

TABLE OF CONTENTS.

CHAPTER I.		Page.
<i>History of Silk,</i>	- - - - -	9
" " in the United States,	- - - - -	13
<i>Natural History of the Silk-worm,</i>	- - - - -	19
CHAPTER II.		
<i>Varieties in Silk-worms,</i>	- - - - -	27
Of rearing two or more crops in one season, in the United States,	- - - - -	28, 115
CHAPTER III.		
<i>Of other Caterpillars producing Silk,</i>	- - - - -	29
Of the Bughy or Tusseh, and Arrindy silk-worms of India,	- - - - -	29
Of the Chinese worms, which do not spin cocoons, but produce threads, and attach them to trees,	- - - - -	30
Of the South American silk-worms,	- - - - -	31
Of the native North American silk-worms,	- - - - -	32
CHAPTER IV.		
<i>Of Mulberry Trees,</i>	- - - - -	32
1. Of the native red mulberry, and its varieties,	- - - - -	33
2. Of the white mulberry tree, and its culture, and varieties,	- - - - -	34, 114
3. On the proportion of leaves to an acre, and to silk produced from them; superiority of the leaves of seedling trees; cautions on picking leaves,	- - - - -	40
CHAPTER V.		
<i>Of the Laboratory,</i>	- - - - -	43
Description and cut of the Rev. Mr. Swayne's rearing frames,	- - - - -	46
CHAPTER VI.		
<i>The art of rearing Silk-worms.</i>	- - - - -	
1. Of the care necessary previously to the hatching,	- - - - -	46
2. Utility of a thermometer to fix the temperature of the room,	- - - - -	48
3. Of the Hot House, and Utensils required,	- - - - -	49
4. Of the hatching of the silk-worms' eggs,	- - - - -	51
CHAPTER VII.		
<i>Of the small apartment in which the new hatched worms are to be received, of their removal into the laboratory, or elsewhere,</i>	- - - - -	58
		59

CHAPTER VIII.

<i>Of the rearing of Silk-worms in the four first ages,</i>	-	-	-	-	61
1. Of rearing Silk-worms in the First Age,	-	-	-	-	64
2. " " Second Age,	-	-	-	-	68
3. " " Third Age,	-	-	-	-	71
4. " " Fourth Age,	-	-	-	-	75

CHAPTER IX.

<i>Of rearing Silk-worms in the Fifth Age, until they prepare to form their cocoons,</i>	79
--	----

CHAPTER X.

<i>Of rearing Silk-worms until the cocoon is perfected,</i>	-	-	-	-	86
1. First preparation of the Hedge, or Espalier,	-	-	-	-	87
2. Cleaning of the Hurdles; and of the preparation for the rising of the silk-worms,	-	-	-	-	89
3. Separation of the silk-worms which will not rise; last cleaning of the Hurdles,	-	-	-	-	91
4. Care of the Laboratory, until the silk-worm has completed its fifth age,	-	-	-	-	92
5. Quantity of vapour emitted by silk-worms,	-	-	-	-	94

CHAPTER XI.

<i>Of the Sixth Age of Silk-worms, or of the Chrysalis.</i>	
1. Gathering and preservation of the cocoons,	94
2. Daily loss in weight of cocoons,	97

CHAPTER XII.

<i>Birth and coupling of the Moths; laying of the Eggs, and their preservation,</i>	98
---	----

CHAPTER XIII.

<i>General view of all the facts stated in this work, immediately connected with the Art of Cultivating Silk-worms.</i>	
1. Number of eggs of different varieties of silk-worms to the ounce,	102
2. Space occupied by silk-worms, from one ounce of eggs, in different ages,	103
Quantities of leaves consumed by them in different ages,	103
3. Facts relative to the cocoons containing the healthy chrysalides; diseased and dead chrysalides,	103
4. Facts relative to the production of eggs,	105
5. Quantities of silk yielded by various parcels of cocoons,	105
6. Weights of cocoons; produce of cocoons and of silk from an ounce of eggs,	106
7. Proportion of eggs to cocoons,	107
8. Proportion of different qualities of cocoons, in various parcels, before and after being baked,	108
<i>Abstract and condensed view of the mode of rearing Silk-worms,</i>	109
Means of producing early food for silk-worms, and on the advantages of budding mulberry trees,	114
On producing two or more crops of silk-worms in one season,	115

CHAPTER XIV.

<i>Diseases of Silk-worms.</i>	
1. Diseases from defect of eggs,	117
2. " " mismanagement of eggs,	118
3. " " bad air of the district in which silk-worms are reared,	118
4. " " impurity in the air of the laboratory,	118
5. On purifying the air of a laboratory by acid fumigations,	119

	Page.
6. Of the Hygrometer, a simple one described, with a cut, - - -	121
7. Diseases from want of room for the worms, - - -	122
8. " quality and quantity of food, - - -	123
9. " change of food, - - -	123
10. " sudden changes of temperature, - - -	125
11. " peculiar constitution of the air, - - -	124
<i>Particular Diseases.</i>	
1. The Passis, - - -	125
2. The Lusette or Clairette, - - -	126
3. The Yellows, - - -	127
4. The Muscardine, - - -	127
5. The Tripes or Mort Blanc, - - -	127

CHAPTER XV.

<i>Preparations for Reeling the Silk.</i>	
1. How to take off the flos from the cocoons, - - -	127
2. Separation of the various qualities of cocoons, - - -	128
3. On heating water for reeling by steam, with a cut, - - -	130
4. Utility of the thermometer to ascertain the heat of the water, - - -	131
5. On killing the chrysalis in the cocoons, by baking and steaming, - - -	131-3
6. Of royal, perforated cocoons, and soufflons, - - -	134
<i>Mode of Reeling Silk from the best Cocoons,</i> - - -	134
<i>Of disbanding the silk from the reel, tying it in skeins, preparation of the silk for use,</i> - - -	142
<i>Doubling Machine, with a cut,</i> - - -	143
<i>Of the preparation of the waste silk, spinning inferior qualities,</i> - - -	144
<i>" of the silk to make organzine,</i> - - -	146
<i>Notice of the warping machine,</i> - - -	146
<i>Explanation of the Plates.</i>	
1. Silk Reel of Piedmont, and various utensils for rearing silk-worms, - - -	147-8
2. Indigo Cradle, - - -	148
3. Frames of split rattans to feed worms on, - - -	148
4. Sholl's improved Silk-loom, - - -	149
5. Winding Reel, - - -	149
6. Throwsting Machine, to make organzine silk, - - -	150
7. Shenton's Engine for tramming silk, - - -	153
8. Richard's improvement in the silk-weavers' draw-boy, - - -	155
9. Loom for weaving figured silk, - - -	158
<i>Notices of various Machines, and recent improvements in Silk Machinery.</i>	
1. Thompson's improved ribbon-loom; French ribbon-looms, - - -	164
2. Jacquart's loom, - - -	164
3. Le Brun's loom, - - -	165
4. English Patents for Improvements in Silk Machinery, - - -	166
5. De Bergue's Power-loom, - - -	166
6. Kendall's Domestic Power-loom, - - -	167
7. Fanshaw's Apparatus for spinning, doubling, and twisting, or throwing silk, with a cut, - - -	167
8. Sadler's improved Power-loom, - - -	169
9. American winding, doubling, and twisting apparatus, - - -	169
10. Other recent improvements in silk-weaving, - - -	169
11. Method of preventing the watering of silk, without the use of a knee roll, - - -	170
<i>Extracts from minutes of evidence before the House of Commons, on the Silk Trade and Silk Manufacture,</i> - - -	171
<i>Appendix, on Dying Silk,</i> - - -	173
<i>Mode of making sewing-silk, and silk twist in Connecticut,</i> - - -	213

LIST OF PLATES.

- Plate 1, fig. 1. Silk-reel of Piedmont.
2. Arrangement of feeding-frames for silk-worms.
3. A double knife to chop mulberry leaves.
4. Box to hold silk-moths, when not coupling.
5. Tressel, to be covered with cloth, for silk-moths to lay eggs on.
6. Rope frame, to hold the cloth or paper containing silk-worm eggs, when not wanted.
7. Hook to lift the worms.
- Plate 2, fig. 1, 2. Indigo cradle.
3. Rattan slides or frames for silk-worms.
4. Frames for silk-worms to spin their cocoons, instead of bushes or twigs.
5. Sholl's improved silk-loom.
- Plate 3, fig. 1. Reel to wind skeins of silk on bobbins.
2. Throwsting machine.
3. A single spindle of a throwsting machine.
- Plate 4. Shenton's tramming engine.
5. Silk loom, exhibiting Richard's improved draw-boy, and the Spitalfields silk-loom.