# THOMLINSON'S EQUIVALENT DADER JUIDE JCALE

John Thomlinson Limited STANLEY WORKS, GLASGOW, W.1

## THOMLINSON'S

**EQUIVALENT** 

## Paper Slide Scale

for DESK OR OFFICE USE . .

also

HANDY SIZE . . 13" long, BOXWOOD TOP, with Mahogany Base 23" long, ALL BOXWOOD . 26" long, Post Free

If special sizes required on Slide E, 10/- Extra

JOHN THOMLINSON LTD. · STANLEY WORKS · GLASGOW, W.1

# THE OFFICE or DESK SLIDE SCALE

This Scale is 23" long and deals with sizes  $8"\times12"$  to  $40"\times60"$  and with weights from 10 to 260 lbs.

Calculations can be quickly and accurately made in finding the comparative weight of any size of paper in any other size of the same substance.

# THE HANDY or POCKET SLIDE SCALE

This Scale is 13'' long and is made to deal with any sheet from  $10'' \times 20''$  to  $30'' \times 40''$  and with weights from 20 to 120 lbs.

As in the case of the Desk Models, it can easily be worked to deal with any size, larger or smaller, that may be wanted by doubling or halving sizes or weights not appearing on the Scale.

As these Scales work out the "rule of three," they can be used for many other calculations than those examples printed in "Instructions." The user soon finds that they have a wider application in the field of calculations.

N.B.—In many of these calculations the figures on Scale D do not necessarily represent lbs. They can stand for "counts" as in the case of Example 6, or money value as in Examples 8 and 9.

Page Two

## Instructions

The letters A, B, C, D and E, used below, indicate the scale on which the result is to be found.

To find the area of any given size of paper.

Set the breadth on B against the length on A, and against the index on B will be found the area on C.

Example.—To find the area of a sheet  $20 \times 25$ , set 25 on B against 20 on A, and against the index will be found on C the area, which in this instance is 500.

To find the equivalent weight of any odd size of paper, to a given weight of any of the standard sizes shown on E.

Set the given weight on D against the standard size on E, and opposite the area of size required (see 1 above) will be found the weight.

Example.—The weight of a sheet  $20\times40$  (=area 800'') is wanted, substance of Demy 21 lb. Set 21 lb. on D against  $17\frac{1}{2}\times22\frac{1}{2}$  on E, and opposite area (800) will be found  $42\frac{3}{4}$  lb., which is the required equivalent weight.

To find the equivalent weight of any standard size, to a given odd size and weight.

Reverse the foregoing process, i.e., set the known weight against the area of the odd size, and opposite the standard size will be the required weight.

Page Three

## THOMLINSON'S EQUIVAL



## ENT PAPER SLIDE SCALE

It is a Real

Time-Saver!



To find the equivalent weight of a size not shown on Scale E, to any other odd size of a given weight.

Set the given weight on D against the area of the odd size, and opposite the area of the size required will be found its weight.

Example.—Find the weight of a sheet of paper  $18 \times 25$  (area 450'') of same substance as a sheet of  $17\frac{1}{2} \times 36$  (area 630'') weighing 28 lb. per ream of 480. Set weight 28 lb. on D against area (630''), and opposite area (450'') will be found 20 lb., being the equivalent weight.

In cases where the sizes are outside the scope of scale, the calculation can be made by altering the values. For example, the weight of a sheet  $60^{\prime\prime} \times 70^{\prime\prime}$  is wanted. Calculate

 $35^{\prime\prime}\times60^{\prime\prime}$  and double the result; or if it is wanted  $12^{\prime\prime}\times10^{\prime\prime}$ , work it as  $12^{\prime\prime}\times20^{\prime\prime}$  and half the result.

To find the equivalent weight of a ream of 500 or 516 sheets, to one of 480 sheets.

Place weight per 480 sheets on Scale D against 480 on Scale E, and against 500 on Scale E will be found weight per ream of 500 sheets. Same applies to 516.

To find the equivalent number of sheets to, say, I cwt. of any size, to that of another size of the same substance.

Place the area of the required size on C against the known number of sheets of the other

size on D, and opposite the area of the known size will be found on D the required number of sheets.

Example.—A sheet  $22 \times 32$  counts 200 sheets per 112 lb. To find the equivalent number of sheets of  $25\frac{1}{4} \times 29\frac{1}{4}$  of same substance, place the area of  $25\frac{1}{4} \times 29\frac{1}{4}$  (739'') against 200 on D, and the number of sheets will be found opposite  $22 \times 32$  on E, which is 190 sheets.

In cases where the counts are outside of those on scale, the calculation can be made by altering the values. For instance, the count of a sheet  $24^{\prime\prime}\times40^{\prime\prime}$  is wanted in substance of  $22^{\prime\prime}\times32^{\prime\prime}$ , 300 sheets per cwt. Work with a count of 150 and double the result.

#### METRICAL EQUIVALENT

7 To find the equivalent weight in "grammes per square metre per sheet" to "lbs. per 480 sheets of any size."

Set given weight on D against the standard size on E (or against the area of odd size on C), and against "grammes per sq. metre" (Scale E) will be found the equivalent.

Example.—Find the grammes per sq. metre of sheet size  $22 \times 32$ —25-lbs.—480s. Set 22 on Scale B against 32 on Scale A. Set 25 on Scale D against Index on Scale B. Against "grammes per sq. metre" will be found the desired equivalent which is 52 grammes against 480 sheets per ream and 50 against 500 sheets per ream.

Note.—Grammes per sht. = kilos. per 1000 shts.

Page Seven

# Transforming "Inches to Cms." and "Cms. to Inches."

Set the measurement on Slide D against "Inches to Cms." marking on E, and against "Cms. to Inches" (also on Scale E) is the equivalent number of Cms.

Reverse the process to get Cms. to Inches.

#### "Lbs. to Kilos" and "Kilos to lbs."

The same method is used as in above, using "Lbs. to Kilos" and "Kilos to Lbs." markings on Scale E.

8 To find the equivalent value in any other size.

Set the value on Slide D against the

size on E or the area of the size on C, and against the size wanted the index on C points to the equivalent value.

Example.— $20 \times 30$  costs 50 - per 1000. Against  $20 \times 30$  on E place 50 on Slide D. Reading along E are the equivalent values per 1000 for standard sizes and along C the values for odd sizes.

#### Used as a Ready Reckoner

9 Set the known price on Slide D against known quantity on C. Along D are the corresponding prices for any quantity shown on C. For example, if 1000 (Scale C) costs 50/- (Scale D), 480 will cost 24/-; 520, 26/-; 600, 30/-, etc.

Page Eight

THE SCALE is invaluable to the busy man.

Once you have realised its capabilities new uses will be discovered and hours of laborious written calculations will be saved.