

CONTENTS.

CHAPTER I.	
Hints to Would-be Designers.	Page 9
CHAPTER II.	
Delicacy and Correctness of Taste.	13
CHAPTER III.	
How to Become a Designer.	15
CHAPTER IV.	
Explanation of Signs and Characters used in Design- ing.—Mathematical Signs.	18
Fractional Equivalents in Percentage.	19
Design Characters.	20
CHAPTER V.	
Explanation of Different Terms used by Designers.	20
CHAPTER VI.	
Hints on Preparing and Examining Samples before Dissecting.	24
CHAPTER VII.	
The Process of Dissecting and Layingout for the Fab- ric, Illustrated—with Pickout, and Cloth Sample.	26
To Find the Number of Threads in the Warp.	31
To Find the Amount of Yarn Required for Warp.	32
To Find the Required Reed.	33
To Find the Amount of Yarn Required for the Filling.	34
To Find the Number of Sections and Number of Spools Required Up.	35
To Find the Number of Yards Required on Each Spool.	36
The Dressing or Warping.	37
To Find the Number of Heddles Required on Each Harness when Using a Cross Draft.	37

CHAPTER VIII.

Estimating the Per Cent. to allow for Loss of Stock During the Process of Manufacture.	41
Rule for Adding Percentage.	42

CHAPTER IX.

Estimating the Per Cent. of Colors in Mixes, and of Different Wools in Batches.	45
To Find the Amount of Each Color Required in a Batch, the Size of Batch and Per Cent. being Known.	45

CHAPTER X.

Figuring the Shrinkage of Wools and Their Cost when Scoured.	47
To Find the Shrinkage of Unscoured wool.	47
To Find the Cost of Scoured Wool, the Market Price and Shrinkage being Known.	47
To Find the Amount of Wool Required in the Grease to Produce a Given Amount Clean, the Shrinkage being Known.	48

CHAPTER XI.

Dressing Pattern Warps and Weaving Pattern Sheets	49
—Pattern Sheet Illustrated by Diagram.	52
Figuring on the Weight of Cloth from Loom.	53

CHAPTER XII.

Three Methods of Attaching a Back to Fabrics—fully Demonstrated with Cloth Samples.	55
--	----

CHAPTER XIII.

Combining Weaves Illustrated.	68
---------------------------------------	----

CHAPTER XIV.

The Analysis of Double Weaves—Their Construction and Stitching—Demonstrated with Cloth Sample.	81
---	----

CHAPTER XV.

The Construction of Triple or Three-ply Weaves— Demonstrated with Cloth Sample.	90
--	----

CHAPTER XVI.

Relative Lengths Per Pound of Woolen, Worsted, Cotton, and Silk Yarns—their Explanation.	99
---	----

CHAPTER XVII.

Samples of Fabrics with General Instructions for Making Them—Eight Samples.	102
---	-----

CHAPTER XVIII.

Miscellaneous Weaves.	107
-------------------------------	-----

CHAPTER XIX.

Designing Broken Twills or Satin Weaves.	117
Rule for Designing Satin Weaves.	122
“Double Satin Weaves.”	123

CHAPTER XX.

Yarn Tables, Rules and Calculations.—Table Showing the Number of Yards Per Pound of Woolen Yarn From $\frac{1}{4}$ Run to 20 Runs.	126
Table Showing the Number of Yards Per Pound of Worsted Yarn from No. 1 to No. 120.	127
Table Showing the Number of Yards Per Pound of Cotton, or Spun-Silk Yarn from No. 1 to No. 90.	128
Table Showing Equivalent Numbers by the Run, Cut and No. System, for Woolen, Worsted, Cotton and Spun-Silk Yarns.	129
Table Showing the Weight in Grains of 50 Yards of Woolen Yarn, from 1 Run to 20 $\frac{1}{2}$ Runs.	130
Rules to Find the Size of Different Yarns, by Grains, without Reference Tables.	131
Rule to Find the Number of a 2 or 3-ply Thread, in Worsted and Cotton Yarns.	132
Rule to Estimate the Weight of Fabrics by the Weight of One Square Inch.	133
Weight Table in Grains.—Rule to Find Average Picks Per Inch in Uneven Cloths.—Cotton Yarn Table.	134
Linen Yarn Table.—Cloth Measure Table.	135
Raw or Tram and Organzine Silk Yarns.	136

CHAPTER XXI.

Weaving Right and Left-hand Twills, on Cam and Chain Looms—Illustrated.	137
---	-----

CHAPTER XXII.

Directions for Making Wool Mixes.—Conclusion.	141
A Centennial Calendar.	145