

Contents

Forewords	5
Acknowledgments	7
Preface	15
PART ONE	19
SETTING THE SCENE TO WEAVE	19
1 THE MAIN CHARACTERS: THE LOOM, THE TOOLS, THE MATERIALS	20
Which Loom Is Right for You?	21
Anatomy of a Loom	23
Tools	24
Yarns	26
Natural Fibers	27
Man-Made Fibers	28
2 FABRICS: BEHIND THE SCENES	30
What Is the Intended Use?	31
Which Yarn Should I Choose?	32
Characteristics of Yarns	32
Yarn Count	34
The Influence of Colors: The Lighting Designer at Work	36
Which Weave Structure Should I Choose?	41
The Basics	41
The Three Components of a Structure	42
The Three Basic Structures	43
What Should the Density Be? Do I Need to Make a Sample?	44
Calculating Density	45
Making Samples: The Dress Rehearsal	47
The Reed: The Tool to Get the Density You Want	51
What Size Should It Be?	52

3 THE READING AND WRITING OF WEAVING: STAGE LEFT THEN STAGE RIGHT	54
How to Read and Understand Threading, Treadling, and Tie-Up Drafts	55
Threading	56
Treadling	56
Tying Up the Treadles	56
The Drawdown	57
Connections Between the Draft and the Loom, or How to Dress Your Loom	58
A Plot Twist: New Notations	60
Tying Up Treadles: A 14-Letter Alphabet	61
Writing and “Weaving” on Paper: Creating the Script	64
Act One: Drawing the Drawdown of a Draft	64
Act Two: Inventing Your Own Fabric and Writing It Out	65
Weaving Software	66
4 STAGING WITHOUT STAGE FRIGHT: DRESSING THE LOOM	68
The Script: Project Record Sheets	70
Winding the Warp: Preparing the Yarn	72
Warp Width	72
Warp Length	72
Projected Amount of Yarn Needed for Warp and Weft	73
Warp Color Order Charts	74
The Warping Board, an Essential Tool for Length, Tension, and the Cross	74
Preparing the Equipment	78
Counting Heddles on the Loom According to the Threading	78
Backstage, Each Accessory in Its Place	79
Setting Up the Raddle and “Raddling” the Warp	81
Beaming the Warp: Quiet on Set . . . We’re Rolling!	82
Warp Sticks	82
Weights	83
A Few Comments	83
End of the Act	84
Heavens, the Cross Has Disappeared!!!	85
Tightening Loose Warp Ends	85
Threading	85
A Comfortable Position Is a Treasure Worth Seeking	86
A Bit of Method to Become More Efficient	86

Now for a Little Dexterity	88
Mistakes May Happen	89
Sleying the Reed: Each Thread in Its Place	89
Method, Attention, Precision!	90
Going Over Your Reed with a Fine-Tooth Comb	91
Tying the Warp to the Cloth Beam	91
Tying Up the Treadles: The Stagehand at Work	93
In Which the Weaver Becomes a “Dresser”	93
Drum Roll Please! The Countermarch Loom	95
Having a Good Treadle Stroke	96
A Short, Well-Thought-Out Summary	97
A Final Fine-Tuning: Adjusting the Shafts, the Reed, and Other Mechanisms	97
To Conclude, Some Encouragement	99
 5 AND NOW, TO THE STAGE: LET THE WEAVING BEGIN!	 100
The Entrance: Before the First Picks	101
Filling the Shuttle	101
The First Six Picks	102
The Paris Stitch and Hemming	103
Time to Perform: Weaving at Last!	103
The Song of the Silk Weavers	103
Beating Pressure	104
Perfect Selvedges	105
Minimal Shrinkage	106
Advancing the Weaving Every 1 to 2 Inches	107
Debriefing on Set in 5 Minutes!	108
Winding onto the Cloth Beam	108
Always Pay Attention to Warp Tension	108
The Conclusion: Finishing Your Weaving	109
Different Ways to Finish Your Weaving: The Final Bow	109
A Last Curtain Call, and We Keep On Weaving	111
In the Limelight: Mistakes to Correct, Tips and Tricks	112
Before Starting to Weave	112
After the First Picks	113
While Weaving, What to Do When . . .	115
By Way of Conclusion	118

PART TWO	121
THE MELODY OF WEAVING: STRUCTURES	121
6 THE BASIC STRUCTURES: PERFECT HARMONY	123
Dynamic Plain Weave	125
Plain Weave Fabrics	126
Let's Review: Plain Weave Explained	127
How Is Plain Weave Made?	129
Welcome Creativity with Method	129
Stripes, Plaid, Log Cabin, and Other Color Effects	135
Supplementary Yarn, Interchanging Warp, and Other Manipulations	135
By Way of Conclusion	137
Plain Weave Derivatives: Changing the Tempo	138
Derivatives Due to Number of Threads	138
Derivatives Due to Density: The Rep Family	141
Twill	149
Prelude: Some Definitions	149
Tie-Up: The Conductor Sets the Rhythm	150
First Concert: A Suite of Twill Threadings on 4 Shafts	152
Intermission! A Few Clarifications to Stay in Harmony	155
A Polyphony of Threading: Twill Gamp or Patchwork	156
An Interlude Suggested by William G. Bateman	159
The Orchestra Is Growing: Twill on an 8-Shaft Loom!	159
Undulating Twill: New Vocalizations	163
Plaited Twills: The Weaver's Braid	164
Twill in Weft-Faced Rep: A Key Change!	165
Threading, Tie-Up, Treadling: Some Points of Reference	165
To Your Instruments: First Picks in G Major	167
When the Question of Density Comes Up Again and Again	169
Finishing the Ends: The Final Arrangements	169
Satin	169
Creating a Satin Without Cacophony	170
Weaving a Satin: Precious and Prized	172
Mastering a Satin	177

7 A PROLIFERATION OF STRUCTURES: THE ORCHESTRA DIVERSIFIES	179
A Concert of Compound Structures	180
Summer and Winter: The Two Seasons of a Weaver	180
Overshot and Monk's Belt: Playing in Major or Minor Key	187
Interlude with Lace Structures	196
Huck Lace	196
Bronson Lace	200
Other Laces	203
Bead Leno	204
Fugues with Deflected Structures	206
Waffle Weave	206
Honeycomb Weave	209
Deflected Doubleweave	210
Doubleweave: A Waltz in Two Beats	216
Theory on 4 Shafts: A Little Sight Reading	216
Double-Width or Tubular Fabric	220
With 8 or More Shafts, the Second Movement	222
Theo Moorman: One More for the Road	228
A Bit of Technique	228
Inlays	229
Taking It Just a Bit Further	230
 PART THREE	 233
 TAKING A GIANT LEAP	 233
 8 LOOKING AT THE BIGGER PICTURE, SKETCHING YOUR DESIGN	 234
Drawing a Profile Draft	236
A Few Definitions	236
First Duet: Profile Draft and Blocks	236
The Choreography Falls into Place	237
Analyzing Fabrics	240
A Few Warm-Up Exercises	240
A New Set Design	242

Weaving Software: Switching Roles	243
But Then, Why Not Use It?	244
Look Around You to Find Inspiration	245
Choose Your Ballet Master	245
Dance Like No One Is Watching	246
Build Up Your Knowledge of Choreography	247
9 DETAILS THAT CHANGE EVERYTHING: MASTERY BECOMES POSSIBLE	249
Changing the Threading	250
Memorizing a Complex Treadling by Creating Codes	252
Installing Supplementary Warp and Rotating the Weaving Draft	254
Tying Up a Countermarch Loom	255
The Skeleton	258
The Network and the Initials Method	260
The Principle	260
Building the Complete Draft Step by Step	260
CONCLUSION	263
APPENDICES	265
Glossary	266
Project Record Sheet	269
Equivalent Imperial and Metric Measurements	272
Equivalent Imperial and Metric Measurements for the Reed	272
Equivalent Imperial and Metric Yarn Counts	272
Composition of Yarns and Burn Test	273
Grid for Warp-Faced Rep Weave	274
Bibliography	275
Index	279
Photo, Illustration, and Weaving Credits	283