EDUCATIONAL SCHOOL GARDENING AND HANDWORK
A handsome flower border  Chard Tatworth C. School.
EDUCATIONAL SCHOOL GARDENING AND HANDWORK

by

G. W. S. BREWER, F.R.H.S.
Inspector of Educational School Gardening,
Somerset County Education Committee

WITH AN INTRODUCTION

by

The Rt. Hon. HENRY HOBHOUSE
Chairman of the Somerset County Council

Cambridge:
at the University Press
1913
PREFATORY NOTE

THIS work on Educational School Gardening is an endeavour to carry into practical school life the spirit of the following extract from Jock of the Bushveld. “Boys is like pups—you got ter help ‘em some; but not too much, an’ not too soon. They got ter larn themselves. I reckon ef a man’s never made a mistake he’s never had a good lesson. Ef you don’t pay for a thing you don’t know what it’s worth; and mistakes is part o’ the price o’ knowledge—the other part is work! But mistakes is the part you don’t like payin’: that’s why you remember it. You save a boy from makin’ mistakes, and ef he’s got good stuff in him most like you spoil it. He don’t know anything properly, ’cause he don’t think; and he don’t think, ’cause you saved him the trouble an’ he never learned how! He don’t know the meanin’ o’ consequences and risks, ’cause you kep’ ’em off him!

An’ bymbye he gets ter believe it’s born in him ter go right, an’ knows everything, an’ can’t go wrong; an’ ef things don’t pan out in the end he reckons it’s jus’ bad luck! No! Sirree! Ef he’s got ter swim you let him know right there that the water’s deep an’ thar ain’t no one to hol’ him up, an’ ef he don’t wade in an’ larn, it’s goin’ ter be his funeral!”

G. W. S. B.

1 September 1913
INTRODUCTION

I have been asked to write a few words of introduction to this little volume, and I do so with pleasure.

We are all conscious now-a-days that there is a widespread dissatisfaction with our system of elementary education. It is said that by giving too much “bookish” instruction it is unfitness our children in the rural districts for their “natural future” on the land and encouraging them to seek for clerical employment in the towns to the detriment of our population as a whole.

This book may well be commended to those who sympathise with these views. It is perhaps through the medium of the school garden, the school workshop and the school kitchen, that we can do most to counteract the tendency complained of. Mr Brewer deserves the thanks of educationalists for the enlightened spirit in which he approaches his subject. He shows how, under wise guidance, the school garden
Introduction

may become the means of training boys in self-help, initiative, and the capacity for finding things out for themselves, and so learning the valuable lessons that only mistakes can teach. Mr Brewer believes that many school lessons, e.g., nature study, arithmetic, drawing, mensuration and composition, may be rendered more interesting and living by taking their subjects from the school garden. There is no doubt that progress in both literary and practical work is promoted by such intelligent co-ordination. Teachers should find the book suggestive and full of practical hints and ingenious devices.

There is, moreover, a still more important object which the author seems to have in view, namely, the formation of character in the training of boys in habits of industry, co-operation, and in what may be called the broad scientific outlook.

HENRY HOBHOUSE.

September 1913
## CONTENTS

<table>
<thead>
<tr>
<th>Chap.</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Thoughts on School Gardening—Aims and Principles</td>
<td>1</td>
</tr>
<tr>
<td>2.</td>
<td>“A Beginning”</td>
<td>10</td>
</tr>
<tr>
<td>3.</td>
<td>“My” Garden</td>
<td>16</td>
</tr>
<tr>
<td>4.</td>
<td>Descriptive Work</td>
<td>23</td>
</tr>
<tr>
<td>5.</td>
<td>Nature Study</td>
<td>29</td>
</tr>
<tr>
<td>6.</td>
<td>The Garden and the Cookery Classes</td>
<td>46</td>
</tr>
<tr>
<td>7.</td>
<td>A School Garden Company</td>
<td>48</td>
</tr>
<tr>
<td>8.</td>
<td>The Recording of Garden Work—What Books shall be kept for Garden Work?</td>
<td>50</td>
</tr>
<tr>
<td>9.</td>
<td>The School Museum</td>
<td>56</td>
</tr>
<tr>
<td>10.</td>
<td>Experimental Work in the Garden</td>
<td>63</td>
</tr>
<tr>
<td>11.</td>
<td>Garden Hints</td>
<td>81</td>
</tr>
<tr>
<td>12.</td>
<td>The School Beautiful</td>
<td>86</td>
</tr>
<tr>
<td>13.</td>
<td>Tools and the Tool Shed</td>
<td>89</td>
</tr>
<tr>
<td>14.</td>
<td>Exhibiting</td>
<td>91</td>
</tr>
<tr>
<td>15.</td>
<td>Evening Continuation Schools</td>
<td>95</td>
</tr>
<tr>
<td>16.</td>
<td>Woodwork and Metalwork</td>
<td>99</td>
</tr>
<tr>
<td></td>
<td>Exercises</td>
<td>169</td>
</tr>
<tr>
<td></td>
<td>Helps</td>
<td>184</td>
</tr>
<tr>
<td></td>
<td>Index</td>
<td>187</td>
</tr>
</tbody>
</table>
LIST OF ILLUSTRATIONS

A handsome flower border. Chard Tatworth C. School  Frontispiece

<table>
<thead>
<tr>
<th>Illustration Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plan of Nailsworth Boys' School Gardens</td>
<td>11</td>
</tr>
<tr>
<td>Plan of Part of Plot 5, Nailsworth School Gardens</td>
<td>19</td>
</tr>
<tr>
<td>Cardboard strip</td>
<td>42</td>
</tr>
<tr>
<td>Graph of broad bean showing influence of weather on growth</td>
<td>43</td>
</tr>
<tr>
<td>Portfolio for garden papers</td>
<td>53</td>
</tr>
<tr>
<td>Beetles pinned</td>
<td>60</td>
</tr>
<tr>
<td>Method of setting butterfly</td>
<td>61</td>
</tr>
<tr>
<td>Plant markers</td>
<td>103</td>
</tr>
<tr>
<td>Plant support</td>
<td>104</td>
</tr>
<tr>
<td>Garden plot marker</td>
<td>105</td>
</tr>
<tr>
<td>A webber</td>
<td>106</td>
</tr>
<tr>
<td>Spade cleaner</td>
<td>107</td>
</tr>
<tr>
<td>Museum stand</td>
<td>108</td>
</tr>
<tr>
<td>Plant label</td>
<td>109</td>
</tr>
<tr>
<td>A soil firmner</td>
<td>110</td>
</tr>
<tr>
<td>Soil treader</td>
<td>111</td>
</tr>
<tr>
<td>Hanging flower baskets</td>
<td>112</td>
</tr>
<tr>
<td>Drill makers</td>
<td>113, 114</td>
</tr>
<tr>
<td>Potato box</td>
<td>115</td>
</tr>
<tr>
<td>A sieve</td>
<td>116</td>
</tr>
<tr>
<td>Leaves scrapper</td>
<td>116</td>
</tr>
<tr>
<td>Bird clappers</td>
<td>117</td>
</tr>
<tr>
<td>A wind clapper</td>
<td>118</td>
</tr>
<tr>
<td>A hand barrow</td>
<td>119</td>
</tr>
<tr>
<td>Pot stand for bottled fruit</td>
<td>120</td>
</tr>
<tr>
<td>Jam stirrer</td>
<td>121</td>
</tr>
<tr>
<td>Potting stick</td>
<td>122</td>
</tr>
<tr>
<td>Boot scrapers</td>
<td>123, 124</td>
</tr>
<tr>
<td>Dibbers</td>
<td>125, 126, 127</td>
</tr>
</tbody>
</table>
### List of Illustrations

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A rake</td>
<td>128</td>
</tr>
<tr>
<td>Garden reels</td>
<td>129</td>
</tr>
<tr>
<td>A hygrometer</td>
<td>130</td>
</tr>
<tr>
<td>A wind vane</td>
<td>132</td>
</tr>
<tr>
<td>Butterfly or specimen case</td>
<td>133</td>
</tr>
<tr>
<td>Display case</td>
<td>135</td>
</tr>
<tr>
<td>Larva boxes</td>
<td>136, 137</td>
</tr>
<tr>
<td>Setting board</td>
<td>138</td>
</tr>
<tr>
<td>Observation box</td>
<td>139</td>
</tr>
<tr>
<td>Thermometer stand</td>
<td>140</td>
</tr>
<tr>
<td>Plant protector</td>
<td>141</td>
</tr>
<tr>
<td>Moveable frames</td>
<td>142, 143</td>
</tr>
<tr>
<td>Plant protector</td>
<td>144</td>
</tr>
<tr>
<td>Fruit drying tray</td>
<td>145</td>
</tr>
<tr>
<td>Seed cabinet</td>
<td>146</td>
</tr>
<tr>
<td>Seed cupboard</td>
<td>147</td>
</tr>
<tr>
<td>Seed cabinet</td>
<td>148</td>
</tr>
<tr>
<td>Pea guard</td>
<td>149</td>
</tr>
<tr>
<td>A tool shed</td>
<td>150</td>
</tr>
<tr>
<td>Bracket in steel</td>
<td>151</td>
</tr>
<tr>
<td>Bracket in wood</td>
<td>152</td>
</tr>
<tr>
<td>Tool rack</td>
<td>152</td>
</tr>
<tr>
<td>Plant propagator</td>
<td>154</td>
</tr>
<tr>
<td>Light rustic woodwork</td>
<td>155</td>
</tr>
<tr>
<td>Rose pillar</td>
<td>157</td>
</tr>
<tr>
<td>Rustic seat</td>
<td>158</td>
</tr>
<tr>
<td>Window box</td>
<td>159</td>
</tr>
<tr>
<td>Plant box</td>
<td>160</td>
</tr>
<tr>
<td>Stands for plant box</td>
<td>160</td>
</tr>
<tr>
<td>Plant box</td>
<td>161</td>
</tr>
<tr>
<td>Garden basket</td>
<td>162</td>
</tr>
<tr>
<td>Mould for concrete edging</td>
<td>163</td>
</tr>
<tr>
<td>Funnel for rain gauge</td>
<td>164</td>
</tr>
<tr>
<td>Hoe</td>
<td>165</td>
</tr>
<tr>
<td>Garden trowel</td>
<td>166</td>
</tr>
<tr>
<td>Garden reel</td>
<td>167</td>
</tr>
</tbody>
</table>