Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.
HENDERSON'S 1917 CATALOGUE

Implements - Tools - Requisites - Fertilizers - Insecticides, Etc.
For the Garden, Greenhouse, Lawn, Orchard and Farm.

ALSO

Everything for the Lawn, Golf Course, Athletic Grounds, Etc.
Lawn Grass Seed Mixtures and Lawn Grasses in Variety.

BUSINESS RULES.

ORDERING, REMITTING, ACCOUNTS FORWARDING, ETC.

Prices in this Catalogue cancel all previous offers unless accepted by us.

The prices quoted in this Catalogue are net. We offer no premiums, discounts nor gratuities. We reserve the right to advance prices without notice should current conditions require it.

PETER HENDERSON & CO. give no warranty, express or implied, as to description, quality, productiveness, or any other matter of any Seeds, Bulbs, Roots or Plants they send out, and they will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are at once to be returned.

REMITTANCES may be made by Express Money Order, P. O. Money Order or Bank Draft; if stamps or cash send in a Registered Letter. We must decline sending goods C. O. D. unless 25 per cent. of their value accompanies the order. Plants we do not ship C. O. D.

ACCOUNTS—Parties having no account with us—who order goods without remittance—must furnish satisfactory reference. New York City reference preferred on account of the shorter delay pending investigation.

WE MAKE NO CHARGE FOR SHIPPING AND CARTING of goods to any railroad station, steamship line or express office in New York City proper.

WE MAKE NO CHARGE FOR PACKING, except special for foreign shipments, as tin-lined cases, double sacks, etc., then we charge cost. Cloth bags we charge for, viz: 1 peck, 10c.; ½ bushel, 12c.; 1 bushel, 15c.; 2 bushels, 25c. All Grass Seed bags are furnished free excepting for Timothy and Clover.

PARCEL POST AND EXPRESS.

On shipments weighing 20 pounds or more it is cheaper to ship by express. As the express companies give a receipt for each package, and are responsible, it amounts practically to insurance without cost, whereas it costs extra, according to value, to insure a parcel post package. We guarantee the safe arrival in the U. S. of all goods shipped by express.

LAWN GRASS SEED MIXTURES.

We deliver quarts and pecks free in the U. S. by parcel post or express at our option. We also deliver free in the U. S. by parcel post, express or freight (our choice) all Lawn Grass Seeds in larger quantities.

For other merchandise marketable by Parcel Post offered in this catalogue—Tools and Accessories, Odorless Fertilizers, Insecticides and Fungicides (Fluids and Poisons excluded)—we have given the packed weight so that extra for postage may be remitted according to Zone distances.

WEIGHT LIMIT—The weight limit within the 1st and 2nd Zones is fifty (50) pounds, within the other Zones the weight limit is twenty (20) pounds and the size limit eighty-four (84) inches for combined length and largest girth. In this catalogue we give the weight packed up to ten (10) pounds on Implements, Insecticides and Fertilizers.

ZONES

<table>
<thead>
<tr>
<th>Weight up to</th>
<th>Local</th>
<th>1st Up</th>
<th>2nd Up</th>
<th>3rd Up</th>
<th>4th Up</th>
<th>5th Up</th>
<th>6th Up</th>
<th>7th Up</th>
<th>8th Over</th>
</tr>
</thead>
<tbody>
<tr>
<td>100 Pounds</td>
<td>$0.05</td>
<td>$0.05</td>
<td>$0.05</td>
<td>$0.06</td>
<td>$0.07</td>
<td>$0.08</td>
<td>$0.09</td>
<td>$0.11</td>
<td>$0.12</td>
</tr>
<tr>
<td>110 Pounds</td>
<td>$0.06</td>
<td>$0.06</td>
<td>$0.06</td>
<td>$0.07</td>
<td>$0.08</td>
<td>$0.09</td>
<td>$0.10</td>
<td>$0.12</td>
<td>$0.14</td>
</tr>
<tr>
<td>120 Pounds</td>
<td>$0.07</td>
<td>$0.07</td>
<td>$0.07</td>
<td>$0.09</td>
<td>$0.10</td>
<td>$0.10</td>
<td>$0.11</td>
<td>$0.13</td>
<td>$0.15</td>
</tr>
<tr>
<td>130 Pounds</td>
<td>$0.08</td>
<td>$0.08</td>
<td>$0.10</td>
<td>$0.11</td>
<td>$0.12</td>
<td>$0.13</td>
<td>$0.14</td>
<td>$0.16</td>
<td>$0.18</td>
</tr>
<tr>
<td>140 Pounds</td>
<td>$0.09</td>
<td>$0.09</td>
<td>$0.11</td>
<td>$0.12</td>
<td>$0.13</td>
<td>$0.14</td>
<td>$0.15</td>
<td>$0.17</td>
<td>$0.19</td>
</tr>
<tr>
<td>150 Pounds</td>
<td>$0.10</td>
<td>$0.10</td>
<td>$0.12</td>
<td>$0.13</td>
<td>$0.14</td>
<td>$0.15</td>
<td>$0.16</td>
<td>$0.18</td>
<td>$0.20</td>
</tr>
<tr>
<td>160 Pounds</td>
<td>$0.11</td>
<td>$0.11</td>
<td>$0.13</td>
<td>$0.14</td>
<td>$0.15</td>
<td>$0.16</td>
<td>$0.17</td>
<td>$0.19</td>
<td>$0.21</td>
</tr>
<tr>
<td>170 Pounds</td>
<td>$0.12</td>
<td>$0.12</td>
<td>$0.14</td>
<td>$0.15</td>
<td>$0.16</td>
<td>$0.17</td>
<td>$0.18</td>
<td>$0.20</td>
<td>$0.22</td>
</tr>
<tr>
<td>180 Pounds</td>
<td>$0.13</td>
<td>$0.13</td>
<td>$0.15</td>
<td>$0.16</td>
<td>$0.17</td>
<td>$0.18</td>
<td>$0.19</td>
<td>$0.21</td>
<td>$0.23</td>
</tr>
<tr>
<td>190 Pounds</td>
<td>$0.14</td>
<td>$0.14</td>
<td>$0.16</td>
<td>$0.17</td>
<td>$0.18</td>
<td>$0.19</td>
<td>$0.20</td>
<td>$0.22</td>
<td>$0.24</td>
</tr>
<tr>
<td>200 Pounds</td>
<td>$0.15</td>
<td>$0.15</td>
<td>$0.17</td>
<td>$0.18</td>
<td>$0.19</td>
<td>$0.20</td>
<td>$0.21</td>
<td>$0.23</td>
<td>$0.25</td>
</tr>
<tr>
<td>210 Pounds</td>
<td>$0.16</td>
<td>$0.16</td>
<td>$0.18</td>
<td>$0.19</td>
<td>$0.20</td>
<td>$0.21</td>
<td>$0.22</td>
<td>$0.24</td>
<td>$0.26</td>
</tr>
<tr>
<td>220 Pounds</td>
<td>$0.17</td>
<td>$0.17</td>
<td>$0.19</td>
<td>$0.20</td>
<td>$0.21</td>
<td>$0.22</td>
<td>$0.23</td>
<td>$0.25</td>
<td>$0.27</td>
</tr>
<tr>
<td>230 Pounds</td>
<td>$0.18</td>
<td>$0.18</td>
<td>$0.20</td>
<td>$0.21</td>
<td>$0.22</td>
<td>$0.23</td>
<td>$0.24</td>
<td>$0.26</td>
<td>$0.28</td>
</tr>
<tr>
<td>240 Pounds</td>
<td>$0.19</td>
<td>$0.19</td>
<td>$0.21</td>
<td>$0.22</td>
<td>$0.23</td>
<td>$0.24</td>
<td>$0.25</td>
<td>$0.27</td>
<td>$0.29</td>
</tr>
<tr>
<td>250 Pounds</td>
<td>$0.20</td>
<td>$0.20</td>
<td>$0.22</td>
<td>$0.23</td>
<td>$0.24</td>
<td>$0.25</td>
<td>$0.26</td>
<td>$0.28</td>
<td>$0.30</td>
</tr>
<tr>
<td>260 Pounds</td>
<td>$0.21</td>
<td>$0.21</td>
<td>$0.23</td>
<td>$0.25</td>
<td>$0.26</td>
<td>$0.27</td>
<td>$0.28</td>
<td>$0.30</td>
<td>$0.32</td>
</tr>
<tr>
<td>270 Pounds</td>
<td>$0.22</td>
<td>$0.22</td>
<td>$0.24</td>
<td>$0.26</td>
<td>$0.27</td>
<td>$0.28</td>
<td>$0.29</td>
<td>$0.31</td>
<td>$0.33</td>
</tr>
<tr>
<td>280 Pounds</td>
<td>$0.23</td>
<td>$0.23</td>
<td>$0.25</td>
<td>$0.27</td>
<td>$0.28</td>
<td>$0.29</td>
<td>$0.30</td>
<td>$0.32</td>
<td>$0.34</td>
</tr>
<tr>
<td>290 Pounds</td>
<td>$0.24</td>
<td>$0.24</td>
<td>$0.26</td>
<td>$0.28</td>
<td>$0.29</td>
<td>$0.30</td>
<td>$0.31</td>
<td>$0.33</td>
<td>$0.35</td>
</tr>
<tr>
<td>300 Pounds</td>
<td>$0.25</td>
<td>$0.25</td>
<td>$0.27</td>
<td>$0.29</td>
<td>$0.30</td>
<td>$0.31</td>
<td>$0.32</td>
<td>$0.34</td>
<td>$0.36</td>
</tr>
</tbody>
</table>

IMPORTANT—In remitting postage always add it to the food of the order as a separate item—this will help to avoid mistakes.

Your local postmaster will inform you what Zone you are in from New York City, if you are in doubt, and you can add for postage accordingly.

INTERNATIONAL PARCEL POST.

We forward Seeds to any postoffice in foreign countries by International Parcel Post when mail rates are open. Full details in our "INTERNATIONAL PARCEL POST CIRCULAR" mailed on application.

Domestic Parcel Post rates (5th Zone) apply to Alaska, the Canal Zone, Guam, Hawaii, Porto Rico and the Philippine Islands.

PETER HENDERSON & CO., 35 and 37 Cortlandt Street, New York.

McIlroy & Emmer, 22 Thames Street, New York.

© CLA 459190

MAR 20 1917
### Index of Implements, Tools, Requisites, Fertilizers, Insecticides, etc.

<table>
<thead>
<tr>
<th>Category</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Apple Parer</td>
<td>22</td>
</tr>
<tr>
<td>Asparagus Buncher</td>
<td>22</td>
</tr>
<tr>
<td>Knife</td>
<td>10</td>
</tr>
<tr>
<td>Axe</td>
<td>30</td>
</tr>
<tr>
<td>Hatchets</td>
<td>24</td>
</tr>
<tr>
<td>Mattock</td>
<td>15</td>
</tr>
<tr>
<td>Bamboo Stakes</td>
<td>25</td>
</tr>
<tr>
<td>Basket Heading Tool</td>
<td>14</td>
</tr>
<tr>
<td>Basket Garden Farm</td>
<td>32</td>
</tr>
<tr>
<td>Hanger</td>
<td>32</td>
</tr>
<tr>
<td>Bellows</td>
<td>48</td>
</tr>
<tr>
<td>Bill Shovel</td>
<td>22</td>
</tr>
<tr>
<td>Bird Netting</td>
<td>17</td>
</tr>
<tr>
<td>Books</td>
<td>61, 64</td>
</tr>
<tr>
<td>Bone Cutters</td>
<td>22</td>
</tr>
<tr>
<td>Border Trimmers</td>
<td>23, 34, 37</td>
</tr>
<tr>
<td>Boxes, Varanda</td>
<td>42</td>
</tr>
<tr>
<td>Broadcast Seeder</td>
<td>30</td>
</tr>
<tr>
<td>Brushes Tree</td>
<td>22</td>
</tr>
<tr>
<td>Brush Axe</td>
<td>22</td>
</tr>
<tr>
<td>Budding Knife</td>
<td>24</td>
</tr>
<tr>
<td>Burning Brand</td>
<td>22</td>
</tr>
<tr>
<td>Burner, Rubber</td>
<td>37</td>
</tr>
<tr>
<td>Canning Outfit</td>
<td>20, 21</td>
</tr>
<tr>
<td>Cart, Hand</td>
<td>15</td>
</tr>
<tr>
<td>Celery Hillers</td>
<td>4</td>
</tr>
<tr>
<td>Celery Blancher</td>
<td>17</td>
</tr>
<tr>
<td>Chain Ties</td>
<td>23</td>
</tr>
<tr>
<td>Choppers, Meat and Food</td>
<td>25</td>
</tr>
<tr>
<td>Cloth, Protecting</td>
<td>19</td>
</tr>
<tr>
<td>Cider, Mills and Presses</td>
<td>14</td>
</tr>
<tr>
<td>Cold Frames</td>
<td>18</td>
</tr>
<tr>
<td>Corn Planter</td>
<td>7</td>
</tr>
<tr>
<td>Knives and Hooks</td>
<td>25</td>
</tr>
<tr>
<td>Sheller</td>
<td>7</td>
</tr>
<tr>
<td>Coverer and Hitter</td>
<td>4</td>
</tr>
<tr>
<td>Cradles, Grain</td>
<td>23</td>
</tr>
<tr>
<td>Cutters—Lawn</td>
<td>11</td>
</tr>
<tr>
<td>Hedge</td>
<td>10</td>
</tr>
<tr>
<td>Herring</td>
<td>9</td>
</tr>
<tr>
<td>Nozzles</td>
<td>32, 33</td>
</tr>
<tr>
<td>Border</td>
<td>22</td>
</tr>
<tr>
<td>Corn</td>
<td>23</td>
</tr>
<tr>
<td>Budding &amp; Pruning</td>
<td>24</td>
</tr>
<tr>
<td>Edging</td>
<td>22, 23, 34, 37</td>
</tr>
<tr>
<td>Jelica</td>
<td>23</td>
</tr>
<tr>
<td>Garden Line and Reels</td>
<td>23</td>
</tr>
<tr>
<td>Glass Cutter</td>
<td>19</td>
</tr>
<tr>
<td>Glazing Points</td>
<td>7, 25</td>
</tr>
<tr>
<td>Putty</td>
<td>12, 26</td>
</tr>
<tr>
<td>Glazier’s Diamond</td>
<td>19</td>
</tr>
<tr>
<td>Gloves</td>
<td>24</td>
</tr>
<tr>
<td>Grade Chisel and Mallet</td>
<td>25</td>
</tr>
<tr>
<td>Grape Bag</td>
<td>23</td>
</tr>
<tr>
<td>Grass Cradles</td>
<td>23</td>
</tr>
<tr>
<td>Grass Food and Worm Killer</td>
<td>51</td>
</tr>
<tr>
<td>Grass Hook</td>
<td>22</td>
</tr>
<tr>
<td>Edger</td>
<td>23, 34, 35</td>
</tr>
<tr>
<td>Hay Rakes</td>
<td>29</td>
</tr>
<tr>
<td>Horse</td>
<td>12</td>
</tr>
<tr>
<td>Hay Shears</td>
<td>27</td>
</tr>
<tr>
<td>Hoe—Hand</td>
<td>24</td>
</tr>
<tr>
<td>Bull</td>
<td>9, 10, 11</td>
</tr>
<tr>
<td>Hooks Cage</td>
<td>44</td>
</tr>
<tr>
<td>Potato and Manure</td>
<td>24</td>
</tr>
<tr>
<td>Horse Hoe</td>
<td>6</td>
</tr>
<tr>
<td>Boots</td>
<td>65</td>
</tr>
<tr>
<td>Radish Graters</td>
<td>15</td>
</tr>
<tr>
<td>Hose Reducer</td>
<td>41</td>
</tr>
<tr>
<td>Rubber</td>
<td>40</td>
</tr>
<tr>
<td>Hoes</td>
<td>12</td>
</tr>
<tr>
<td>Composers</td>
<td>24</td>
</tr>
<tr>
<td>Hot Bed Frames</td>
<td>18</td>
</tr>
<tr>
<td>Sash</td>
<td>18</td>
</tr>
<tr>
<td>Mats</td>
<td>19</td>
</tr>
<tr>
<td>Hydrant Swivel</td>
<td>41</td>
</tr>
<tr>
<td>Feed Cutters</td>
<td>41</td>
</tr>
<tr>
<td>Grinders</td>
<td>14</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>52</td>
</tr>
<tr>
<td>Fertilizer Distributors</td>
<td>6, 7, 8</td>
</tr>
<tr>
<td>Seeds</td>
<td>30</td>
</tr>
<tr>
<td>Flower Boxes</td>
<td>42</td>
</tr>
<tr>
<td>Forcing Frame (Barrie)</td>
<td>18</td>
</tr>
<tr>
<td>Forks</td>
<td>23</td>
</tr>
<tr>
<td>Frames, Hot Bed</td>
<td>18</td>
</tr>
<tr>
<td>Knapsack Sprayers</td>
<td>47</td>
</tr>
<tr>
<td>Knives—Asparagus</td>
<td>22</td>
</tr>
<tr>
<td>Beet-Topping</td>
<td>22</td>
</tr>
<tr>
<td>Hoe</td>
<td>11</td>
</tr>
<tr>
<td>Pumigators</td>
<td>38</td>
</tr>
<tr>
<td>Fungicides</td>
<td>50, 51</td>
</tr>
<tr>
<td>Garden Line and Reels</td>
<td>23</td>
</tr>
<tr>
<td>Glass Cutter</td>
<td>19</td>
</tr>
<tr>
<td>Glazing Points</td>
<td>7, 25</td>
</tr>
<tr>
<td>Putty</td>
<td>12, 26</td>
</tr>
<tr>
<td>Glazier’s Diamond</td>
<td>19</td>
</tr>
<tr>
<td>Gloves</td>
<td>24</td>
</tr>
<tr>
<td>Grade Chisel and Mallet</td>
<td>25</td>
</tr>
<tr>
<td>Grape Bag</td>
<td>23</td>
</tr>
<tr>
<td>Grass Cradles</td>
<td>23</td>
</tr>
<tr>
<td>Grass Food and Worm Killer</td>
<td>51</td>
</tr>
<tr>
<td>Grass Hook</td>
<td>22</td>
</tr>
<tr>
<td>Edger</td>
<td>23, 34, 35</td>
</tr>
<tr>
<td>Hay Rakes</td>
<td>29</td>
</tr>
<tr>
<td>Horse</td>
<td>12</td>
</tr>
<tr>
<td>Hay Shears</td>
<td>27</td>
</tr>
<tr>
<td>Hoe—Hand</td>
<td>24</td>
</tr>
<tr>
<td>Bull</td>
<td>9, 10, 11</td>
</tr>
<tr>
<td>Hooks Cage</td>
<td>44</td>
</tr>
<tr>
<td>Potato and Manure</td>
<td>24</td>
</tr>
<tr>
<td>Horse Hoe</td>
<td>6</td>
</tr>
<tr>
<td>Boots</td>
<td>65</td>
</tr>
<tr>
<td>Radish Graters</td>
<td>15</td>
</tr>
<tr>
<td>Hose Reducer</td>
<td>41</td>
</tr>
<tr>
<td>Rubber</td>
<td>40</td>
</tr>
<tr>
<td>Hoes</td>
<td>12</td>
</tr>
<tr>
<td>Composers</td>
<td>24</td>
</tr>
<tr>
<td>Hot Bed Frames</td>
<td>18</td>
</tr>
<tr>
<td>Sash</td>
<td>18</td>
</tr>
<tr>
<td>Mats</td>
<td>19</td>
</tr>
<tr>
<td>Hydrant Swivel</td>
<td>41</td>
</tr>
<tr>
<td>Feed Cutters</td>
<td>41</td>
</tr>
<tr>
<td>Grinders</td>
<td>14</td>
</tr>
<tr>
<td>Fertilizers</td>
<td>52</td>
</tr>
<tr>
<td>Fertilizer Distributors</td>
<td>6, 7, 8</td>
</tr>
<tr>
<td>Seeds</td>
<td>30</td>
</tr>
<tr>
<td>Flower Boxes</td>
<td>42</td>
</tr>
<tr>
<td>Forcing Frame (Barrie)</td>
<td>18</td>
</tr>
<tr>
<td>Forks</td>
<td>23</td>
</tr>
</tbody>
</table>

### Index of Grass Seeds for Lawns, Golf Courses, and Athletic Grounds.

<table>
<thead>
<tr>
<th>Category</th>
<th>Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grass Seeds</td>
<td>54, 55, 56</td>
</tr>
<tr>
<td>Shady Nook Lawn Seed</td>
<td>61</td>
</tr>
<tr>
<td>Terrace Sod</td>
<td>61</td>
</tr>
<tr>
<td>Sunny South</td>
<td>60</td>
</tr>
<tr>
<td>Seaside</td>
<td>60</td>
</tr>
<tr>
<td>Tough Turf</td>
<td>60</td>
</tr>
<tr>
<td>Vegetable Garden Seeds</td>
<td>64</td>
</tr>
</tbody>
</table>

**Notes:**
- **Shade Nook Lawn Seed:** 61
- **Terrace Sod:** 61
- **Sunny South:** 60
- **Seaside:** 60
- **Tough Turf:** 60
- **Special Grass Seeds:** 64
- **We deliver quarts and pecks of Lawn Grass Mixtures: FREE in the U. S. by parcel post or express at our option.**
- **We also deliver FREE in the U. S. by parcel post, express or freight (our choice) all Lawn Grass Seeds in larger quantities.**
THE "HENDERSON" 
CHILLED PLOWS.

Lightest Draft. Correct Shape.
Runs Steady. Harder than Steel.

The "Henderson" 1 Horse Chilled Plow is without a peer as a garden and corn plow. (See prices below).

The "HENDERSON" 
CHILLED PLOWS 
Do Grand Work in all Soils, Sod or Stubble.

The outlines and shape are exactly right to do perfect work with the least draft, and with the greatest ease to the plowman.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Light, one horse. . . . . . . . . . . . . . .</td>
<td>$6.50</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
</tr>
<tr>
<td>B</td>
<td>Medium, one horse. . . . . . . . . . . . . .</td>
<td>8.00</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
</tr>
<tr>
<td>C</td>
<td>Ful, one horse. . . . . . . . . . . . . . . .</td>
<td>9.50</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
</tr>
<tr>
<td>D</td>
<td>Medium, two horse. . . . . . . . . . . . . .</td>
<td>12.00</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
</tr>
<tr>
<td>E</td>
<td>Ful, two horse. . . . . . . . . . . . . . . .</td>
<td>14.00</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
<td>. . . . . . . . . . .</td>
</tr>
</tbody>
</table>

An extra Share goes with each plow. A Wrench free with each plow.

THE ARLINGTON ONE-HORSE SWIVEL PLOW.

The Arlington Plow has become a favorite in many sections. They are made with Steel Shifting Lever with Clevis, also Patent Spring Foot Latch.

Mold-boards are made of Patent Steeled Metal, and all castings nicely polished. The Beam and Handles are made from Selected stock, neatly striped and varnished.

Their general neatness of appearance, light weight, and exceptionally good work in the field, whether on flat land or hillside, commend them to all desirous of handling a perfect plow.

Prices: No. 27, plum, $10.00; with wheel, $11.25; with wheel and cutter, $13.25.
The "Henderson Perfect" Steel Plow.

STEEL BEAM, STEEL LANDSIDE.

Steel Mould, Guaranteed 5 Years but will last a lifetime.

The "Henderson" Perfect Steel Plow.
IS THE ACME OF PERFECTION.
EASILY HANDLED.
LIGHT DRAFT.
WILL LAST A LIFETIME.
SCOURS IN ALL SOILS.

The "Henderson Perfect" Steel Plow is made of genuine finely tempered steel, both mouldboard, shpiniece and landside; the beam is also of steel and will not bend nor break. The entire design of the plow is similar to the celebrated Scotch Plows the mould being perfection in shape, turning the furrow clear over, and grass, weeds and manure entirely under; it scours like glass in all soils, and works beautifully either in light loam without body, or in heavy muck; it runs 25 per cent. easier than ordinary plows, being lighter for both man and team. It is adjustable in every way—the handles can be raised or lowered or shifted to the side; it can be quickly set to cut deep or shallow, wide or narrow, and runs so steadily that at times it is not necessary to touch the handles. The landside is fitted with an adjustable shoe, the temper in the mould is uniformly perfect—free from soft spots—the cutting edge or "shpiniece" can be taken off and sharpened. We usually supply these plows with a chilled carbon-steel unless ordered otherwise. The ground this plow does not require a jointer or coulter; in medium and poor ground use a jointer which will turn the furrow well under. The mouldboard of this plow is guaranteed for 5 years—though with ordinary care it will last for many more years.

PRICING OF THE "HENDSBERG PERFECT" STEEL PLOW.

<table>
<thead>
<tr>
<th>Price Description</th>
<th>Plain</th>
<th>With Wheel</th>
<th>With Wheel and Jointer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular Two-Horse Size (Number 25) cuts 8 to 12 inches deep by 12 to 15 inches wide</td>
<td>$16.00</td>
<td>$17.00</td>
<td>$18.75</td>
</tr>
<tr>
<td>Chilled Carbonate Share</td>
<td>$0.50</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Knife Coulter supplied in place of jointer if preferred. Rolling Coulter will cost $3.50 extra. Steel share if wanted will be $3.00 extra.

The Plow for Gardeners and Truckers.

The best One-Horse Turn Plow ever sold. It makes a beautiful furrow, turning everything under—weeds, grass, trash and all. We call attention to the fact that the purchaser actually gets four plows for the price of one, viz.: One complete plow, No. 1 mouldboard and share, making a medium-size one-horse plow. A No. 1 mouldboard and share, making a complete mouldboard plow, and by using the mouldboard with the small share bolted to standard, makes a superior plow for working among cabbage, strawberries, etc. Price, $6.50 or with a spindled double mouldboard for furrowing, hillfing, etc., $8.00.

Traceless Farm Harness.

Comfort and Convenience for Man and Team.
No Wiffle Trees. No Traces.
A practical, up-to-date and common-sense harness which does away with wiffle trees and traces which cause so much damage and annoyance. It is particularly designed for all kinds of low down work, the plow, cultivator, drag stone boat, hay fork, etc. It is valuable for skidding logs, mining and many other kinds of special work. It is commonly used on wagons, moving machines, etc., having poles. It is ideal for the fruit grower because you can work up close to trees or other growing crops, making a greater saving in hand labor. This harness brings your team 1 to 2 feet closer to their load, making a lighter draft. You can turn your implements in almost their own length. The draft is straight from the shoulders of both animals at all times, same as in the ordinary harness. Each animal is completely independent in its movements and can be either higher or lower, ahead of or behind its mate, and have ample play to spread apart or come together, without disturbing the even draft.
It is simple in construction and more easily put on or taken off than the old style. Each animal is harnessed separately, either in stall or elsewhere.

How Adjusted to the Team. The harness go on the collars as usual. A bow hangs underneath each horse, somewhat farther back than where the belly-band ordinarily hangs. The bows are connected by the short evener between and under the horses. The back pads hold the harness in place when team is not drawing, and are stack at all other times. The back straps keep collars and back pads always in proper position.

No part of the under-gear ever touches the horses, except the broad padded belts. The draft chain runs from the evener, between the team, to the load. The yokes and all other parts are adjustable whenever necessary, to allow for teams of different sizes. Horses can be separated instantly. We supply the harness in two sizes: Regular size for teams weighing from 17 to 20-inch collars, and an extra large size for those weighing from 20-inch and upwards. Hames are furnished in the low-top style from 17 to 24-inch inclusive. Price, $27.50 set (draft chain $1.50 extra).

We do not furnish headstalls, collars or reins. In ordering, always give size of hames desired, or of the collars which you use. Weight, complete, crated, 50 lbs.

Steel Swivel or Reversible Plow.

Swivel or Reversible Plow for Level Land or Side Hill Work.

This Steel Swivel Plow has a steel beam to give lightness with strength. The finest quality steel mouldboard and adjustable handles. It will do the greatest kind of plowing, whether in level, mellow land or on a rough hillside. It is of light draft and runs very steadily, being an exceptionally easy plow to manage.

It has a side-shifting clevis which is operated by the lever extending to the cross-bar in the handles, where it rests in notches at the will of the plowman. Clevis can be regulated while team is walking to a narrow or wide furrow. When the mouldboard is thrown under at the end of the row, a lock lever is so arranged that the jointer or coulter shifts and is held securely in position and always in direct line of cut. The mouldboard is thrown over by lifting the handles and pressing a foot latch with the toe. This foot latch is automatic and positive in action, and locks firmly.

Steel two-horse reversible plow, complete as shown $20.00.
Imperial Shaker Potato Digger.

This is a practical Digger, strong in construction, easy to operate and suitable for any soil.

It has a steel Beam, strong but not heavy, correctly shaped, with moderately high arch. The Clevis is adjustable in both directions to secure the proper depth and alignment. The Handles are made of white oak and are adjustable to suit the height of the operator. The Beam is carried on a Fender to clear away vines and prepare the way for the Bin, which is slightly concave. It lifts all the potatoes, leaving none in the ground, and carries them up to the grate in the rear. The Grate or Shaker is given an up and down motion by the five-toothed sprocket wheel which runs the ground in the rear. This slits the dirt, which falls between the bars, while the potatoes pass over and are left clean and whole on the surface of the ground. Two Runners are placed under the forward end of the Shaker. They act as a sled and take up the jar caused by the action of the shaker wheel. The Digger thus cuts easily and smoothly. A two-wheeled Forestruck is furnished with the Imperial Digger. It runs astride the row with each wheel on solid ground, and prevents injury to the potatoes. The wheels can be adjusted up and down for depth and sidewise to suit width of row. Price: complete with Forestruck as in cut, $15.50.

Double Mold Plow FOR RIDGING AND FURROWING.

A one-horse plow used for making drills to plant potatoes, corn, etc., for ditching, ridging, plowing out between rows; as it throws the earth both ways, doing the duty of two single mold plows. It is also good for digging potatoes.

Prices, No. 1, small size, $5.00; No. 13, medium, $10.00; No. 2, full size, $7.00.

Improved Steel Wing Marker.

FOR POTATO AND CORN GROUND.

The long runners make a very true and even mark, which cannot be thrown out by stiff sod or stones, a difficulty with marker with single runners. The wings can be adjusted to width and depth, as desired. The wearing parts of the runners are chilled iron, the wings are steel bolted on and easily replaced when worn. The frame is oak.

Price, for two horses—three runners, gauge, pole and seat $15.00.

Henderson’s Gold Medal Sub-soil Plow

By following the plow with a subsoil plow the earth can be broken to a depth of from 15 to 20 inches, giving roots a wider range for food, and the plants are hardly affected by excessive drought or a wet season, as the deep soil absorbs all the rain like a sponge and gradually gives off moisture during dry, hot weather.

The "Gold Medal" involves new principles and accomplishes the work without throwing any subsoil on top. Its merits are ease of penetration, light draft, superior pulverization of hard pan, perfection of the "mode trapezoidal effect."

The one-horse plow will reach to a depth equal to the height of its standard—15 to 16 inches—and the two horse plow to the depth of 20 inches.

Prices for one-horse, with wheel and draft rod, $8.25; two-horse, $10.50.

Extra shares, 1 horse, 50c.; 2 horse, 90c.

Planet, Jr., Celery Hillers.

Celery Hillers are now considered indispensable in celery growing. The leaf lifters are adjustable in height, and are especially valuable for first workings. With them some large growers all their celery without any handling. We can supply both single and double hillers, with lever wheels, expanders and leaf lifters. The Double Celery Hiller is fitted with lever wheels. The hilling blades are 48 inches long, adjustable in width or height as wanted; the double machine works all rows up to four feet apart. Before hilling, the soil should be thoroughly loosened with a hoe.

The Single Celery Hiller runs lighter than the double, and throws rather higher; it works any width rows. Where market gardeners plant close, and first bleach every other row, it is "just the thing." It is also excellent help when burying the crop.

Prices, Double Celery Hiller, complete..... $20.00

Single " " " " " " " " " " " " " " " " " " " " " "$14.50

Darnell’s Marker, Furrower and Coverer.

Valuable for marking out, furrowing, covering or ridging all kinds of row crops, in any kind of soil the revolving discs, 14 inches in diameter, make a clean cut, are not choked by manure, trash or sods, and leave the earth in a pulverized condition at the bottom of the furrow. It is adjustable in every way, depth of furrows, distance apart, broad or narrow furrows, etc. It opens two furrows at one time, or it will make one double furrow: or ridge up both sides of a row at one operation; it covers evenly at any depth, it runs steadily, will not slide on a side hill, and is strong, light, durable and invaluable to every farmer and truck gardener.

Price, $22.00.

Eddy Potato Coverer and Hiller.

Adapted for covering and hillling all rowed crops as fast as a team can walk. It will not only cover the seed, but hill up both sides of the row at one operation, throwing up much or little earth as desired, according to the angles at which the disks are set. The disks are adjustable on the frame for a wide or narrow row.

Price, $13.25. Whiffletrees are not included. Complete with whiffletrees and neck yoke, $16.75.

Henderson’s Improved Winged Shovel Plow.

For furrowing out, hilling and cultivating all kinds of crops that are planted in rows. Cuts up all grass and weeds. Wings and points of steel. The wings can be opened or closed to throw off more or less earth, and to adapt them to rows of different widths. The depth is regulated by the wheel and Draft handles adjustable in height. Price, $7.00, or with the Potato Digger Attachment, $10.75. By the changing of one bolt it may be converted into a first-class potato digger. The fingers are adjustable and removable.
Imported Scotch Chain Harrow.

The Scotch Chain Harrow is being so much sought after for the undermentioned purposes that we have imported and carry in stock a few of each size to prevent delay in filling hurry orders. It is one of the best implements for pulverizing the surface of the soil, levelling and smoothing, and is also splendid for covering grass seeds, etc., being superior to the Brush Harrow for this purpose. Used on driveways and race tracks, it smooths the surface, eliminating ruts and footprints. It is made of wrought-iron links, as illustrated above, and is very durable.

**SIZES AND PRICES.**

- One horse size, 5 x 6 feet .................................. $22.00
- Medium two-horse, 6 x 7½ feet .......................... $28.00
- Full two-horse size, 7½ x 7½ feet ...................... 38.00
- Whiffletrees, extra ....................................... 2.50

The Henderson Lever-Set All-Steel Harrow.

A spike-tooth Harrow with lever up. A smoothing Harrow with lever down.

A high-class Harrow in every respect, being made entirely of finest steel, excepting the draw-bars. With a wrench the tooth-bars can be loosened so that any one or all of the teeth can be lowered—to compensate for wear. It has a wide range of adjustment. The teeth can be instantly set at any angle from a forward pitch to straight up and down or slanting backward, the lever-catch holding them securely in the desired position. This Harrow is not made to sell "cheap" but is of full weight and strength, with 1 inch teeth. It is handsomely finished, simple, strong and does grand work.

**SIZES AND PRICES.**

<table>
<thead>
<tr>
<th>No. A</th>
<th>1 Horse</th>
<th>1 Section, 25 Teeth, 4 ft. cut</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>B 1</td>
<td>1</td>
<td>30 &quot; 5 &quot;</td>
<td>10.00</td>
</tr>
<tr>
<td>C 2</td>
<td>2 Sections 50 &quot; 8 &quot;</td>
<td>17.00</td>
<td></td>
</tr>
<tr>
<td>D 2</td>
<td>2</td>
<td>60 &quot; 10 &quot;</td>
<td>19.00</td>
</tr>
</tbody>
</table>

Diamond Tooth "Harrow Cultivator."

A splendid tool for cultivating garden and field crops in rows. The numerous diamond-shaped steel reversible teeth thoroughly pulverize and loosen the soil. The frame expands or contracts by operating the lever between the handles. The back, wide, flat steel hoe sweep cuts off all weeds. Can be used or not as the work requires.

Price, with wheel, $6.90; Sweep, extra $1.00.

The Meeker Disc-Smoothing Harrow.

It is a splendid substitute for a rake for garden purposes, or for seedling down. It pulverizes and grades, leaving the ground in as fine a condition as could possibly be done by hand. No market gardener or farmer can afford to be without it.

The board in the center is set at an angle; is adjusted up and down, and acts as a leveler.

The discs grind all lumps so fine that seed must come up, and mashes small stones below the surface better than any field roller; it levels the ground at the same time, which a field roller does not do.

**PRICES.**

- Market garden, size 6½ feet .......................... $25.00
- Track "8½" ............................................. 30.00

Evan's Gardener's Harrow

It is designed for one horse, convenient to handle and get around garden plots, etc. Beams of oak, teeth of steel. For transportation to and from the field invert the harrow on the runners, which saves lifting and loading.

**PRICE.**

30 teeth ................................................... $8.00

The "Acme" Pulverizing Harrow.

A general-purpose harrow, that will crush, cut, lift, turn, smooth and level the soil to perfection, all in one operation. While preeminently adapted for heavy, stubborn land, it can be adjusted by means of the levers and runners to do perfect work on the lightest soil. It cuts the entire surface without disturbing sod or trash that has been turned under by the plow. It prepares a perfect seed bed, and also covers seed in the best manner. The draft is reduced to a minimum. Being made entirely of cast steel and wrought iron, it is practically indestructible. Nothing but the coulters can possibly wear, and these are readily replaced at a trifling cost.

**PRICES AND SIZES.**

<table>
<thead>
<tr>
<th>No. 23</th>
<th>New Flexible Gang Two-horse Riding Harrow. Cuts 6½ feet</th>
<th>$24.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. H</td>
<td>Works 4½ feet wide. 8 coulters. With seat and lever adjusted</td>
<td>$18.00</td>
</tr>
<tr>
<td>No. G</td>
<td>A splendid one-horse cultivator. 6 coulters. Cuts 3 feet wide. Has handles, as shown in cut, but no seat or lever</td>
<td>$12.00</td>
</tr>
</tbody>
</table>
"Planet, Jr." All Steel Horse Hoe and Cultivator, No. 8.

This grand implement is without a peer as a labor saver, and no progressive gardener or farmer after once trying it would be without it for ten times its cost. It is not an ordinary heavy, clumsy cultivator, but an implement made scientifically correct and entirely of steel. The patent frame is extra long and two inches higher than other cultivators, the standards being hollow, giving great strength and remarkably light weight; in consequence it is easy for both men and horse to work. The cultivator, teeth, hoes, etc., are of the finest possible quality of case hardened, polished steel that will retain an edge; they always scour bright, and will not clog in the stickiest soil; besides, they are so correctly shaped and curved that the operator can work closer up to plants without danger than with any other horse implement made, thereby entirely doing away with the usual finishing up with a hand hoe. As set in the illustration, the two forward cultivator teeth loosen the soil to any desired depth; the hoes follow cutting off weeds below the surface and throw much or little dirt to the rows as desired; this being quickly arranged by setting the hoes at the desired angle from the plant to the center of the row, as the hoe standards are on an adjustable swivel. Hoeing away from small plants is done by swiveling the hoe standards entirely around. Plain cultivating is done by replacing the three back hoes with cultivator teeth. Furrowing is done with the two hoes or with the back plow steel placed in front of the two hoes. The Lever Expander enables the operator instantly to open or shut the implement and lock it to suit any width or row, and can be worked while the implement is in motion, so that perfect work can be done even in irregular rows. The Level Wheel enables the machine to be instantly raised or lowered and locked at any desired height, while the implement is in motion, and is very convenient for changing the depth in variable soils and for raising the teeth out for turning at the end of the rows. The Depth Regulator is worked and set simultaneously with the wheel by the lever-bar; by this arrangement the implement runs steadily and the depth can be gauged instantly and to a nicety while the horse is in motion. The Handles can be quickly set to either side, and the height can be changed to suit the operator. Weight 82 lbs. Price, Planet Jr., No. 8, with solid steel wheel (as shown in cut), $11.50.

Planet, Jr., No. 10 Horse Hoe, Cultivator, Hiller and Vine Turner.

The latest and best tool for its purposes, combining the valuable features of our one-horse cultivators and horse hoes and is lighter and stronger. But four teeth are used for ordinary work; three cultivator teeth, followed by a wide sweep with fingers in the rear, a combination that works like a charm for level cultivation. For hilling, three extra teeth are provided; two plows and one 10-inch furrower, especially adapted to hilling crops not over 3 feet apart. As a furrower it works admirably. The Vine Turners, a new pattern, are of special value in cultivation of all vine crops. Price, complete, as in cut, $15.00. Without Vine Turner, $13.50.

The Planet, Jr., 12-Tooth Harrow, Cultivator and Pulverizer.

This thorough working tool has rapidly grown in favor among strawberry growers, market gardeners and farmers. The twelve chisel-shaped teeth do capital work, without throwing earth on small plants, and the tool is so convenient, durable and strong, the combination of teeth and pulverizer leaving the ground in the finest condition. The pulverizer also enables the operator to set the tool, in conjunction with the wheel, to any exact depth desired, making the delicate work not only possible, but very easy. It is invaluable in narrow rows and close work, and is fine for preparing seed beds. The implement is fitted with lever wheel and lever expander, so the depth or width can be changed instantly while in operation; it contracts to 12 inches and expands to 22 inches. The handles can be raised or lowered to suit the driver. Price, plain, $7.75; with wheel, $9.50; complete, $11.50.

Stevens Hand Power Fertilizer Sower.

For Top-Dressing Lawns, Tennis Courts, Golf Greens, etc.

It sows all kinds of commercial fertilizers, bonemeal, wood ashes, lime, etc., in large or very small quantities. It can also be successfully used for fertilizing strawberry beds, and other garden and field work; excellent for sifting wood or coal ashes, sawdust or dry sand on icy walks; will also sow damp sand by removing two blades. The hopper is 34 inches long and holds one and one-half bushels. Weight of machine, 83 lbs. It is well made and nicely painted. Price, $15.00.

For the McWhorter Horse Power Fertilizer Distributors see page 8.
Any commercial fertilizer can be applied to it in any desired quantity from 3 pounds to 40 pounds per 100 yards of row, or in furrows or between rows, or on the sides of one, two, or four rows, according to their distance apart, and handled with ease. The fertilizer is forced through eight distributing spouts, which may be contracted to cover a 4-inch strip; or they may be spread into any position not exceeding 21 feet in width. For top dressing strawberry beds, lawns, etc., as well as for row crops, it is a boon. Easily worked by man or boy. Weight 61 lbs. Price, $13.00.

The "Keystone" Corn Planter and Fertilizer Distributor

The only Planter containing an adjustable dropping disc. The disc is quickly adjusted for a light or heavy seeding, and rotates similar to the disc in a Horse planter. The Planter is easily operated by a boy or girl. Works in all kinds and conditions of soil, and is the only one which insures an accurate and reliable seeding.

Price, $2.00. P.P., 5 lb.

THE HENDERSON Hand Corn Planter.

The Henderson DOUBLE HOPPER Wheelbarrow Seeder.

SOWS GRASS SEED MIXTURES AS WELL AS HEAVY SEEDS OR LIGHT CHAFFY SEEDS.

This is a superior Seeder. One side of the Seed Box is adapted for all such heavy seeds as clover, timothy, millet, alfalfa, Hungarian, etc. The opposite side handles the light chaffy seeds, as Red top, Kentucky blue, Orchard grass, etc., as well as grass seed mixtures for golf, pasture, hay, lawns, etc. The machine may be easily regulated to sow any desired quantity per acre, sowing it accurately and evenly the whole length of the hopper—14 feet—and it does not clog up. The total weight of the machine is only 40 pounds. The hopper is perfectly balanced and is close to the large wheel—giving greatest force with least exertion, and leaving light weight on the operator. Every machine warranted to do good work, and of especial value on a windy day. Full directions with each seeder. Price, $12.00.

The Planet, Jr., Spot and Row Markers.

These new implements fill a long felt need for marking out rows and "spotting" them for planting out such crops as onion, beets, leeks, celery, cabbage lettuce, strawberries, etc. The steel wheels are 13 inches in diameter with 2-inch face to which are bolted 16 steel pointed plugs 13 inches long; these are removable so the "spots" are marked 3, 6, 12, 15, 24 or 48 inches apart as required. The wheels may also be spaced to mark out rows different distances apart, for instance with the 5 row machine which is 60 inches wide may be set to mark out 5 rows any width from 8 to 12 inches apart or 4 rows 14 to 16 inches apart or 3 rows 12 to 24 inches or two rows 23 to 48 inches apart, etc. The two row spot marker is especially adapted for marking out two rows any distance from 12 to 30 in. apart.

Prices, 5 row spot marker $13.00; 3 row spot marker $12.00; 2 row spot marker $8.00; 1 row spot marking attachment (wheel and marker) for any Planet Jr. wheel hoe having arch $2.75, wheel only, $1.50.

The "Velvetlawn" Seeder.

For seeding new lawns and renovating worn out lawns and bad spots without digging. Puts the seed in old sod or IN newly prepared ground, covers and rolls it.

See description on page 36.
Steel One-Horse Lawn Rollers.
Especially designed to smooth and keep in perfection
LAWNS, DRIVES, WALKS AND GROUNDS OF GOLF, TENNIS, ATHLETIC
AND COUNTRY CLUBS AND GENTLEMEN’S PLACES
No. 2, 24 in. diam.; tracks 5 ft., 5 in.; 2 sections; weight 400 lbs. Price, $35.00.

These Sheet Steel Rollers are the
Most Popular on the Market

Unbreakable rolled sheet steel drums, with steel fellows and channel steel spokes; thoroughly riveted and practically indestructible; axle of heavy stiff steel with lathe turned ends, working in oil soaked maple boxes which are recessed below and filled with cotton waste. When soiled with oil will lubricate the journals the whole season, resulting in the lightest draught, smoothest and most noiseless working Roller on the market. The frames and hangers of heavy stiff angle iron are securely bolted and the frame so arranged that additional weight may be added to suit requirements.

Steel Two-Horse Rollers.
(For details of construction see above.)
No. 16, 24 in. diam.; tracks 7 ft. 3 sections; weight 519 lbs. . . . . Price, $31.00
No. 34, 30 " 8 3 728 lbs. . . . . Price, $42.00
Prices include double trees and neck yoke.

McWhorter
Horse Power Fertilizer Distributors.

These improved machines are very highly appreciated by farmers where known, and are extensively used in the large market gardening sections, where they are considered indispensable. With one of these machines commercial fertilizer of any kind may be distributed in any desired quantity in open furrows, or placed as side dressing on both sides of a row of growing plants doing two to six furrows or rows at one time according to the distance between the rows and the size of the machine. The machines are very simple and easily understood, the fertilizer is forced through adjustable distributing spouts, which can be quickly spread to suit the width of row or size of plants; or the spouts may be instantly set as a complete and uniform broadcaster for strawberry beds, farm crops, lawns, etc.

No. 34 McWhorter Fertilizer Distributor.
Our New “Low Down” for one horse. The four feeds and moveable rubber spout makes it a complete broadcaster to the extent of six and one half feet. It will fertilize three furrows if not over two feet nine inches apart, and will distribute in two furrows from that up to five feet six inches, the spouts being adjustable to suit the different kinds of work. It will side dress on both sides of two rows of growing crops. It will also side dress one side of two or three rows.
Shipping and net weight, 260 lbs. Hopper capacity about 375 lbs. Price, $41.00.

No. 26 McWhorter Fertilizer Distributor.
Our New “Low Down” two horse Fertilizer Distributor, broadcasting a width of nine feet. Being low down and the wheels entirely out of the way make it especially well adapted to fertilizing orchards and groves of all kinds. By means of the adjustable spouts it will also fertilize any number of furrows or rows that come under the width of the machine.
Shipping and net weight 373 lbs. Hopper capacity about 540 lbs. Price, $57.00.

Henderson’s Superior Iron Rollers.
For use on Lawn, Field, Golf Course, Roads, Etc.

These rollers are of superior quality and finish, having smooth machine turned faces, and attractively decorated woodwork. They are the lightest draft rollers of equal weight on the market, being perfectly balanced and pulling directly from the axle. The weights given are actual, which fact should be taken into consideration in comparing prices with rollers of other manufacturers that run 15 to 25 per cent. less than advertised weights.

Iron One-Horse Rollers. Complete with Weight Box, Shaft and Seat. (If scraper is wanted, add $.00 per roller.)

<table>
<thead>
<tr>
<th>Number</th>
<th>Diameter</th>
<th>Sections</th>
<th>Track</th>
<th>Weight</th>
<th>Net Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>60</td>
<td>20 inches</td>
<td>4</td>
<td>4 feet</td>
<td>950 lbs</td>
<td>$5.50</td>
</tr>
<tr>
<td>61</td>
<td>20 &quot;</td>
<td>5</td>
<td>5 &quot;</td>
<td>1150 &quot;</td>
<td>6.00</td>
</tr>
<tr>
<td>62</td>
<td>24 &quot;</td>
<td>4</td>
<td>4 &quot;</td>
<td>1200 &quot;</td>
<td>6.50</td>
</tr>
<tr>
<td>63</td>
<td>24 &quot;</td>
<td>5</td>
<td>5 &quot;</td>
<td>1450 &quot;</td>
<td>8.00</td>
</tr>
<tr>
<td>64</td>
<td>24 &quot;</td>
<td>6</td>
<td>6 &quot;</td>
<td>1700 &quot;</td>
<td>9.00</td>
</tr>
<tr>
<td>65</td>
<td>28 &quot;</td>
<td>4</td>
<td>4 &quot;</td>
<td>1350 &quot;</td>
<td>26.50</td>
</tr>
<tr>
<td>66</td>
<td>28 &quot;</td>
<td>5</td>
<td>5 &quot;</td>
<td>1650 &quot;</td>
<td>29.00</td>
</tr>
<tr>
<td>67</td>
<td>28 &quot;</td>
<td>6</td>
<td>6 &quot;</td>
<td>1850 &quot;</td>
<td>30.00</td>
</tr>
<tr>
<td>68</td>
<td>32 &quot;</td>
<td>4</td>
<td>4 &quot;</td>
<td>2200 &quot;</td>
<td>122.00</td>
</tr>
<tr>
<td>69</td>
<td>32 &quot;</td>
<td>5</td>
<td>5 &quot;</td>
<td>2600 &quot;</td>
<td>142.00</td>
</tr>
</tbody>
</table>

Iron Two-Horse Rollers.
Prices include weight box seat and tongue. If whisksteres and neck yoke are wanted, add $4.00 per roller; if scraper is wanted, add $6.00 per roller.

<table>
<thead>
<tr>
<th>Number</th>
<th>Diameter</th>
<th>Sections</th>
<th>Track</th>
<th>Weight</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>70</td>
<td>20 inches</td>
<td>5</td>
<td>5 feet</td>
<td>1150 lbs</td>
<td>64.00</td>
</tr>
<tr>
<td>71</td>
<td>20 &quot;</td>
<td>6</td>
<td>6 &quot;</td>
<td>1300 &quot;</td>
<td>70.00</td>
</tr>
<tr>
<td>72</td>
<td>24 &quot;</td>
<td>5</td>
<td>5 &quot;</td>
<td>1450 &quot;</td>
<td>80.00</td>
</tr>
<tr>
<td>73</td>
<td>24 &quot;</td>
<td>6</td>
<td>6 &quot;</td>
<td>1700 &quot;</td>
<td>92.00</td>
</tr>
<tr>
<td>74</td>
<td>28 &quot;</td>
<td>4</td>
<td>4 &quot;</td>
<td>1350 &quot;</td>
<td>76.50</td>
</tr>
<tr>
<td>75</td>
<td>28 &quot;</td>
<td>5</td>
<td>5 &quot;</td>
<td>1650 &quot;</td>
<td>90.00</td>
</tr>
<tr>
<td>76</td>
<td>28 &quot;</td>
<td>6</td>
<td>6 &quot;</td>
<td>1850 &quot;</td>
<td>105.00</td>
</tr>
<tr>
<td>77</td>
<td>32 &quot;</td>
<td>4</td>
<td>4 &quot;</td>
<td>2200 &quot;</td>
<td>122.00</td>
</tr>
<tr>
<td>78</td>
<td>32 &quot;</td>
<td>5</td>
<td>5 &quot;</td>
<td>2600 &quot;</td>
<td>142.00</td>
</tr>
<tr>
<td>79</td>
<td>32 &quot;</td>
<td>6</td>
<td>6 &quot;</td>
<td>3000 &quot;</td>
<td>162.00</td>
</tr>
</tbody>
</table>

For Hand Power Rollers see page 36.
The "Planet, Jr." Hand Power Hill and Drill Seeders.

A good Seeder is one of the most important of garden and farm implements; with it the seeding may be done in one-fourth of the time required by hand and be done far better, producing a more even crop and with a great saving of seed; with the "hill droppers" there is also a great additional saving of labor in thinning, and the seed being sown in an even narrow line enables wheel hoe cultivation and hoeing to be done closer to the plants, thus reducing hand labor to a minimum. We believe that even after forty years of pushing on our part, hand seeders and wheel hoes are not yet appreciated as they should be; are not used by one-half the people that would find them to pay for themselves in a short time.

No. 25, Planet, Jr. and Drill Seeder combined with Double Wheel Hoe.

Prices, "Planet Jr." Hill and Drill Seeders.

<table>
<thead>
<tr>
<th>Wheel Capacity Price</th>
<th>Wheel Capacity Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 5 Hill and Drill Seeder. A special large size for market gardeners and farmers, sugar beet growers, etc.</td>
<td>16½ in. 3 qts. $15.50</td>
</tr>
<tr>
<td>No. 3 Hill and Drill Seeder. The popular size for market gardens and large private and hotel gardens.</td>
<td>15 in. 3 qts. 12.50</td>
</tr>
<tr>
<td>No. 4 Hill and Drill Seeder. The favorite size for family gardens and small market gardens.</td>
<td>11 in. 2½ qts. 10.75</td>
</tr>
<tr>
<td>No. 4 Combined Seeder, with a Single Wheel Hoe Outfit. Seeder removes for hoeing, etc.</td>
<td>11 in. 2½ qts. 13.25</td>
</tr>
<tr>
<td>No. 28 Combined Seeder, with a double Wheel Hoe Outfit, (as illustrated.) The seedhopper holds one quart.</td>
<td>11 in. 2½ qts. 16.00</td>
</tr>
<tr>
<td>No. 6 Hill and Drill Seeder, as a seed only.</td>
<td>16½ in. 14.00</td>
</tr>
<tr>
<td>No. 6 Seeder Combined with a Single Wheel Hoe Outfit, (as illustrated)</td>
<td>17.00</td>
</tr>
</tbody>
</table>

The "Planet Jr." Hill and Drill Seeders are the very best hand-power seed planters in the world. Improvement after improvement has been adopted as suggested during an experience of 40 years in their manufacture until they are now far in advance of any other Seeders and without a rival. These seeders, at the will of the operators, either sow seeds in a continuous drill, thick or thin, shallow or deep, or they may be instantly set to plant any desired quantity of seeds at any of the following regular distances apart: 4, 6, 8, 12 or 24 inches. They open the furrow, drop the seed, cover and roll it mark the next row at one operation and as fast as a man can walk. The flow of seed may be instantly shut off, thus preventing waste when turning the end of the row. These Seeders are light in operation, strong, simple and do not get out of order.

To illustrate their usefulness, here is a list of some of the seeds, all of which these seeders will sow in either drills or drills:

- Asparagus
- Cucumber
- Onions for Bulbs
- Ruta Baga
- Bean
- Endive
- Onion for Sets
- Sage
- Beet
- Flower Seeds
- Parsley
- Spinach
- Cabbage
- Kale
- Pea
- Tobacco
- Carrot
- Leek
- Pepper
- Turnip
- Cauliflower
- Lettuce
- Radish
- Chicory
- Celery
- Melon
- Root
- Potatoes
- Etc.

These are very useful and popular. Combining as they do in a single implement both the seeding and the hoeing, cultivating and other attachments. The Seeder removes entirely from the frame by loosening just one nut, when the hoeing attachments, etc., are to be used, and rice versa. See illustrations.

The Planet, Jr. No. 31

Combined Seeder, Wheel Hoe, Cultivator, Etc.

A SPECIAL LOW PRICED MACHINE FOR SMALL GARDENS

Those who do their own gardening in a small way in town or suburbs and have not felt justified in purchasing the higher priced implements may now enjoy the pleasure and profit of working their gardens with a thoroughly practical up-to-date Planet Jr. of moderate cost, with the new No. 31 all garden seeds from the smallest even to peas and beans may be sown in rows as rapidly as you can walk. It opens the drill ¼ to 2 inches in depth sows the seed even to a packet any thickness desired and covers it all at one operation. The index for different seeds is quickly and easily set. The seed hopper holds one quart. The Seeder may be removed in a moment for the hoeing and cultivating attachments to be used. These consist of one large garden plow for forrowng out, hilling up, etc. Two flat hoe rows, or "Sweeps" one ½ inches and one 10 one-tooth grading hoe for deep or shallow furrows, etc. and one two-inch cultivator. The whole combination is just what is needed doing the various operations for which it is made. May be used by each alone as desired.

| The Planet, Jr., Hill and Drill Seeder, rep- | Combined Seeder, Wheel Hoe, Etc. |
| resenting Nos. 5, 3 and 4. |

For Henderson's Special Hill and Drill Seeder, Cultivator and Wheel Hoe see page 53.
The New "Planet, Jr." Wheel Hoes and Cultivators.

**FOR HAND POWER.**

Wheel Hoes with their attachments for cultivating, hilling, furrowing, covering, etc., are among the great labor-savers of the age. They not only make the care of all rowed crops a pleasure, but enable a man to care for five times the area that can be done by "the man with the (other) hoe." They are built substantially for all-day work by an able-bodied man, yet they are adapted to the strength of a boy or woman.

**THE DOUBLE WHEEL HOES,**

while they work equally well between two rows of plants, are especially adapted for straddling one row, working close up to both sides of the plants, until they are twenty inches high.

**THE SINGLE WHEEL HOES,**

are rather lighter than the double, and while the wheel can be set on the side of the frame, enabling both sides of one row to be hoed at one time, yet they are best adapted for working between two rows of plants.

Henderson's Special Hill and Drill Seeder Wheel Hoe, Cultivator, etc., is offered on page 83.

---

**The New**

"Planet, Jr." Wheel Hoes, Etc.

**THEIR ATTACHMENTS AND USES.**

The Cultivator Teeth, a fine model of best stamped steel used for either deep or shallow stirring and cultivation.

The Flat Hoes, for surface hoeing, cutting off weeds, etc. The 4½-inch are for rows under 12 inches wide; the 6-inch for wider rows. The hoes can be exchanged to either side, thus throwing a little earth to or from the plants, as desired.

The Small Plows, (supplied with the Double Wheel Hoes) are valuable for hilling up, covering, furrowing, etc.

The Large Landside or Turn Plow, (supplied with the Single Wheel Hoes) is used for plowing, furrowing, hilling, covering, etc.

They will throw either to or from the plants as set.

The Rakes are for stirring, fining and leveling the surface and for early cultivation.

**The Leaf Lifters** turn aside the foliage without injury when plants are large, so that close work can be done rapidly and easily.

---

The "Henderson" Hand Garden Plow, Furrower, Hiller and Scuffle Hoe.

This is one of the handiest garden tools ever used, very light (weighs only 20 pounds), but strongly made and finely finished; adjustable frame. It is equipped with a plow, suitable for opening and covering furrows, hilling celery, potatoes, etc., and for plowing under the accumulations in a poultry yard it is very useful. The Scuffle Hoe cuts off weeds below the surface and loosens the surface of the soil; it is also fine for cleaning walks; the seed furrow opening tooth is also very useful for its purpose. The rake attachment will level and fine the soil in preparing seed beds, and is a useful attachment for killing small weeds and surface cultivation.

Price, complete, as shown in the cut, $4.25.

---

THE PLANET, Jr. CATALOGUE MORE FULLY DESCRIBING AND ILLUSTRATING THEIR FULL LINE OF HAND AND HORSE POWER IMPLEMENTS, Mailed to Applicants.
No. 28 Planet, Jr., Combined Hill and Drill Seeder, Wheel Hoe, Cultivator, Rake and Plow.

Price $16.50
Packed weight, 64 lbs.
Holds 3 quarts.

The "Gem of the Garden" Single Wheel Hoe and Cultivator.

A WONDERFULLY POPULAR GARDEN IMPLEMENT.

No greater proof can be given of the popularity of a tool, or of its intrinsic worth, than the one simple fact of a continued and increasing demand for it. During the past few years we have placed about fifteen thousand of the "Gem of the Garden" in the hands of gardeners, and we are not aware of a single instance in which it has failed to give thorough satisfaction to the user. It is not a toy; neither is it a tool calling for constant repair, the "Gem" being made up of steel and unbreakable iron. The set of slender stirring teeth, each stamped from one piece of steel, cannot be excelled for thorough work, especially in hard soil. The "Gem" is nicely finished and makes a handsome implement.

Price, plain, with five teeth only, $4.75; with Scuffle Hoes, Plows and Cultivator Teeth, $6.25. Land Side Plow, extra, $1.15.

Rapp's Hand Seed Sower.

For Frame and Hot Bed Sowings.

This is the invention of a practical market gardener of long experience who felt the need of such a sower to avoid kneeling, reaching and backaches. It is light, weighing only 2½ lbs., and sows all kinds of seeds not larger than spinach seed, thin or thick as set, and five times faster than by hand, and it sows equally well well going forwards or backwards; consequently it is pushed along one furrow and pulled back in the next, thus saving time and lifting. The revolving brass covered drum holds one pint of seeds which drop through holes in a brass band which can be shifted to make the opening larger, smaller, or to shut off the flow of seed. The Rapp seed sower is a homemade affair; it does not open furrows nor cover the seed, therefore is so simple that it can be used by the most inexperienced. Price, $3.30.

The "New Model" Seed Drill.

A favorite—retaining its popularity where known, on account of its simplicity. Our Market Gardener friends tell us it is the one seed drill that they can safely put in the hands of ignorant or unskilled workmen, knowing that they can not go over the ground without sowing the seed. The "New Model" Seed Drill does not plant in hills, but it is one of the best continuous row seeders on the market. The discharge can be regulated to a hair's breadth, by moving a simple index to the name of the seed to be sown. The flow of seed can be instantly cut off for turning rows, etc.; opens the drill, sows the seed, covers and rolls the seed, and marks the next row all at one operation.

Price, $10.00.

The Columbia Garden Seed Planter.

Made with geared or cog driven seed delivery, consequently will sow with absolute regularity no matter what the speed of the operator. Every seed is carried to the ground and covered, not a seed can escape nor pass through the machine unless the machine is in gear and ready to do its work. It will sow all vegetable and flower seeds with perfect uniformity and at any required depth. Full instructions with each machine.

Price, $10.50.
GENUINE ADRIANCE MOWERS.

These famous and reliable machines are the standards of America. Made scientifically correct, embodying all practical improvements to date. The frame is symmetrical light, simple but thoroughly strong, and is fitted with roller bearings and brass composition bushings. The driving wheels are large and wide apart, clearing the swath and carrying all weight, well divided to give equal power to either wheel. The driving wheels do not lift when the bar strikes an obstruction, insuring safety. The self-adapting finger bar is carried, not drooped. There is no side draft, and smooth cutting is assured. The height of cut is quickly adjusted, and can also be varied while mowing by the tilling lever—the levers are easily operated by hand or foot. It is the lightest draftmower on the market.

PRICES FOR TWO-HORSE ADRIANCE MOWERS.

4-foot cut ................... $55.00 5-foot cut ................... $60.00

ADRIANCE ONE-HORSE MOWER.

The Best and Most Popular One-Horse Mower Made.

This mower is made entirely from patterns especially designed for a small machine, and is so proportioned as to secure the necessary strength consistent with lightness of draft. It has all improvements—hand and foot levers working independently or together—and is a very popular and satisfactory machine. Is especially used on rough or obstructed ground, where a team and a long cutter bar is troublesome to manage; and is also useful on large lawns, leaving a clean, neat stubble, even in short grass.

Price One-Horse Adriance Mower, 3½-foot or 4 foot cut ................... $50.00

ADRIANCE All Steel SULKY HAYRAKE.

With this improved rake the hay is slid along the ground, and when dumped, the dump under portion is left on top. The shape of the teeth is such that they do not scratch the ground, but rake the stubble and leave all rubbish on the ground. It has a most accurate and durable dumping arrangement, and under perfect control. The driver simply presses the dump lever lightly with one foot, and the teeth rise high in the air and return at the proper time without any effort on the part of the driver. These Rakes are fitted with steel cleaner rods; it is dumped by either wheel alone, and can be dumped in any position the Rake may be drawn; large, easy steel seat that can be raised or lowered to suit driver; a foot lever by which the teeth can be held down to their work in carrying an extra large load, or the same lever will hold the teeth up for driving on roads and across fields; the combination "Pole and Shafts" supplied with these rakes enables them to be used with either one horse or a team by uniting the shafts. The steel wheels are widely staggered giving great strength for resisting side and twisting strains. In addition to the number of raking teeth every rake has a guard tooth at each wheel.

PRICES.

8-foot Rake with shafts, 24 teeth, $26.00 30 teeth, $27.00
9-foot " with combination 28 " 27.50 35 " 29.00
10-foot " thilla and pole 32 " 30.00 40 " 30.50

Improved Wooden Revolving Horse Hay Rake.

For raking heavy grass the Revolving Hay Rake has no superior. For this particular purpose we recommend it as being even better than the Wheel Rakes. They are of the most approved kind, and are made in the most substantial and durable manner. 16 hickory teeth. We pack them snugly for shipment. Price, $16.00.

THE HENDERSON ALL-IRON ROOT CUTTER.

Made entirely of Iron and Steel. A positive feed—it must cut the roots: cannot get away from the knives. This cutter has 19 gouge shaped steel knives, fastened from the inside with two bolts to a cast iron cone shaped drum. The drum is driven by gear wheels with the power in favor of the operator, so it makes an easy running root cutter with good capacity. Hopper 24-inches diameter at top, 11 inches at bottom, 16 inches deep, weight, 100 lbs. Capacity 45 to 60 bushels per hour.

Price, complete $15.00.

THE "BANNER" ROOT AND VEGETABLE CUTTER.

The "Banner" Root Cutter is, without question, the best ever invented; it contains features found in no other machine; it has a self-feeder; separates the dirt from the cut feed, and leaves the cut food in such condition that stock cannot choke. The pieces are cut in long, half-round slices, and are not crushed, ground or torn; even young lambs can safely be fed with roots cut with the Henderson cutter.

No. 02. Hand power, capacity, 30 to 50 bu. an hour. $12.00
No. 01. The above fitted with pulley for power capacity, 60 to 80 bu. an hour .......... 14.00

No. 61. Hand and small power Cutter, fitted with balance wheel crank and pulley capacity, 120 to 150 bu. an hour .......... 20.00
No. 91. Exclusively Power Cutter capacity, 4 to 6 bu. a min .......... 30.00
No. 70. Poultry and Lamb Food Cutter .......... 5.00

THE HENDERSON ALL-IRON ROOT CUTTER.
"Clipper" Hand Lever Feed Cutter.

The "Clipper" Lever Cutter is a strong framed machine, and the most simple cutter made, and we recommend it to all who have but a moderate amount of feed to cut. It will cut 15 bushels an hour.

We furnish all with the gauge-plate, with which short feed can be cut much faster than without it.

It can also be changed to make any length of cut. Price, $4.75.

The "Black Hawk" Corn Sheller.

Fastens to a box quickly and securely by clamps which are furnished free with each machine.

It is recognized as a standard sheller and no machine has ever given more universal satisfaction.

The "Black Hawk" Sheller shells corn for home use and poultry. Its construction is such that it cannot choke, is durable, malleable iron is largely used in its construction. Bearings that are subject to wear are long and thoroughly chilled. It will last a lifetime, is simple, easily adjusted and will shell clean all kinds of field corn. Price, $2.25 each.

The Baldwin Hand Power Fodder Cutters.

The latest improved and best hand power cutters made. They cut rapidly and easily all kinds of fodder, hay, straw, cornstalks, etc. Adjustable self feeding iron rolls. The revolving knives of finest steel give a sheaf cut. Length of cut quickly changed. Substantial and durable.

Price Net.

No. 1.—Our smallest cutter for one or two head of stock; has one 6 inch knife, cuts 5/8, 1, 11/4 and 2 inches.................$20.00
No. 9.—For three or four head of stock; has two 51/4 inch knives, cuts 5/8, 1, 11/4 and 1 inch................. 25.00
No. 10.—For five to eight head of stock; has two 11/2 inch knives, cuts 11/4, 1, 11/4 and 1 inch................. 29.50
No. 11.—For ten to twenty head of stock; has two 1 inch knives, cuts 11/4, 1, 11/4 and 1 inch................. 34.00

Spiral Knife Hide Roller Feed Cutter.

A reliable old favorite low-priced Cutter, and one of the best for cutting hay and straw, but not calculated for stalks. The knives cut against a hide roller, which revolves with the cylinder, making it a self-feeding Cutter. Any one knife may be taken off and ground without removing the whole number.

The "Henderson" Corn Sheller.

With Cob Separator, Fan and Feed Table.

This is the best one-hole Sheller made. The hopper is adjustable and it shells the largest as well as the smallest ears with the same ease and perfection. The cobs are thrown out of one spout and the shelled corn, after being fanned of chaff and impurities, flows out from another spout. The feed table is a great convenience and facilitates rapid work. The balance wheel is extra large, giving great momentum and making it the lightest running Sheller on the market. The gearing is all enclosed, preventing accidents. It is handsomely painted and finished.

PRICE, complete (as shown in the cut)...........$13.00
Without Feed Table....................... 12.00

Burrall Improved Corn Sheller.

An all-iron and very durable one-hole Sheller. It shells both large and small ears and separates the corn from cob perfectly. One man can turn and feed at the same time. Capacity, 100 bushels per day. It has been a popular sheller for years and with the present improvements is better than ever. Price, $9.00.
MANN'S NEW MODEL BONE CUTTERS.

These Bone Cutters have attained a reputation for durability, ease of operation, rapidity of work and adaptability for cutting bone in all conditions, that place them easily in the lead of all other bone mills. Almost any mill will cut or grind dry bone satisfactorily, but it is the fresh green bone that makes chickens grow and hens lay, and these machines are made particularly for cutting such. They will cut fresh bones with meet and gristle on them; dry bones, pressed scraps, corn or corn on the cob; potatoes, turnips and vegetables of all kinds, and all without clogging. These machines are cutters, not grinders; they may be operated by man or boy; they run easy and cut fast; have an automatic feed; can be adjusted to cut fine or coarse; have the finest quality steel knives, that can be removed and sharpened by any one and many other points of merit.

In selecting a Mann's Bone Cutter, the No. 5's are adapted, only for small flocks of 15 to 25 hens. The Nos. 7 and 9 are the popular sizes, and perhaps the most economical to buy. For large flocks, of course, power machines should be chosen.

PRICES AND SIZES OF MANN'S BONE CUTTERS.

<table>
<thead>
<tr>
<th>No.</th>
<th>Model</th>
<th>Capacity</th>
<th>Weight</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 C</td>
<td>with Crank Handle</td>
<td>15 lbs.</td>
<td>$6.00</td>
<td></td>
</tr>
<tr>
<td>5 B</td>
<td>with Balance Wheel</td>
<td>10 lbs.</td>
<td>$4.00</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>on Iron Stand, with Balance Wheel</td>
<td>30 lbs.</td>
<td>$10.00</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Hand and Power Cutter</td>
<td>125 lbs.</td>
<td>$26.00</td>
<td></td>
</tr>
</tbody>
</table>

THE NEW DEPARTURE

CIDER MILL.

This cider mill has established a reputation over all others, and has proved itself to be the leading mill. It has been awarded the First Premium over all competitors at state and county fairs, where it has met with every character, and beaten all. It is constructed on an entirely different principle from other mills, in which either grate or cut the apples, leaving the larger portion of the pomace in lumps, from which the juice cannot be extracted by the press. In this mill the two lower rollers are cast with alternate ribs and grooves interlocking, to draw in the apples, and the fruit is smashed between the smooth segments, breaking thoroughly all the cells, so that the cider is entirely extracted in the press. It will produce one-fourth more cider than any other mill from the same quantity of apples. For light running and fast grinding it has no equal. Price, $24.00.

THE HENDERSON IMPROVED

CIDER MILL.

A greatly improved combined mill and press, most durably made and braced. The hopper will hold nearly half a bushel of apples, and the crushers are so constructed that it is self-feeding and does not require the use of a stick to force the apples into the crushing rolls as so many of the other styles of combined mill and press. It will grind apples, grapes, currents, berries, in fact all kinds of fruit used for either cider, vinegar or wine. The improved gearing is outside and the greatly increased speed co-joined with ease of operation, enables one person to grind from 15 to 20 bushels of apples per hour. The curb measures 12 x 12 in. and holds the pomace of about 2 bushels of apples. Price, $13.50.

CIDER AND WINE PRESSES.

These new style presses are much stronger and more durable than those usually sold. The upright side posts are made wide at the bottom, giving a bearing the full width for the bed timber. They have also two rods on each side instead of only one, as usually used, thereby greatly adding to the strength of the frame. The screws are made of steel.

<table>
<thead>
<tr>
<th>Number</th>
<th>Size tub.</th>
<th>Capacity</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10 x 8 in.</td>
<td>2 gallons</td>
<td>$5.00</td>
</tr>
<tr>
<td>2</td>
<td>12 x 11 &quot;</td>
<td>5 &quot;</td>
<td>6.00</td>
</tr>
<tr>
<td>3</td>
<td>13 x 14 &quot;</td>
<td>7 &quot;</td>
<td>7.00</td>
</tr>
</tbody>
</table>
From PETER HENDERSON & CO., NEW YORK

SCHROETER'S NEW MODEL GRATTERS.

For Grating Horse Radish, Almonds, Cocoanut, Carrots, Potatoes, Pumpkins, Cheese, Pineapple, Crackers, Bread, etc.

All horse radish and other articles grated with these machines come through light, short and flaky, entirely different from the hard indigestible stuff that comes through a meat-chopper. The grating drums are of the very best heavy tin punched with patent shaped teeth that cut the material instead of tearing it off. The machines in all other respects are made in the best manner of high class materials are simple, durable, easily operated and quickly cleaned.

Schroeter's Family Size Grater, No. 10.

A convenient size for the ordinary small family. Attaches to any table with thumb nut, drum removable for cleaning; dimensions (exclusive of handle) height 18 in., width 3 in.; drum 3 in. diam. 3 in. wide. Hopper opening 2 in. x 2 in.; finish dark blue, striped gold. Price, $1.50. (Net weight, 21 lbs.)

Schroeter's Hotel Size Grater, No. 500.

A special size for grating quantities sufficient for hotels, restaurants, meat markets, bakeries, confectioners, as well as for large private families. It grates very rapidly, requiring not longer than 1 minute to grate a large root of horse radish. Dimensions: 15 in. high; 8 inches wide; 8 inches deep; grater drum, 61 in. diam. by 3 in. wide. It clamps to any table by two thumb nuts. Price, $3.00. (Shipping weight 15 lbs.)

Schroeter's Commercial Size Grater, No. 2500.

Designed for either hand or motive power, being supplied with both crank handle and a 6 x 21 inch pulley. The gearing is of heavy high grade iron, machine fitted and fitted to work with slight friction and without noise. The open trough in front holds the roots to be grated. The flyer under the drum catches the grated material. The machine operates easily and accomplishes the work rapidly. Dimensions: height 58 in., length 30 in. and with 100 lb. drum 10 in. diam. by 51 in. wide, weight 75 lb. or crated 106 lb. Price $25.00.

The HUMMER GRINDER No. 271.

This outfit consists of two Dimo-Grit grinding wheels 6 in. in diameter by 12 in. face one being of medium fine grit and the other of coarse grit. This "Dimo-Grit" is the best abrasive substance yet discovered or manufactured for tool sharpening and grinding steel cast iron and similar metals and is in universal use in factories and machine shops. These grinding wheel are mounted on a sturdy compact iron framework fitted with seat and foot treadle attached to gearing which rapidly revolving the grinders with greatest ease. The head can be swiveled to any angle.

The balance of the outfit comprises a universal tool rest and a chisel and plane bit guide so that tools etc. may be sharpened and ground to the exact bevel desired. Price, as above described $15.00.

HANDY SCREENS.

for Ashes, Coal, Sand, Gravel, Etc.
Extra heavy wire. Spruce Frames. Stain whether you want 1, 1, 1 or 1-inch mesh.

Luther Tool Grinder No. 6M.

Strong and well built for hard service. Attaches to bench or table by thumb-screw. Grinding wheel of carbonium, the best material for sharpening tools, etc. Equipped with a combination adjustable tool rest, Gear case 22 inches in diameter; grinding wheel 6 x 1 inch making 16 revolutions to one of the handle. Packed weight 14 lbs. Price, $4.50.

FAMILY GRINDSTONE.

 Mounted, cast iron basin and clamp to fasten to table. Price, 6 in. (diameter), $1.25, 8 in., $1.50, 10 in., $1.85, 12 in., $2.25.

TACKLE-BLOCK WIRE STRETCHER.

This tool is a complete stretcher for all kinds of wire fencing, whether netting or barbed wire, and is a convenient set of pulley blocks besides, the whole costing no more than is ordinarily paid for one separately. All the iron in it is either malleable or wrought iron. The rollers are furnished with each set. The pulleys are 2 inches in diameter. They are strong enough for 1,000 lbs. strain. The rope grasp is very convenient and quickly adjusted. They give better satisfaction than any wire-stretchers ever introduced. Price, $1.50. P. P. 6 lb.

"BEST REST" COMBINED WIRE PLIERS AND CUTTERS.

Superior Galvanized Riddles.

Do not rust; the wires cannot slip so as to form irregular openings, hence a perfect separation is always obtained; the wire cannot be pulled from the rim and will not sag in the middle. The numbers indicate the number of openings to an inch. No. 2 for gravel, etc.; 3, beans coarse sand, etc.; 4 corn and mason's sand, etc.; 5 and 6, fine sand, etc.; 8, wheat, rye, barley, etc.; 10 and over for special purposes. They are all 18 inches in diameter. Price, $1.25 each.

EXTRA HEAVY FLORISTS' RIDDLES.

Special Oat Screens (No. 19), for taking dust out of oats before feeding. $1.50 each. Extra Heavy Florists' Riddle, for rubbing moss, mold, coconut fibre and lumpy loam through. 1, 1, 1 and 1 inch mesh; 18 inches in diameter. $2.00 each.

No. 10
FAMILY SIZE GRATER.

No. 500. HOTEL SIZE GRATER.

No. 2500
COMMERCIAL SIZE GRATER.

"BI-TREADLE" GRINDSTONE.

STRONG, TUBULAR STEEL FRAME
Adjustable seat, 4 in. to 5 in. vertically Stone movable forward and back on frame. Frame being slightly flexible it adjusts itself to uneven floor or surfaces. Rigid and easily set up. Bi-Treadle, with power properly applied. Hinged connection with ball-bearings on crank. Ball bearings in journals.

Frame is narrow at top, making it convenient to apply power, and spread at base giving greatest rigidity.

Craded complete, with face of stone protected. Made in one size, average weight of stone 60 pounds. Shipping weight 90 pounds. Frames will carry larger stones to 28 in. diameter if wanted and will be quoted on application. Price, $7.00.
HENDERSON'S "MAN-SIZE"

Water Barrel Trucks and Accessories.

The Barrel, capacity about 50 gallons, is raised from the ground, carried to the place desired, and can be readily disconnected from or attached to the truck while barrel is either full or empty. We supply as extra attachments the following: A Box with trunnions and spring catch, making a very superior dumping hand-cart. A Sprinkler, invaluable for watering lawns and sprinkling walks. (Water is turned on and off by hand wheel and ball valve). A Leaf Rack, very useful for removing leaves and litter. (For a Sprayer Pump we recommend our "Fruitall" offered on page 58.)

PRICES OF HENDERSON'S "MAN-SIZE" WATER BARREL TRUCKS AND ACCESSORIES.

<table>
<thead>
<tr>
<th>Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hand-cart Box Extra</td>
<td>$4.50</td>
</tr>
<tr>
<td>Leaf Rack</td>
<td>$7.00</td>
</tr>
<tr>
<td>Sprinkler attachment</td>
<td>$4.00</td>
</tr>
<tr>
<td>Extra trunnions, per pair</td>
<td>$0.76</td>
</tr>
</tbody>
</table>

Small or 30 Gallon Size Barrel and Truck.

A very convenient outfit easily pulled about and of sufficient capacity for many purposes. The various accessories may be purchased separately or in combination. The truck has 30 inch iron wheels with 2 inch rims. The barrel is about half size—holding 30 gallons, spray pump easily attached. The box is 20 1/2 x 20 1/2 x 7 inches, handy for carrying tools, garden truck, etc. The rack is 30 x 24 inches, very handy for collecting leaves, litter and bulky garden and farm products. For a spray pump suitable for this 30 gal. bbl., we recommend our Fruitall offered on page 58. Price, Truck only $9.50; Barrel with trunnions $2.50; Hand Cart Box $4.00; Rack, $7.00.

The Butler Steel Hand Cart.

The Butler Steel Hand Cart fills the want for a two-wheel cart better than any other invention. Its usefulness is unlimited, and is not confined to one special purpose.

It will handle fruit, garden vegetables, grain, leaves, cut grass, trash, ensilage, manure, fertilizer, tools, barrels, kegs, boxes, packages, etc. Nothing equals its perpetual usefulness about the lawn, yard, stable, farm, dairy creamery, garden and orchard.

Light in weight, great strength and easily handled. If numbers sold is any criterion of merit, this is unquestionably the cart of the future.

DESCRIPTION.

Wheels.—Steel, 36 inches high. Tires.—Regular, 2 1/2 inch, or 3-inch. Width.—Between wheels, 30 inches; from end to end of hub, 42 inches. Axle and all frame parts steel. Will easily sustain a load of 500 lbs. Platform.—Hard Wood, 26 x 33 inches. Side Boards.—15 inches high, hard wood, instantly removable, leaving cart in shape for handling barrels, boxes, milk cans, etc. Flaring Hopper.—Sides and ends extend 12 inches above the box. Painting.—Body red, evenly striped; wheels bright green.

<table>
<thead>
<tr>
<th>Description</th>
<th>Price/Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. 1, Plain, without box (Figs. A, B, C)</td>
<td>$16.00/95 lbs.</td>
</tr>
<tr>
<td>No. 2, With detachable box (Figs. D, E, F)</td>
<td>$14.00/125 lbs.</td>
</tr>
<tr>
<td>No. 3, With detachable box and Flaring Hopper (Fig. G)</td>
<td>$18.00/150 lbs.</td>
</tr>
</tbody>
</table>

Note.—Unless otherwise ordered, we send 2 1/2 inch tire wheels.
The Ball Celery Bleaching Tubes.

JUST THE THING FOR QUICKLY AND EASILY BLANCHING EARLY CELERY.

ELIMINATES THE LABOR OF "BANKING UP" OR BUYING, HUNTING UP AND PLACING BOARDS, JUST SLIP ON A "BLEACHING TUBE" AND IN 10 TO 14 DAYS HAVE WHITE CRISP LUCIOUS CELERY.

The Ball Celery Bleaching Tubes are of specially manufactured heavy paper, waterproofed and with care may be used over and over again for several years. The celery plant is simply drawn together and the tube slipped over it. Spring brass celery handler is also used it facilitates the operation. All light is then excluded and the celery blanches beautifully in from 10 to 15 days at times. If there are openings between the tube, an inch or two of soil drawn around the tube will shut out the light. Celery blanched with tubes is sweeter and cleaner than that blanched by banking. For there is no earthy flavor as with the latter, and no soil with the frequent accompaniment of worms gets down into the heart stems, and besides celery may be had for the table very much earlier in the fall, because by using tubes they may be placed over the plants at any time after the celery is large enough, even in hot moist weather which would cause banked celery to rot.

The free circulation of air around the plant inside the tube allows it to dry out quickly after a rain. Customers who use these tubes place a few for first early, say—12 or 25 tubes over as many plants and in a week or 10 days later tube another lot of plants. When they are removed from the first lot they are placed over other celery plants in this way a continuous supply of fresh crisp sweet and delicious celery is always ready for the table until freezing weather. For the benefit of those who have only used the soil method of blanching we mention that celery should be nearly full-grown before putting on our bleaching tubes. At this time, with plenty of moisture, heart growth is very rapid. Under these conditions celery will often be in prime condition in from 8 to 14 days after putting on the tubes.

These bleaching tubes are generally used on early celery in the Northern and Middle States, also in the South where the temperatures are too high for soil blanching. For best results they should not be used for bleaching when freezing temperatures occur at night. They bleach best when outside temperatures are from 50 to 75 or more degrees. If you desire to bleach the green or late varieties of celery it is best to put on the bleachers a week or more earlier so as to give a longer period for the growing of the heart, as the outside stalks don't bleach very well. All plants should, of course, be large enough to reach above the top of bleaching tubes at the time that you put them on.

Green celery treated in this manner makes a superior product. For the late or winter crops where a clean and superior celery is desired these bleachers can be put on just before blanching with soil; they will prevent dirt from entering the heart of the plant. When used in this manner the bleachers can be only used once, but the superior results—sanitary cleanliness and freedom from dirt, more than compensate the cost, especially for private use.

The 6 x 12 size is usually used on medium or average size celery. The 6 x 13 is for large stalks. The 7 x 14 is best for very big celery, especially the green varieties, which usually grow much larger than the self-blanching kinds.

The bleachers should hug the celery close, but not tight. If an unusually large plant is encountered trim off a few leaves.

PRICE OF THE BALL CELERY BLEACHING TUBES.

6 x 12 inch 30c. doz., $1.75 per 100, $16.00 per 1000
6 x 13 " 35c. " 2.00 " 18.00 "
7 x 14 " 40c. " 2.50 " 20.00 "
(mail weight about 2 lbs. per doz.)

BIRD NETTING TO PROTECT FRUITS, VEGETABLES, ETC.

What is more exasperating than to anticipate a liberal picking of some fruit to find when you reach the garden that your bird neighbors have been there before you and consumed or destroyed the ripest and choicest berries, grapes or cherries of which some birds are voraciously fond. Lettuce and peas are often ravaged by birds, even flowers are not immune from their attacks and they revel among some plants ripening seeds. All this may be obviated by shutting the birds out with bird netting. This is good quality cotton netting of 1 inch mesh and comes in 20 foot and 30 foot widths and of any reasonable length. Price, $1.10 per 100 square feet. P.P. 1 lb.

THE BALL PLANT PROTECTORS.

These protectors are well made, a wood frame work covered with good white muslin which is drawn to a knot at the top to be used as a handle. The users project below the bottom bow and thrust in to the ground acting as an anchor to prevent the protectors from being displaced by the wind. These protective legs also permit the protectors to be raised and held slightly above the ground when greater ventilation is desirable. The protectors are so shaped that they rest one in another like flower pots for storage and shipment. They will last for years with good care and may be used over and over again for advancing the growth of tender plants and protecting them from frosts. Tomatoes, melons, cucumbers, egg plants, peppers and many other garden vegetables and flowering plants, may be safely set out much earlier than usual by using the Ball Plant Protectors which will also be found useful for shading lettuce and spinach during hot weather—which without some shade are apt to quickly bolt to seed. These protectors are also valuable placed over newly set out plants, preventing them from wilting as they give just the right shade.

Price, No. 1—9 in. diam. x 12 in. high $2.50 doz., $18.00 per 100
No. 2—12 " x 15 " 3.00 " 25.00 "

THE BALL LIGHTNING CELERY HANDLER.

When putting on the paper bleaching tubes it facilitates the operation by using the Ball Lightning Celery Handler. This is a spring brass implement which gathers up the foliage so that the bleaching tubes can be placed without damage to the plant. Operation is demonstrated in pictures. With a little practice a boy can place 3000 to 4000 tubes a day. Price, $3.50.
HENDERSON'S SASH AND FRAMES
FOR HOT BEDS, COLD FRAMES AND COLD PITS

HENDERSON'S "REGULATION" UNGLAZED HOT BED SASH.
These sash are of No. 1 Gulf Cypress free from knots and sap. They measure 3 feet wide by 6 feet long and 1.5 inches thick. They take five rows of 6 x 8 inch glass (1 box of glass 150 panes glazes three sash). They are unpainted. These sash are well and durably made and we sell thousands of them every year with evident satisfaction to purchasers. Price, $1.20 each; $13.00 per doz.; $100.00 per 100. F.O.B. N. Y.

HENDERSON'S "EXTRA FINE" UNGLAZED HOT BED SASH.
These are made of selected Red Gulf Cypress, free from knots and sap. They have finished edges and two T-shaped bars in the center. Size 3 feet wide by 6 feet long and 1.5 inches thick, and take three rows of 10 x 12 inch glass (1 box of 60 panes of glass glazes three sash). They are unpainted, but the joints were white leaded before being put together. They are largely used on private places and florists and gardeners who wish less shade than is cast by live row sash. Price, $2.40 each; $25.00 per doz. F.O.B. N. Y.

HENDERSON'S "EXTRA FINE" GLAZED SASH.
This is the same sash as described above, 3 x 6 feet, 15 inches thick, painted two coats of white and glazed with three rows of double thick, 12 x 12 inch glass. Price, $4.00 each; $45.00 per doz. F.O.B. N. Y. Packing for shipment 35c. per crate extra. (See note below regarding packing and shipping glazed sash).

"HALF-WIDTH" FRAME AND "HALF-LENGTH" SASH.

HENDERSON'S "HALF" SASH AND FRAMES
These are very convenient for small gardens, especially where frames are to be placed against a fence or building, thus precluding the possibility of getting at them from both sides. In such situations it is difficult to reach clear back from the front without stepping in the frames as must be done with the full size 6-foot sash. These "Half" Length" sash are 3 feet wide by 3 feet in length covering the "Half Width" frames which are 34 inches in width. Another advantage that the "Half" sash possess is their lightness being easily handled by a child or lady.

HENDERSON'S "HALF LENGTH" SASH UNGLAZED.
These are made in the best manner of A1 Gulf Cypress, 15 inches in thickness and 3 x 3 feet square, taking three rows of 10 x 12 inch glass (1 box of 60 panes glazes 3/4 "Half" sash). Price, $1.15 each; $12.50 per doz. F.O.B. N. Y.

HENDERSON'S GLAZED "HALF LENGTH" SASH.
These are the above described "Half" sash painted two coats of white and glazed with double thick 10 x 12 inch glass. Price, $3.00 each; $30.00 per doz. F.O.B. N. Y. Packing for shipment 35c. per crate extra. (See note below regarding packing and shipping glazed sash).

HENDERSON'S "DOUBLE-LIGHT," HALF-LENGTH" SASH.
These possess all of the advantages of the full size "Double-Light" sash described above, but are only half the size, viz.: 3 x 3 feet square, they are painted two coats of white and glazed with three rows of 10 x 12 inch glass on top with bottom rows of glass slid in grooves on the under side. Price, $4.00 each; $45.00 per doz. F.O.B. N. Y. Packing for shipment 35c. per crate extra. (See note below regarding packing and shipping glazed sash.)

"H" Special Note Regarding the Packing and Shipping of Glazed Sash.
For shipment, glazed sash must be crated and boarded up on both sides, for which an extra charge is made of 30c. per crate for full size, 3 x 6 ft. sash, and 35c. per crate for "Half-Length," 3 x 3 ft. sash. Up to six sash can be packed in one crate. We cannot allow for any breakage.

The standard boxes of glass contain 160 panes of the 6 x 8 in.; 90 panes of the 8 x 10 in.; and 60 panes of the 10 x 12 in.; either single or double thick glass.
Henderson’s Hot Bed and Cold Frame Mats.

To Protect Plants from Frost in Winter and Spring.

These are made of Burlap, warmly lined with waste wool and cotton which is quilted in to hold position. A trial for two winters, proved they do not harbor mice or other vermin.

Prices.

Size A, 40 by 76 inches, $1.00 each; $15.00 per dozen.

Size B, 76 by 76 inches, $3.00 each; $35.00 per dozen.

PATENT PROTECTING CLOTH.

Prepared to prevent mildewing and rotting; valuable for protecting plants from frost, covering hot-beds and frames in spring in lieu of glass, for Chrysanthemum houses. One yard wide.

PRICES.

Heavy Grade, per piece of 50 yards, $9.00

Medium Grade, per piece of 50 yards, $7.00

Twemlow's Old English Glazing Putty.

A semi-liquid putty that we find superior to any other of similar character for glazing greenhouse and hot-bed sash. We use it with a Scollay’s Rubber Putty Bulb, and if the putty is too thick at times, we thin it with a little boiled linseed oil. When so thinned it can be brushed into any crack or leak, making a solid filling. For bedding glass in, for filling cracks or seams in roof joints and frames it is splendid, being impervious to moisture and when set on dry wood it does not heave and will not crack nor peel. 1 gallon glazes about 300 lineal feet. Price, 1 quart, 55c.; gallon, $1.75.

Rubber Putty Bulbs for applying, $1.00; P.P. 1 lb.

PERFECTION GLAZING POINTS.

The finest glazing points on the market; the glass cannot slip; they are quick and easily put in with special pincers or may be driven in; no “rights and lefts” to bother with.

The points being beveled on top will hug close to glass when driven.

Price, per box of 1,000, 65c., P. P. 1 lb; pincers, price per pair, 60c., P. P. 1 lb.

DIAMOND GLASS CUTTER

A diamond in one corner and a wheel in the other, thus giving a sure cut. Will never lose the point.

Price, $1.00.

CHEAP GLAZING TOOL

For the price this is a very satisfactory little implement—cuts with a little steel wheel.

Price, 10c. each, $1.00 per doz.; postage 25c. each extra.

GALVANIZED WIRE GARDEN TRELLIS.

FOR

PEAS,

TOMATOES,

VINES,

ETC.

A Great Improvement in Garden Trellis, indispensable in every well-kept garden, easily put up, more tidy than brush, practically indestructible. Can be rolled up, stored away and used again year after year. Tomatoes grown on this Trellis are clean, ripen more evenly, and are less liable to rot. Cucumbers and other vines can be advantageously trained on the Trellis, economizing space and insuring cleaner and better matured fruits. This Trellis 48 inches wide is made of the best galvanized wire, 2-inch mesh, and is furnished in 10-foot lengths, with a 5½ foot stake at each end and one in the centre. Price, per 10 foot length, $1.00; per doz. lengths, $11.00.

HENDERSON’S SUPERIOR GALVANIZED WIRE NETTING, For Poultry Yards, Fencing, Garden Borders Etc.

Our netting is made of high tempered steel wire of maximum strength; it is heavily galvanized with zinc after it is woven, which renders it “good for 100 years,” and unites the wire together; the meshes are regular; it is woven straight and does not bulge. Warranted full measure. No. 19 wire, 2 inch mesh, is the popular poultry netting, though we can supply a heavier grade of wire at an extra cost, if specially wanted.

We do not sell LESS THAN ROLLS 180 FEET LONG.

We can supply 3½, 1 ½, 1¼, and 2¼ and 2½ inch mesh in all widths from 12 to 72 inches in either No. 19 or No. 20 wire.

On account of the fluctuations in price of wire netting caused by existing conditions in the metal trade, we cannot print firm prices for the season, but will be pleased to quote on application.

"Best Steel" Combined Wire Pliers and Cutters.

6 in., 60c., P. P., 1 lb.; 8 in., 80c., P. P., 1 lb.; 10 in., $1.00, P. P., 2 lb.
"EL-FLO" CANNERS AND CANNING OUTFITS.

Kitchen and Outdoor Canners for the Home, Trucker, Hotel, College, Hospital and Commercial Purposes.

The art of canning or preserving in one form or another is almost as old as history itself. The Chinese possessed the secret long before the era of civilization—but “the reason why” has only been recently generally understood. It is complete sterilization which destroys all bacteria and molds, yeasts, germs—or minute forms of life which seem in the air we breathe, the water we drink and all uncooked fruits and vegetables that we eat. These are the sole causes of decomposition or rotting. “Canning” therefore is destroying the bacteria, etc., by heat and sterilizing the air content of the can or jar and hermetically sealing to prevent the ingress of outside air with its accompanying destructive hosts. Where this is thoroughly done canned goods will last indefinitely. Household canning has been considered more or less of a bug-a-boo by most housewives many of whom seem to think that canning and preserving is a special gift possessed by a fortunate few, whereas any one may do it successfully by understanding the simple fundamentals. Forty percent of the orchard and garden products of the U. S. go to waste every year, for the lack of facilities and a better understanding of domestic canning—this waste could be converted into appetizing, healthful, nutritious food from your own garden or farm. Simply equip yourself with an “EL-Flo” canning outfit of a size suited to your needs, follow the directions given in the Instruction Book given with each—and solve the problem of the high cost of living. “EL-Flo” canners are the best made, being scientifically constructed, durable, simple and convenient. They generate a high degree of heat quickly and maintain it uniformly, so that higher grade products are turned out than by the slow Boiling process of canning by ordinary kitchen methods. With an “EL-Flo” canner you can quickly “put up” a few cans a day—as the vegetables and fruits become ready—or they may be operated to their full capacity as circumstances may require and if desired quite a little money may be made by disposing of the output.

Among the vegetables and fruits preserved or “canned” either in tin or glass as preferred we mention apples, apricots, asparagus, beans, beets, barley, cherries, corn, grapes, peas, peaches, pears, plums, pumpkin, quince, rhubarb, spinach, squash, sourdough, tomatoes, etc. and also meats.

"EL-FLO" KITCHEN AND OUTDOOR CANNERS.

Descriptions, Capacities and Prices of Various Sizes.

"EL-FLO" No. 14—ONE HOLE KITCHEN CANNER. This is the smallest canner we make and it is very efficient and convenient where but a few cans or glass jars of vegetables or fruits are to be “put up” every few days. The water pocket fits in the hole of any stove or range, it holds 14 No. 3 cans or 7 quart jars. Canning for about 1 bushel of the average vegetables or fruit at one time. The outfit consists of round boiler 14 in. diam. by 12 in. high with cover, combination tray, tipping copper, can tongs, tray lifters, flux cord, can filler and book of instructions. Price, complete, $3.50.

"EL-FLO" No. 24—TWO HOLE KITCHEN CANNER. A larger capacity canner than the above having two water pockets that fit in two holes of any stove or range. Where canning is to be done in the kitchen, this will be found a most satisfactory size—being light in weight and easily moved about. It holds 24 No. 3 cans or 12 quart glass jars. Canning for about 1 1/2 bushels of the average vegetables or fruits at one time. The outfit consists of boiler 19 inches long by 14 in. wide, by 12 in. high with cover, 2 combination trays, tipping copper, can tongs, tray lifters, flux cord, can filler and book of instructions. Price, complete, $5.00.

"EL-FLO" No. 16—SMALL FAMILY OUTDOOR CANNER. Very light, portable and convenient. Most efficient for canning either in tin or glass. It will take care of quite a large quantity of fruits and vegetables during the season if kept busy as it holds at each filling 16 No. 3 cans or 8 quart glass jars. Canning for about 1 bushel of the average vegetables or fruits at one time. The outfit consists of boiler 18 in. long by 10 inches wide by 18 in. high with cover, combination tray, tipping copper, can tongs, tray lifters, two joiants, can filler, flux cord and book of instructions. Price, complete, $7.50.

"EL-FLO" No. 30—LARGE FAMILY OUTDOOR CANNER. The most convenient general family size and very efficient. It holds the world’s record for the most economical pack and is largely used by the U. S. government demonstrators, many truckers and hundreds of private families. It has no superior nor even an equal for its size anywhere. Every modern convenience is embodied in this outfit. The contents of each can or jar are processed uniformly and just right and will remain so indefinitely. It holds 30 No. 3 cans or 15 quart glass jars at each filling. Caring for about 1 1/2 bushels of the average vegetables or fruits at a time. The outfit comprises boiler 23 in. long by 14 in. wide by 23 inches high, cover, copper, tipping copper, two combination trays, tray lifters, can tongs, can filler, flux cord, two joints pipe and book of instructions. Price, complete, $12.50.

NOTE: THE PRICES OF CANNERS ARE SUBJECT TO ADVANCE WITHOUT NOTICE.
EL-FLO NO. 64. HOTEL AND COLLEGE SIZE OUTDOOR CANNER. A large roomy, well proportioned canner and operated very economically. It is built so that it may be operated in units of one, two, three or all as desired. No. $250.00 canner can do more or better canning than may be accomplished with the $200.00 canner. (Fig. 13.) The trays are conveniently handled by one person. Several of these No. 100 outfits are "putting up" 100,000 cans each annually. It holds at each filling 94 No. 3 cans or 50 quart glass jars, caring for about 5 bushels of the average vegetable or fruits at a time. The outfit consists of boiler 55 in. long x 22 in. wide x 24 in. high x 24 in. and cover pipe, 2 capping steels, 2 tipping copper, 4 combination trays, tray lifters, can tong, can filler, bluing, faucet, 2 joints and pipe elbow and book of instructions. Price complete $32.00.

INTERIOR VIEW OF
No. 216 EL-FLO CANNER.

EL-FLO NO. 100. COMMERCIAL AND TRUCKERS OUTDOOR CANNER. A portable canner for canning on a comparatively large scale, for either "community" canning or commercial purposes by truckers and others. It is built so that it may be operated in units of one, two, three or all as desired. No. $250.00 canner can do more or better canning than may be accomplished with this. (Fig. 16.) No. 200 outfit is complete, $350.00.

EL-FLO NO. 216—LARGE COMMERCIAL AND TRUCKERS OUTDOOR CANNER. Our largest portable outdoor canner and adapted for a large output though may be profitably operated in units. It is especially designed for co-operative factory canning—but it is also extensively used by truckers farmers and fruit growers, for handling their surplus crops of vegetables and fruits. The outfit is complete and the equal of any $500.00 factory plant in efficiency and results. Its operation is simple and economical requiring no expert help. There are 8 trays each holding 27 No. 3 cans at one filling and 20 No. 5 cans at one filling. Price complete, $75.00.

AN AVERAGE ESTIMATE PER BUSHEL. One bushel of either tomatoes, apples, peaches, pears, plums, beans, peas, corn, berries, potatoes, okra, squashes, etc., will fill 18 to 21 No. 3 cans, or 28 to 36 No. 2 cans. No. 3 cans are the standard size. The capacity of our Outfits are made on this average size can. Five bushels of the average fruits and vegetables will fill 100 No. 3 cans.

EL FLO CONTINUOUS HEATING CAPPING STEEL. The secret of the EL-FLO Capping Steel is the deflection by improperly heated tools is attributed the greatest per cent. of defective in canned goods—thus the skill of the operator. A blue flame plays uniformly on the steel, keeping a nice uniform heat the whole day through. It is light, neatly finished, compact, convenient, and never requires any "tinning" or "flushing." Perfectly safe, and is as simple and easily operated as a lamp. No experience whatever is needed to do perfect and rapid sealing from the beginning. Three styles and made in all sizes. The heat is applied on either side, top or interior of steel. EL-FLO Continuous Heater, with capping steel "tinned," will handle any size No. 3. Extra capping steels, best quality and highly finished $1.25.

COOK-STOVE FRUIT DRYER OR EVAPORATOR. (Fig. 20.) This is the latest, cheapest and best machine of its kind on the market. It can be used on any kind of stove. Its dimensions are: base, 14 x 16 inches; height, 36 inches. Containing eight galvanized wire-cloth trays, Weight, 22 lbs. No extra fire is required. It is easily set off and on the stove, as needed, whether empty or filled with fruit. With it you can evaporate all kinds of fruits, berries, and vegetables. Price, $6.00.

THE FAVORITE JELLY STRAINER HOLDER. (Fig. 25.) This strainer holder is appreciated by every housekeeper who makes jelly or uses a strainer for any purpose. The cloth can, after being removed for cleaning and the rings and rod are plated to prevent rust and tarnishing, standard jointed so that it may be packed away in small space. Price in pasteboard box complete with bag $1.00. (Mail weight 1 lb.)

NOTE: THE PRICES OF CANNERS ARE SUBJECT TO ADVANCE WITHOUT NOTICE.
WATT'S ASPARAGUS BUNCHER.

The Best Buncher Made.
May be adjusted by simply loosening the bolts at either end and pulling out the pins to fit; thus both ends of asparagus can be bunched properly. As the asparagus grows larger at one end than the other this will be found at a great advantage, as both ends can be regulated. Price, 1 lb. size, $1.25; 2 lb. size, $3.25; P. P. 10 lbs.

ASPARAGUS KNIVES.

American straight edge, each, 40c.; American V-shaped knife, small, each, 35c.; large, 50c. English saw-tooth edge, each $1.75. P. P. 1 lb.

BRUSH AXE.

This is an excellent tool for trimming out underbrush, cutting down old berry hedges, etc. Price, handled, $1.25.

AXES.

Best quality, handled. Light, 2½ lbs., $1.10; medium, 3 lbs., $1.35; heavy, 3½ lbs., $1.60.

Boy's Axe, $1.00.

BEET TOPPING KNIFE.

Especially made for rapidly and easily cutting off the tops of beets, mangels, rutabagas, etc. Price, 65c. P. P. 1 lb.

HENDERSON'S GARDEN BASKET.

This basket is made of white willow with compartments and fits a long felt want for the amateur gardener. We fit these baskets with 1 pair Goat Skin gardeners' gloves, 1 pair 8½ Leader Pruning Shears, 1 English weeding fork, 1 Eureka weeder, 1 6 in. solid steel trowel, 1 budding knife, 1 pair trimming scissors, 1 pair flower gathering scissors; 1 ball twine.

Price, complete... $14.00
Basket only... 4.00
Flower Picking Basket, to stick in the ground... 4.00

HEND E RSON'S BRUSHES.

Apple Parer, Coreer and Slicer.
The paring and juice fall clear of the working parts; strong, durable and does good work; it can be used to pare only without coring and slicing, if desired. Price, $1.75 P. P. 4 lbs.

FARMER'S BASKETS.

Best Oak Splint.
Hand made. Each.
Bushel... 90c.
1½ bush... $1.50
2... 1.60
3... 2.00

Price, complete... $14.00
Basket only... 4.00
Flower Picking Basket, to stick in the ground... 4.00

MEHLE R'S
Handy Cultivator and Weedcr.
Works with ease—Saves the knees.

An entirely distinct tool; made with a special handle 1½ ft. long; entire weight 1 lb.

Note the special arrangement of the 5 teeth, which allows cultivation closer to the plant than any other device and at the same time on three sides at one stroke; you being in a comfortable standing position.

No hoe is needed where this tool is used; just the thing for working among flowers and young vegetable plants.

Price, 60c each.

THE NORCROSS LONG HANDLED CULTIVATORS AND WEEDERS.

Most useful of hand Garden Tools. It will pull out weeds, pulverize the ground thoroughly, leaving it level. It will work between rows or the centre shovel can be removed and the row straddled if desired. It is adjustable in width by sliding the top plate.

It is light, weighing but three pounds including long handle. Price, 3 prong, 65c.; 5 prong, 90c.
MEHLER’S HANDY EDGER.
The handle at one side gives full view of the work the entire width of the edger and the handle being at your side, permits the edger to be drawn with a knife-like action instead of chopping, thus insuring a straight line. Where foot pressure is applied, there is a ¼ of surface directly over the center of the tool, thus forcing the full width of the tool. Price, $1.25.

"HALF MOON"
GRASS AND TURF-EDGING KNIFE.
For trimming the sod around borders of walks, etc. Price, with handle, 75c. each.

HENDERSON’S POTATO DIGGING FORK.
Expressly made for digging potatoes and root crops. It has 6 round, heavy tines, 10 in. each, long, with points not too sharp. Made with extra long “D” handles, strongly strapped. The best tool for the purpose. Price, $1.50.

TETHER CHAIN AND STAKE.
Wrought stake with swivel top, one swivel in chain, Price complete, 30-ft. chain, P. P. 3 lb., $1.50; 30-ft. chain, P. P. 9 lb., $1.75.

ADJUSTABLE "KRAUT" CUTTERS.
Nicely made of hardwood.
No. 55—3 knives 8 x 26, $1.50
No. 65—3 " 9 x 30, 2.25
No. 70—3 " 12 x 36, 3.25

SPADING OR DIGGING FORKS.
Extra quality, spear-pointed tines, with diamond-shaped backs; handles strapped. D-handle.
4 tine......$1.25 Long handle $1.25
5 " 1.40 " " 1.40
6 " 1.75 " " 1.75

TRANSPALNTING FORKS.
A very convenient tool for transplanting plants, strawberries, etc. Imported English Hand Fork, finest steel, 85c., P. P. 1 lb.
American Hand Fork, malleable, 25c., P. P. 1 lb.

STONE PICKING FORKS.
The handiest tool for the purpose $1.25.

GARDEN LINES.
Braided linen, 100 feet, 75c., P. P. 1 lb.

GARDEN LINE REELS.
Malleable, P. P. 9 lb. $70.

GRAPE BAGS.
To enclose the growing branches of grapes as a preventative of Mildew and Black Rot, as well as attacks of Bees, wasps and other insects has been largely practiced of late years with excellent results. The fiber bag although a trifle higher in cost is the most serviceable.
Glazed Paper Bags $7½ x 10½ inches, per dozen, 25c., per hundred, $1.50.
4½ lb. Square Bottom Bags, $1.25 per hundred.

GRAFTING WAX.
(Trowbridge’s)
The best grade on the market.
¾ lb., pkg., 20c.; 1 lb., pkg., 35c.
GRASS HOOPS.
English Riveted Back
Thin, sharp blades, strengthened by a riveted back, light and rapidly
handled. Small size 50c.; Medium size 60c.; Large size 75c.
Knuckle Saver Grass Hook.
The blade is raised from the handle, making it possible to cut close within
the knuckles. Price, 60c.
Popular Grass Hook.
A good low price hook. Full size, 35c.

GARDENER'S GLOVES.
For protecting the hands, handling thorny plants, etc. Heavy goat, per
pair: P. P., 1 lb. Men's size, $2.00; Ladies' size, $1.75.

IMPORTED ENGLISH SCUFFLE HOES.
(Handles extra, 15c. each.)
5-inch, 65c.; 6-inch, 75c.; 7-inch, 85c.; 8-inch, 95c.; 9-inch, 100c.; 11-inch, 1.25;
12-inch, 1.50.

COMBINED HOE-RAKE.
A convenient tool for garden weeding and cultivating, solid steel 4-
tooth, 4½-inch blade, 65c.; 6-tooth, 6½-inch blade, 85c.

HATCHETS.
Axe Pattern, for pruning, hunters use, etc. No. 1, 1½ lb., 65c.; No. 2, 2 lb., 75c.; No. 3, 2½ lb., 85c.
Shillinging Hatchet, 50c. Barred, or Half Hatchet, 85c. Claw Hatchet, 95c.

"RAPID-EASY" SCUFFLE HOE AND WEEDEER.
Works very easily through the ground just below the surface loosening and
pulverizing the soil cutting off all weeds by a push and pull motion
both edges of the zig zag blade being cutters.
85c. each.

WARREN, or HEART-SHAPED HOE.
YOU NEED ONE!
The Best Garden and Field Hoe.
The Warren Hoes are unequalled for hoeing, weeding, cultivating, making
drills, covering seed, etc. Scour sharp, right hand, light to handle.
Prices: Small, 80c.; medium, 90c.; large, $1.00.

ACME WEEDING HOES.
Very popular hoes with florists and gardeners; for digging, cultivating
and weeding.
Acme Double Prong, 4½-inch blade, 70c.
Acme Single Prong, 6-inch blade, 60c.

REGULATION GRUB HOE.
Strong for grubbing out roots, clay, ditches, etc. about 4½-lb. $1.00.

GARDEN MATTOCK HOE.
Particularly adapted for working heavy or hard soils; upper blade, 11 in. and lower 3 inches wide; handle, 5 ft.
Price, 75c.

BUDDING AND PRUNING KNIVES.
(Parcell post weight 4 oz. ea. for Budding and 6 oz. for Pruning Knives.)

THE HILTON.
The Best Scuffle or Push Hoe.

This celebrated hoe is made of spring steel, shaped as shown in cut, with
double edged blades so adjusted that it cuts and cultivates equally well
when thrust forward or pulled back. These hoes are made in two
widths—six and eight inches.
Price, 6-inch, 50c.; 8-inch, 65c.

THE CARPENTER PATENT SCUFFLE HOE AND PULVERIZER.
A combined scuffle hoe, pulverizer and shovel. Excellent for breaking up
lumps of dirt, manure, etc. Has 6 foot handle. Price, 75c.

PRONG HOES, OR POTATO AND MANURE HOOKS.
Indispensable for digging potatoes and other crops, forking over manure.
Four-round time..............70c.
Five-round time..............85c.
For broad flat time.............90c.

HENDERSON'S SUPERIOR DRAW HOES.
Extra quality cast steel, oil-tempered, thin, elastic, polished blade; Swan's neck socket shank, 5-inch, Ladies, 4½, and the following sizes.
6, 7, 7½ and 8-inch blades, 60c. each.
dozen ...........................................$6.50

A Round point budder. Brass lined with bolster, ivory handle. $2.00
B Straight blade budder. Brass lined with bolster, ivory handle. $2.00.
C Straight blade long handled budder, brass lined with bolster. Ivory handle. $2.25.
D Medium size point bladed pruner; stag handle, steel lined with bolster, $1.35.
E Double bladed pruner, steel lined with bolster, $2.00.
F Large hook bladed pruner, steel lined with bolster, $2.00.
G "Wahrencliffe" three bladed stag handle, $2.00.
X Double bladed budder, 1 straight and 1 moud point blade; brass lined, ivory handle, $2.00.
SIMPLEX Waterproof Plant Labels.
The writing is protected by the transparent cover and will last indefinitely if done with lead pencil. No. 1, 2 x 3 in. each, 25c. per dozen. No. 2, 4 x 4 in. each, 50c. per dozen. Price, 5c. each, 50c., P.P. 1 lb.

PERMANENT LABEL HOLDER.
To stick in ground. It is made with a 3 in. hole to thrust in the ground carrying an inclined removable 3 x 2 in. frame-holding name card and muc protector. It is just the thing for labeling shrubs, herbs, cucumbers, etc. Price, 20c. each, $2.00 per dozen, P.P. 4 lbs.

Permanent Label Holder.—The best device for permanent labelling; absolutely air and water tight, the label is annealed. Write the name on card, insert through opening at bottom of holder, and seal with putty or plaster Paris. Price, 60c., P.P. 1 lb; or $4.50 per 100, buyer paying expressage.

THE PERFECTION MOLE TRAP.
The best and most complete Mole Trap, easy to set and cannot “startle” or injure the operator. It will catch moles when quite deep in the ground, and there being no pin or other obstruction projecting into the run, there is nothing to frighten or disturb the mole as it passes, and in doing so raises the ground over the “run” just enough to spring the trigger, which must firmly set on the soil over the “run.” The points of the pins being constantly in the ground, it cannot catch or injure chickens or other domestic animals. Being made of metal it cannot warp or get out of order. It can be set close to plants without injuring them, and it can also be set touching a wall, fence, etc. 85c. each, mail weight 5 lb., $9.00 per dozen.

HENDERSON New Model Mole Trap.
10½ inches high when set. The only trap that can be successfully used in hot beds. Anchor posts are notched, preventing trap springing from the ground when tripped. Self setting. Price, $1.50; mail weight 4 lb.

THE PERFECTION MOLE TRAP.

WOODEN MEASURES.

MAULE OR BEETLE.
Heavy and strong, with iron bands, for driving wedges, etc., $3.00 each.

THE EUREKA LAWN MOWER SHARPENER.
A new device to attach to the stationary Bar of any mower. Sharpens all revolving blades to a keen, even, accurate edge in a few minutes. Anyone can attach it. No filing, no work. Simply push the mower, on sidewalk with Sharpener attached and blades sharpen automatically. Price, 35c. (P.P. 8 oz). Specify width of mower whether 12 in., 14 in., 16 in., 18 in., or 20 in.

FRUIT, WINE AND JELLY PRESS.
Superior, simple, easily operated, saves all rehandling, as it extracts the juice and ejects the skins and seeds in one operation, it can be used for many purposes, including the making of wine, jelly, fruit butters from grapes, currants, quinces, pineapples, tomato catsup, etc. Prices, Family size, capacity 1 qt., $3.50; 3 qts., $18.00.
**HENDERSON'S IMPLEMENTS, TOOLS AND REQUISITES**

### Extension Peony Supports

For supporting the outer flowers; heavy galvanized wire in sections so they may be taken apart for shipping and storing. Diameter 21 ft.; height 2 ft. Price, 35c. ea., $9.00 doz.

### Neponset Waterproof Paper Flower Pots

Unbreakable, light economical. They last at least one season and their cost is trifling; they nest closely for shipping.

**Prices.**

<table>
<thead>
<tr>
<th>1 in.</th>
<th>Doz., P.P.</th>
<th>100 P.P.</th>
<th>1000 P.P.</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>10c.</td>
<td>3 oz.</td>
<td>20c.</td>
</tr>
<tr>
<td>3</td>
<td>12c.</td>
<td>3 oz.</td>
<td>25c.</td>
</tr>
<tr>
<td>4</td>
<td>14c.</td>
<td>3 oz.</td>
<td>30c.</td>
</tr>
<tr>
<td>5</td>
<td>16c.</td>
<td>3 oz.</td>
<td>35c.</td>
</tr>
<tr>
<td>6</td>
<td>18c.</td>
<td>3 oz.</td>
<td>40c.</td>
</tr>
</tbody>
</table>

### Rubber Putty Bulb

The best for applying liquid putty and white lead when glazing and repairing sash and greenhouses.

**Price,** $1.00 (mail weight 1 lb.)

### Rubber Sprinklers

For sprinkling cut flowers, seedlings, clothes, etc. A pressure on the bulb ejects the water in a fine spray.

**Prices,** straightneck, 7 oz, size 85c.; 12 oz, size, 95c.

### Compound Lever Pruner

The compound lever construction gives great power. Limbs up to 1½ inches in diam. may be cut off with ease; does double the work of any other pruner with less exertion. Blades forged from high grade crucible steel. **Price on 10 ft. pole,** $3.00; 12 ft. pole, $3.25; 14 ft. pole, $3.50; 16 ft. pole, $3.75.

### Waters Tree Pruners

The best pruner on the market. Cuts limbs up to 1 inch in diameter. The spring on handle resets the cutting blade.

**Prices**

- With 4 ft. handle 85c.
- 6 ft. 95c.
- 8 ft. $1.05.
- 10 ft. $1.15.
- 12 ft. $1.25

**Extra Knives,** each 25c.

### Telegraph Tree Pruner

Attaches to pole of any length, operates with a cord; a spring throws knife back in position.

**Prices,** (without pole), $1.15. P.P. 2 lb.
STEEL GARDEN RAKE.

Steel Garden Rakes, 10 teeth, 60c.; 12 teeth, 65c.; 14 teeth, 75c.; 16 teeth 80c.
Fine Tooth Steel Gravel Rakes, 16 teeth, 85c.; 18 teeth, 95c.

AUTOMATIC SELF-CLEANING LAWN RAKE.

A backward motion of the operator will clean all the teeth at once, thus avoiding cleaning the teeth with the fingers. Made of best hickory.
26 teeth, $1.00; 38 teeth, $1.25.
52 teeth, $2.25 each.

PLAIN "ONE-EDGE" PRUNING SAW.

This style is still a favorite with many pruners. The blade being narrow gets among close limbs, and the upper edge being smooth does not cut the upper limb.
14-inch, 70c.; 16-inch, 80c.; 18-inch, 90c.; 20-inch, $1.00.
Price, P.P. 2 lb.

SWIVEL PRUNING SAW.

Very handy for getting among closely branched limbs; blade can be swiveled around in the frame to suit any position required. The handle can be unscrewed and a pole attached when desired.
Price, $1.25, P.P. 3 lb.; extra blades, 60c. each.

SCYTHE SNATH OR HANDLES.

Grass Snaths, extra quality, patent socket, $1.25 each, $12.50 doz.
Bush Snaths, double ring, screw ribs, iron ferrule, $1.25.

SCYTHE STONES AND RIFLES.

Genuine English Talara; round taper ends, 50c. each, $4.00 doz.
“Olive Red-end,” flat stone, 2c. each, 50c. doz.; Rifles, quadruple emery-coated 12c. each, $1.25 doz.

STEEL BOW RAKE.

Steel "Bow" Garden Rakes. The best rake; does not break in middle; 12 teeth 85c.; 14 teeth, 90c.; 16 teeth, 95c.

WOOD HAY RAKE.

Our wood rakes are of superior grade; selected wood; 3 bow.
Wood Hay, 12 teeth, 45c. ea., $5.00 doz.
Wood Lawn, 24 teeth, 45c. ea., $5.00 doz.

GEM DANDELION RAKE.

"GOLF LAWN" RAKE.

This new rake is designed for use on golf courses, tennis courts, and lawns. The blade of saw steel is 16 inches long by 41 inches wide and is curved to hold fine cut grass, leaves, litter, etc. The V-shaped teeth cut off dandelion heads and other weeds preventing them from going to seed. A strong durable efficient rake. Price 65c.

GEM DANDELION AND LAWN RAKE.

A fine toothed sheet metal rake with self cleaner. The stripper being operated by a wire trigger attached to the handle, so the contents can be deposited in a basket without handling. The teeth are curved so they ride over the ground, removing all trash, cut grass, worm casts, dandelion flowers, leaves, etc. For worm casts and dandelions on putting greens, this rake is especially recommended.
Price, 16 inch size $1.75; 24 inch size $2.25.

BOW PRUNING SAW.

CALIFORNIA BOW-SHAPED PRUNING SAW.

Very popular among orange growers but equally useful for all low pruning work. 14-inch saw, 75c.; 16-inch, 85c.; 18-inch, 95c.; 20-inch, $1.10 P.P. 2 lb.

RHODES POLE PRUNING SAW.


CLIPPER GRASS SCYTHES.

Clipper grass Scythes. Hollow ground, 32 inch, $1.25; 34 inch, $1.35; 36 inch, $1.40; 38 inch, $1.50.

IMPORTED GRAPE-THINNING SCISSORS.

Finest quality, imported. Used for thinning out the grapes in the bunches, allowing the remaining ones to develop, $1.25 P.P. 4 oz.

IMPORTED FLOWER-GATHERING SCISSORS.

Finest quality, imported. Cuts and holds the flower, $1.25 P.P. 4 oz.

REVERSIBLE STEEL LAWN RAKE.

Heavily tinned steel teeth. The arched teeth
for leaves and litter and the opposite side for fine cut grass. Twenty-four teeth closely set in a 21-inch head. Price, 60c. each.

REVERSIBLE STEEL LAWN RAKE
WITH TEETH CLEANER.

This is the Reversible Steel Lawn Rake described above with an extra iron bar — perforated for the teeth so it slides up and down quickly cleaning the rake when clogged. Price, with handle $1.00 each.

LIGHTNING DOUBLE-EDGE PRUNING SAW.

Lightning teeth on one side, ordinary teeth on the other. The most popular saw we sell. It can be attached to a pole of any length; prices do not include pole.
Prices
16 in., 80c.
18 in., 90c.
20 in., $1.00.
Price, P.P. 2 lb.

IMPORTED ENGLISH RIVETED-BACK LAWN SCYTHE.

Imported English Riveted-Back Lawn Scythe.

Light and thin broad blades, strengthened by a riveted back, 32 inches, $1.75; 34 inches, $1.85; 36 inches, $2.00; 38 inches, $2.25.

SCYTHE SNATHS OR HANDLES.

With patent fastening $1.25 each.

SHEEP-SHEARING SHEARS.

Standard 5 inch blades, 50c.
Price, P.P. 1 lb.
SWISS PATTERN PRUNING SHEARS

Full polished, best quality crucible steel blades, tempered, ground convex; adjusting nut and regulating ratchet; longitudinal double brass spring; removable handle-clip. Made in 9 inch size.

Each shears individually boxed, with an extra blade, which practically doubles the life of the shears. Price $2.00 pair.

"TROWEL SHANK" GRASS SHEARS.

Solid steel, of finest quality and temper; 7-inch blades. The raised trowel-like handles keep the knuckles off the ground and allow smoother cutting. $1.00 P.P. 2 lb.

LADIES' ENGLISH GARDEN SHEARS.

Blades of the best steel, handles stained and varnished; light and very useful for general trimming in the garden. $1.50. P.P. 3 lb.

FARMER'S UTILITY SHOVEL.

The blade is perfectly flat, rendering it useful in handling manure, snow, etc. Price, 1.25.

Scoop Shovel.

Henderson's Extra Quality, steel, No. 2 (10x 14 inch). D handle, $1.50. No. 3, 11x 15 inch. D handle, $1.60.

POST HOLE SPADE.

A polished concave blade tapering from six inches at point to 5 inches at shoulder. 16 inch, $2.00; 18 inch, $2.25; 20 inch, $2.50.

HENDerson's XX PRUNING SHEARS. (the finest made.)

The highest grade pruners made. Finest steel best temper. The blade is detachable, the ratchet nut keeps them properly tightened up. 9-inch, $1.50; 10 inch, $1.75. P.P. 2 lb.

GRASS EDGING OR BORDER SHEARS.

For trimming the overhanging grass around the edges of walks, etc. Price, 9-inch blades, $6.00 or with wheel, $3.50.

"CALIFORNIA" PRUNING SHEARS.

A good low-priced article. Black malleable handles. Steel detachable blade. 8-inch, 60c. P.P. 1 lb.

LADIES' NICKLE PLATED PRUNING SHEARS.

$1.00, P.P. 1 lb.

LAWN SHEARS.

For cutting grass under shrubs, fences, etc. Price, with two wheels, 9-inch blades, $3.75.

HENDERSON's SOD TAMPER.

Useful in laying new sod—and in tamping back sod that has heaved from frost or other causes—leveling hummocks in Putting Greens etc.—Cast iron 9½ x 9½ inch. wrought iron, with handle 17 lbs. Price, $1.35 each.

SQUARE POINT SPADE.

Henderson's Standard Quality, steel, smooth backs, fully strapped. No. 2, D handle, $1.35; long handle, $1.35. Boy's Spades, 95c.

VEGETABLE SCOOP.

Price, Wire.... $1.65.

The best shovel for handling potatoes, apples, vegetables and roots. Will not cut and dirt sifts out; besides, it is light.

TREE DIGGING SPADE.

A strong, powerful spade strapped the entire length of handle, size 14½ x 7½ x 5½. Ames' extra quality, $3.50.

Nursery Spade, similar to above strapped half way, size 12½ x 7½ x 7½, $2.75.

ROUND POINT SHOVEL.

Henderson's Standard Quality, steel, smooth backs, strapped. No. 2, D handle, $1.35; long handle, $1.35.

SQUARE POINT SHOVEL.

Henderson's Standard Quality, steel strapped, smooth backs. No. 2, D handle, $1.35; long handle, $1.35. Boy's Shovels, 95c.

U. S. SOD LIFTER.

A handy tool for cutting under and lifting sod; solid steel blade; 18-inch shank; D-handle. Price, $1.75.

ENGLISH TURFING SPADE.

For lifting sod evenly, rapidly, and without breaking, $6.00.
HENDERSON’S BRASS SYRINGES.

These Syringes are applicable for all horticultural purposes in the conservatory and garden. They are fitted with Caps for ejecting water in one stream or dispersing it in a fine or coarse spray, as required.

No. A. Length of barrel, 12 ins.; diam., 1 in.; 1 spray rose and 1 jet, $2.75. P.P. 3 lb.

No. B. Barrel 16 ins. long; 1½ ins. diam. 1 spray rose and 1 stream jet, side attachment and elbow joint for spraying under foliage, $4.50. P.P. 4 lb.

No. 2. Barrel 13½ ins. long; diam., 13-16 ins.; 1 coarse and 1 fine spray rose and 1 jet, side attachment, $4.50. P.P. 4 lb.

No. H. Sheet brass Syringe, with fixed spray rose; barrel 16 ins. long; 1½ ins. diameter, $3.00. P.P. 3 lb.

No. 10. Barrel 18 ins. long; diam. 1½ ins.; 1 coarse and 1 fine spray rose and 1 stream jet, with patent valves and elbow joint for sprinkling under the foliage, $7.00. P.P. 5 lb.

No. 11. Same as No. 10, without patent valves, $5.50. P.P. 3 lb.

JAPANNED TIN CASE THERMOMETERS.

8 inch, 35c.; 10 inch, 45c.; 12 inch, 50c. P.P. 1 lb.

SIEVE’S THERMOMETER.

Registers both Heat and Cold.

Price include magnet for drawing registering needles back, 8 inch, $3.25; 10 inch, $3.75; 12 inch, $4.25. P.P. 3 lb.

TREE SCRAPER.

An important tool for scraping diseased bark from trees, removing insect eggs, cocoons, etc., 60c. P.P. 2 lb.

SOLID STEEL TROWEL

The cheapest trowel in the long run, light, strong, durable and perfect “hang” handle cannot come off, 5-inch blade, 45c.; 6-inch, 50c.; 7 inch, 55c.; P.P. 1 lb.

Ordinary Trowels, 5 inch, 15c.; 6 inch, 20c.; 7 inch, 25c. P.P. 1 lb.

HOUSEHOLD THERMOMETERS.

Wood back, natural finish. 8 inch, 50c.; 10 inch, 75c. P.P. 1 lb.

REGISTERING THERMOMETERS.

Minimum or cold registering, 8 inch, wood case, $1.00. Maximum, or heat registering, 8 inch, wood case, $1.15. P.P. 1 lb.

HEART-SHAPED TROWEL.

P.P. 1 lb.

Heart shaped blade 4½ in. wide for planting out plants from large pots, transplanting bulbs, etc. Price, 60c.

“SLIM JIM” TROWEL.


DISTANCE READING THERMOMETERS.

Coppered metal case black oxidized scales white filled figures and graduations. Scale range 20° to 30° below zero to 120° above. Price, 5-in., 55c.; 10-in., 75c.

EXTENSION TOMATO SUPPORTS

32 inches high, 14 inches diameter, of heavy steel wires, will last for years, 25c. each, $2.50 per doz.; Extension Peony Supports. Of heavy galvanized steel wire, 2½ ft. diameter, 2 ft. high, 55c. each, $8.50 doz.

VINE OR WALL NAILS.

Splendid invention for fastening vines to walls, houses, trellises etc., the lead clip being pliable; turn over the vine holding it in place, and will give sufficiently to prevent binding as the vine expands with age. 1 inch per 100, $1.50, P.P. 3 lbs. 1½ in., $1.80 per 100, P.P. 4 lbs. 2 ins., $2.00 per 100, P.P. 5 lb.

PLATE GLASS THERMOMETERS.

Very elegant for either parlor or outside of the window; no wood or metal to get shabby. Bevel edge, white enamel face. Price, includes arms for attaching, 8 inch, $1.25; 10 inch, $1.50; 12 inch, $1.75. P.P. 2 lb.

HOT BED AND MUSHROOM BED THERMOMETERS.

Brass tipped point encloses the temperature bulb; it is simply thrust into the soil or bed. Best grade, $1.75. P.P. 2 lb.

PERFECTION PATENT WOOD.

Syringe. 85c.

26 inches high, 10 inches wide, made of clear straight wood. Can be taken apart and stored when not in use. Solidly made and will last for years. Price, 25c. each, P.P. 4 lbs. $2.50 doz.

LARGE VEGETABLE SLICER.

For slicing, thin or thick, vegetables and fruits, such as cabbage for kraut or sauer, potatoes, beets, turnips, carrots, cucumbers, egg plants, pumpkins, squash, onion, citrus, melon rind, pineapples, apples for drying, etc. Price, $6.00.
WATERING POTS

Regular Style, galvanized iron, 6-quart, $1.00; 8-quart, $1.25; 10-quart, $1.50; 12-quart, $1.75.

French or Oval Shaped Watering Pots.
Easily carried in narrow places. 6-quart, $2.75; 8-quart, $3.00; 10-quart, $3.25; 12-quart, $3.50.

"Common Sense" Watering Pots.
2-quart, $1.50; 4-quart, $1.75; 6-quart, $2.00.

Womerspoon's Galvanized Watering Pots.
With brass fittings and two brass roses, one fine and one coarse, with each pot, 6-quart, $2.50; 8-quart, $3.00; 10-quart, $3.50.

ENGLISH PATTERN WATERING POT.
Made of heavy tin, japanned with two roses, both copper faced—the oval one directs the water upward so it falls in a gentle shower for seedlings. The round one is for ordinary watering; the long spout and arrangement of the handle, permits a long reach. Price, 4-quart, $2.50; 6-quart, $2.75; 8-quart, $3.00; 10-quart, $3.25.

GARDEN TOOLS

LADIES’ AND CHILDREN’S SET OF GARDEN TOOLS
Of good quality, made for use, not toys. Comprises a long handle hoe with 4-inch blade, long handled garden rake with 6 teeth, round pointed spade 8 x 4½ in. blade, towel 5-inch, and Excelsior Weeder five tools in all for $1.75.

YOUTHS’ SET OF HIGH GRADE GARDEN TOOLS
This high quality set is made for business. It contains a 4-prong digging fork, shovel 7 x 9 inch blade; long handled hoe with 5-inch blade, long handled steel garden rake with 11 teeth, 5-inch solid steel trowel, and Eureka Weeder. Six tools in all for $3.00.
THE HENDERSON BALL-BEARING MOWER has high drive wheels, large, open non-clogging cylinders. The spiral of the knives is correctly proportioned to give a continuous cut, leaving the lawn as smooth as if shaved entirely free from the corrugated surface left by other Mowers. The handles are braced and reinforced to prevent twisting and breaking when the mower is held off the ground, and besides the handle is equipped with improved "grips" which keeps the hands in a natural position, gives more power, and is less tiring than a continued grasp, with wrists twisted, on a horizontal grip.

"We have been using one of your 24-inch Henderson Mowers for the past few years, mowing about an acre of lawn at least once a week, and it has cost us just 7½c. for repairs—a record any machine might be proud of."

ESTATE JOHN MURRIN
Carbondale, Pa.

The Henderson Side-Wheel Ball-Bearing "Putting-Green" Mower
Eight-bladed—Close, Smooth Cutting—Easy Running

We offer this mower to Golf Clubs as the very best side-wheel mower ever devised for smooth, close work on putting-greens. It has an eight-bladed revolving cutter working in ball-bearings and speeded high, thus leaving the cut surface of the "green" absolutely free from corrugations, and almost as smooth as a billiard table. The knives can be set so low that they will fairly shave the ground if desired, though on a level, well-rolled green, with close, fine turf, a quarter to a half-inch clip leaves the surface in the nicest condition for putting. A well-known instructor and greenkeeper says: "It is the best mower for putting-greens that I have ever seen either in this country or in Scotland. It cuts the turf so smooth and even that it is like putting on a carpet."

Henderson's "Putting-Green" Mower is a thoroughly high-grade machine, carefully built of finest material, the knives especially being of finest steel. It runs easy, considering the number of knives and fine cut. Guaranteed satisfactory.

Prices (Strictly net; no charge for packing or cartage.)

<1-inch cut... $1.00
2-inch cut... 1.50
2½-inch cut... 1.75

Grass Catcher (extra)...

For "Putting-Greens" the Henderson 3-bladed Ball-Bearing Lawn Mower is Superior to any "Side-Wheel" Mower Made
Pennsylvania Putting Greens or Roller Mower

This mower is unequalled for cutting undulating or wavy greens, also Tennis Courts, Cricket Creases and Other Lawns requiring an exceptionally close and smooth cut. It can also be used as a border trimmer for the ordinary lawn. It is a thoroughly high grade machine carefully built of the very best materials. (See engraving.) Blades. There are six crucible tool steel, oil hardened and water tempered blades.

Gears. The gears are triple, insuring power and speed.

Rollers. Cast iron, 7 inches diameter.

Bottom Knife. Improved curved pattern, tempered, crucible tool steel. Bolted rigidly to the frame, making the adjustment entirely with the Cylinder.

Height of Cut. 3-16 to 1-1/4 inch.

Journal Boxes or Cylinder Bearings. Self-aligning, insuring a perfect cutting edge the entire length of the blade.

Handle. Hard wood. Iron braces on cross bar. 7-inch rollers. 5-inch, six blade cylinder.

Prices (Strictly net; no charges for cartage or packing.)

<table>
<thead>
<tr>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>10-inch cut</td>
<td>$13.00</td>
</tr>
<tr>
<td>12-inch cut</td>
<td>$14.50</td>
</tr>
<tr>
<td>14-inch cut</td>
<td>$16.00</td>
</tr>
<tr>
<td>18-inch cut</td>
<td>$24.00</td>
</tr>
<tr>
<td>20-inch cut</td>
<td>$26.00</td>
</tr>
</tbody>
</table>

Excelsior Roller Lawn Mower

An old reliable lawn mower for those preferring a roller mower which, of course, has some advantages over side-wheel mowers, as in mowing new lawns where the ground is still soft and impressionable, cutting narrow borders, where a side-wheel machine will run off the edge, rolling down worn casts, etc., etc., but to offset these merits, roller mowers do push a little harder.

Excelsior Roller Mowers are durably made with best crucible steel knives and the adjustments are simple and with the 4-bladed revolving cutter is adapted for all lawn cutting. The 6-bladed cutter is for extra fine work and for golf courses, tennis courts, etc., but runs harder.

Prices (Strictly net; no charge for cartage or packing.)

<table>
<thead>
<tr>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-inch cut</td>
<td>$13.00</td>
</tr>
<tr>
<td>14-inch cut</td>
<td>$16.00</td>
</tr>
<tr>
<td>18-inch cut</td>
<td>$17.50</td>
</tr>
</tbody>
</table>

If 6-bladed cutter is desired, include $1.00 extra, any size; Grass Catcher and Deflector $1.00 extra, any size.

Ten-Ship’s Golf Wonder Mower For Putting Greens

An "Roller" mower, especially designed to mow "greens" close and evenly. It is considered by green keepers who have used it as one of the best of the roller mowers for the purpose. It may be set to cut so close that the green is virtually chipped or may be set to cut at any desired height, leaving the surface as smooth as a billiard table.

Prices (Strictly net; no charge for cartage or packing.)

<table>
<thead>
<tr>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>16-inch cut</td>
<td>$22.00</td>
</tr>
<tr>
<td>18-inch cut</td>
<td>$24.00</td>
</tr>
<tr>
<td>20-inch cut</td>
<td>$26.00</td>
</tr>
</tbody>
</table>

Grass Catcher, with fun elevator, etc., complete for any size mower, $8.00 extra.

The Philadelphia "All Steel" Lawn Mower

This all-steel, Style A, Philadelphia mower is about the last word in lawn mower construction. The frame, being made of steel in place of cast iron, is much lighter, stronger and not liable to break any place. The drive wheels, 10 inches in diameter, give great traction power and spin the 4-bladed 61/2-inch revolving cutter with great speed, thus leaving a smoothly cut surface. The train of three gears keeps the cutters down to their work and prevents "bobbing up" in high grass. The roller bearings aid in the phenomenal ease with which this light and practically indestructible mower is operated.

Prices (Strictly net; no charge for cartage or packing.)

<table>
<thead>
<tr>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-inch cut</td>
<td>$16.00</td>
</tr>
<tr>
<td>17-inch cut</td>
<td>$16.50</td>
</tr>
<tr>
<td>19-inch cut</td>
<td>$18.00</td>
</tr>
<tr>
<td>21-inch cut</td>
<td>$20.00</td>
</tr>
</tbody>
</table>

"Runaway" High-Wheel Lawn Mower

A first class high-wheel lawn mower at a popular price, the four revolving knives give a continuous cut; made of best materials, easy running and fully warranted.

Prices (Strictly net; no charge for cartage or packing.)

<table>
<thead>
<tr>
<th>Size</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>12-inch cut</td>
<td>$3.25</td>
</tr>
<tr>
<td>14-inch cut</td>
<td>$3.25</td>
</tr>
<tr>
<td>16-inch cut</td>
<td>$3.75</td>
</tr>
<tr>
<td>18-inch cut</td>
<td>$3.75</td>
</tr>
<tr>
<td>20-inch cut</td>
<td>$3.75</td>
</tr>
</tbody>
</table>

Metal Bottom Grass Catcher, for any size "Runaway" Mower (extra). $1.50
THE NEW IMPROVED HENDERSON
Horse Lawn Mower and Roller Combined

The New Improved Henderson Horse Lawn Mower

We consider this to be the best horse power Lawn Mower on the market. It is simple in construction and very durable, the best steel and iron being used in its manufacture, and is finished in the most perfect manner.

A lever beside the driver enables him to cut grass any height, high or low from the ground and to easily and quickly raise the mowers in or out of gear without stopping the horse or leaving his seat. A slight movement of a small lever throws the mower in or out of gear without stopping. The side draft rod is attached to the left side of the mower keeping the horse and preventing the trampling down of the grass which is to be cut. The revolving knives, five in number, are "high speeded," making a continuous cut and leaving the surface of the lawn as smooth as velvet. The rollers, three in number, 15 inches in diameter, with triple pails in each roll make the most powerful and instantaneous drawing mechanism ever put in a lawn mower. This feature maintains the motion of the blades even when turning sharp corners, a great advantage over other double roll mowers whose knives have no motion when turning corners. The self-aligning Journal boxes are a very valuable improvement and prevent cramping of the journals, a very common and dangerous fault in many horse mowers. The seat rest is spacious and prevents cramping of limbs and accidents through the feet slipping into the revolving cutters.

These mowers will weigh, including shafts and driver, 900 to 700 pounds, thereby rolling the lawn at the same time it is cutting; or the cutter may be thrown out of gear, and the machine used for rolling alone.

Prices for the New Improved Henderson Horse Lawn Mower and Roller combined, complete with Tool Box, Seat, Shafts, and side Draft Attachment:

- 30-inch cut, net weight 487 lbs., packed weight 625 lbs. .................................................. $80.00
- 35-inch cut, net weight 505 lbs., packed weight 665 lbs. .................................................. 90.00
- 40-inch cut, net weight 520 lbs., packed weight 695 lbs. .................................................. 100.00

Townsend's "Triplex" Horse Lawn Mower

For large lawns, parks, golf courses, etc., it is a boon, cutting a swath over seven feet (86 inches) wide; doing the work of two motor mowers at an eighth of the expense. The series of three mowers adapt themselves to uneven surface, mowing over ridges and through hollows as well as level ground. Simple durable and light running. Easily drawn by one horse—all day long—and operated by any man capable of driving.

With the Triplex the man and one horse will cut more grass in a day than three men and three horses with three ordinary lawnmowers, and will cut as much grass as any two motor mowers, cut it better—without crushing the life out of soft turf—and at a small fraction of the cost.

The Triplex consists of three lawn mowers yoked together, one abreast, and one following in the center, lapping each front mower, thus cutting a clear swath sixty-six inches wide. As the three mowers work independently of each other, and are so connected from their centers to the main frame that they can seived, rise and fall, they therefore adapt themselves to the contours of the ground—rolling over ridges and hollows—keeping the grass as perfectly as on the level, and better than is possible with a long straight-edged bottom knife mower of any kind.

On rolling ground the Triplex Mower shows its qualities to perfection, holding to a side hill where a motor mower will slide sideways. It is of extremely light draught, due partly to ball bearings and partly to the excellence of design, material and workmanship.

Three levers at the driver's right enable him to lift any one or all of the cutting apparatus from the ground to avoid obstructions, or in going to and from the field. A small knob in the center of each wheel operates the clutch throwing the machines in and out of gear.

The mower is provided with a spring seat, ample foot rest, shafts, iron toilet box with tools and oil can. Net weight, 800 lbs.

The mowers are packed singly in crates, the frame work is shipped assembled. It is only the work of ten minutes to assemble the machines and attach the shafts.

Price, $275.00 net, F. O. B. New York.
The Universal Lawn Trimmer.

The latest and best machine that we know of for trimming grass close up to the fence or wall, thus reducing hand work with shears to a minimum. It will also be found handy for trimming up around trees, under bushes, etc., and in cemeteries it will be a boon. It cuts 6 inches in width.

This Lawn Trimmer is a high-grade machine in every respect with self-adjusting ball bearings preventing any "end play," thus keeping the knives always set, wearing to the same bevel and therefore always sharp. The handle being on line with the driving wheel overcomes the tendency of the machine to run sideways—so annoying in other machines designed for a similar purpose. Price, $5.50.

The Utica Lawn Trimmer.

A similar but lower priced machine than the Universal, and designed for the same purpose. It trims close up to borders and edgings and is a great help in keeping lawn and grass plots trim.

Price, $4.00.

Special Golf-Green Sweeper.

This is a practical necessity for Putting Greens, Bowling Greens, Grass Tennis Courts, etc. It keeps the grass and turf in perfect playing condition. The machine is the same as the lawn sweeper described above, excepting that the revolving brush is composed of alternating tufts of palmetto fibre and spring steel wire—thus combining the brush and comb method of cleaning the turf clear to the roots and free from worm casts and ant hills as well as litter. Price, 28-inch Special Golf Green Sweeper, $18.00. Rubber Tires Extra, $2.00.

The Pennsylvania Rotary Lawn Rake.

This machine will remove from the lawn not only the cut grass, but all sorts of litter leaves and trash, leaving the grass standing up right and free from foreign matter that prevents the sunlight and dew from getting to the roots.

The action of the three revolving 24-inch wire-tooth rakes is beneficial to the turf. It raises up the low growing crab, grass and other spreading weeds, allowing the lawn mower to cut the seeds pod off before they ripen, thus preventing their reappearing the following year. As these weeds and grasses are annuals, it is only necessary to prevent their going to seed for a season to get rid of them.

This machine is easy to operate and, with it, one man will do more and better work than four men with hand rakes.

Price, 24-inch machine, $17.00. (Weight packed for shipment, 90 lb.) Price, 36-inch machine, $29.00. (Weight packed for shipment, 150 lb.)

Lawn Scarifier.

Here is what every gardener and householder wants, or any one having a grass plot or lawn. Father or mother, son or daughter will take pleasure in breaking up the bare spots, sowing the "Henderson" Lawn Grass seed, and presto in a few weeks there is a green velvet carpet around your home. It is also of great value for use in city parks, on golf courses, lawn tennis courts, polo fields, hunt and race courses, in fact any place where grass has become worn out and bare.

Price, $5.00, or with tamper attachment, $5.50.

The "Everwear" Lawn and Walk Sweeper.

A large carpet sweeper-like machine, fitted with a revolving reel, 12 inches in diameter, composed of a series of eight Palmetto fibre brushes—the toughest and most durable fibre known and absolutely unaffected by water. All cut grass, leaves, litter, twigs, small stones, etc., are swept into the collecting box, which is dumped by simply pulling the chain. The machine can be adjusted for close or light sweeping adapting it for lawns, tennis courts, putting greens, etc., as well as walks and stable floors. The brush reels automatically take up the wear of the fibre brushes. The drive wheels are 15 inches in diameter, giving a powerful spin to the reel and pushing as easily as a lawn mower and reduces the labor of hours to a few minutes. Lawns swept with this sweeper have a bright, clean velvet-like appearance.

Price, 24-inch Lawn Sweeper, $14.00; 28-inch Sweeper $15.00.

Rubber Tires Extra, $2.00 pair.

Planet, Jr., Grass Edger.

This little tool trims the turf around the edges of the flower beds, walks, roads, etc., giving a finished appearance to the lawn.

The revolving cutter does perfect work, either on a curved or straight border, edging accurately at just the correct angle and at the speed of a mile an hour, while the hoe cleans the bottom of walk.

The hoe can be removed if desired. The small tooth is for cement and stone walks.

Price complete, $7.00.
THE "VELVET LAWN" SEEDER.

Valuable machines involving new principles. Puts seed IN either new ground or old sod. For renewing or thickening the grass and renovating bad spots in lawns, tennis courts, putting greens, etc., without replowing, redigging, or marring the surface.

This is a valuable machine for seeding new lawns and doubly valuable for renovating worn-out lawns and bad spots. In Greens, Tennis Courts, etc., and without redigging or plowing, and without marring the surface. It puts the seed IN newly prepared ground OR IN old sod—covers it and rolls it.

The seed is evenly distributed, wind or no wind, much or little as may be desired, and at any required depth. The machine is adjusted by the operator. The even distribution of the seed and its uniform depth insures an even stand of grass—not too thick in some places and too thin in others. The illustration on the right shows how the above claims are accomplished. The revolving steel discs cut a narrow gash or trench in the ground or sod—the seed is forced through the front of whirler which directs the seed into the trench when at its deepest immediately under the cutting discs, the roller then follows closing up the gash and of course covering the seed. There are eight of these discs with their accompanying seed spouts. They sow 2 inches apart; thus the machine sows a strip 16 inches wide as fast as a man can walk. It will sow and cross sow an area 50 x 150 feet in thirty minutes. As each disc, seed spout and roller work individually they therefore adapt themselves to inequalities of the ground, insuring a perfect stand of grass, and the cutting (not treading) of the old sod in this way has proven beneficial, a sort of a cultivation that relieves its hide-bound condition.

The machines have "force feeds" one to each disc and seed spout—every feed sows an equal amount of seed and a gauge regulates the quantity sowen whether the machines are going fast or slow. The flow of seed can be shut off by moving a lever.

The seed must grow because it is IN the ground and not on top of it.

No seed is wasted. Birds cannot get it, rain cannot wash it nor wind blow it away.

In new ground or soft turf it is easily operated by one man but in old hard sod it may require another person to pull. Price $20.00.

Henderson's Sod Perforator.

An invaluable tool to aid in renovating bad spots in lawns, grass plots, putting greens, etc.

It is operated like a rammer, the lower surface being provided with spikes which puncture the sod, leaving small holes into which much of the seed or fertilizer drops when broadcasted, thus preventing its being blown or washed away.

The holes are filled with soil by the first rain, which covers the seed so it can germinate. Price, $3.50.

HENDERSON'S "CHAMPION" SOD CUTTER.

A horse-power machine for cutting sod in long strips; an important and valuable implement for golf grounds parks and other places which have much sod laying or repairing to do. It cuts the sod of uniform width and thickness, in any length, so that it is particularly adapted to giving solidity to slopes in cuts and on embankments, working equally well on level or uneven surface, cutting both ways with the land, and leaving no sod uncut, being light of draft, easily managed, strong, neat and durable. It is the best and cleanest sod-cutting machine in America.

Has a Reversible Knife made of one piece of steel. While one side dulls, the opposite edge is getting sharpened; cannot get chocked. An Adjustable Roller regulates the thickness of the sod from one-half inch to two inches; the front roller swings back under the guide-shoe and takes the weight when the machine is not cutting. The guide-shoe can be changed to either side in a minute; no friction or injury to the grass. The knife can be cleaned without turning over the machine.

One machine will cut from 30,000 to 40,000 square feet per day, doing the work of forty men; the expense saved between cutting by hand and with horse power in one day is enough to pay the price of our machine. Instructions for operating furnished with every machine. Price, $27.00. Extra knives, $1.00 each.

THE McINTOSH LAWN CULTIVATOR.

A new and splendid invention for improving and repairing lawns, putting greens, grass tennis courts, etc. It pushes as easily as a lawn mower, cutting narrow almost invisible grooves in the turf 3/4 of an inch apart (by removing every other knife 1 1/8 inches apart) and 1/2 to 2 inches deep as set over a 12-inch strip as fast as a man can walk. This enables seed broadcasted either before or after it is to be brushed or rolled in to the hooved soil in the grooves where the grass can germinate and get a root hold and not be dried out, washed or blown away as too often is the case when grass seed is merely broadcasted over a non-scufified turf. There are 16 knives, 3 1/2 inches long made of the finest Sheffield steel. They are perfectly straight, easily removed for sharpening and adjustable to take up the wear until only 2 or 3 inches long when they may be quickly replaced by a new set. These knives slant backwards making a draw cut which does not disturb thin sod nor tear it up and expose the roots as often happens when a scarifying rake is used.

Other benefits from the use of the Mcintosh Lawn Cultivator: It cultivates, loosens and aerates hard surfaces and "hide bound" soil, increases the root joints and allows the roots to spread thereby making a thicker growth of grass and consequently of finer texture. It also permits water and fertilizer to reach the roots where seeded and besides eventually eliminates creeping crab grass,grounding etc., by cutting them into short joints and removing the seed bearing stems. It is also effective for dandelion and plantain, cutting the large leaves and crowns so the grass can grow close up to the roots and smothering them out. These benefits are necessary to cut into the turf deeply, just enough pressure should be given to cut through the grass mat. Price $20.00.

"Please send at once one more Mcintosh Lawn Cultivator. Have used the one purchased this spring with great success and think they are indispensable for use on lawns and greens,"

BERT KROOSTAD, Professional, Bridgewater Golf Club, Chicago, Ill.
THE HENDERSON

Cast Iron Water Ballast Roller.

The advantages of a roller, the weight of which can be increased or lightened at pleasure, can scarcely be over-estimated. Often on light or sandy soil, or on newly made lawns, or in early spring when the ground is moist or after a rainy spell, a lighter-weight roller is a necessity: then on thick soil or on hard soil, on walks and roads, a heavy roller is needed. With a Henderson Water Ballast Roller one can secure any weight desired, between minimum and maximum, by simply removing the thumb-cap from each end and filling the two hollow sections with as much water or sand as may be needed, which is easily and quickly done with a hose or through a funnel, and the roller is as quickly emptied. The inside being heavily galvanized, it will last for years.

These are perfect rollers, and do perfect work on lawns, tennis courts, golf greens, roads, walks, etc. They are high-grade in every respect, being carefully manufactured of best material, and the diameter is large, insuring a lighter draft for a given weight than is usual.

The Henderson Patent Water Ballast Roller for man power. Weighs 300 lbs.; loads up to 600 lbs.; tracks, 24 inches, diameter of drums, 24 inches; counterbalanced handle, stands erect when not in use. Price, $29.00.

<table>
<thead>
<tr>
<th>No.</th>
<th>Diam.</th>
<th>Length</th>
<th>Sections</th>
<th>Weight</th>
<th>Water Filled</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>WB 5</td>
<td>18 in.</td>
<td>24 in.</td>
<td>1</td>
<td>80 lbs.</td>
<td>310 lbs.</td>
<td>$12.00</td>
</tr>
<tr>
<td>WB 7</td>
<td>24 in.</td>
<td>24 in.</td>
<td>1</td>
<td>115 lbs.</td>
<td>500 lbs.</td>
<td>$17.00</td>
</tr>
<tr>
<td>WB 13</td>
<td>24 in.</td>
<td>32 in.</td>
<td>2</td>
<td>160 lbs.</td>
<td>650 lbs.</td>
<td>$21.00</td>
</tr>
<tr>
<td>WB 15</td>
<td>24 in.</td>
<td>32 in.</td>
<td>2</td>
<td>140 lbs.</td>
<td>500 lbs.</td>
<td>$21.00</td>
</tr>
</tbody>
</table>

If weights to hold handle erect are wanted add $1.50 per roller.

Henderson's Superior Iron Hand Rollers.

These are very superior Rollers, the edges are beveled to prevent marking, the faces are ground smooth so they will not pick up and carry lumps of earth, the axles are of steel, the sections fit closely and the handles are of our improved design, will not break and are counterbalanced so they will always up from the ground, clean and out of the way.

From 300 to 500 lbs. is the weight chosen for one-man power for average level lawns. Remember that the heavier the roller used on your lawn the finer your care will have.

Weight Boxes can be supplied on any roller larger than number 3, at an extra price as quoted.

<table>
<thead>
<tr>
<th>No.</th>
<th>Diameter</th>
<th>Total Length</th>
<th>Actual Weight</th>
<th>Net Prices</th>
<th>Weight Box Extra</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>15 inches</td>
<td>15 in. in 2 sec.</td>
<td>150 lbs.</td>
<td>5.50</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>22 &quot; in 3 &quot;</td>
<td>300 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>20</td>
<td>16 &quot; in 2 &quot;</td>
<td>200 &quot;</td>
<td>8.00</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>20 &quot; in 1 &quot;</td>
<td>200 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>20 &quot; in 1 &quot;</td>
<td>200 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>20</td>
<td>24 &quot; in 3 &quot;</td>
<td>300 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>20</td>
<td>20 &quot; in 2 &quot;</td>
<td>200 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>8</td>
<td>20</td>
<td>30 &quot; in 3 &quot;</td>
<td>300 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>24</td>
<td>30 &quot; in 3 &quot;</td>
<td>300 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>24</td>
<td>30 &quot; in 3 &quot;</td>
<td>300 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>24</td>
<td>30 &quot; in 3 &quot;</td>
<td>300 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>28</td>
<td>30 &quot; in 3 &quot;</td>
<td>300 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>28</td>
<td>30 &quot; in 3 &quot;</td>
<td>300 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>28</td>
<td>30 &quot; in 3 &quot;</td>
<td>300 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>28</td>
<td>30 &quot; in 3 &quot;</td>
<td>300 &quot;</td>
<td>12.50</td>
<td></td>
</tr>
</tbody>
</table>

Henderson's Wooden Putting-Green Roller.

A roller especially made to meet requirements in rolling and keeping in good condition both grass and clay "Putting Greens." It is used and endorsed by the green keepers of some of the best golf courses in the United States. The roller is four feet wide, having four 12-inch sections 10 inches in dia. The ameter made of turned rock maple the ends of each section being banded with steel to prevent splitting. The entire face surface is very true leaving no ridges or indentations on the "green." The width is sufficient to go over the green quickly, keep it level, and the weight, 150 lbs., just right for convenience in handling by one man and yet effective for rolling. It turns readily without scraping the green. This roller is also very useful for firming the soil when making up vegetable garden beds both before and after seeding. Price, $17.50.

Cast Iron Putting-Green Roller With Detachable Scrapper and Collecting Box.

This is undoubtedly the most efficient roller on the market for Putting Greens. The cylinder is made of cast iron in 4-inch sections making the roller 40 inches wide. It is light in weight, easy to handle and in four sections. A new feature of this roller is that it is fitted with a scraper and collecting box for sticky worm casts—which when filled may be removed and emptied. This the cylinder is being continually cleaned while the roller is being used. A man can traverse the greens with great rapidity with this roller, and can easily keep them in good condition during the hot season. This roller is also very useful for rolling garden beds after seeding. Weight, 190 lbs. Price, $25.00.

SUPERIOR IRON HORSE ROLLERS.—For use on Lawn, Field, Golf Course, Roads, etc. See page 8.
Lawn and Stable Barrow.

Our Lawn and Stable Barrow is designed for extra heavy work and has a large capacity, adapting it for manure, lawn litter, etc.; box 25 inches wide by 32 inches long by 18 inches deep. Price, $7.00.

Wheelbarrow Leaf Rack.

A handy device for collecting leaves and litter. It fits on any wheelbarrow with removable sides. It is made of galvanized wire bolted to a wooden base; capacity about 10 bushels. Price, (rack only) $5.00.

The "Henderson" Barrow.

This barrow is light, strong and durable, has a steel wheel and axle and oil-tempered springs, and we do not hesitate to say that it is the best barrow on the market and as well painted, striped and varnished as a buggy. While its carrying capacity is from 300 to 500 pounds, its weight is less than 40 pounds; fully warranted to stand the roughest usage.

The tire being wide makes it more desirable for lawn and garden use and a stronger wheel for the pavements. The shoe brace, running from the rear of the body to the foot of leg, is a great protection to the leg against breakage and prevents it from sinking into soft ground.

The barrow is made of selected material, and will outlast several of the cheaper, heavy, clumsy barrows.

Weight, 50 pounds; body, 26 inches by 22½ inches by 12 inches deep; diameter of wheel, 20 inches; width of tire, 1⅛ inches.

Price, $6.00.

Standard Rubbish Burner.

A very convenient basket-like arrangement, durably made of galvanized wire with heavy iron supports, for the disposal of leaves, rubbish, papers, etc., in the open air. Made in two sizes.

Price, Small size, 15 in. dia., 24 in high... $3.50
Large size, 20 in. dia., 35 in. high... 6.50

Revolving Sod Trimmer or Border Cutter.

A splendid tool for trimming the turf around the edges of walks and flower beds. A revolving knife enables the work to be done with rapidity. Price, $1.75.

To Operate the Revolving Sod Trimmer

The forward hand holding the tool should rest against the forward leg just above the knee and the knee should assist in pushing the trimmer (as is sometimes done in shoveling earth); this prevents the knife from cutting in too deep.
Lawn Sprinklers

Lawns need an abundance of water to enable their rich luxuriance to be maintained during hot dry weather. If the soil was originally prepared very deeply to induce deep root action, the necessity for artificial watering is less pronounced, but lawns intelligently laid down in this manner are in the minority in this country. It is therefore advisable on lawns with the average thin turf to water or "sprinkle" frequently. In such cases a good lawn sprinkler is a necessary adjunct, being far superior to a hose nozzle. The latter usually throws too strong a stream, eventually washing the earth from the grass roots leaving them exposed to the injurious effects of the hot sun, thus causing the grass to burn up. With a lawn sprinkler the same flow of water is broken up and uniformly distributed over a large area in the form of fine gentle rain, thoroughly saturating the ground covered without any injurious washing.

Campbell Automatic Sprinkler

is constructed of brass, with the exception of the ball-bearings which are bell metal and bronze. The machine has two discharge tubes, and the water being forced under pressure from the stand pipe through the sprinkler, is projected a great distance, the machine being revolved by the reaction of the atmosphere against the stream. This, in emerging from the small tube, is broken up and evenly distributed at a considerable distance from the stand pipe, in a circle of 50 to 60 feet in diameter. Price, $3.50.

Henderson's 4-Arm and 8-Arm Lawn Sprinklers

This is the best lawn sprinkler made. It can be attached to hose and placed anywhere on the lawn, where it serves the double purpose of a beautiful fountain and of thoroughly saturating the grass or garden. The water is distributed fine and in drops over an area of 60 to 100 feet in circumference, according to the water pressure. An ornamental standard, about four feet high, is surmounted with long perforated arms, which rotate, so the beautiful sprays are constantly changing. Prices, 4-arm sprinkler, $3.50; 8-arm, $4.00.

Ball and Basket. This fits on top of the Henderson sprinkler, and the stream of water keeps the silvered ball dancing on its summit in the air. When the ball falls the basket catches it, and it rolls into the center and is again raised by the water. Price, $3.50 extra.

The "Shower" Lawn Sprinkler.

One of the most satisfactory lawn sprinklers we offer. It is very simple—no parts to revolve, squeak, clay, or get out of order. No arms to break off. It is a round box-like affair—about 3 inches in diameter by 1 in. in depth with a turbine arrangement inside which gives the water passing through a swirl causing it to pass through the simple opening and be distributed over a circular area 25 feet or more in diameter according to the water pressure. The water descends evenly from center to circumference in the form of fine rain. Price, on stand $2.75 (mail $2.50) without stand, to be used as a nozzle, $1.25 (mail weight 1 lb.).

The Skinner "Lawn Mist" Irrigator.

This is virtually the famous "Skinner Irrigation System" on wheels and is therefore portable and may be placed and moved anywhere on the lawn or in the garden where it can be connected to the garden hose. Its advantages are that it waters a large area without little attention and the water is distributed evenly and gently in a fine spray which does not pack nor crust the ground nor wash soil from the roots of grass or plants, besides the chill is taken off the water for the minute drops absorb warmth from the air before descending and also cool the atmosphere. The refreshing effect on a sultry night being most noticeable. The Skinner Lawn Mist Irrigator is a length of galvanized pipe in which are fitted about every three feet apart, clusters of small spray nozzles so arranged that the distribution of water is entirely uniform the entire length of the pipe—and over a width of from 16 to 20 feet according to the volume and pressure of the water supply. A 12 foot section of pipe is fitted to 4 sets of nozzles, a 15 foot section to 6 sets and an 18 foot section to 8 sets of spraying nozzles. A 15 foot length operating under a 30 lb. pressure will distribute about 5 gallons of water per minute, other lengths in proportion. Where the water supply and pressure is sufficient two or more lengths of pipe may be connected and operated at one time and if the extra lengths are fitted with our "flexible couplings" the pipes may be placed at different angles as may be desirable. The Skinner "Lawn Mist" Irrigator works best with a water pressure of 30 lbs., or more though very satisfactory results are given with pressures as low as 20 lbs. Each section is fitted to a pair 2-wheel truck at one end and a shoe runner at the opposite end. Coupled for 1 hose.

Price, per 12 foot section, $12.00; 15 ft. section, $13.50; 18 foot section, $15.00. Flexible coupling to connect two sections, 75c. each.
“Water Witch”
Lawn Sprinklers.

An effective device for sprinkling lawns, gardens or flower beds. The water flows with unimpeded force and is divided and deflected by the two lips of the swivel piece, which it causes to revolve rapidly, scattering the water in fine drops and evenly over a circular area of 25 to 40 feet diameter. It works more satisfactorily with a very low pressure of water than any sprinkler we know of.

Price, without stand (i.e., with spout to stick in the ground [see cut]). 50c each, P. P. 1 lb.
Price, with stand, $1.20 each. P. P. 3 lb.

Columbia” Three-Arm Lawn Sprinkler.

This fills the want for a low-priced arm Sprinkler; it is compactly and strongly made with phosphor-bronze bearing and will cover a space 48 feet in diameter with suitable pressure of water. The top and arms are brass, stand and legs of iron handsomely japanned. The water flows freely through an unobstructed channel, so there is no clogging—it stands 12 inches high.

Price, $1.60 P. P. 3 lb.

The Sunset Sprinkler.

Does the work of two sprinklers. When the little thumb nut is screwed up the Sunset covers a perfect half circle, enabling the user to give his lawn a thorough drenching right up to the edge of the sidewalk without wetting the walk itself. When the little thumb nut is screwed down the Sunset sprinkles a full circle, gently but thoroughly, covering an area 25, 30, or 35 ft. in diameter, depending on the water pressure. It can be easily dragged around the lawn without tipping.

Price, $1.35. P. P. 3 lb.

The Ring Lawn Sprinkler.

The simplest lawn sprinkler made—on revolving parts to wear and get out of order or leak. Easily moved about the lawn—made of polished brass—light, durable and economical. Price, 75c. P. P. 1 lb.

Henderson’s “Siamese” Lawn Sprinkler Attachment.

By using these, several sprinklers can be used at one time providing the pressure and volume of water are sufficient. A 3-in. hose and 30 to 40 lb. pressure will operate 3 sprinklers, a 4-in. hose and 50 lb. pressure, 4 sprinklers; with 1-inch hose and a good pressure, 6 sprinklers can be operated satisfactorily. This method of watering is valuable for thoroughly saturating large areas of lawn or garden. Price, for 3-in. hose, 75c. P. P. 1 lb.; for 1-in. hose, $1.00; P. P. 1 lb.

Universal Lawn Sprinkler and Fountain.

This Combination Lawn Sprinkler and Fountain when in operation on the lawn is very attractive. The nickel plated arms revolve distributing the water in rain like drops over an area of 25 feet or more in diameter according to the water pressure. In addition to this the central oval spray cover causes some of the water to be thrown up forming a beautiful umbrella shaped fountain.

Price, $2.75 each. P. P. 4 lb.

The Campbell Portable Oscillating Irrigator.

This Irrigator is made in two lengths, 8 and 14 feet. The distributing pipe is self-oscillating throwing the water and breaking it into a fine spray on both sides and evenly distributing over a strip 50 to 70 feet long according to the water pressure—20 to 40 lbs.—and the width of the machine. It may be adjusted to throw water either on one or both sides as desired.

These oscillating irrigators are light—the 8-foot machine weighing only about 30 lbs. and therefore are easily moved from place to place on the curved skids, wheels not being needed.

For watering lawns and gardens it is unequaled. Couplings fitted for 3/4 inch hose.

Price, 8-foot machine, $16.50; 14-foot machine $28.00.

The Turbo Irrigator. For Lawns, Gardens, Golf Greens, Etc.

This sprinkler, mounted on its tripod, may be placed anywhere and coupled to garden hose will water an area 25 to 50 feet from the center or 150 to 300 feet in circumference, according to the water pressure. A single stream, broken into a rain of drops and spray is thrown from the nozzle, which the mechanism causes to rise and fall as it is slowly revolved around the machine, so that every portion of the ground covered is thoroughly and evenly watered from center to circumference. Price, $15.00.
Henderson's “Best Para” Rubber Hose.

This is the highest grade of garden hose, being made entirely from New Para Rubber, and will outlast cheap hose three times over. We guarantee it to stand a 300-pound water pressure, and it will be as resilient in three or four years time as when new, while cheap hose of that age will be hard and rotten. Every length of Henderson’s “Best Para” Hose is fitted with the new watertight couplings, without extra charge.

(Hose is furnished only in 25-feet and 50-feet lengths; the sizes 1/4 and 1 inch refer to the internal diameter of the hose.)

1/4-inch hose, per 25-foot length, $4.75, per 50-foot length, $9.00. 1-inch hose, per 25-foot length, $7.00; per 50-foot length, $13.00.

ALL IRON HOSE REEL.

Note position of reeling and unreeling hose. The All Iron Hose Reels are constructed entirely of iron, and are indestructible; light in weight, frictionless, and the wheels being high make it easily manipulated; these reels cannot tip over when unreeling and there is no weight of hose to carry on the bundle.

No. 10, 21-in. holds 100 ft. 1/4-in. hose $3.60
No. 20, 24 “ 150 “ 1 “ 3.85
No. 30, 36 “ 500 “ 1 “ 5.75

BENT LEG HOSE REEL.

The best wooden reel made—not easily tipped over. The ratchet prevents unwinding unless it is desired to throw back the clutch.

It holds from 100 to 150 feet of 1/4 in. hose. Price, $2.75.

SIMPLEX HOSE REEL.

A stationary reel to be attached to wall or side of a building or fence in any convenient place. Just the thing for small gardens where a portable reel is in the way, and where only 25 to 50 feet of hose is used. The smallest diameter of the arms is 12 inches, and when filled with 50 ft. of 1/4 in. hose, the outside diameter is about 22 inches. The Simplex reel is shipped “knocked down” with all necessary parts and screws to put together and fasten up. Mail weight 6 lbs. Price, $1.75.

THE KINNEY LIQUID MANURE PUMP.

For applying liquid manure this pump has no equal. Enough labor is often saved in feeding a house of plants once to pay for the pump. The water pressure does the pumping. Being made entirely of brass and nickel plated, these pumps are not corroded by chemicals and do not wear out.

It will apply from 5 to 15 gallons of liquid fertilizer a minute. There is no waste. You screw the pump to the faucet, put the end of the suction hose into a barrel or tank of clear liquid manure, attach the three-fourths inch discharge hose, open the faucet and go the end of the hose. The liquid manure follows, and will keep coming as long as you want it, or until the supply in the barrel or tank is exhausted—provided the liquid manure is reasonably free from course matter which would clog the pump. The Kinney Pump weighs only 15 ounces. Price, $2.00, mail weight 1 lb.

“Standard Quality” Rubber Hose.

This is a grade that is often sold as the “best.” It is a good hose and will stand a 100-pound pressure. Each length is fitted with the regular couplings, without extra charge. For 1/4-inch Spray Pump Hose and Tubing see below.

1/4-inch Standard, per 25-foot length, $3.50; per 50-foot length, $6.50.
1-inch Standard, per 25-foot length, $5.00; per 50-foot length, $9.50.

Spray Pump Discharge Hose.

Cut any length, 10 ft. up to 50 ft. 1/4 inch bore. 13c. per foot (coupling extra 2c. set). 1 inch red tubing 13c. per foot, cut any length. 3 to 50 foot Couplings extra, 20 cents per set.

Hose Draining Reel and Lawn Sprinkler.

The life of hose is considerably lengthened when regularly and thoroughly drained. On this new reel hose may be wound in gradually ascending coils so that it naturally self-drains when placed in the vertical position shown in the illustration, though when reeling and unreeling the hose the truck is placed in a horizontal position.

This reel is also equipped with a splendid lawn sprinkler head, rendering it doubly useful.

Price, No. 1, for 50 ft., 1/4-inch hose, $4.50. No. 2, for 100-ft., 1/4-inch hose, $5.00.

“HOLE-PROOF” HOSE HANGERS.

“Hole-Proof” Hose Hangers drain, dry and protect your hose when in use; preserve it when stored; insure it against holes, cracks and checks, and double its life and usefulness.

Compact, convenient and inexpensive. Carries 100 ft. hose, 75c., mail weight 5 lb.

BALL AND SOCKET HOSE HOLDER.

A most practical and efficient hose holder. It may be stuck anywhere and the nozzle may be pointed in any direction or at any angle, by simply operating one thumb screw, which fastens the ball and socket joint.

Price, 75c. Mail weight 1 lb.

GEM NOZZLE HOLDER.

For watering lawns and flower beds.

The hose is held firmly and can be adjusted to any elevation in an instant.

25c. each. Mail weight 1 lb.
BRASS HOSE NOZZLE.

With stop-cock, spray rose and stream. Price, 1/4 inch hose, $1.25 for 1 in., $1.50 P.P. 1 lb.

THE "GRADUATING" SPRAY NOZZLE.

Will throw a coarse or a fine spray or a solid stream. Price, 1/4 inch, 65c.; 1 inch, 95c. P.P. 1 lb.

FLORISTS' AND GARDENERS' HOSE SPRINKLER.

A wide face nozzle. The holes are small and numerous so that a copious yet gentle shower is given without washing out cracking the soil. Price, for 1/4 inch hose, 3 inch face, 95c.; 4 inch face $2.25. P.P. 1 lb.

VERMOREL NOZZLES

The Vermorel is one of the best spray nozzles for close range. The screw cap is easily removed when necessary. Easily cleaned by pressing the degorgan.-Single spray, 90c.; P.P. 8 oz. Double spray, $1.75. P.P. 14 oz. Triple spray, $3.50. P.P. 1 lb.

THE COOPER BRASS HOSE MENDER.

Made of thin brass tubing; will not rust or wear out; scarcely decreases the flow of water; easily applied by any one; simply cut out your bad piece of hose and force the ends of the good hose over the mender until they meet in the centre. No other fastening is required; the hoops will hold it and it will not leak. Price, for hose with 3/4 inch bore, 8c. each, 83c. doz., P.P. 1 lb.; for hose with 1/4 inch bored, 6c. each, 60c. doz., P.P. 1 lb.; for hose with 1 inch bore, 10c. each, $1.00 doz., P.P. 2 lb.

THE SURE SHUT HOSE MENDER.

The simplest, strongest and best device on the market for repairing leaky hose. No tools necessary to attach it. Makes an absolute water tight connection. Made entirely of brass and will not rust. Price, for 3/4 inch hose; 15 cents each, $1.00 per dozen, P.P. 2 lb.

Caldwell's Hose Strap.


Hudson's Hose Mender.

Practical, simple, perfect. Box of 6 tubes, 20 bands and piers, 85c. P.P. 1 lb. Give stock as follows: Tubes, 3/4 inch, 10c. each; Band, 25c. per doz.; Pliers, 35c., P.P. 1 lb.

Bull Dog Hose Clamp.

The best device for attaching hose couplings, hose straps for 1/4 inch hose, 30c. doz., P.P. 1 lb.; 1/2 inch hose, 60c. doz., P.P. 2 lb.; 1 inch hose, $1.00 doz., P.P. 2 lb.

Spraying Requisites

Bordeaux Nozzle

Spray and Stream.

A combination spraying, sprinkling or solid stream. It throws solid stream or fan-shaped spray adjustable to any fineness. It is quickly degorged by turning the cock handle. It will also throw a long distance coarse spray for spraying very large trees; or it may be shut off altogether. Price, for either 1/4 inch pipe or 3/4 or 1 inch hose, 80c. P.P. 1 lb.

"Mistry" Spray Nozzle

Will cover a greater surface with a finer mist like spray, and with less solution than any other nozzle. Made of brass with a removable steel disc in the discharge cap.

The "Mistry" Spray Nozzle

"Mistry" Nozzle (Fig. A), with swivel adjustment to spray at any angle. For 1/4 inch pipe, $1.00; for hose connection, $1.55. P.P. 1 lb.

Twin "Mistry" Nozzle (Fig. B), two of the above attached to a brass "Y" to adjust to spray in any direction $3.50. P.P. 2 lb.

Mistry, Jr. Nozzle (Fig. C), similar to Fig. A but without swivel adjustment. Two steel discs come with each nozzle, one for coarse and one for a fine spray. Never clogs. No extensions to catch in the trees. Will do the work of two ordinary nozzles. For 3/4 inch pipe, 95c.; for hose connection, $1.15; P.P. 5 oz. Extra discs, 60c. doz.

Bamboo Extension Rod.

Spray Pump Discharge

Hose

Cut any length, 10 ft. up to 50 ft. 1/2 inch bore, 12c. per foot (couplings extra, 25c. set).

Bamboo Extension Rod. Fitted with non-corrosive tube 1/2 inch diam. inside, with brass stop cock and drip guard. Price, 10 ft. long $3.50; 12 ft. long $4.00.

Iron Extension Rod. 8 feet long with stop cock. Galvanized, $1.75. For hose add 25c. for attachment

Screw for thread, 10c. for water connection, $1.00. For extension, 25c. for coupling, 25c. for iron ends, 25c. for water connection.

No. 2. No. 3. Pole connection so hose may be elevated where extension rods are not used, 25c. P.P. 6 oz.
No. 2. Connection for 1/4 or 1/2 inch hose and 1/4 inch threaded pipe or nozzle, 25c. P.P. 4 oz.
No. 4. Brass Stop Cock to shut off flow and save waste while changing position of nozzle. 1/4 inch female thread both ends, 65c. or with male thread attachment at one end, $1.00. P.P. 4 oz.
No. 3. Brass "Y" for connecting two spray nozzles, base tapped to fit 1/4 inch pipe. 60c. Or with No. 2 hose connection 85c. P.P. 1 lb.
No. 6. Funnel and Strainer for spraying mixtures. Strainer 9 inch diameter, 10 inch deep, $1.50.

For spray hose see page 47.
Self-Watering Iron Window Boxes.

These are made of sheet iron, galvanized and finished on the outside in green enamel. They are very durable, rust proof and positively will not leak.

The crowning merit of these boxes, however, is the self-watering feature. This is accomplished by a false bottom below which the water is contained, it being poured in through a tube in the corner that projects from the rim to the bottom. The false bottom has holes in it in which are inserted small sponges. These absorb the water and it is drawn up by the soil or fibre, keeping it evenly moist for a week or more before the water requires replenishing; thus the plants do not dry out from neglect and thrive and bloom with unusual luxuriance.

<table>
<thead>
<tr>
<th>No.</th>
<th>Height</th>
<th>Width</th>
<th>Length</th>
<th>Water Capacity</th>
<th>Price Plain</th>
<th>Price Ornamental</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>8 ins.</td>
<td>9 3/4 ins.</td>
<td>23 in.</td>
<td>3 3/4 qts.</td>
<td>$2.00</td>
<td>$2.15</td>
</tr>
<tr>
<td>2</td>
<td>8 3/4 in.</td>
<td>29 3/4 in.</td>
<td>7 3/4 in.</td>
<td>3 3/4 qts.</td>
<td>3.00</td>
<td>3.50</td>
</tr>
<tr>
<td>3</td>
<td>8 3/4 in.</td>
<td>29 in.</td>
<td>5 3/4 in.</td>
<td>3 qts.</td>
<td>3.00</td>
<td>3.50</td>
</tr>
<tr>
<td>4</td>
<td>8 3/4 in.</td>
<td>41 in.</td>
<td>7 in.</td>
<td>3.50</td>
<td>3.00</td>
<td>3.50</td>
</tr>
</tbody>
</table>

Note:—The "Plain" self-watering Window Boxes have a smooth surface, enameled green; the "Ornamental" have a design pressed in the metal which, as illustrated, greatly improves the effect.

Rustic Hanging Baskets.

Hexagon shaped bowls covered with laurel roots finished natural color and varnished.

10 in. $1.75 each; $15.00 per dozen
12 in. $2.00 each; $20.00 per dozen
15 in. $2.50 each; $25.00 per dozen

Wire Hanging Baskets.

Green and bronze finish, strong and well made. Just the thing for decorating piazzas of summer homes and suburban residences.

No. 4, 8 in. diam., 25c. ea.
No. 5, 10 in. diam., 30c. ea.
$2.50 doz.

Waterproof Fibre Saucers for Flower Pots.

Are not porous and therefore do not absorb moisture and spoil work, etc., on which plants stand. Not breakable. Color, terra cotta brown.

(Costs given are the inside diameters.)

<table>
<thead>
<tr>
<th>Inch</th>
<th>Each (diameter)</th>
<th>Doz. (capacity)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>75c.</td>
<td>2.50</td>
</tr>
<tr>
<td>3 1/2</td>
<td>95c.</td>
<td>3.00</td>
</tr>
<tr>
<td>4</td>
<td>1.00</td>
<td>3.50</td>
</tr>
<tr>
<td>4 1/2</td>
<td>1.25</td>
<td>4.00</td>
</tr>
<tr>
<td>5</td>
<td>1.75</td>
<td>5.00</td>
</tr>
</tbody>
</table>

Self-Watering Iron Hanging Pots.

The ordinary hanging baskets are usually an abomination. It is to water them that the plant suffers. The self-watering Iron Hanging Pots eliminate this trouble, as they contain a so-called "drop" which, if placed inside the basket, the water will rise and distribute itself through the soil, thus moistening the plants. The pots are of galvanized iron. They are made in sizes 8, 10, 12, 14, 16, and 18 inches in diameter and 12 inches in length. Prices include stands. A portion of the proceeds to be used in Settling the Caledonia St. John's Fund.

No. A. Diameter, 9 inches; Water Capacity, 2 pints. Price............. $3.00
No. B. Diameter, 10 inches; Water Capacity, 2 pints. Price............. 3.50
No. C. Diameter, 12 inches; Water Capacity, 3 pints. Price............. 4.50

Rolling Stands for Heavy Plants.

The device consists of two steel pieces securely riveted and equipped with casters (see illustration), a strong and compact support for plants, in large pots or tubs.

Prices (including Fibre Saucers).

No. 12—12 ins. diam., takes 10-in. tubs... $8.50
14—14 " " " 11 " " 1.00
16—16 " " " 13 " " 1.25
18—18 " " " 15 " " 1.50
20—20 " " " 17 " " 1.75
22—22 " " " 20 " " 2.15

Flower Vases, Waterproof Fibre Ware.

Do not rust nor leak, not easily broken. Mahogany finish but can be enamelled any color by purchaser, inside dimensions as given.

No. | Depth | Diameter | Each | Doz. |
--- | --- | --- | --- | --- |
0 | 13 in. | 8 in. | 95c. | 9.50 |
1 | 10 " | 5 3/4 " | 85c. | 8.50 |
2 | 9 " | 4 3/4 " | 75c. | 7.50 |
3 | 6 3/4 " | 4 " | 65c. | 6.50 |
4 | 4 3/4 " | 3 " | 50c. | 5.00 |

(Note: Prices of larger sizes on application)

Cedar Plant Tubs.

Heavy iron hoops. Drop handles, serving as hooks for carrying poles. Iron legs. Removable perforated bottoms. Painted green outside and brown inside. Painted red, if desired, at an extra cost of 10 per cent.

<table>
<thead>
<tr>
<th>No.</th>
<th>Diameter, of Stave</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>27 ins.</td>
<td>24 ins.</td>
</tr>
<tr>
<td>1 25</td>
<td>22 ins.</td>
<td>6.00</td>
</tr>
<tr>
<td>2 23</td>
<td>20 ins.</td>
<td>5.50</td>
</tr>
<tr>
<td>3 21</td>
<td>18 ins.</td>
<td>5.00</td>
</tr>
<tr>
<td>4 18</td>
<td>16 in.</td>
<td>4.50</td>
</tr>
<tr>
<td>5 16</td>
<td>14 in.</td>
<td>3.75</td>
</tr>
<tr>
<td>6 14</td>
<td>12 ins.</td>
<td>3.25</td>
</tr>
<tr>
<td>7 13</td>
<td>11 ins.</td>
<td>3.00</td>
</tr>
<tr>
<td>8 12</td>
<td>10 ins.</td>
<td>2.50</td>
</tr>
</tbody>
</table>

"Columbia" Plant Tub.

Durable cypress staves, held by strong steel wire hoops that can be tightened by draw-screws connected with handles. Natural wood finish.

<table>
<thead>
<tr>
<th>No.</th>
<th>Diameter</th>
<th>Height</th>
<th>Each</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>21 ins.</td>
<td>18 ins.</td>
<td>3.00</td>
</tr>
<tr>
<td>E</td>
<td>24 &quot;</td>
<td>20 &quot;</td>
<td>3.50</td>
</tr>
</tbody>
</table>

Oak Jardiniere.

In these goods, the oak is selected to show the quartered grain, stained dark and finished with lustre surface. The hoops and handles are of brass, highly polished and lacquered. Inside of tubs painted a rich dark red. High form for Inside Standard Flower Pots. Low Form for Bulb and Fern Pans.
Giant Lawn Umbrella.


These gaint framed umbrellas are the strongest and most durable umbrellas in the world. They are not only very useful but very attractive on a lawn; they spread 8 feet. The center pole is thrust into a large hollow iron screw, which is easily turned into the ground; the screw can remain, if desired, and the umbrella can be closed and removed in a moment. It can be quickly set up in any soil with ease. The umbrella has 10 strong steel ribs covered with heavy cloth, in alternate bright colors, usually red, yellow, blue and buff; the edge is finished with an 8-inch curtain. Price, complete, with ground fastenings, $8.50.

Park Settees.

A very popular settee, with varnished, natural wood seat and back, with painted iron work.

No. 1, 3½ ft. long..................$3.50
No. 2, 4½ ft. " "..................4.00
No. 3, 5½ ft. " "..................4.50

Eagle Steel Lawn Swing.

Will accommodate 4 passengers—8 feet 6 inches long; 5 feet 6 inches wide; 2 feet 8 inches high. Full swinging space, 12 feet. Weight, 200 pounds. Width of seat, 30 inches; height of seat from platform, 17 inches. The frames are high carbon steel finished in green and carmine enamel. The slats for seats and platform are made of selected, hardwood, finished in oil or painted a rich red, and will last for years. The Eagle Four Passenger Lawn Swing may be used as a swing; a reclining chair, or thrown perfectly flat for a couch. They are fitted with a canopy top over the seats, which may be removed by simply unfastening four hooks from the frame. To add greater value to the Eagle Swing we have prepared a neat table that may be placed upon the platform between the seats and used as a lunch table, card table or sewing table. Adjustable head rests can be furnished which may be raised, lowered or removed as desired by simply loosening thumb nuts. There are side and end curtains furnished at extra price, of same material as the canopy and when attached make the swing as private as a sleeping car berth, if you wish to use it as a couch at home or in camp. Convenient clasps make the removing of these curtains very easy. The Eagle Lawn Swing is not an ordinary cheap wood swing, but a high class swing for high class people. If it did not have unusually desirable features, there would be no good reason for offering it. Everyone enjoys its motion because the seats do not have that rocking effect that remain in their fixed position at all times. The Swing is shipped in two packages—one containing the frame, the other the seats, platform and canopy.

No. 4 Four Passenger Eagle Steel Lawn Swing..................$16.50
Settee, shade, 31 inches wide, each ..................2.25
End Shades, 31 inches wide, each ..................2.00
Table, complete ..................4.50
Adjustable Steel Head Rests, per set ..................1.35

WIRE ARCHES FOR LAWNS AND GARDENS

Steel wire, with round iron frame and border. Green and bronze finish. Made any size required. In ordering, state height in center wanted from the ground up and width of passageway.

Price per Running Foot.
6 in. wide ..................40c.
12 " " ..................50c.
18 " " ..................65c.
24 " " ..................80c.
30 " " ..................95c.
36 " " ..................$1.00

WIRE VINE TRAINERS.

Steel wire, with round iron frame and border. Green and bronze finish. Made any length required.

Price per Running Foot.
6 in. wide ..................40c.
12 " " ..................50c.
18 " " ..................65c.
24 " " ..................80c.
30 " " ..................95c.
36 " " ..................$1.00

Wire Vine Trainers.

Steel wire, with round iron frame and border. Green and bronze finish. Made any length required.

Price per Running Foot.
6 in. wide ..................40c.
12 " " ..................50c.
18 " " ..................65c.
24 " " ..................80c.
30 " " ..................95c.
36 " " ..................$1.00

EXCELSIOR "CAGE" TREE GUARD.

Made of No. 17 wire, 2 mesh, re-morced every 6 inches by flat steel rods, securely woven into the fabric. Fastens around the tree by means of tie wires.

Each Doz.
6 foot high, 6 inch diameter..................$1.15
8 foot high, 8 inch diameter..................$1.50
10 foot high, 10 inch diameter..................$2.00
16 " 10 " "..................$2.50
20 " 12 " "..................$3.00
24 " 14 " "..................$3.50
30 " 16 " "..................$4.00

EXCELSIOR WIRE MESH GUARDS.

Orchardists often sustain heavy loss through the gnawing or girdling their trees by rabbits, mice, woodchucks and similar rodents. The Wire Mesh Guards will prevent this. They keep out all animals, allow the sun and wind free access to the bark, leaves and fruit. They are easy to set and may be lifted up to allow the bark to be cleaned. Although light, they are so strong and durable that when a tree outgrows its guard a larger one may be substituted and the old guard used again around a younger tree made in two sizes, 10 inches high, 4 inches diameter, $2.00 per dozen, 18 inches high, 6 inches diameter, $3.00 per dozen.

Cyclone Vine Trainers.

Very attractive in appearance, very durable and retain shape perfectly being made of heavy (No. 10) galvanized wire on No. 13 galvanized cable wire. Easily placed in position and adaptable to various forms and shapes.

Price, 18 inches wide per linear foot..................8c.
24 " " " "..................10c.
30 " " " "..................12c.

Sun Dials.

Sun Dials are very unique and interesting ornaments for the lawn or garden. We supply the figured plates, all ready to screw on or cement on to pedestal or post. The figures, etc., are of raised metal; diameter of plate, 10 inches.

Cast Iron, Japanned black, gilt figures, (P. P. 6 lbs.) $1.75.
In vermilion, red, polished figures, etc., (P. P. 8 lbs.) $3.50.
WOOD PLAN T STAKES.

<table>
<thead>
<tr>
<th>Stakes—Round Green Tapering</th>
<th>Square Green Tapering</th>
<th>Round Dahlia Poles Green, White Tops</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length</td>
<td>Doz.</td>
<td>100</td>
</tr>
<tr>
<td>2 feet</td>
<td>$0.35</td>
<td>$2.25</td>
</tr>
<tr>
<td>3 &quot;</td>
<td>$0.60</td>
<td>$4.75</td>
</tr>
<tr>
<td>4 &quot;</td>
<td>$0.90</td>
<td>$7.50</td>
</tr>
<tr>
<td>5 &quot;</td>
<td>$1.25</td>
<td>$10.00</td>
</tr>
<tr>
<td>6 &quot;</td>
<td>$1.25</td>
<td>$15.00</td>
</tr>
</tbody>
</table>

Wooden Garden Trellis for Roses and Vines.

These are well made of wood and painted dark green.

Veranda Trellis, 6 ft. x 18 in. $1.25 each; 8 ft. x 18 in. $1.75 each; 10 ft. x 20 in. $2.35 each.

Extra Wide, 12 ft. x 20 in. $3.00 each.

Fan Trellis, 4 ft. x 27 in. wide at top 90c.; 8 ft. x 28 in. $2.00 each; 8 ft. x 28 in. $2.75 each; 10 ft. x 31 in. $3.50 each; 12 ft. x 36 in. $4.25 each.

Lattice Trellis, 6 ft. x 18 in. $1.25; 8 ft. x 18 in. $1.75; 10 ft. x 18 in. $2.35; 12 ft. x 18 in. $3.00 each.

Enameded Iron Everlasting Signs.

**NO TRESPASSING**

**KEEP OFF THE GRASS**

"Keep off the Grass" Name plate of iron; enameded with white letters; size 20x1 in. long by 4 in. wide iron rod. 26 in. long. Will last years. Price, $1.50 ea.; $15.00 per doz.

"No Trespassing." Iron enameded blue, white letters. Sign 20x4 in., four screw holes for attaching to fence, trees etc.; no rod. Price, $1.25 each $15.50 doz.

**CYCLONE FLOWER BED AND LAWN GUARD.**

This guard is made of heavy galvanized wire, having the pickets extended about four inches below the lower cable for holding the same in the ground, and is made to stand 12 to 18 inches in height when set in place. Full rolls contain 165 feet, but cut lengths will be supplied when desired.

Price, per lineal foot
16 inches in height ........................................................................ 12c.
22 inches in height ........................................................................ 15c.

The Arrow Weather Vane.

Durably made of iron, enameded black and ornamental in red and aluminum, can be fastened to pole or roof.

Height 15 inches, length of revolving arrow 23 in.; arms (N, S. E., and W.) each 8 in. long. All parts unscrew and pack in small compass for shipment. Net weight 31 lbs., P.P. weight 4 lbs.

Price, $2.50 each.

**COPPER WEATHER VANES.**

The vanes are made entirely of copper and brass, and the points of compass are cast iron. The upright rods or spires are of wrought iron with steel spindles on which the vanes revolve. All parts are well painted, revolving sections, balls and letters, points of compass are gilded with 22 karat gold leaf. We can supply various designs. Horse, Automobile, Arrow, Cow, Deer, Dog, Eagle and Rooster in various sizes, varying from $6.00 and upward each. Special Circular mailed on application.
Auto Compressed Air Sprayer No. 1

For Spraying Liquid Insecticides and Fungicides on Garden or Green House Plants, Shrubs, Trees, etc. Also Whitewash and Disinfectants to Poultry Houses. Also Applies Fly Oils for Animal Protection.

The Auto-Spray No. 1 is the standard of all compressed air sprayers, and is in greater demand than all other similar machines combined. It is exceptionally strong and entirely practical. No other compressed air sprayer will do such a variety of work and do it so well. Can be used in every variety of spraying. Suitable for all garden work, five acres of field crops, a limited number of trees any size, also will handle whitewash and disinfectants in the Poultry House, and handling disinfectants, for sheep and cattle dip, and cattle fly oil. Even those who have commercial orchards and large power sprayers, need the "Auto-Spray" No. 1, for small work.

The Auto-Sprayer, No. 1, when properly charged, contains three gallons of solution and one gallon of compressed air. Eight to twelve strokes of the plunger will compress the air and two pumpings will empty the entire contents, and it works automatically for six to fifteen minutes, according to the nozzle opening, and will give higher and more constant pressure than any other similar machine.

There is not a good feature in any other compressed air sprayer that is not to be found in the Auto-Spray No. 1, and there are many improvements in the Auto-Sprayer No. 1 which are not to be found in any other compressed air sprayer.

The construction is the strongest ever invented, and our tank is the only one which absolutely does not require a safety valve.

The pump is of large capacity, seamless brass, 2-inch diameter, insures rapid pumping and a constant high pressure. The pump plunger can be removed and re-inserted by simply drawing the leather cup into a sleeve.

The Leather Cup is specially treated and remains long in pliable condition. It is fitted underneath with a flexible brass spreader, which keeps it spread out against the sides of the cylinder.

The Spray Nozzle is our "Auto-Pop." The best. It automatically controls the spray; operating the lever, opens or closes the valve, and at the same time works a cleaning stem through the nozzle aperture. Not tiresome as in the case of the thumb operated device. Saves both time and solution.

We use a half-inch hose a little better than the usual, and protect it with a wire coil at the tank connection to prevent breaking. We warrant the Auto-Spray No. 1 to be perfect mechanically, and to give satisfaction in every case. It is used by nearly all State Experiment Stations, by the United States Government, and in all foreign countries.

Auto-Sprayer No. 1: Diameter, 7 inches; height, 2 feet; capacity, 4 gallons. Weight, empty, 7 lbs.; loaded, 39 lbs.; shipping weight, 15 lbs. Easily carried either by handle or shoulder strap.

NET PRICES.
Auto-spray No. 1B, Brass tank with Nozzle. $8.50
Auto-spray No. 1D, Galvanized tank with Nozzle. 5.50

EXTRA ATTACHMENTS FOR AUTO SPRAYER NO. 1

Extension Pipes. Brass, two-foot lengths. As many as three can be used for reaching trees. They screw into one another and go right into the shut-off, which detaches from the Auto-Pop Nozzle. The nozzle goes on the far end of the extension, and the shut-off always remains under control of your hand. Price, two-foot lengths, 60c. each. Mail weight 1 lb.

Brass Elbow. Used for reaching the under side of the leaves. Will fit either the shut-off or extension. Price, 30c. Mail weight 4 oz.


Two-Rod Attachment. Made of heavy brass. With two nozzles, 9 inches apart, arranged at such an angle that they properly cover two rows of crop at one operation. Price, $1.50. Mail weight 1 lb.

Torch. A practical device for burning worms' nests. Can be used with the Auto-Sprayer only, will force the flame 41 feet from the outlet. Price, $1.00. Mail weight 1 lb.

THE DEMING "AEROSPRA."

The "Aerospra. is a compressed-air sprayer of improved design with several new and valuable devices on which patents have been applied for. For several years some of our customers have wanted a hand compressed-air sprayer of especial merit. We have devised one with new features of portability which is much appreciated by the user. The operator can pump up and spray at ease, until the reduced pressure requires pumping again. The tanks are tested up to 100 pounds pressure—more than twice the pressure which is obtained by the average operator.

Specifications
Pump. Brass tube cylinder, diameter 2 inches, stroke 12 inches. Top cap of tank attached to cylinder. The pump can be instantly removed for filling the tank.
Tank. Made either of the best quality of Galvanized Sheet Steel or Sheet Brass. The diameter is 7 inches and height 18 1/2 inches, with about 4 gallons capacity. The tank should be about two-thirds filled; weight, loaded, is about 30 pounds.

Price. "Aerospra. as above, but with galvanized steel tank, $10.00. Seven-foot section of 3-inch hose with couplings and pole holder, for tree spraying, $2.00.
Henderson’s "Fruitall" Spray Pump.

A High Grade Pump for Moderate Sized Orchards, Etc.

It is simple, the parts accessible and easily removed for cleaning. It has all working parts of brass. It can be mounted on or removed from barrel or tank by the simple adjustment of two thumbcrews. It is held firmly by clamp at top and anchor at bottom. The Brass Plunger is very strong. The Brass Valves never clog. Steel air chamber. It has a long lever. Is built low down, and with the exception of lever and discharge, is contained within the barrel, offering no obstruction to over-hanging limbs, and is not top-heavy. The pump is easily operated by a single person. The Paddle Agitator is mechanical in its action and much superior to the old method of "return discharge."

Prices.

Henderson’s "Fruitall" Pump only (with Agitator) $9.00; with barrel, $18.00.
Henderson’s "Fruitall" Pump, Outfit "A" Single spray. Pump with one lead 10 ft. 1 in. discharge hose, with "Venorel" Spray Nozzle and Agitator, $12.00; or with barrel, $16.00.

Henderson’s "Gem" Spray Pump.

Clamps to the chine or side of any barrel but is made particularly for our water barrel and truck outfits, offered on page 18. The "Gem" is intended to fill a want for a low-priced pump. It has not the power or capacity of the larger and more expensive spray pumps, but where there are only a few trees, bushes, vines, etc., to be treated, it will answer admirably for both applying insecticides and fungicides, and by altering the nozzle it is adapted for sprinkling walks, watering flower-beds, washing windows, carriages, etc. The pump can be quickly removed from the barrel.

Prices (without barrel or truck).

Gem Outfit "A." Pump fitted with two feet of suction pipe and brass strainer; 51 ft., 1 in. hose and nozzle, $5.00.
Gem Outfit "B." is the same as "A," excepting the hose is 12 ft. long, fitted with pole connection to spray trees, $7.00.
For price of Water Barrel and Truck, see page 16.

Henderson’s "Acme" Spraying Outfit.

A very complete and convenient outfit for spraying garden crops, flowers, shrubs, vineyards, etc. It can also be used for other purposes than spraying—such as washing windows, carriages, sprinkling roads and walks, watering garden and flower beds, etc. The hardwood iron-hooped tank, with hinged lid, holds about 25 gallons; is firmly fastened to a cart narrow enough for most garden paths; it is easily wheeled about and sits firmly while the pump is being operated. The force-pump has brass cylinder, to prevent corrosion when fungicides are used. Price, of Acme Spraying Outfit, complete, cart, pump, 6 feet discharge hose and combination spray and stream nozzle, $20.00. Iron extension pipe 8 feet (for tree spraying), fitted to attach to nozzle and hose, $1.75 extra.

For Water Barrels and Trucks, see page 16. Our new 30 gal. size barrel or truck is convenient for small operations.

Henderson's "Pomona" Spray Pump.

We unhesitatingly offer this as the best Orchard Spray Pump for mounting on barrel.

It is of large capacity and powerful with long adjustable leverage, so that it is easily operated by one person, when necessary, but is especially built for spraying from two leads of hose. The unusually large steel air chamber gives sufficient pressure for a continuous and regular spray for some time after the operator stops pumping. All working parts are of brass, including plunger and valves, which are easily accessible; the whole pump can be quickly inserted or removed from the barrel; it has a paddled agitator far superior to the old "return discharge" method of stirring. It is adjustable for barrels of different sizes, and as the bulk of the Pump goes within the barrel, it is not top-heavy, and does not catch low branches. We furnish the Pomona for end of barrel only.

Prices.

Pomona Pump only (with agitator) $16.00; or fitted to barrel, $20.00.
Pomona Outfit "A" pump, agitator, 1 lead discharge hose and spray nozzle, $20.00; or fitted to barrel, $24.00.
Pomona Outfit "B" pump, agitator, 2 leads discharge hose and 2 spray nozzles, $27.00; or fitted to barrel, $26.00.
Brass shut-off for 1 lead, $1.35 extra; for 2 leads, $1.60 extra.
Buyer has choice of nozzles, but we send "Missy, Jr.," unless otherwise ordered.

Extras for Tall Tree Spraying.
The following are adaptable for any of our Spray Pumps.

Iron Extension Rods, 8 ft. long, with shut-off cock at base, fitted to attach hose at bottom and nozzle at top, $1.75 each.
Bamboo Extension Rods, practically the same as above, excepting the pipe is enclosed in bamboo which stiffens it. Price, 10 ft. $3.30; 12 ft. $4.00.
Discharge Hose, 1 in. bore. 12c. per foot. Couplings extra, 25c. per set. (For spray nozzles see page 41.)

The Auto No. 40 Wheel Sprayer.

Applies, in a mist-like spray, all fluid insecticide and fungicide solutions on garden crops, ornamental plants, shrubs and low trees; also useful for whitewashing, applying sheep dip, fly oils, etc. It is a most convenient, large capacity, Auto Sprayer, fitted to a tubular iron frame with 20-inch wheel, so that it is as easily moved about as a wheel-barrow. The tank of heavy galvanized steel or brass (as may be selected) holds the spray solution and the compressed air pump with which the operator keeps up a continuous and uniform spray. The machine is furnished with 8 ft. of high pressure spray hose with connections in 8 ft. iron extension pipe with lever "shut-off" for tree spraying and the latest pattern Venorel nozzle, which fits either the hose or pipe. Price, with 12 gal. galvanized steel tank $16.00; with 12 gal. brass tank, $20.00; weight 58 lbs., crated, 72 lbs.

For Water Barrels and Trucks, see page 16. Our new 30 gal. size barrel or truck is convenient for small operations.
THE "PLANTER'S TRACTOR" SPRAYER.

This "Wheel-Barrow" Sprayer is operated by one man, either for spraying two rows of garden or field crops, grapes, etc., the pumping being done by the traction wheel as the machine is pushed along, as fast as a man can walk, or the gearing may be instantly unmeshed and the pump be worked with the handle, the machine standing still. It is the newest and most efficient sprayer of its kind that we have ever seen. The tank of galvanized metal or brass as may be selected, is 23 inches high, 12 inches in diameter and holds 12 gallons. The air-chamber force pump is of good capacity, is non-corroding, with brass fittings and positive agitator. The frame is of tubular iron, the iron wheel is 20 inches in diameter and 21-inch tire. The spraying outfit consists of two 2 ft. sections of hose with stop cocks connected each to a hose pipe 18 in. long, having an angle attachment and nozzle so that the spray may be adjusted backward or forward, up or down. Price, with galvanized tank $30.00; with brass tank $42.00. Extra, a 7 ft. section of spray hose with couplings for tree spraying $2.00.

"HENDERSON" HAND BUCKET PUMP.

This is the best and most durable portable hand pump in the market. Working parts are made of solid brass with large air-chambers and is double acting, throwing an absolutely continuous stream, either solid or in a fine spray as desired; very light and easily carried, and works from any bucket or tub. Just the thing for throwing liquid insecticides and fungicides on low trees, shrubs, plants, etc., and by altering the nozzle it can be used for washing carriages, windows, etc. (See cut). Price, with 3 feet of hose and combination spray and stream nozzle, $4.50. P.P. $9.00; or, with extra 7 feet section of hose and pole connection for tree spraying, $10.50. P.P. $10.00.

THE "SUCCESS" KNAPSACK SPRAYER.

A KNAPSACK SPRAYER AND BUCKET SPRAYER COMBINED.

Five-Gallon Brass Tank. Brass Pump with Bronze Ball Valves.

This valuable arrangement is used for applying fungicides, such as Bordeaux Mixtures, Ammonia Compound of Copper, and other fluid remedies in a mist-like spray, for the treatment of grapes and other vegetation, for the prevention and cure of mildew, black rot, and kindred diseases, as well as for potato blight, etc.; with it a man can spray five to six acres of vines in a day. The machines are made entirely of copper and brass, and the chemicals will not corrode or rust them. The air chamber keeps up a steady pressure, so a continuous discharge is given. The Pump may be worked with either the right or left hand. The drip cup is just below the air chamber, and is made extra wide, so that any leakage around the plunger is returned into the tank and not allowed to run down the operator's back. The attachment shown as A is for underspraying. This sprayer can be used either as a knapsack or bucket sprayer, the illustration as here given showing its use as a knapsack. To be used as a bucket sprayer the handle and the lever are removed and the extra handle with which the outfit is complete, $18.00.

THE "SUCCESS" WHITEWASH SPRAYER.

Whitewash is a necessity in poultry and stock raising, but when applied with a brush, it takes a lot of time and is an unpleasant operation. Our "Success" is especially designed for whitewashing purposes. The tank holds 5 gallons. The pump has ample valve areas which allow free passage of the liquid, and prevent clogging. It is provided with an agitator and a large strainer, and for this purpose is fitted with a Bordeaux nozzle, which throws a wide, fan-shaped spray that can be graduated from fine to coarse. The liquid, when applied through this nozzle, penetrates every crack and corner where a brush could not, and the result is a uniform white surface.

Price, with galvanized tank, $11.00; with brass tank for chemical preparations, $14.00.

FORMULA FOR WHITEWASH.

As Used on U.S. Forts and Lighthouses

Half a bushel of unslaked lime, slack in warm water, cover it during the process to keep in the steam; strain the liquid through a fine sieve or strainer; add a peak of salt previously well dissolved in warm water, three pounds of ground rice boiled to a thin paste and stirred in boiling hot; half pound of powdered Spanish whitewash and a pound of glue which has been previously dissolved over slow fire. Mix the whole and let it stand for a few days, covered from the dirt. Strain carefully and apply with a spray pump. It should be put on hot.

JUMBO POWDER GUN.

For applying insect powder on plants in the house or small gardens; it will hold about 4 oz. of powder which is ejected and distributed by a pressure with the thumb. The "Jumbo" we consider the best small powder distributor on the market. Price, 30c. each, P. P. 5 oz.

DANDELION EXTERMINATOR.

Destroys the root of the troublesome weed by chemical action. Fill the tank with Gasoline or Weed Destroyer and insert point in center of plant as far as the stop, hold instrument and lift up on valve stem, allowing the liquid to flow for an instant; release valve stem and remove instrument. Price, $1.75.

THE ASBESTOS TORCH.

Attach the torch to the end of a pole of suitable length; saturate with kerosene oil, light and hold under the caterpillar nests and pass quickly along the branches and around the trunk of the tree where the insects lodge. The heat instantly destroys the insects and will in no way injure the tree.

Price, without pole, 40c., P. P. 1 lb.
WOODASON'S DOUBLE CONE POWDER BELLOWS.

For Dusting Plants with Dry Powders for Insects and Fungi.

This bellows can be held in any direction without wasting powder, as it regulates its own supply. The bellows is a patented invention, and when properly adjusted, it will cover a given area more thoroughly and effectively with a cloud of powder, and use less powder than any other contrivance. The outlet nozzles are fitted with adjustable nozzles of various deflections. The outlet nozzles are fitted with adjustable nozzles of various deflections. The outlet nozzles are fitted with adjustable nozzles of various deflections.

Price, large size, $2.75. Small size (for conservatory and house use), $1.50.

LITTLE GIANT POWDER GUN.

For distributing all insecticides and fungicides in dry powder form, such as Paris Green, Bordeaux Mixture, Hemlock, etc. It will dust either one or two rows of potatoes, tomatoes, cabbage, and other vegetables as fast as a man can walk. The outlet nozzles are adjustable to different widths of rows. By applying insecticides, etc., dry method, with the Little Giant Powder Gun, your crops are treated more quickly, easily, and at less cost than with a fluid spray. Simply put the powder in the reservoir and turn the crank; it runs entirely by gearing; capacity about 1 quart. The Little Giant is furnished with three 16 inch tubes, five nozzles and a shoulder strap. Weight about 9 lbs. (packed 15 lbs.) Price $7.00.

NORTON'S PLANT DUSTER.

This is one of the best articles for dusting potatoes, vines, etc., with powder insecticides. A slight jolting motion distributes the dust in a fine cloud. It is made scientifically correct with a cylinder air chamber projecting above the powder so that it never clogs. Another point of merit is the projecting dust guard, which prevents the powder from escaping beyond the plant being treated. Price, $1.00 each, P. P., 5 lb.

Acre-an-Hour Sifter.

For applying dry mixtures economically, such as Slag. Split. Planter or Cement and Paris Green, Bordeaux, or any prepared mixture to potato vines, tomatoes, tobacco, and cucumbers, rose and currant bushes, as fast as a man can walk. Will cover perfectly and instantly plant 3 feet in diameter. A handy job for the boys. For large acreage use one in each hand. Price, 75 c. P. P., 2 lb.

Little Giant Solid Brass Compressed Air Atomizer and Sprayer.

The most perfect small hand compressed air sprayer made. Delivers a continuous fog-like spray. Is fitted with straight and adjustable nozzles making a perfect under leaf spray. In fact, spray can be delivered at any angle or position desired. Made in solid brass sheathed highly polished; holds 1 quart. Price, $2.00. P. P., 2 lb.

Greenhouse Fumigators for Smoking Plants.

EUREKA FUMIGATORS

For fumigating greenhouses with dampened tobacco stems; made of galvanized sheet iron, a damper regulates the draft; no danger of fire; no ashes or dirt. No. 1, 12 in. high, $1.60; No. 2, 16 in. high, $2.75; No. 3, 20 in. high, $4.25; No. 4, 24 in. high, $6.50.

PERFECTION FUMIGATORS.

Make Moist Smoke.

This fumigator will last for years; it has a water tank between the fire and the outside, preventing burning out. The tank should be filled with tobacco water, from which the vapor arises and mixes with the dry smoke from the stems, producing a dampened smoke more dense and less injurious, to delicate foliage than any other fumigator made. Outside fumigating can also be done with the Perfection; the cast iron lid is made so a hose can be attached, and all the outlets for the smoke (except through the hole) can be closed off. No. 1 holds one peck of stems, $3.50; No. 2 holds half bushel of stems, $4.25; No. 3 holds three-quarters bushel stems, $5.00.
The Kirke Automatic Lawn and Garden Feeder
ALSO INSECT AND BLIGHT ABOLISHER

Merely slip a cartridge for either purpose in the container, attach to the hose and water as usual.

This Kirke System of liquefying and applying in mild solution cartridges of concentrated fertilizers, insecticides or fungicides, through the hose while watering the garden and lawn, is a simple, practical and most efficient method. The feeder is a nickel-plated durable metal affair, about 6 inches long by 2 3/4 inches in diameter with strainer in the outlet end; the top unscrews for the insertion of cartridge. It is fitted to couple to any 3/4-inch garden hose, either at the faucet or nozzle end. The cartridges—clean and odorless—have been compounded by an expert agricultural chemist and contain in concentrated slowly soluble form the various ingredients—strictly high grade and scientifically blended for the purpose designed, so that when the hose is turned on the cartridge gradually dissolves and impregnates the outflowing water with a proportion of plant food, insect destroyer or fungus remedy.

<table>
<thead>
<tr>
<th>PRICES</th>
<th>Each 1/2 doz.</th>
<th>Doz.</th>
<th>Mail Wt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kirke Cartridge Feeder</td>
<td>$2.00</td>
<td></td>
<td>1 lb. each</td>
</tr>
<tr>
<td>KirkeFertilizer Cartridges</td>
<td>$2.10</td>
<td></td>
<td>7 lb. doz.</td>
</tr>
<tr>
<td>Kirke Tobacco Cartridge</td>
<td>$2.00</td>
<td></td>
<td>6 lb. doz.</td>
</tr>
<tr>
<td>Kirke Arsenate of Lead Insecticide Cartridges</td>
<td>$3.00</td>
<td></td>
<td>4 lb. doz.</td>
</tr>
<tr>
<td>Kirke Bordeaux Cartridges</td>
<td>$4.00</td>
<td></td>
<td>5 lb. doz.</td>
</tr>
</tbody>
</table>

Any further post and postage at Zone Rates, see 2d page cover.

Note: The fertilizer cartridge may be used with an ordinary hose nozzle but a spray nozzle should be used when applying insecticides. We recommend the "Bordeaux" nozzle offered on page 41—price with reducer to fit 3/4 in. hose coupling $1.20.

THE KIRKE FERTILIZER CARTRIDGE (Color green, weight about 8 ozs.). Contains the proportions of nitrogen, phosphoric acid and potash in high grade, soluble and assimilable plant food form and is immediately effective in feeding and invigorating lawns, grass tennis courts, putting greens, etc.—whether applied through hose nozzle or lawn sprinkler. For gardens, vegetables, flowers, shrubs, etc., it is equally beneficial, and being so diluted with an abundance of water which carries the plant feeding constituents right to the roots, there is no danger of burning grass or any vegetation, whether applied spring, summer or fall. If you wish to luxuriant, velvet-green lawn throughout hot, dry weather use the Kirke Fertilizer Cartridges and Distributor.

THE KIRKE TOBACCO CARTRIDGE (Color brown, weight about 6 1/2 ozs.). The active agent in this is nicotine, destructive to all sucking insects such as Aphids, Plant Lice, Green Fly, Thrip, Leaf Hopper, Mealy Bug, Currant Worms, Canker Worms, etc. It is not poisonous and will not injure fruits or flowers. To be effective for insects of this class the insecticide must touch them, therefore should be applied with a spray nozzle. See note above.

THE KIRKE ARSENATE OF LEAD CARTRIDGE (Color white, weight about 10 ozs.). This is a very effective poisonous insecticide for Bugs, Beetles, Caterpillars, Worms and Bugs that chew or eat foliage, etc. Applied in a spray it adheres to the plants without injury and the moment the slightest particle reaches the stomach of the depredate he is done for. Apply with a spray nozzle. See note above.

THE KIRKE BORDEAUX CARTRIDGE (Color blue, weight about 5 ozs.). The active ingredients of this best of all fungicides is Copper Sulphate and Lime. An effective remedy and preventative for Mildew, Blight, Rust, Leaf Spot, Bitter Rot and other fungus diseases. Apply in spray form so it will cling to the foliage, etc.—it then also acts as a deterrent for many insects. Apply with a spray nozzle. See note above.

The Kirke System is easily taught and the ordinary housewife is perfectly capable of applying the ingredients in the various grades in the correct order. Both the irrigation and the fertilizing or the insecticide application is done in a scientific and practical manner.

INVIGORATING THE LAWN
KIRKE'S LAWN AND GARDEN FEEDER
ALSO INSECT AND BLIGHT ABOLISHER
SPRAYING FOR INSECTS

Tree Tanglefoot.

PREVENTS CATERPILLARS FROM CRAWLING UP TREES

Tree Tanglefoot—made by the "Tanglefoot Sticky Fly Paper" Manufacturers— is the most successful and economical method of keeping caterpillars, cut worms, ants and other climbing insect pests out of trees. After a tree is cleaned of the cocoons and eggs, it is banded 2 to 5 inch wide and 1/4 of an inch thick with Tree Tanglefoot—applied like soft putty with a paddle and it will protect the tree from further ravages of these pests, providing the bands are inspected occasionally to see that the surface has not become coated, with dust or broken. Renew the bands each year to protect the tree perpetually.

NO CRAWLING INSECT CAN PASS A BAND OF TREE TANGLEFOOT.

Tree Tanglefoot remains sticky on the tree for fully 3 months—during any weather from freezing to 110° Fahrenheit—does not dry up nor drop off—nor is it effected by rain storms. It should be applied very early in the spring—before the caterpillars commence to crawl—and again in the fall.

Quantity Needed.—One pound will be sufficient for a six-foot band 4 inches wide, 1/4 inch thick.

Price.—1 lb. can $3.50; P. P. 1 2/3 lb.; 3 lb. can $6.00, P. P. 3 1/2 lb. The following cannot be mailed: 10 lb. can $35.00; 20 lb. can $55.75; 30 lb. can $65.75.

Sticky Tree Cord.

For banding trees to prevent the ascent of Caterpillars and other insects.

A soft cord about 3/8 of an inch in diameter, thoroughly saturated and coated with a black sticky material similar to that used on sticky fly paper. It is supplied in tubes about 3 1/2 x 6 inches, containing about 30 ft. of cord which is pulled out through a hole in the screw top, which has an attachment for clamping to facilitate cutting-off the cord. It is applied to trees by tacking one end of the cord, then passing it around once or twice, tacking about every 18 inches and then cut off. The cord will not run or drip appreciably and will remain sticky for three or four months according to climatic conditions.

Economy. Each tube contains sufficient to band about 10 trees six inches in diameter twice around. Trees banded with Sticky Tree Cord are not unsightly. No injury is sustained by the tree because little material comes out of the cord and it is non-poisonous. Rough barked trees such as Pecan, Gum, etc., should have a channel two inches wide cut into the bark to give a fairly smooth surface for the cord. No caterpillar, worm, or other insect can cross it nor go underneath it if properly applied. It is easy to remove, leaving only a very little trace.

Price, $2.50 per tube. $2.50 per doz. tubes. A small clamp to catch hold of the cord is supplied free. Weight about 1 1/2 pounds.
APRIN. A powerful insecticide, readily soluble in water and applied as a spray, wash or dipping solution. It kills green and black fly, thrips, red and yellow mealy bugs, scale, etc. Price, 1 gill, 5c; ½ pint, 10c; pint, 25c; quart, $1.00; gallon, 40c.

APHIS PUNK is a wool-pulp powder, in 6 x 33-inch sheets, saturated with 22½ per cent. nicotine, rolled and cut in 2½-in. squares, and is a clean, convenient and effective remedy for aphids, mealy bugs, scale, soft and hard scale. Price, per pound, 65c.; 5-lb. bag, $1.05; 10-lb. box, $2.30; 25-lb. box, $1.25; 50-lb. box, $2.45.

APOXIDE. Bordeaux-Arsenate of Lead. A combination in proper proportions of these standard fungicides and insecticides, thus killing insects and fungus pests. Diseases as well as pests can be controlled with a single application. Quantity required, 1 to 2 lbs. in 10 gallons water. Price, 1 gill, 12½c.; ½ pint, 25c.; pint, 50c.; quart, $1.75; 50 lbs., $8.00; 100-lb. keg, $15.00.

Bordeaux. Ready for use by simply adding water. Several indices indicate that this fungicide is effective against mildew, blight and rust. Price, 1 pint, 30c.; 1 quart, 45c.; 1 gallon, $1.25; 5 gallons, $5.00.

Bordeaux. Powdered. Requires 1 to 1½ lbs. to 10 gallons of water as a fungicide spray. Price, 1 lb., 35c.; 5 lbs., $1.50; 10 lbs., $2.15.

Borowax. A complete protection against borers if applied in the spring or fall. Quantity required, 1 to ½ pint to a tree according to size. Price, quart, 35c.; half gallon, 65c.; gallon, can (boxed), $1.00; 5-gal. drums, $3.50.

Borowax. A non-poison insect-killing powder, for cabbage and tomato worms, potato and cucumber bugs, etc. Apply with a dusting bag at the rate of about 12 lbs. per acre. Price, 20c. per lb. 25-lb. bucket, $4.50; 50-lb. bucket, $8.00; 100-lb. keg, $14.00.

Borowax. Powdered. May be used either as a dust or diluted with hydrated lime, plaster or road dust, or as a liquid spray with water, lime-sulphur, solution or Bordeaux, only half the weight is needed as of the paste form. Price, 1 lb., 45c.; 5 lbs., $2.00; 10 lbs., $3.50; 25-lb. and over at 30c. per lb.

Bordeaux-Arsenate of Lead. A combination in proper proportions of these standard fungicide and insecticide remedies, thus killing insects and fungus pests. Diseases as well as pests can be controlled with a single application. Quantity required, 1 to 2 lbs. in 10 gallons water. Price, 1 gill, 12½c.; ½ pint, 25c.; pint, 50c.; quart, $1.75; 50 lbs., $8.00; 100-lb. keg, $15.00.

Bordeaux. Ready for use by simply adding water. Several indices indicate that this fungicide is effective against mildew, blight and rust. Price, 1 pint, 30c.; 1 quart, 45c.; 1 gallon, $1.25; 5 gallons, $5.00.

Bordeaux. Powdered. Requires 1 to 1½ lbs. to 10 gallons of water as a fungicide spray. Price, 1 lb., 35c.; 5 lbs., $1.50; 10 lbs., $2.15.

Beathen Maker (for applying above, 25c. per bottle). Cattle Comfort. Promotes the growth of cattle, dogs, etc., from flies, gnats, mosquitoes, horse-fly and other insects, helps to control flies, deodorizes hay, etc. Price, 1 quart, $1.00.

Copper Solution, Ammoniated. A fungicide, the essential ingredient, "Carbapatate of Copper," being dissolved in a solution of ammonium carbonate. It is white in color and is used as a liming treatment to control insects. Price, 1 lb., 75c.; 5 lbs., $2.00; 10 lbs., $3.50; 25-lb. and over at 30c. per lb.

Kerosene Miscible Oil. Better than Kerosene Emulsion, mixes easier, has greater killing power and is especially valuable against all soft bodied insects. Can be used on practically all insects for which nicotine is employed. For Wooly Aphid on apple and thorn it is much more effective than nicotine. Contains 80 per cent Kerosene. Dilute 1 part Oil to 16 parts water. Tendrils plants 1 part to 36 parts water. Price, 1 pint, 35c.; 1 quart, 75c.; 1 gallon, $1.25; 5 gallons, $12.00.

LIME SAND. For both fungus and insect diseases. An excellent spray when used in the proportion of 1 part lime sand to 9 parts water. It is also used as a dusting spray on fruit trees. Price, 1 lb., 25c.; 5 lbs., $1.00; gallon, $2.00.
spray pump while the trees are dormant, after the leaves have fallen in fall and before the buds swell in spring. It is also effective in late March and early April. Apply two gallons of water, or earlier or later it will be safer to dilute it 1 gallon to 30 to 50 pounds of water. Price, quart can, $2.25; gallon, $7.50.

NICOTINE. An extract of tobacco, containing about 30 per cent nicotine. A most effective, economical and safe remedy for spraying greenhouses and garden plants, diluted two parts to a gallon of water for most insects. For fumigating greenhouses, etc., use a solution of 1 lb. of nicotine and 1000 parts of water, for each pan, which is sufficient when vaporized, by placing a hot iron in it, for 500 square feet of floor space. Price, 4-lb. bottle, $1.00; 4-bottle, $3.00; 1-lb. bottle, $1.50; half-lb. bottle, 50c.

NICO-FUME. A tobacco paper saturated with nicotine. It comes in strips, which, suspended and lighted, is one of the best, safest and least injurious methods of fumigating conservatories for aphids and all insects that will infest tobacco insects. One sheet is sufficient for two thousand cubic feet. Price, air-tight cans of two dozen sheets, 95c. (mail weight, 1 lb.); 1 gross sheets, $4.00 (mail weight, 8 lbs.).

PARIS GREEN. An insoluble, poisonous powder for potato bugs, codling moth, worms, caterpillars, slugs and bugs. Applied as a powder or dust, it should be mixed with plaster or fly flour, and one part of Paris Green; in solution mix 1 in 150. Price, 1-lb. package, 50c.; 4-lb. package, $2.50; 10-lb. package, $7.50; 100-lb. package, $75.00; 1-ton bag, $45.00; 10-ton bag, $275.00.

PYROX. A combined insecticide and fungicide for all leaf-eating insects, blights and fungus troubles on tomatoes, cucumbers, vegetables, roses, shrubbery, etc. It is a creamy paste that is applied dry and is thoroughly mixed with cold water to apply. Price, 1-lb. bottle, 25c.; 5-lb. crock, $1.00; 10-lb. crock, $1.50; 20-lb. crock, $4.50; 50-lb. keg, $8.00; 100-lb. keg, $15.00.

SCALCIDE. The best spray for San Jose scale, cottony maple scale and Pear Psylla. It is not powerful, but it is a mechanical preparation of petroleum that mixes with cold water and is ready to apply. 1 gallon to 20 gallons of water sprayed on roses and bushes will kill every scale that it reaches without injury to tree or fruit if applied in late fall, winter or early spring while the foliage is off. Price, 1 quart, 40c.; 1-gallon can, $1.90; 5-gallon can, $5.90; 10-gallon can, $9.75; 30-gallon barrel, $15.00.

SCOTCH SOFT COAL SALT. For soil insects and for removing fertilizer. Used in onion drills, radish beds, cabbage beds, garden spots, etc., it checks the attacks of grubs, cutworms, etc. When scattered lightly, as a dusting around plants, it drives away insects that hide in the ground and lay their eggs near the roots. Price, 50-lb. bag, $2.50; 100-lb. bag, $4.00.

SLUG SHOT. A non-poisonous powder insecticide: it requires no mixing or preparation, easily applied and not injurious to animals, the person applying it, or the plants treated. Very effectual in destroying potato bugs and besides, green and black flies, flies, caterpillars, etc. Price, per lb. of 125 lbs., net, $7.50, per barrel of 250 lbs. net, $10.00; 10-lb. package, 75c. (mail weight, 1 1/2 lbs.); 4-lb. package, 40c.; in tin canister with perforated top for applying, 30c. each.

STICKY TREE CORD. Tack one end to the trees and the other end to the stakes and tack on every 18 inches, or in the furrows of round-barked trees, it will then prevent caterpillars, etc., from crawler up the tree and by placing it where it on all summer, it is easily put up and removed. It comes in 1000 foot rolls. Price, 25c., or $2.50 per doz. (mail weight, 11/b. each).

SULPHUR, FLUXED. For roots. Price, per lb. (mail weight, 2 lbs.); 10 lbs., 75c.; 25 lbs. and over, 46c. per lb., 10 lbs. net, 75c.; 10 lb. net, 75c. per lb. (mail weight, 11/2 lbs.)

SALT WATER. SHEEP DIP. A gallon makes a hundred gallons for most uses. Price, 10c. per gal., 75c. per half gal., 1 lb., $4.00 per half gal., 10 lbs. keg, $8.00; 100-lb. keg, $15.00.

Henderson's Worm-Killing Grass Food

Feeds the Grass and Eliminates the Worms

Henderson’s Worm-Killing Grass Food not only stimulates the grass on lawns, putting-greens, tennis courts, croquet grounds, etc., into rich green growth but it actually eliminates the wireworms that burrow in the turf in almost unbelievable quantities, causing the soil to become sticky, sour and becoming a breeding place for wireworms, that burrow in the soft grass to turn yellow and die out in spots. More lawn troubles are traceable to earthworms than most people realize and we advise all whose grass is not as good as it should be to apply Henderson’s Worm-Killing Grass Food at the rate of 1/2 pound to a square yard during rainy weather or else water in thoroughly with a hose. The worms will then immediately come to the surface and die. For putting-greens it is invaluable, keeping free from worm casts, level and true without the trouble and expense of daily brushing and rolling. It is used by many Golf and Country Clubs and on many private grounds in the United States, and all users are gratified with the results. Henderson’s worm-killing grass food is a non-poisonous powder not injurious to animal or bird life. Its fertilizing properties while combined in a well-balanced grass food are not so strong but that it can safely be applied on grass according to directions, at any season of the year. Use one pound for each two square yards. Though late in the season when the worms are deep in the ground the quantity may be increased.

Price of Henderson’s Worm-Killing Grass Food (P. B. N. Y.)

<table>
<thead>
<tr>
<th>Product</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 lb. pkg. (Mail wt. 6 lbs.)</td>
<td>$1.75</td>
</tr>
<tr>
<td>10&quot;</td>
<td>$3.50</td>
</tr>
<tr>
<td>10&quot; (Mail wt. 11 lbs.)</td>
<td>$1.25</td>
</tr>
<tr>
<td>25&quot;</td>
<td>$4.00</td>
</tr>
<tr>
<td>25 lb.</td>
<td>$1.00</td>
</tr>
</tbody>
</table>

“Your ‘Weed Destroyer’ is a boon to us here with our numerous garden walks and carriage drives to be kept clean and free of weeds. It is used to hoe here, hoe, hoe, from morning till night, all summer long, but the last two seasons by sprinkling with water in spring, followed by drizzling with water, it has kept the weeds and moss away and the walk in apple pie order.”

Henderson’s Flower Weed Destroyer

It completely destroys all weeds, wherever applied, and by its effect on the ground prevents the growth of fresh ones for a year afterwards, thus saving an immense amount of labor in hoeing, etc. For brick walks it is a boon, being in a liquid form and only requiring to be mixed with water and applied with a watering can or sprinkling cart. If the ground is very dry it should first be sprinkled with clear water, so the Weed Destroyer will not soak away too quickly. Where large weeds and docks are to be destroyed it is best to mow or clip off the tops first. Full directions for use with each package. (Not available)

<table>
<thead>
<tr>
<th>Product</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quart Can.</td>
<td>$0.50</td>
</tr>
<tr>
<td>Gallon Can.</td>
<td>$1.00</td>
</tr>
<tr>
<td>6-Gallon Keg</td>
<td>$5.00</td>
</tr>
<tr>
<td>60-Gallon Barrels</td>
<td>$50.00</td>
</tr>
</tbody>
</table>

“Climax” Lawn Sand

A non-poisonous, dried chemical, which easily distributed about 4 ounces per square yard kills weeds by suffocating the roots. It is used to prevent the growth of grass that tends to crowd out the grass that is desirable. Henderson’s ‘Climax’ Lawn Sand is thicker in growth, finer in texture and richer in color than any other. It is marvelous how quickly the grass responds and how lasting the improvement. Price, $3.50 lb., 70c. (Mail weight 4 lbs.); 7 lbs., $1.10 (Mail weight, 8 lbs.) will dress about 25 square yards; 14 lbs., $1.75; 25 lbs., $2.25; 100 lbs., $6.00; 1 ton, $90.00.

“Purchaser pays Express, Freight or Parcel Post Charges on Fertilizers, Insecticides and Fungicides. See 2d page cover.”

D. M. ELANFORD, Silver Springs, Md.
Bone Fertilizers

Decompose slowly in the soil, and therefore form excellent permanent improvement, less likely than any other fertilizer to waste. With bone there is no danger of burning the plants. Excel- lent for top-dressing lawns and grass lands, for garden and field crops.

**Quantity required.** For lawns, pasture and moving lands, 15 to 20 lbs. per acre. For trees and vines, 2 to 4 quarts each. For field and garden crops, ½ to 1 lb. broadcasted and harrowed in. For vine beds, pot plants, etc., one part to about fifty of soil.

**Raw Bone Meal.** This is ground very fine, de- composes more rapidly in the soil than the coarser grades, and is therefore more quickly beneficial.

Price, 1-lb. package, 15c.; (weight 2 lbs.) 5-lb. package, 35c.; 10-lb. package, 60c.; 25-lb. bag, $1.25; 50-lb. bag, $2.50; 100-lb. bag, $5.50; per ton of 2,000 lbs., $20.00.

**Raw Ground Bone.** This is moderately fine and particularly adapted for general fertilizing; the finer particles are immediately beneficial, the coarse keeping up the supply of plant food for a long period.

Price, per 100-lb. bag, $3.50; per ton of 2,000 lbs., $5.60.

**Blood and Bone.**

A very high grade fertilizer and superior, for immediate as well as for prolonged results; it is of exceptional value for garden crops, root crops, corn, grass, fruits, trees, small fruits, grape vines, and, in fact, all vegetables. It contains an abundance of potassium, phosphoric acid, and nitrogen. It is most beneficial in potting plants and in making manure for flowers and for potting plants. It is an excellent fertilizer for the soil of warm-weather crops, such as cucumbers, melons, tomatoes, etc., and for the same reason is excellent for potting plants.

Price, per 100-lb. bag, $3.50; per ton of 2,000 lbs., $5.60.

**Imported English Fertilizers.**

**CLAY’S FERTILIZER.** Price, 1-lb. bag, $1.25; 2-lb. bag, $2.50; 5-lb. bag, $10.00; 112-lb. bag, $7.00.

**THOMSON’S VINE, PLANT AND VEGETABLE MANURE.** Price, 2-lb. bag, $1.75; 5-lb. bag, $3.50; 112-lb. bag, $6.75.

**THOMSON’S SPECIAL CHRYSANTHEMUM AND TOP-DRESSING MANURE.** 7-lb. bag, $1.50; 14-lb. bag, $2.50; 25-lb. bag, $4.00; 50-lb. bag, $7.00.

**Henderson’s Superior Fertilizer for House Plants.**

A safe, clean and high-grade fertilizer, free from disagreeable odor, prepared especially for feeding plants grown in pots. It is a wonderful in- vigorator, producing luxuriant, healthy growth, fol- iage of rich texture and brilliant and more brilliant flowers. Detailed directions on each package. Price, 1-lb. bag, $1.00. Suitable for 25 ordinary- sized plants for one year, 25c. (weight 1 lb.)

**Pure Animal Manures.**

Convenient, compact, high-grade natural ma- nures dried and ground or pulverized, very nutritious, immediate and lasting in effect. They make rich Liquid Manures.

**Quantity required.** For garden and field crops, 1 to 2 tons per acre.—For potting, the balance before blooming. For top-dressing grass, use 1 ton per acre, applied in fall or early spring.

**SHEEP MANURE PULVERIZED.** Price, 50- lb. bag, $1.50; 100-lb. bag, $2.50; per ton of 2,000 lbs., $36.00; in packages of 2 lbs., 10c.; (weight 3 lbs.) 5-lb. bag, 35c.; (weight 6 lbs.) 10-lb. bag, 60c.

**HORSE MANURE DRIED.** Price, per 100-lb. bag, $2.50; 500-lb. bag, $10.00; per ton of 2,000 lbs., $30.00.

**CATTLE MANURE, DRIED.** $2.00 per 100- lb. bag, $30.00 per ton.

**Genuine Peruvian Guano.** Valuable for its Nitrogen which is a stimulator for both flowers and vegetables. Price, 1-lb. tin, 30c.; 5-lb. tin, $1.00; 10-lb. tin, $2.00; 25-lb. bag, $3.00; 50-lb. bag, $5.50; 100-lb. bag, $7.50.

**Ashes, Canada Hard Wood.**

Drive away insects and improve the texture of the soil; indispensable for all crops requiring pot- ash; very beneficial for garden and field crops, grass lands and lawns. A 1 to 2 tons per acre.

Price, per 100-lb. bag, $2.00; per lb. of about 200 lbs., $4.00; per ton of 2,000 lbs., in bulk, $38.00.

**Commercial Fertilizers.**

The highest grade commercial fertilizers made.

**Potato Manure.** $2.75. Potato Manure is $2.75. Corn Manure is $2.25. Special Truck Manure for vegetable crops, $2.50. General Crop Compound, $2.50.

**HENDERSON’S GARDEN GUIDE AND RE- CORDED Dressed, revivified, and brought up to date.** Price, 25c.—is sent free with all orders amounting to $2.00 or over. It tells all about garden ground preparation, and fertilization. It also shows how much Nitrogen, Phosphoric Acid and Potash are consumed by various crops, thus in- dicating what fertilizer the land requires.
**Henderson’s Special (Planet, Jr. No. 24) Hill and Drill Seeder.**

PRICE, $10.00.

Or Combined as a Single Wheel Hoe, Cultivator and Garden Plow

as illustrated

Price, $12.00.

This implement is a first class Seeder, holding one quart of seed. It will drop all garden seeds, even peas and beans, in hills 4, 6, 8, 12 or 24 inches apart or sow in drills with great regularity in a narrow line to any exact depth required. It opens the furrow. drops the seed, covers it, rolls it down and marks the next row all at one passage as fast as the operator can walk. As a Single wheel Hoe, Cultivator and Garden Plow it is unsurpassed being furnished with one pair of hoes, three cultivating teeth one large garden plow and one double leaf guard. When used as a cultivator &c. the seeder is entirely removed making a light, handy and practical implement. The steel driving wheel is 13 inches in diameter.

---

**SPECIAL SUGGESTIONS.**

Ground intended to be planted with a Seed Sower or cultivated by a Wheel Hoe should be fine, free from trash, and should be well leveled by raking or rolling.

Set up the machine as shown in the cut.

To set the Seeder. Before putting in the seed, move the index finger beyond the line on the scale corresponding to the number of the seed to be sown, and then adjust the finger accurately to that line, by screwing forward the brass thumbscrew. For instance, to sow onions in drills, adjust the finger accurately to Fig. 12. To sow onions in hills, make it point to Fig. 10, then after pushing the feed rod all the way down, put in the seed.

To Start Sowing. Pull up the feed rod on the handles as far as it will go, so that the index finger presses against the thumbscrew.

To cut off the flow of seed, push the feed rod all the way down.

Hill Dropping. There are three spacing wheels; two of them double. Use the six-tooth spacer for four inch hills; the four-tooth for six inch; the three-tooth for eight inch; the two-tooth for twelve inch; and the one-tooth for twenty-four inch hills.

To Sow in Drills. Raise the piece which engages with the spacing wheels, and push it over to the left until it drops into the notch provided to hold it open.

When set according to the index if the drill sows thicker or thinner than desired the amount can be adjusted accurately by the thumbscrew. As different varieties of seed of the same name especially peas and beans vary greatly in size and the number wanted per foot also varies it is much better to test the Seeder before using it on a strip of cloth or other good surface, moving the set-screw and pointer as needed. Test it at the speed of a moderate walk. Shut off the feed, when the machine is stopped by means of the feed rod.

---

**TO CHANGE FROM A SEEDER TO WHEEL HOE, CULTIVATOR &c.**

Turn the machine up side down, resting it on the wheel and handles, take out bolt that fastens wheel arms to the drill, then lift out the drill and substitute the tool frame.

This machine hoes to or from, deep or shallow, finishing at one passage the space between all rows from six to sixteen inches apart, at the speed of a moderate walk.

Adjust the handles to the most comfortable height after loosening the bolts in the slots and then secure them firmly, by tightening the nuts.

The Wheel Hoe may be pushed straight ahead, though it is better to use it with successive strokes from six inches in length for delicate work, to the whole length of a step in other cases; but in either case moving at the speed of a moderate walk. Do not watch the blades, but the wheel only.

Leaf Guard. Use this only when plants are so spreading that the wheel would injure the leaves.

Change depth of work by raising or lowering the frame, first loosening the bolt that holds the frame.

First, hoeing between small plants, use the D hoe on the left side and the C hoe on the right. Set two to three inches narrower than the distance between the rows.

To hoe both sides at once, put on the extension on the right side of the frame and use the C hoe on the left and the D hoe on the right of the row.

Second hoeing, use the C hoe on the left and the D hoe on the right side, between the rows.

If wide rows require two passages, first hoe out the middle, hoes close together, and then finish next to the crop, hoes wide apart.

Rakes are supplied as an extra. Use the three-tooth rakes for six inch rows, the five-tooth for the nine and ten inch, the seven-tooth for twelve inch rows, and the three and five together for fourteen, etc. The five and seven-tooth together for leveling ground and raking trash.

Cultivating. Use all three teeth in the main slot; or put the centre one in the rear end of slot, when wishing to hill the crop, with all the points set downward.

Use a single tooth for marking out rows for Onion Sets, Peas, Beans, etc.

Plowing. Open furrows with the plow by going twice in a furrow and cover by throwing a light furrow from one side, then a heavy one from the other. Plow away from crops with plow on left side and towards them in right side of frame.

Keep the blades sharp and bright, and they will work like a charm.

With care in following the directions at first, a little practice will render the work easy and delightful.
The Henderson System of Lawn Making

HOW TO MAKE A LAWN—By Peter Henderson

Digging
Draining
Grading
Fertilizing

Seeding
Mowing
Rolling
Renovating

THE VALUE OF A LAWN. That an expanse of smooth green turf, surrounding a dwelling in a distinct asset, adding much to the appearance, and therefore the value of a house is generally admitted; but not infrequently we see, after dwellings costing it may be from five to thirty thousand dollars are erected, that the grounds surrounding it are left to the tender mercy of some incompetent to grade and put in shape. The architect’s duties usually end with the completion of the building, and very often the contractor is commissioned without any particular instructions to make the lawn. This frequently results in the beauty of the place being marred—for this matter requires both intelligence and good taste, and if the lawns are of great extent some knowledge of the principles of landscape gardening.

The character of the turf which is to form the “green carpet” is the first and most important consideration, for unless this be of the best, all the subsequent labor will be in vain. The matter resolves itself into the question—what grasses are the most suitable for forming a perfect lawn? The answer is “turf-forming” grasses, which will form a closely interwoven, firm, deep and elastic turf; growing so closely that weeds are unable to obtain a foothold. All “bunch grasses” that is, all grasses that form tussocks, by growing in separate clumps, must be rigidly excluded from any combination of grasses for a lawn.

GRASS SEED MIXTURES. There are hundreds of varieties of grasses but only about sixteen of them are suitable for use in making a lawn, and a perfect and enduring lawn cannot be made by sowing any single one of these varieties. Kentucky Blue Grass for instance which is sometimes recommended for lawns grows but sparsely during midsummer, is slow to form a close sward—requiring two years to do that; and loses color in hot weather. A good lawn can only be made by sowing a combination of grasses so arranged that they arrive at their best during different months of the year, one kind constantly succeeding another so that perpetual verdure is maintained. Another great advantage secured by sowing mixtures, is that the plant food in the soil is made use of to the fullest extent, because such grasses, having different root formations—some being shallow rooted and others deep rooted in habit—seek their food at different levels, and treble the usual number of plants are able to grow on every square foot of land. Thus a close turf is formed which takes entire possession of the soil to the exclusion of all weeds, and a perfect lawn is produced which is constantly covered with a carpet of living green. The Henderson Lawn Grass Seed is a combination of just such grasses as those described. It is the fruit of years of experience and close study of American conditions and is undoubtedly the best for the American climate.

GRADING. One of the first conditions for a perfect lawn is, that the land be perfectly drained either naturally or artificially. If the subsoil is sand or gravel, so the water can quickly pass through it, then there will be no need for artificial drains, but if there is a stratum of adhesive clay for a subsoil then drains are indispensable every fifteen or twenty feet. As the formation of the lawn is the foundation of all subsequent operations, it is imperative that it be carefully done; for if badly done at first it cannot be changed or altered, unless to the great detriment of trees or shrubs that have been planted or flower beds or walks that have been laid out.

The first thing to be done is to get the ground shaped to the desired grade, taking care in grading that when hills or rocks are removed, sufficient subsoil is also removed to be replaced with top soil, so that at least five inches of good soil will overlay the whole in all places; and where trees are to be planted there should be twice that depth of good soil. When the grading is finished, if the nature of the ground requires it, drains should be laid where necessary; then the whole should be thoroughly plowed, a subsoil flowing in the wake of the common plow, until it is completely pulverized. A heavy harrow should then be applied until the surface is thoroughly fined down; all

THE IMPORTANCE OF ROLLING.

In the winter time, alternate thawing and freezing causes the ground to heave, leaving air spaces and fissures exposing tender feeding roots to the air which dries them out and kills them. Also in very hot weather the ground bakes, and cracks appear which lead down to the roots. These must be closed up by thorough rolling or the roots are killed.
HOW TO MAKE A LAWN—Continued

stones, roots, etc., should be removed, so that a smooth surface may be obtained. We have used, with great effect and saving of labor the Imported Scotch Chain Harrow, which fines and levels the land equal to a steel rake; and wherever large areas are in preparation for lawns, or in fact for any field culture, requiring a fine smooth surface, this implement will be found to be of great value.

For small plots, of course, digging, trenching and raking must be done instead of plowing, subsoiling and harrowing, and the surface after sowing should be patted down with the back of a spade or rolled with a roller.

FERTILIZING. The question of fertilizers for the lawn is an important one. Perhaps the best way to apply well-rotted stable manure is to spread it thick enough to cover the ground after plowing or digging, and then harrow or rake it in. Though a little more costly, the best plan to insure permanency for the lawn is to use from 1,500 to 2,000 lbs. per acre of coarse Ground Bone or better still, about the half the above quantity of bone and the other half of the Henderson Lawn Enricher, or in that proportion over lesser areas. The bone decomposes slowly, giving lasting enrichment; while the Lawn Enricher gives immediate results, the combination of these two fertilizers is perfect in effect, insuring a "velvet lawn," under ordinary circumstances, for several years without further application of manure. To insure even distribution, the fertilizers could be applied in the manner recommended for sowing lawn seed on this page. The quantity of fertilizer required for each 8 ft. x 8 ft. square is 2½ lbs., or 25 lbs. for 10 squares.

When the land has not been fertilized before sowing, it is necessary to use top-dressing of manure each season to keep up the fertility of the lawn, and nothing is better for this purpose than well-rotted short stable manure to spread over it late in the fall (November or December) enough to partially cover the surface. On no account should fresh stable manure be used, or the lawn will be very apt to be ruined by the introduction of weed seeds. This should be allowed to remain on until such time as the grass shows signs of starting in the Spring, when the rough portion should be raked off and a heavy roller applied, so that the surface of the lawn be rendered smooth and firm for the mower. If the top-dressing of well-rotted stable manure has been omitted in the Fall, fine bone dust mixed with finely sifted wood ashes, in equal parts may be sown on the lawn about as thick as sand is usually strewn on the floor, and rolled down, and we advise that the lawn be rolled several times during the Spring.

SEEDING. In the latitude of New York the seed may be sown any time from March 20th to June 20th. If the ground has been well prepared, and the weather is not too dry, a good lawn will be in evidence in 6 to 10 weeks time. Under very congenial conditions, new lawns are often ready for mowing in 6 weeks from sowing, and we have received hundreds of letters from customers announcing that 4 weeks from sowing their lawn was ready for mowing. When seed is sown during the hot months of June and July a sprinkling of oats may be sown at the same time to protect the young grass from the sun, but water must be used copiously or failure is likely to result. Lawns are also sown during the fall months from August 20th to October 15th with excellent results.

Sow the seed on the newly raked or harrowed surface, but do not sow on a windy day or much of the seed will be lost. Also do not sow seed when the soil is wet, or much is lost during the necessary rolling, and besides the perfect level desirable will be destroyed.

THE BEST METHOD OF SOWING. We illustrate on this page a method of sowing which will enable the operator to avoid sowing the same place twice and also prevent him missing any part of the ground.

The two garden lines A and B are stretched across the plot—the ends being attached to stakes. The lines are placed 8 feet apart. Then the rods C and D are laid across, these also being 8 feet apart. The space thus enclosed 8 x feet is then sown with seed, and the rod D is lifted and placed 8 feet in advance of C, and that space is also sown. The rod C is lifted and placed 8 feet in advance of D and so on until the entire width has been sown. Then line A is lifted and placed 8 feet the other side of line B, the rods are again placed in position another strip is sown, and so on until the lawn is completed. For each square about a pint of seed should be used, if quick results are desired. Less than this is usually allowed viz. 1 quart to 300 square feet, or 5 bushels to the acre, but there is no arbitrary rule. After all the seed is sown cover with soil about ¾ in. deep. This may be accomplished by raking the surface first in one direction and then in an opposite one. Do not bury the teeth of the rake too deeply. When the raking is finished roll the ground thoroughly with a heavy iron roller, also in two opposite directions.

For seeding lawns of large area we advise the use of the Velvet-Lawn’ Seeders. These valuable machines, of recent invention, greatly facilitate the seeding of extensive grounds, such as Golf Courses, Tennis Courts, Putting Greens, etc. There is also the “Velvet-Lawn” hand-power for use on smaller places, which is wonderfully efficient, putting the seeds into old sod or newly prepared ground with great evenness whether the day be windy or not.

QUANTITY OF SEED REQUIRED. As a guide for the proper quantity of seed required to form a perfect lawn, we may state that one quart of Lawn Grass mixture is sufficient to sow an area of 20 feet by 15 feet—300 square feet—or to cover an acre five bushels will be required. It should be borne in mind that in order to produce the best results, grass seed for lawns should be sown thickly. In a lawn of about an acre in extent, which we made, six bushels of the “Henderson” mixture were sown on the 25th of April harrowed well in, then rolled firmly with a heavy iron roller—the result was that by July 1st, or about sixty days from the date of sowing—a perfect lawn was obtained, having had to be twice mowed previous to that date.

MOWING. The young grass will be up in about a week if sown in the fall, and in about two weeks if sown in the spring, depending of course upon the prevailing weather. When the grass is nearly
HOW TO MAKE A LAWN—Continued.

two inches high, it should be rolled with a light weight roller, to firm the soil, and when over 2 inches in height it is ready for the lawn mower.

The knives should be set high for this first cutting, so as not to cut it off too close to the ground. The best machine on the market is the Henderson Ball Bearing Lawn Mower. From this time on until growth is retarded in the fall, the lawn should be regularly mown every week, so as to induce the grass to spread out over the surface, instead of growing up tall and leaving bare spots. Any bare spots should be repaired as soon as observed, by scratching the ground, putting in a handful of seed and covering in the usual way. When a lawn is mown regularly the clippings may be left on, and as the sun soon shrivels them up they never appear unsightly, also they protect the roots of the young grass from the hot sun.

If the grass is allowed to get long then the clippings should be raked off or caught in a grass-catcher which may be attached to the mower. In the early stages of the growth of a lawn, it will be found very beneficial to top-dress it, by scattering broadcast a compost of sifted soil and sand and the Henderson Lawn Enricher using 25 lbs. of the latter to a cartload of the former. It often happens that the soil contains weed seeds of various species and among them crab-grass, known also as five-fingered grass. Like many of the others this is annual, and if not allowed to seed, may ultimately be eradicated. But as it is prostrate in growth it should be loosened up with a rake and the scythe used two or three times during the season. Whatever means are employed it must be cut out, and lawn grass seed thickly sown in its place, so that it will not be able to obtain a footing the following year.

ROLLING. The benefit derived from using a roller on the lawn, especially in the spring is not fully understood. The action of freezing and thawing causes the ground to heave, and we may sometimes see hardy plants so forced up that their roots are destroyed. A lawn is just a collection of millions of little plants and they suffer in the same way unless the ground is firmly pressed back with a roller before hot weather comes. For use on the lawn always take a "two or three section" roller, as they can be turned without injuring the grass. A 300 lb. roller is about as heavy as one man can pull, though a 400 lb. will be better if you have two persons to operate it.

RENOVATING. To renovate lawns that have become worn out by neglect or other causes, and where it is not convenient or desirable to renew by plowing up, they may be greatly benefited by first moving the grass as closely as possible. Then top dress with the Henderson Lawn Enricher using 1/2 pounds to every square of 9 ft. x 8 ft. or a 5 lb. pack-
age for 4 spaces. This must be well raked in, or if the lawn is large, harrowed in, with a light steel harrow, so as to open up the soil. Unless this is done the roots of young grass cannot penetrate the old soil. Sow over the raked surface about half the quantity of lawn seed used in sowing a new lawn. After sowing the surface should be harrowed or raked over, and firmly rolled or beaten down, but if spurious grass or other weeds have got possession of lawn, then this way of renovation would not be satisfactory, and it had better be plowed under and sown afresh, in the manner already given for the formation of the lawn.

STIMULATING. Where very quick results are required, or in case a lawn is becoming bare or patchy in spots, caused by wear and tear or otherwise, the grasses may be forced into a quick growth by applying Nitrate of Soda at the rate of 100 lbs. per acre.

If put on in the dry state it should be applied just before a shower, otherwise it is apt to burn the grasses; but the safer plan is to dissolve one pound of the nitrate in thirty to forty gallons of water and sprinkle with the solution.

The Henderson Lawn Enricher is always successful in inducing a new growth on worn-out lawns, and is much safer to use, there being no danger of burning the grass, whether used in spring or autumn. Apply as recommended in the instructions for Renovating.

SHADY LAWNS. When a lawn is much shaded either in whole or in part, the shaded portions should be sown with Henderson's Shady Nook Lawn Grass Mixture, which is a combination of fine dwarf growing evergreen varieties, which in their wild or natural state are to be found growing in the woods or other sheltered or shaded spots.

In the immediate neighborhood of large trees, fertilizers should be applied frequently, for the trees absorb the fertilizer and impoverish the ground.

Ground much shaded is frequently sour, and is apt to be covered with moss. An application of lime raked into the soil is an excellent corrector and sweetener, but the moss should be first cut off with a scuffle hoe and then thrown away.

TERRACES. On terraces it is often necessary to use sod, as the rains wash the soil off before the grass seed has time to germinate, but in favorable weather it is possible to grow grass on them from seed.

Henderson's Terrace Sod mixture which we offer is composed of deep-rooting grasses, which, if once established, will hold the soil and prevent washouts. We advise liberal fertilizing and seeding so that the grasses may be quickly established.
THE MOST BEAUTIFUL LAWNS IN AMERICA ARE MADE WITH

The “Henderson” Lawn Grass Seed.

The “Henderson” Lawn Grass Seed has been the means of adorning innumerable American homes with what has been aptly described as the "GAIETY OF GRASS," that finishing touch to the home beautiful which is so essential and necessary—a perfect and enduring lawn. That home-owners in all parts of the United States appreciate and value at its true worth this celebrated mixture is evidenced by the large number of letters of recommendation annually received by us. A few of these we print in our catalogue and as will be seen, they not only confirm our somewhat conservative claims as to the value of this far-famed lawn mixture, but go further than we have hitherto done in praise and commendation. The "Henderson" Lawn Grass Seed has been thoroughly tested by country-wide use, for more than half a century. It is the fruit of years of experience and close study of American conditions, and is undoubtedly the best for the American climate.

HOME OWNERS IN ALL PARTS OF THE U. S. PRAISE THE “HENDERS0N” LAWN GRASS SEED

“My lawn is the finest in town. I made it 25 years ago and got the seed of you. No velvet carpet is softer, I use hardwood ashes and phosphate twice a season, and in early spring you broadcast the "Henderson" Lawn Grass Seed, and roll it. D. R. SMITH, Adams, Mass.”

“I am becoming firmly convinced that there is but one good grass seed, Henderson’s Lawn Grass Seed.”

NATH. L. BRONSON, Waterbury, Conn.

“Wish to say that I had great luck with your Lawn Grass Seed last year. It was O. K. Had lawns in about six weeks from time of planting. Could have mowed it with lawn mower had I wanted to.”

J. C. BARSTON, Williamsville, Conn.

“Your Grass Seed is indeed a wonder, both for quick growth and for beauty.”

C. N. LAWS, Rapid City, S. D.

“The Henderson Lawn Grass Seed is the best that ever came to Deadwood.”

W. J. THORBY, Deadwood, S. D.

“The Henderson Grass Seed has given great satisfaction in the past, and we are desirous of continuing its use.”

LIVINGSTON MANOR CORP., New Brunswick, N. J.

“I am highly pleased with the Lawn Grass Seed. In my opinion it is the best I have ever used.”

PETER LANE, Sedalia, Mo.

“I would like you to mail me your catalogue containing description of your Lawn Grass Seed. I have used it for the past two years and all who have seen it say it is the finest looking lawn in this city.”

THOMAS A. LEE, 174 Wall St., Pawtucket, R. I.

“Really can’t get along out here without Henderson’s Lawn Grass Seed. Two years ago I sowed my lawn with your seed. It is far ahead of anything else in the neighborhood.”

HERBERT HUNT, 5730 No. 280th St., Tacoma, Wash.

“The Henderson Lawn Grass Seed used on my lawn is ‘Dandy’ and I have a lawn as smooth and velvety as a carpet.”

CHAS. E. MASON, Birmingham, Ala.

“The Lawn Grass Seed I purchased from you last spring did fine. I have a fine set of grass on my lawn and am well pleased.”

J. J. NELSON, Palmyra, Mo.

“Your seeds have always given satisfaction. I have a large lawn now with the Henderson Lawn Grass Seed, and it is much admired.”

Dr. FANNIE GOSDEN, Farley, Ia.

PRICE OF THE “HENDERS0N” LAWN GRASS SEED. DELIVERED FREE IN THE U. S.

30c. per quart. 55c. for 2 quarts. $1.00 for 4 quarts. $1.75 per peck. $6.00 per bushel of 20 lbs.

We Deliver quarts and pecks FREE in the U. S. by Parcel Post or Express at our option.

Bushels and larger quantities we deliver FREE by Parcel Post, Express or Freight at our option.
THE HIGHEST AWARDS

In the Gift of the Judges Has Invariably Been Won by the Lawns Made With

The “Henderson” Lawn Grass Seed

Besides its country-wide use on the home grounds of the people The “Henderson” Lawn Grass Seed has invariably been chosen to produce lawns at the International Expositions held in the United States—notably the Centennial at Philadelphia, the Columbian at Chicago, the Pan-American at Buffalo, the Lewis & Clark at Portland, and the Jamestown at Norfolk. At all these great industrial congresses it has been our privilege to furnish the emerald setting for many of the beautiful edifices designed by the great architects of the world.

The brilliant color scheme adopted for these buildings—white, red and yellow—made these spacious green lawns most acceptable and restful to the eye, attracted the attention of every visitor and helped to make The “HENDERSO”N LAWN GRASS SEED famous throughout the country.

As is usual at all these great undertakings everything was delayed to the last moment, and we were required to produce the lawns in a few weeks’ time. We successfully accomplished this in from four to six weeks and as the superintendent of grounds at the Jamestown Exposition remarked, “It was a miracle in lawn making.”

GOLDEN MEDALS MARK ITS TRIUMPHS

but we value still more the enthusiastic praise of our customers.

“Enclosed please find order for lawn grass seed. I planted half a bushel of the Henderson Lawn Grass Seed last year, and I have the best looking lawn in this locality. It was sown on barren ground and it exceeded all my expectations.”

F. H. MAPLE, Bettendorf, Iowa

March 13, 1916.

“We were able to produce a fine set of grass with your Lawn Grass Seed, where there had never been a speck of grass before. I praise your seeds to everybody.”


Hubert St., Peoria, Ill.

“While in Kentucky I saw a lawn in Henderson, Ky., which was the admiration of all who saw it. It was sown with your lawn seed mixtures.”

H. W. C. AINLEY, Delores, Col.

March 5, 1916.

PRICE OF THE “HENDERSO”N LAWN GRASS SEED (Delivered Free)

30c. per quart. 55c. for 2 quarts. $1.00 for 4 quarts. $1.75 per peck. $6.00 per bushel of 20 lb.

We deliver quarts and pecks free in the U. S. by parcel post or express at our option.

We also deliver free in the U. S. by parcel post, express or freight (our choice) all Lawn Grass Seeds in larger quantities.

“The Henderson Lawn Grass Seed I sowed this spring has been the talk of the neighborhood. It required mowing in just four weeks from sowing to the very day. I am more than pleased with it.”

G. S. KALLENBAUGH, Galena, Ohio.

June 27, 1916.

“I enclose a couple of photographs showing my lawn for which I took first prize. It was planted with the Henderson Lawn Grass Seed.”

J. E. WELLS, Phillips Ave., Dayton, Ohio.

April 4, 1916.

“I sowed the Henderson Lawn Grass Seed last August and I mowed it in five weeks’ time. There is no grass as good in Collinswood.”

STUART W. FRAZER, Linwood Ave., Collinswood, N. J.

April 26, 1916.
Lawn Makers in All Parts of the United States

TELL OF THE BEAUTIFUL LAWNS MADE WITH

THE “HENDERSON” LAWN GRASS SEED.

"I want to express to you the satisfaction I have found with your Lawn Grass Seed. I planted the seed February 23rd, and by June 1st it had been mowed four times, and is a beautiful plot of grass. It is absolutely free from weeds, and as you represent. Next year I want my whole lawn planted with it."

Mrs. L. W. WORSHAM, Corinth, Miss.

"About fifteen years ago I bought some lawn seed of you and followed your instructions and had the best lawn in the City. I have a small lawn to fix up this year part new and part old, and want some more seed that will grow quick and make a nice lawn."

E. K. CALLAHAN
142 Winspere St., Buffalo, N. Y.

"The grass seed I bought from you some time ago is fine and dandy and a treat to look at. I have as fine a lawn for the first year as there is in the City and that is saying something."

WILLIAM JONES
64 Kulp St., Wilkes Barre, Pa.

"The lawn grass seed which you sent about April 15th was sowed immediately following its receipt, and is now up. It gives promise of producing a good lawn, something for which I have been striving for three years."

H. J. SAVAGE
1227 Girard St., N.E., Washington, D. C.

"We cut our lawn grass six weeks from planting. It's some seed."

Mrs. FORDHAM
1229 Charlevoix St., Detroit, Mich.

"Late this Spring I purchased some of your lawn grass seed for my yard, and must say that I was agreeably surprised at its rapid growth and beauty. Some was not sowed until late, but I have the prettiest lawn in town."

S. W. PICKENS, Hendricks, W. Va.

"I got a fine stand of grass from the Henderson Lawn Grass Seed on the lawn of my new home, a photo of which I send you. They were graded and seeded down in October. It is said to be the prettiest grass and the quickest growing in this section."

A. O. SURBER, Clifton Forge, Va.

"They can all talk about lawn seed, but there is none that can come up to yours. I have tried many kinds and yours can't be beat."

Gus J. Kraemer, Hazel Crest, Illinois.

"In the early Spring we used about six bushels of your lawn grass seed with excellent results."

HUDSON COUNTY HOSPITAL, Secaucus, N. J.

"Your Lawn Grass Seed has certainly been very satisfactory. I gave you an order this spring, and certainly have a beautiful lawn now. Just about three weeks ago now I recommended your Grass Seed to Mr. Levi Plank, who sent you an order in consequence, and he now actually has grass at least two inches high. Your grass is certainly the thing for Kansas."

Fred L. Taylor
Lyons, Kansas.

"I saw one of your lawns at Brookfield, Wash., and it was fine."

Luman R. Wing
326 W. Madison St., Chicago, Ill.

"In your catalogue you say "Four weeks from sowing, ready for mowing." Well, after having my house built a year ago last summer I sent for some of the Henderson Lawn Grass Seed. Then I had the grading done with ordinary sandy loam and sowed the seed about the middle of August. In 21 days from the time of sowing I had to mow it. No one around ever saw the like before."

Chester Pleives
255 Simcoe St., London, Ont.

"Last Spring I bought the "Henderson" Lawn Grass Seed. I had to defer sowing it until late in the Spring on account of waiting for the cement sidewalk. Two days after it was in we had a fine shower, and within five weeks I went over it with the lawn mower. During the summer I was away for five weeks and no one looked after it. When I came back there were several places that looked dead, but they revived after a shower and the lawn has grown luxuriantly ever since. Many in town admire the lawn very much, and I suppose that you have your orders by this time."

Rev. Martin Ossewaarde
Sioux Center, Iowa.
Henderson’s “Seaside” Lawn Grass Seed.

Along our seacoast there are many beautiful summer homes and resorts with such sandy saline surroundings that a turf of the favorite lawn Grasses cannot be produced. Our “Seaside” mixture will make a good turf of green on sand, though, of course, the sand must be top-dressed with not less than 2 inches of soil before even our “Seaside” Grass Seed is sown, to enable the young Grass to get a start, after which the long roots—peculiar to the varieties we use in this mixture—drive down deeply in the sand. Attention must be given to sprinkling during dry weather. Use not less than one quart for 300 square feet; 5 bushels per acre. Price, delivered free in the U. S. 25c. qt., 85c. for 4 qts., $1.50 pk., $5.00 bu.

“For several years I have ordered for laying down new lawns, and for renovating others, Henderson’s Seaside Lawn Grass Seed. It has produced the best results.”

ELTON G. CUSHMAN, Taunton, Mass.

Henderson’s “Sunny South” Lawn Grass Seed.

It is especially prepared for the South, and contains all the best grasses that are by nature adapted for hot, dry situations. In the South, Bermuda Grass is frequently used, but it remains green only in the summer months, turning brown in winter, but by using this mixture, and with some care and attention to watering an all-the-year-round lawn can be maintained in the Southern States where grasses do not usually thrive.

Price, delivered free in the U. S., 35c. qt., $1.25 for 4 qts., $2.00 pk., $7.00 bu. of 20 lbs.

A GREEN LAWN IN TEXAS.

“At my former home at El Paso I had a lawn of your Sunny South Lawn Grass Seed which under irrigation produced the heaviest lawn I ever saw, necessitating cutting three times weekly in order to make it look trim. I use your Ball-Bearing Lawn Mowers.”

L. H. VANDERWERT, Wilcox, Ariz.

“I have sent you under separate cover a photograph showing bird’s-eye-view of Tennessee Centennial Exposition grounds, on which we have used exclusively Henderson Lawn Grass Seed. That lawn last September and it now presents a good shape, making an elegant lawn for the Exposition.”

E. C. LEWIS.

Henderson’s “Tough Turf” Grass Seed.

For Tennis Courts, Croquet Grounds, Bowling Greens, etc.

It Quickly Forms an Indestructible Turf.

SMOOTH, FIRM, ELASTIC, STANDING WEAR AND TEAR OF OUTDOOR GAMES.

Under congenial conditions it will be ready for moving four weeks from sowing, and in six weeks ready for playing.

Henderson’s “Tough Turf” Grass Seed is a blend of Grasses especially suited for the making of Grass tennis courts, croquet grounds, bowling greens, etc. The turf required for outdoor sports must be closely interwoven, firm, elastic, smooth, and durable to stand the wear and tear. These requirements are met in Henderson’s “Tough Turf” Mixture, which is composed of fibrous, deep rooting Grasses that spread and intermingle. The seeds are blended in the proper proportions to form and maintain a tough, matted sward, constantly green, even in dry weather.

These varieties of Grasses being low-growing and fine-leaved, require to be sown liberally if a playing turf is desired quickly; not less than one quart should be used for 300 square feet, or five bushels per acre although fifty per cent more may be used with advantage. Half that quantity will do for renovating. (See engraving.)

Price, delivered free in the U. S., 30c. qt., $1.00 for 4 qts., $1.75 pk., $6.00 bu. of 20 lbs.

“I have a Tennis Lawn of your beautiful ‘Tough Turf’ Grass seed mixture. It attracts the attention of every passer by, for it is indeed a beauty.”

L. E. RICHARDSON, Marinette, Ill.

“I purchased some ‘Tough Turf’ Grass Seed Mixture from you last year. I succeeded admirably, and it is very beautiful, keeping green all the year round.”

HART F. SMITH, Isleton, Cal.
Henderson's

"Shady Nook" Lawn Grass Seed.

On nearly all lawns there are unsightly bare spots under the shade of trees, which have baffled all efforts to get into Grass, but with this mixture there need be no further difficulty. It is a combination of fine, dwarf growing, evergreen varieties, which in their wild or natural state are to be found growing, in the woods or other sheltered and shaded spots. Ground that has been densely shaded by trees is frequently "sour," and if the drainage is defective it is apt to be covered with moss and coarse bog Grasses. In such cases an application of slaked lime, at the rate of one bushel to each thousand square feet, or forty bushels to the acre, is an excellent corrective and sweetener but the moss should be first removed by the use of a sharp rake.

Price, delivered free in the U. S., 35 cts. qt., $1.25 for 4 qts., $2.00 pk., $7.00 bu. of 20 lbs.

"The popular opinion of many is that grass will not grow under the dense shade of the Magnolia tree and I was always of that opinion until I tried your Shady Nook seed. I now have a fine green grass plot and I need not tell you how much it adds to the appearance of the front of my residence."

Dr. EDWIN BENTLEY,
113 East Capitol Ave., Little Rock, Ark.

"On July 15th we seeded many bare spots under the large trees with your shady Nook Grass seed. Now in thirty-five days of midsummer, the spots are closely covered with beautiful green grass greatly admired by all."

D. E. HOWATT,
Forest Hill, Cleveland, Ohio.

Henderson's

"Terrace Sod" Lawn Grass Seed.

This is a special mixture of grasses best suited for sowing on terraces, embankments and hillsides. These varieties push forth deep, strong, spreading roots; that bind the soil firmly into a compact turf, which will withstand the heaviest rains. They are all hardy grasses, enduring long periods of drought, they thrive on shallow soils, and can be relied upon to produce a rich velvety-green turf of fine leaved grasses throughout the season. The great difficulty to be overcome in getting grass established on slopes is to prevent rains washing out the young grass before it is thoroughly rooted. To prevent this, place a continuous run of ten inch boards, set on edge and held in position by stakes, along the crest of the hill. This will check and turn the water to a great extent.

Price, delivered free in U. S., 35 cts. qt., $1.25 for 4 qts., $2.00 pk., $7.00 bu. of 20 lbs.

"From your Terrace Sod Seed last year I had the finest sod on Terraces you ever saw."
O. M. KIMMEL, Graford, Pa.

"It affords me great pleasure to state that I have been using Henderson's Shady Nook Lawn Grass Seed under Magnolia and Maple trees for many years with great success. I put on a fresh supply of seed each year and then fertilize it."
Mrs. J. H. McFERRIN, Collierville, Tenn.

"The Terrace Sod Lawn Grass Seed I have from you last year does well indeed. It holds the soil firmly."
L. H. STEPHENS, Rinecoton, Conn.
The International Polo Games
At Meadowbrook, L. I., June 13th and 17th, 1914,
were played upon turf produced with the
Henderson "Athletic Field" Grass Seed Mixture

Its rich dark velvety-green was the subject of admiring comment of thousands. The illustration is from photos taken at Meadowbrook on the occasion of the famous international match between picked teams representing America and England. The Polo Field and the various lawns at Meadowbrook were originally laid down with the Henderson "Athletic Field" Grass Seed Mixture and have been renovated from time to time with the same mixture. The superintendent has thus been able to maintain at all times a close, compact turf of dark emerald-green (see his testimonial printed below) which has aroused the admiration of thousands. The oblong picture is a view of the grounds being prepared for the game by mowing the Grass with a power mower, which at the same time rolls and smooths the surface. The Grass cuttings were removed later by a small army of men with rakes, leaving a perfectly clean turf. In the circle is a photo of an incident at the opening of the second game, showing a group of the principal players in action.

THE NEW YORK TIMES of June 17th, 1914, describing the contest and the surroundings, says in part, "The crowd was larger than on the first day, and sat tier upon tier around the rolled field which looked for all the world like a great strip of green velvet."

HENDERSON'S "ATHLETIC FIELD" GRASS SEED MIXTURE
FOR BASEBALL, POLO AND CRICKET GROUNDS, ETC., ETC.

is a special blend of deep-rooting, fine-leaved, turf-forming Grasses, especially suited for Baseball Grounds, Polo Grounds, Cricket Grounds, etc. This mixture forms a thick strong, enduring turf that will stand any amount of hard usage without showing wear and tear. It grows quickly, and if soil and conditions are at all favorable with attention to rolling and mowing, should be ready for hard use in eight weeks from sowing.

The refreshing green and the close turf—which have attracted the attention of hundreds of thousands of patrons of the principal Baseball Parks and Polo Grounds of the country—were produced by this special mixture of The Henderson Grass Seed. Among others we may mention the Polo Grounds at Meadowbrook where the famous international match was played last June. Newport, Lakewood, Rockaway Hunt, Saratoga, also some of the leading Baseball Parks in the country including the Polo Grounds in New York, Ebbets Field and Washington Park in Brooklyn. (See engraving). Sow 100 to 150 lbs. per acre according to soil conditions. Price, delivered free in the U. S., per lb., 30c.; per 100 lbs., $26.00.

A 14-YEAR TEST PROVES ITS VALUE
At Meadowbrook, L. I.
June 17th, 1914.

"Our polo Grounds and lawns at Meadowbrook were laid about 14 years ago with the special mixture of HENDERSON "ATHLETIC FIELD" GRASS SEED MIXTURE and we have renovated them from time to time with the same mixture. We would not use any other brand. The condition of these grounds at all seasons of the year is the best possible testimonial to the value of your seed. For forming a spring, yet compact turf, that will withstand the hard usage incidental to the game of polo, it is all that can be desired."

JAMES McCROSSAN,
Superintendent, Meadowbrook Club, L. I.

YOUR GRASS SEED MADE OUR CRICKET COURSE FAMOUS
"I have had from you at different times many bushels of Henderson's Special Grass Seed Mixture for use on Cricket Grounds, and it has always given excellent satisfaction. In Lawrence we used it on the Merrimack Club Grounds, and the course had a good name all over the State. Since I have been connected with the Mohair Cricket Club, in Lowell, we have used the same seed with the same result, that our wickets is considered the best in the State."

Jos. W. Harrison,
Lowell, Mass.
HENDERSON'S GOLF COURSE GRASS SEED
FOR LAYING DOWN NEW COURSES AND RENOVATING OLD ONES.

We have had great experience with, and have given much attention and close study to grasses suitable for Golf Links. When Golf first became a popular game in this country and courses were laid out, it was soon found that many grasses used with good results on European courses would not thrive in the climate of the United States.

We then made extensive experiments with every known variety of grass in our trial grounds at Jersey City, N. J., and we also sent samples to various sections of the country for trial and report. As a result of these experiences we made up our now well-known mixtures—HENDERSON'S GOLF COURSE GRASS SEED MIXTURES both for Putting Greens and Fair Greens. They are undoubtedly the best for the American climate and American conditions, being composed of thoroughly acclimated varieties, seeds of the highest germinating power only are used. Many of the finest courses in America today were laid down with these mixtures, and with proper care the finest Putting Greens and Fair Greens in the world can be successfully rivalled. Henderson's Golf Course mixtures are made up to suit the grounds and soil to be seeded, low and wet, high and dry, sandy or clayey, as the case may be, and a description of the soil and notes on climate and the lay of the land should be sent when ordering.

Warning.—The best of seed is necessary for use on Golf Courses and all grounds devoted to sport. We deal only in the highest grades and before offering this seed to our customers for sale, it is thoroughly recleaned by the most modern seed-cleaning machinery in America. These are not ordinary fanning mills, but machines with an even and strong air suction—equal at all points—which is quite a different thing from a blast. By this process we are enabled to eliminate the rubbish, and light imperfect seeds, leaving only sound perfect seeds.

HENDERSON'S "PUTTING GREEN" GRASS MIXTURE.
Price, delivered free in the U. S., 35c qt., $1.25 for 4 qts., $2.00 pk., $7.00 bush. of 25 lbs. Sow at the rate of 5 to 8 bushels per acre according to the nature of the soil.

HENDERSON'S "FAIR GREEN" GRASS MIXTURE.
Price, delivered free in the U. S., 30c. pound, $25.00 per 100 lbs. Sow 75 to 150 lbs. per acre according to the nature of the soil.

HENDERSON'S GOLF COURSE GRASS SEED
FOR FAIR GREENS AND PUTTING GREENS IS USED ON THE CHAMPIONSHIP COURSES

The finest Courses in America to-day are those on which Henderson's Grass Seed has been used.

Among which we mention:

<table>
<thead>
<tr>
<th>Garden City Golf Club</th>
<th>N. Y.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hackensack Golf Club</td>
<td>N. J.</td>
</tr>
<tr>
<td>Ardsley Golf Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Tuxedo Golf Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Portland Golf Club</td>
<td>Ore.</td>
</tr>
<tr>
<td>Spokane Golf Club</td>
<td>Wash.</td>
</tr>
<tr>
<td>St. James' Club</td>
<td>Montreal, Can.</td>
</tr>
<tr>
<td>Royal Montreal Golf Club</td>
<td>Can.</td>
</tr>
<tr>
<td>Quebec Golf Club</td>
<td>Can.</td>
</tr>
<tr>
<td>Merion Cricket Club</td>
<td>Pa.</td>
</tr>
<tr>
<td>Westchester Country Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Newport Golf Club</td>
<td>R. I.</td>
</tr>
<tr>
<td>Lakewood Golf Club</td>
<td>N. J.</td>
</tr>
<tr>
<td>Century Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Knollwood Country Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>N. Y. City Public Golf Course</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Salisbury Golf Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Wilmington Country Club</td>
<td>Del.</td>
</tr>
<tr>
<td>Homewood Country Club</td>
<td>Ill.</td>
</tr>
<tr>
<td>Foxhills Golf Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Mohawk Golf Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Apawamis Golf Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Lake Placid Golf Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Richmond Country Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Westfield Golf Club</td>
<td>N. J.</td>
</tr>
<tr>
<td>Cranford Golf Club</td>
<td>N. J.</td>
</tr>
<tr>
<td>Haworth Country Club</td>
<td>N. J.</td>
</tr>
<tr>
<td>Hollywood Golf Club</td>
<td>N. J.</td>
</tr>
<tr>
<td>Yountakah Golf Club</td>
<td>N. J.</td>
</tr>
<tr>
<td>Essex County Club</td>
<td>N. J.</td>
</tr>
<tr>
<td>Chicago Golf Club</td>
<td>Ill.</td>
</tr>
<tr>
<td>Chery Chase Country Club</td>
<td>D. C.</td>
</tr>
<tr>
<td>St. Andrew's Golf Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Shinnecock Golf Club</td>
<td>N. Y.</td>
</tr>
<tr>
<td>Eagle Nest Golf and Country Club, N. Y.</td>
<td></td>
</tr>
<tr>
<td>Essex County Club</td>
<td>Mass.</td>
</tr>
</tbody>
</table>

PLEASE NOTICE THAT WE DELIVER FREE IN THE U. S. ALL GOLF AND LAWN GRASS MIXTURES (BY MAIL, EXPRESS OR FREIGHT AT OUR OPTION.)
BERMUDA GRASS SEED.

Sow for the Summer Lawn in the Extreme South.

BERMUDA GRASS is the most important and valuable grass for lawns in the extreme South. A well kept lawn of this grass is a refreshing and beautiful sight. It is of low creeping habit, roots from the stem joints and forms a dense sod. It will grow on almost any soil, thriving best on rich land, but will also thrive on poor sandy land. In moist climates it will grow in nearly pure sand, making a good sand binder and bank holder.

It revels in the heat and direct rays of the sun, remaining green through the long tropical and sub-tropical summers, when any other type of grass adapted for lawns would burn out. Although Bermuda Grass is especially adapted for lawn formation in the extreme South, and may be grown as far north as Richmond, Va., and St. Louis, without being winter killed, yet the further north it is grown the shorter will be its season of growth, as the foliage turns brown after the first frost and does not "green" until after frosts cease in spring. For this reason in sections subject to frosts an associate winter grass, usually English Ryegrass, is sown in the fall over the Bermuda Grass lawn after the surface has been scarified. These two associate grasses thus furnish a green lawn the year round in the Southern States. For lawn purposes sow 6 lbs. of Bermuda Grass Seed per acre. It is best sown in the spring, as it germinates best in warm weather.

Price of Seed, 75c. per lb., 100 lbs. at 70c. per lb.

<table>
<thead>
<tr>
<th>Quantity to sow</th>
<th>Weight per bushel</th>
</tr>
</thead>
<tbody>
<tr>
<td>6 pounds</td>
<td>35 pounds</td>
</tr>
<tr>
<td>3 bushels</td>
<td>14 pounds</td>
</tr>
<tr>
<td>2 bushels</td>
<td>20 pounds</td>
</tr>
<tr>
<td>1½ bushels</td>
<td>21 pounds</td>
</tr>
<tr>
<td>3 bushels</td>
<td>24 pounds</td>
</tr>
<tr>
<td>3 bushels</td>
<td>14 pounds</td>
</tr>
<tr>
<td>2½ bushels</td>
<td>12 pounds</td>
</tr>
<tr>
<td>2½ bushels</td>
<td>14 pounds</td>
</tr>
<tr>
<td>2¼ bushels</td>
<td>12 pounds</td>
</tr>
<tr>
<td>3 bushels</td>
<td>14 pounds</td>
</tr>
<tr>
<td>3 bushels</td>
<td>22 pounds</td>
</tr>
<tr>
<td>3 bushels</td>
<td>23 pounds</td>
</tr>
<tr>
<td>3 bushels</td>
<td>18 pounds</td>
</tr>
<tr>
<td>3 bushels</td>
<td>14 pounds</td>
</tr>
<tr>
<td>1 bushel</td>
<td>32 pounds</td>
</tr>
<tr>
<td>2 bushels</td>
<td>14 pounds</td>
</tr>
<tr>
<td>3½ bushels</td>
<td>10 pounds</td>
</tr>
<tr>
<td>2 bushels</td>
<td>14 pounds</td>
</tr>
<tr>
<td>8 pounds</td>
<td>60 pounds</td>
</tr>
</tbody>
</table>

Henderson's Recleamed Lawn Grass Seeds.

We are prepared at all times to make up special mixtures of grass seeds, for those who prefer to select their own varieties.

BERMUDA GRASS. (Cynodon Dactylon.) Valuable lawn grass for the extreme South, but does not thrive north of Virginia.

CANADA BLUE GRASS. (Poa Compressa.) Useful on hard clay and poor gravelly soils; resists drought. 

CREeping BENT GRASS. (Agrostis Stolonifera.) Excellent for lawns and putting greens; succeeds well in most situations.

CRESTED DOG'S TAIL. (Cynosurus Cristatens.) Should enter in moderate quantity in lawn and putting green mixtures.

ENGLISH RYE GRASS. (Lolium Perenne.) For quick results, it makes a good showing within a month.

FESCUE FINE-LEAVED SHEEPS. (Festuca Orina Tenuatifolia.) The finest bladed grass and valuable only for lawns.

FESCUE HARD. (Festuca Duraecula.) A dwarf-growing grass forming a dense, fibrous mat, succeeding well in dry situations.

FESCUE RED OR CREEPING. (Festuca Rebrusa.) Forms a close, rich sod, and is valuable in lawn and putting green mixtures.

FESCUE SHEEPS. (Festuca Ovina.) Sown in lawns and puttiing greens.

FESCUE VARIOUS-LEAVED. (Festuca Heterophila.) Valuable in lawn mixtures, forms a close rich sod.

FESCUE MEADOW. (Festuca Praecox.) Of robust growth and useful in permanent mixtures.

FESCUE CHEWINGS NEW ZEALAND. (Festuca Chewings.) This grass is specially recommended for golf putting greens and lawns. Succeeds on all soils.

ITALIAN RYE GRASS. (Lolium Italicum.) For quick one-season results; thrives in almost any soil.

KENTUCKY BLUE GRASS. (Poa Ptenantha.) Does best under shady situations, particularly making a good turf, but not the first year. Fancy or double extra clean. Though offered at the standard weight of 14 lbs. per bushel, the natural weight of this fancy seed is 20 to 25 lbs. per measured bushel.

RED TOP GRASS, FANCY. (Agrostis Vulgaris.) Forms a close sod, thrives on moist clayey soil and even on slightly acid soils, extra seed reseeded free from chaff and weighs 2 lbs. per measured bushel.

RHODE ISLAND BENT GRASS. (Agrostis Canina.) Related to the Red Top, but much finer in texture; a very close, rich, soft turf.

ROUGH STALK MEADOW GRASS. (Poa Trivialis.) Adapted for shaded spots on damp soils.

SWEET VERNAL, TRUE PERENNIAL. (Anthoxanthum Odoratum.) Emits an agreeable odor when the lawn is mown.

WOOD MEADOW GRASS. (Poa Memorialis.) Of early growth, thriving well under trees; makes a fine close sod.

WHITE CLOVER. (Trifolium Repens.) A hardy perennial of low creeping growth often used in lawns.

ENGLISH RYE GRASS SEED.

Sow for the Winter Lawn in the Extreme South.

This most valuable grass for the North is also particularly useful in sections of the South as an associate with Bermuda Grass where the latter turns brown in the winter. By sowing Rye Grass in the fall right over the Bermuda Grass sod, and raking and rolling the seed in, a green lawn may be had throughout the winter until warm weather again starts the Bermuda Grass into growth, when the Rye Grass will die out. The ground must be reseeded with Rye Grass each Fall.

Rye Grass is of rapid growth coming up in 8 to 10 days time and soon covers the ground with a dense growth of grass which if kept mown forms a fine Sward. Sow at the rate of 50 pounds per acre.

Price, 16c. per lb., $3.50 per bushel. of 24 lbs.; $12.00 per 100 lbs.

METHOD OF A GEORGIA CUSTOMER IN MAINTAINING A GREEN LAWN THE YEAR ROUND.

Gentlemen: I enclose you the details of my plan in maintaining a green lawn the year around, in the climate where ordinary grasses burn out in summer. The experiment has been a success in every way, and you may with confidence recommend this plan to your Southern customes.

Area ½ acre, sown with the Bermuda Grass Seed Jan 3rd. Our soil is very free by clayey loam, and in good condition, growing in 200 lbs. of Cotton Seed Meal on the ½ acre, sown with the Bermuda Grass Seed Jan. 3rd (6 lbs. per acre). Several subsequent rollings with a light roller had a good effect. Oct. 2d during a rain broadcasted 12 lbs. of Nitrate of Soda over the ½ acre with good results, This Bermuda Grass Sows quite at a fast-rate, etc. lawns all summer, it stands mowing and cares for no drought, the first frost kills it to the ground. October 2d I applied a top dressing of rich soil and cotton seed meal and raked in English Rye Grass Seed in the proportion of 50 lbs. per acre on the ground. The latter grass seed comes up in eight days, in six weeks it is a mass of green and gives a good lawn all winter; it dies in May leaving the ground clear for the Bermuda Grass, the roots of which survive in the ground here through the winter.
GARDENING FOR PLEASURE.
By PETER HENDERSON. 404 pages fully illustrated. Price, post-paid, $1.50.
Written for those desiring information on home gardening. Its scope therefore embraces directions for the culture and propagation of Flowers, Vegetables and Fruits. It has had a large sale, and gone through several editions, it exhaustively treats on the Vegetable Garden, Flower Garden, Fruit Garden, Greenhouse, Orchard, Window Garden, Lawn, the Water Garden, etc.

GARDENING FOR PROFIT.
By PETER HENDERSON. 375 pages, fully illustrated. Price, post-paid, $1.50.
If you wish to grow Vegetables for Sale, read GARDENING FOR PROFIT: The personal success of its author during his long career as a market gardener, and the success of thousands from the time he first made his cultural methods known up to the present day show the popular estimation of the value set upon this great work. While written particularly for the Market Gardener and Trucker, yet it is of equal value for large private gardens. It tells the whole story, from selection and treatment, of soils to marketing the product; also covers the forcing of vegetables, strawberries, etc.

PRACTICAL FLORICULTURE.
By PETER HENDERSON. 325 pages, fully illustrated. Price, post-paid, $1.50.
If you wish to become a Commercial Florist, then of all books you should procure PRACTICAL FLORICULTURE. We have any number of complimentary letters from people who actually know nothing of the florists' business, but who followed the instructions in this work and are now "full fledged florists." And although written especially for the Commercial Florist, it is equally valuable to the amateur and all having conservatories, greenhouses, window gardens, etc.

HOW THE FARM PAYS.
An acknowledged authority for farmers. Gives practical Methods of Growing Grass, Grain, Root Crops, Fruits, etc., and all about Stock, Farm Machinery, etc. It is written in a plain and easy-to-be-understood language. Everything pertaining to scientific or agricultural subjects has been ignored, the information given being the most direct to make the work of the farm pay.

Ornamental Gardening in Europe, America and Japan, illustrated and described in

"PICTURESQUE GARDENS"
BY CHARLES HENDERSON.

This unique book mirrors the charms of the prettiest parks, lawns and gardens of Europe and America. The picturesque, the natural and the gardenesque adornments are reflected in over three hundred magnificent photographic illustrations from nature that many of these views are 5 x 7 inches, some larger, few smaller; they are grouped and printed in a most artistic manner on heavy paper, with just enough text matter to describe the view and name the plants, vines, trees and shrubs needed to produce a similar effect or design.

There are in this country many lawns, gardens and grounds which the owners would improve and embellish, but they do not know exactly what they want, what would look well nor how to go about it, and it is for the benefit of such that we have prepared this book, for, although there are countless works on "artistic precept" or gardening, there have been none issued so rich with illustrations of example. In it we force no particular styles or fashions, but describe and picture such a great variety of lawn and garden creations that some fruitful suggestions must be found adaptable to the environment of every home, whether pretentious or modest.

Those who are fond of improving and embellishing their gardens, lawns and grounds, or who are planning new ones, will get many valuable ideas from this beautiful book.

"Picturesque Gardens" is handsomely bound, and will grace any library table, even as an album of the beautiful in gardens.

Price, "Popular Edition" with Heavy Levant Paper Cover, $1.00 Postpaid.
Price "De Luxe Edition" on heavy plate paper, handsomely bound in cloth, with panel in colors, $2.50 delivered free in the U.S.

HENDERSON'S HANDBOOK OF PLANTS, AND GENERAL HORTICULTURE.
The standard American dictionary of flowers, ornamental, economic, etc., including vegetables and fruits, in fact, a complete work on cultivated plant life. Everything is arranged alphabetically and very complete descriptions are given, with full cultural instructions for everything of importance. A full list of popular names and all botanical terms are given; also a glossary of the technical terms used in describing plants. A monthly calendar of operations for the greenhouse and window garden, flower, fruit and kitchen garden, renders it valuable as a book of reference; in short, there is sufficient matter given on all gardening subjects to allow this book to be termed The American Gardener's Dictionary.

HENDERSON'S BULB CULTURE.
68 pages, profusely illustrated. Price, postpaid, 50c.
This gives the up-to-date methods of treatment for all kinds of Hardy and Tender Winter, Spring, Summer and Autumn Flowering Bulbs, Tubers, Corms, etc.—Bulbs for Gardens and Lawns—Design, Bedding—Mixed Borders—Naturalization—Situations, Soils and Preparation—Time and Depth to Plant—Treatment after Flowering—Bulbs for the House and Greenhouse—Forcing—Flowering Bulbs in Glasses of Water, etc.—Keeping Dormant Bulbs—Hints on Buying and Selecting for Different Purposes, etc.

CULTURE OF WATER LILIES AND AQUATICS.
This gives the latest methods of growing and flowering Nymphaeas, Nelmiums, Victoriae and all other Ornamental Aquatics, both in natural and artificial ponds, pools, tanks, etc., including suitably situated natural waters—Making Artificial Ponds, etc.—How and When to Plant—Proper Depths—Soil—Wintering Tender Species—Propagation from Seeds and Otherwise—Bogs—Marginal Plants and Planting—Descriptions of Varieties—Aquarium Plants, etc.

SPECIAL OFFER: If ordered at once we will supply the full set of 3 copies of the De Luxe Edition of "Picturesque Gardens," (Separately, they would cost $12.50) carriage prepaid, for $10.00.

For Our Complete List of Books on Flower and Ornamental Gardening, Landscaping, Trees, Vegetable and Market Gardening, Agriculture, Fruit Growing, Soils, Irrigation, Dry Farming, Fertilizers, Insects, etc. See Our Catalogue "Everything for the Garden"
4 WEEKS FROM SOWING

The Most Beautiful Lawns in America are made with the "HENDERSON" LAWN GRASS SEED. It is the fruit of years of experience and close study of American conditions and is undoubtedly the best for the American climate.

(See pages 54 to 58.)

EVERYTHING FOR THE LAWN
GOLF COURSE AND ATHLETIC GROUND

PETER HENDERSON & CO.
35 and 37 Corinental St., New York

IT IS READY FOR MOWING

The "Henderson" Lawn Grass Seed is used and praised by thousands from Maine to California. Home owners in all parts of the U.S. appreciate and value this celebrated lawn grass mixture.

(See testimonials, pages 64 to 88.)