lb. dec.
1 stone English	14	= 0 12.894	= 0 10.318
	17.360	= 1 0	= 0 12.800
	21.700	= 1 4	= 1 0
$\frac{1}{2}$ cwt. - - -	56	= 3 3.576	= 2 9.272
1 cwt. - - -	112	= 6 7.152	= 5 2.544
Nearly $1\frac{1}{4}$ cwt.	158.880	= 8 0	= 6 6.400
1800 weight -	2016	= 116 0.736	= 92 13.692
20 cwt. or 1 ton	2240	= 128 15.040	= 103 2.432

## LINEAL ENGLISH MEASURE.

inches.	foot.					
12 =	1	yard.				
36 =	3 =	1	fathom.	pole		
72 =	6 =	2 =	1	or rod.		
198 =	16.5 =	5.5 =	2.75 =	1	furlong.	
7920 =	666 =	220 =	110 =	40 =	1	mile.
63360 =	5280 =	1760 =	880 =	320 =	8 =	1 degree.
					$69\frac{1}{2}$ =	1

inches.	{ links of a chain. }	feet.	yards.	{ poles or rods. }	chain.	mile.
792	= 1					
792	= 100	66	22	4 = 1		
					80 = 1	

2 $\frac{1}{4}$ Inches	-	-	-	-	-	1 Nail.
4 Nails, or 9 Inches	-	-	-	-	-	1 Quarter.
4 Quarters, or 36 Inches	-	-	-	-	-	1 Yard.
5 Quarters, or 45 Inches	-	-	-	-	-	1 Ell.

### SQUARE ENGLISH MEASURE.

inches.	foot.	yard.	pole or rod.	rod.	acre.
144 =	1				
1296	9 =	1			
	272	30.25 =	1		
	10890*	1210	40 =	1	
6272640	43560	4840	160	4 =	1

inches.	{ links of a chain. }	feet.	yards.	poles.	chain.	rod.	acre.
627264	= 1 =	4356					
	10000 =	4356					
	100000	43560	484	16 =	1	.400	.100
			4840	160	10	4	1

100 Square feet = 1 Square of roofing.

### CUBIC, OR SOLID MEASURE.

4728 Cubic inches	-	-	-	1 Cubic foot.
27 Cubic feet	-	-	-	1 Cubic yard.

## ENGLISH DRY MEASURE.

				cubic inches.
1 Pint	-	-	-	33·6
2 Pints	-	-	1 Quart	67·2
2 Quarts	-	-	1 Pottle	134·4
2 Pottles	-	-	1 Gallon	268·8
2 Gallons	-	-	1 Peck	537·6
4 Pecks	-	-	1 Bushel	2150·4
4 Bushels	-	-	1 Coomb	8601·6
5 Bushels	-	-	1 Load (for a man.)	
8 Bushels	-	-	1 Quarter	10752·
5 Quarters	-	-	1 Load	56016·
10 Quarters	-	-	1 Last	860160·

*Coal Measure.*

1 Peck				
4 Pecks	-	-	-	1 Bushel.
3 Bushels	-	-	-	1 Sack.
12 Sacks, or 36 bushels	-	-	-	1 London chaldron,
21 Chaldrons	-	-	-	1 Score.

A cord of wood should be 8 feet long, 4 feet broad, and 4 feet deep,=128 cubic feet.

A stack of wood should be 12 feet long, 3 feet wide, and 3 feet deep,=108 cubic feet.

TABLE XX.—(See page 38.)

For making Measure equal in Capacity to the Winchester Bushel.

Diameter in inches and 8ths.	Depth in inches and 8ths.	Exceeds the contents of a Winchester bushel by	Increase by pressure in striking.	Each 8th of an inch in depth contains.
inches.	inches.	cup. in. 10ths.	cup. in. 10ths.	cup. in. 10ths.
13	16 $\frac{1}{4}$	6.49	24.8	16.59
	16	14.09	25.3	16.91
	15 $\frac{5}{8}$	2.08	25.8	17.22
	15 $\frac{3}{4}$	9.48	26.3	17.56
	15 $\frac{1}{2}$	14.54	26.8	17.89
	14 $\frac{3}{4}$	0.0	27.3	18.22
	14 $\frac{1}{2}$	3.07	27.8	18.56
	14 $\frac{1}{4}$	4.20	28.3	18.90
14	14	4.71	28.8	19.24
	13 $\frac{3}{4}$	4.19	29.3	19.58
	13 $\frac{1}{2}$	2.63	29.8	19.93
	13 $\frac{1}{4}$	13.24	30.4	20.41
	13	16.91	30.9	20.64
	12 $\frac{7}{8}$	12.40	31.3	21.
	12 $\frac{3}{4}$	6.84	32.0	21.36
	12 $\frac{1}{2}$	0.13	32.5	21.72
15	12 $\frac{1}{4}$	14.33	33.1	22.09
	12	5.50	33.6	22.46
	11 $\frac{7}{8}$	18.58	34.4	22.83
	11 $\frac{3}{4}$	7.88	34.8	23.20
	11 $\frac{1}{2}$	19.53	35.3	23.58
	11 $\frac{1}{4}$	6.53	35.9	23.96
	11	16.37	36.4	24.34
	10 $\frac{7}{8}$	1.76	37.1	24.74
16	10 $\frac{3}{4}$	11.	37.6	25.13
	10 $\frac{1}{2}$	19.81	38.2	25.53
	10 $\frac{1}{4}$	1.30	38.8	25.92
	10	7.74	39.4	26.31
	10	14.53	40.0	26.72
	10	20.25	40.7	27.13
	9 $\frac{7}{8}$	25.56	41.3	27.54
	9 $\frac{3}{4}$	2.04	41.9	27.95
17	9 $\frac{1}{2}$	5.89	42.5	28.37
	9 $\frac{1}{4}$	8.80	43.1	28.78
	9	11.54	43.7	29.21
	9	13.	44.1	29.63
	9	14.15	45.1	30.06
	8 $\frac{7}{8}$	14.70	45.6	30.49
	8 $\frac{3}{4}$	15.77	46.3	30.93
	8 $\frac{1}{2}$	13.02	47.1	31.35
18	8 $\frac{1}{4}$	11.57	47.7	31.80
	8	10.41	48.3	32.25
	8	7.63	49.0	32.69
	8	4.42	49.7	33.15
	8	0.0	50.4	33.60

## ENGLISH LIQUID MEASURES.

	Cubic Inches.	Pints.	Quarts.	Gallons.	Barrels.	Hhds.
Beer	15228	432	216	54		
Ale	13576	384	192	48	$1\frac{1}{2}$	1
Country Measure	14382	408	204	51		
Beer	10152	288	144	36		
Ale	9024	256	128	32	1	
Country Measure	9588	272	136	34		
Beer	282	8	4	1		
Ale						
Country Measure						
Beer	$70\frac{1}{2}$	2	1			
Ale						
Country Measure						
Beer	$33\frac{1}{4}$	1				
Ale						
Country Measure						

## WINE MEASURE.

	Cubic Inches.	Pints.	Quarts.	Gallons.	Barrels.	Hhds.
Hogshead	14553	504	252	63	2	1
Barrel	7276.5	252	126	$31\frac{1}{2}$	1	
Gallon	231	8	4	1		
Quart	$57\frac{1}{4}$	2	1			
Pint	28.875	1				

## LINEAL SCOTCH MEASURE.

Inches.	Feet.		Ells.			
12	= 1					
37·2	3·1	= 1	Falls.			
223·2	18·6	6 = 1	Furlongs.			
8928·	744	240	40 = 1	Miles.		
71424·	5952	1920 } 1984 yds. }	320	8 = 1		
						61½ is one degree.

Inches	{ Links of a chain. }	Feet.	Ells.	{ Falls, or short roods. }	Ch.	Long roods.
8·928	1					
8928	100	74·4	24·	} 4	1	·666
			yds. 24·18 }			
		111·	36	6	1·5	1·000

	English yds.				
English yds.	1984	- - - -	80·0		
24·8 = 1 Scots chain	- - 1000	- - - -	40·34	Eng. mile.	
			71·	Scots ch. = 1	

## SQUARE SCOTCH MEASURE.

Inches	Feet		Ells.			
144 =	1					
	9·61 = 1		Falls.			
	545·96	36 =	1	Roods.		
	13838·4	1440	40 =	1	Acre.	
	55353·6	5760 } Eng. yds. 6150 }	160	4 =	1	Mile.
					640 =	1

Inches.	{ Links of a chain. }	Feet.	Ells.	{ Falls, or roods. }	Ch.	{ Roods of Land. }	Acre.
79·719 =	1	·553					
	10000	5536·	576	16	1	·400	·101
	100000	55360·	5760	160	10	4· =	1000



## SCOTCH DRY MEASURE.

*Linlithgow Bear Measure.*

					Cub. In.
A Lippie, or Feed for a Horse	-	-	-	-	200·345
4 Lippies	-	-	= 1 Peck	-	801·381
4 Pecks	-	-	= 1 Firiot	-	3205·524
16 Pecks, or 4 Firlots	=	1 Bole	-	-	12822·026

*Linlithgow Wheat Measure.*

					Cub. In.
1 Firiot	-	-	-	-	= 2197·335
4 Firlots	-	1 Bole	-	-	= 8789·340

## SCOTCH LIQUID MEASURE.

	Cub. In.	Gills.	Mutch.	Chop.	Pints.	Qts.	Galls.	Hhd.
Hogshead	13235·7	2048	512	256	128	64	16	1
Gallon	827·23	128	32	16	8	4	1	
Quart	206·8	32	8	4	2	1		
Pint	103·404	16	4	2	1			
Chopin	51·7	8	2	1				
Mutchkin	25·85	4	1					
Gill	6·462	1						

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E. Blackader, Typ.

Took's Court, Chancery Lane, London.



## ERRATA.



PREFACE, *Page v. line 20, for " at Christmas Spring," read " at the Christmas and Spring."*

— 7 — 9 — "Table VII." *read "Table VI."*

— 12 — 1 — "that," *read "than."*

— 29 — 23 *after ".65" dele " or 6-tenths and 500."*

Table XVI. — 86 — 84 (third column,) *for "13.7," read "12.7."*

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*Entered at Stationers' Hall.*

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S           Cooke, Layton  
413         Tables adapted to the  
C6         use of farmers and  
            graziers

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