27th Annual Series. 1st Edition 15,000.

18 62.

JAMES CARTER AND CO.'S

GARDENER'S AND FARMER'S VADE-MECUM.

JAMES CARTER & Co.,

Fellows of the Royal Horticultural Society of London and the Royal Agricultural Society of England, &c.,

SEED MERCHANTS AND NURSERYMEN.

Offices and Seed Warehouses,

237, 238, & 261, HIGH HOLBORN, LONDON, W.C.

Nursery.	Seed Farms.
CRYSTAL PALACE NURSERY, FOREST HILL, SYDENHAM, S.	EAST HOUSE FARM, DEDHAM, ESSEX, & THE SEED FARM, St. OSYTH, ESSEX.

*** *It is particularly requested that all letters be addressed to the Holborn Establishment to avoid delay.*

A SUPPLEMENT,

IN THE FORM OF A COMPLETE LIST OF BEDDING AND OTHER PLANTS, WILL BE PUBLISHED ON THE 1st OF MAY, AND WILL BE FORWARDED FREE OF CHARGE, AND POST PAID, ON APPLICATION.

THE AUTUMN SUPPLEMENT OF DUTCH AND CAPE BULBS WILL BE PUBLISHED AS USUAL.

POST-OFFICE ORDERS TO BE MADE PAYABLE AT THE "HOLBORN OFFICE."

CHEQUES TO BE CROSSED "LONDON AND WESTMINSTER BANK."

January 1862. *Price One Shilling.* [*Entered at Stationers' Hall.*]

Taylor and Francis, Printers, Red Lion Court, Fleet Street.

ADDRESS TO OUR CORRESPONDENTS.

We have much pleasure in submitting to your notice the *Twenty-seventh Annual Issue* of our **GARDENER'S** and **FARMER'S VADE-MECUM**, which we feel assured, upon examination, will be found to far surpass any existing work of a similar description: we have spared neither time, trouble, nor expense in its compilation; and as the cost of the present far exceeds that of previous issues, and as we cannot be expected to furnish the majority of the Gardening World with a useful book of reference, free of charge and post paid, we have decided to affix the price of One Shilling to the present edition in self-protection: we have observed in past years that many persons have applied for the Vade-Mecum, and when obtained, have refrained from purchasing; however, as heretofore, *all our Customers will receive a copy gratis.*

Under the Column headed "**GENERAL OBSERVATIONS,**" we have endeavoured to give as complete a description of the best soils for, mode of culture, &c. &c., of *nearly* 3000 *Species and Varieties of Flower Seeds* as the limited space will permit. We wish to draw special attention to the "**CALENDAR OF GARDEN OPERATIONS**" (*commencing at page* 73), which we think will be found an unrivalled production of its kind. We have also appended **A COMPREHENSIVE ORIGINAL AND PRACTICAL GUIDE FOR FARM OPERATIONS OF EVERY DESCRIPTION** (*commencing at page* 95), which we doubt not will prove a valuable assistance to the Amateur and Professional Farmer and the Agricultural Emigrant. The entire work has been re-written, and the greatest care taken to eliminate errors; but should any accidentally have crept in, we shall esteem it a favour to be informed of it. All the information is entirely original and practical, and we trust will prove of essential service alike to the Professional as to the Amateur Gardener.

Such of the Seeds as ripen well in England have been grown at our own Farms (*vide page* 120; and to obtain those which require a warmer climate to perfect their ripening, our senior Partner has travelled nearly the whole of Europe, and has personally inspected the growing crops of all the principal Floriculturists in Italy, France, Switzerland, Germany, &c. &c.; *and as we purchase only from the original producers*, we are enabled to recommend our Seeds with greater confidence than it is in the power of any other Firm to do. The Miscellaneous List of Flower Seeds will be found to contain all the best varieties in cultivation, all deserving Novelties, and many choice and rare Seeds, which we have received from our various Correspondents in the East and West Indies, America, Australia, British Columbia, &c. &c.

DIVISIONS OF COLOURED PAPER.—Many of our Correspondents having intimated to us that, in consequence of the yearly increasing size of the **VADE-MECUM**, it became a matter of some little difficulty to refer to the articles in the body of the work, we have printed the whole of the **VEGETABLE** and **AGRICULTURAL DEPARTMENT** upon **DARK-COLOURED PAPER**, and the **NOTICES OF NEW FLOWERS, ILLUSTRATIONS,** &c. upon **LIGHT-COLOURED PAPER**, by means of which easy reference is at once obtained; and we trust that this alteration will prove of service our many Correspondents.

QUALITY OF THE SEEDS.—We have much pleasure in stating that the quality of Seeds is unusually good this season, as the late harvest has been one of the best known for many seasons; and it is scarcely necessary for us to advert to our invariable practice of sending out *genuine Seeds only.*

"**CARTER'S FLORAL ILLUSTRATIONS**" are a series of truthful drawings of the Floral Novelties of the day, respecting which further particulars will be found at *page* 119.

SEEDS FOR EXPORTATION.—We beg leave to say that, being large Exporters to all parts of the world, we are in a position to make selections suited to any climate, and will pack them in such a manner as to ensure a safe transit: and all orders that we may receive we will take care to despatch at the proper season.

"**PARMENTER'S PREPARATION FOR THE DESTRUCTION OF INSECTS.**"—This Preparation has been found to act with the most unerring certainty; and we can confidently recommend it as the best destroyer of Insects on plants ever offered to public notice (*for particulars see page* 112).

"**SPERGULA PILIFERA.**"—This charming substitute for Grass for Lawns is increasing in reputation, and we are enabled to offer it at a very reasonable figure (*vide page* 118).

"**BEDDING, GREENHOUSE, AND STOVE PLANTS.**"—A complete List of Bedding and other Plants grown at our Sydenham Nursery will be published on the 1st of May, and forwarded free of charge, on application.

In conclusion, we beg leave respectfully to prefer a few requests. *First*, that with each Order the full name and address be given, that we may be enabled to keep our accounts as correctly as possible; *Secondly*, that with each remittance our Invoice or Statement be returned; *Thirdly*, that no Post-Office Order be sent without a name, as the Post-Office Authorities forbid their officers from informing the Payee of the name of the Remitter; and *Fourthly*, we earnestly request that no *Money in Coin* be sent through the Post, as, besides risking the loss of the money, it offers temptation to the Post-Office Servants.

We wish also respectfully to intimate that, except in case of urgency, all orders will be executed in rotation as received; and having considerably enlarged our Premises, and increased our Staff of Assistants, *no unnecessary delay will take place*: but we would strongly advise that orders be sent early. In returning our sincere thanks for past favours, we solicit a continuance of the same, with your kind recommendations.

We have the honour to be,

Your very obedient Servants,

JAMES CARTER AND CO.

Nos. 237, 238, and 261, High Holborn, London,
January 1862

PART I.

KEY TO THE COLUMNAR SYSTEM OF ARRANGEMENT.

1st Column.—The Linnean Classes.

The Linnean Classes are founded on the Sexual Organs.

a. *Stamens (male organs) equal.*

Classes.

No. 1. Monan'dria . 1 *stamen*
2. Diandria . 2 *stamens*
3. Triandria . 3 ,,
4. Tetrandria . 4 ,,
5. Pentandria . 5 ,,
6. Hexandria . 6 ,,
7. Heptandria . 7 ,,
8. Octandria . 8 ,,
9. Enneandria . 9 ,,
10. Decandria . 10 ,,
11. Dodecandria 12 to 19 S. in the cup
12. Icosandria 20 or more S. on the base
13. Polyandria, *many Stamens*

b. *Stamens unequal.*

14. Didynàmia, 2 *long*, 2 *short*
15. Tetradynàmia, 4 ,, 2 ,,

c. *Stamens united in sets.*

No. 16. Monadelphia, 1 *set*
17. Diadelphia, 2 *sets*
18. Polyadelphia, *many sets*

d. *Compound Flowers (Asters, &c.).*

19. Syngenèsia

e. *Stamens on the style.*

20. Gynandria

f. *Male and female separated.*

21. Monœ'cia, *on one plant*
22. Diœ'cia, *on different plants*

g. *Male, female, and hermaphrodite Flowers on one or different plants.*

23. Polygàmia, *many marriages*

h. *Flowers wanting, or incomplete.*

24. Cryptogàmia, *hidden marriages (Ferns, Mosses, &c.).*

2nd Column.—The Linnean Orders.

The Linnean Orders are founded on the Sexual Organs, Seeds, Pods, or Fronds.

a. *Orders founded on the Styles, or female organs.*

No. 25. Monogy'nia . 1 *style*
26. Digy'nia . 2 *styles*
27. Di-pentagy'nia 2 to 5 ,,
28. Trigy'nia . 3 ,,
29. Tetragy'nia . 4 ,,
30. Pentagy'nia . 5 ,,
31. Hexagy'nia . 6 ,,
32. Heptagy'nia . 7 ,,
33. Decagy'nia . 10 ,,
34. Dodecagy'nia . 12 ,,
35. Polygy'nia *many* ,,

b. *On the Stamens (male organs).*

36. Monan'dria . 1 *stamen*
37. Diandria . 2 *stamens*
38. Triandria . 3 ,,
39. Tetrandria . 4 ,,
40. Pentandria . 5 ,,
41. Hexandria . 6 ,,
42. Heptandria . 7 ,,
43. Octandria . 8 ,,
44. Enneandria . 9 ,,
45. Decandria . 10 ,,
46. Dodecandria . 12 ,,
47. Icosandria . 20 ,,
48. Polyandria *many* ,,

c. *On the sets of Stamens.*

49. Monadelphia, 1 *set*

d. *Styles and stamens united.*

No. 50. Gynandria, *male and female*

e. *Male and female separate.*

51. Monœ'cia, *on one plant*
52. Diœ'cia, *on different plants*

f. *On the Polygamy.*

53. Polygàmia æquàlis, or *Equal Polygamy*
54. Polygàmia superflua *Superfluous Polygamy*
55. Polygàmia frustrànea *Frustrated Polygamy*
56. Polygàmia necessària *Necessary Polygamy*
57. Polygàmia segregàta *Separated Polygamy*

g. *On the Seeds.*

58. Gymnosper'mia *Naked seeds*
59. Angiosper'mia, *in a capsule*

h. *On the Pods.*

60. Siliculòsa, *a small pod*
61. Siliquòsa, *a long pod*

i. *On the Fronds, &c.*

62. Filices, *Ferns.*

3rd Column.—The Natural Orders.

The *Natural Orders* are founded on *Structural Affinities*; and the plan of numerical reference adopted in the present work will prove of essential service to the Amateur in forming, by comparison, an opinion of any plant in this Catalogue which may be unknown to him: for instance, *Anagallis, Cyclamen, Dodecatheon, Primula sinensis,* and *Auricula* belong to the same *Natural Order,* "*Primulaceæ,*" No. 160; consequently, should *Dodecatheon* be unknown, the knowledge of one or more of the others would greatly assist in forming an opinion of it. In making comparisons, however, the *height* of the plant should be considered: for example, the *Aster* and *Daisy* belong to the same *Natural Order,* "*Compositæ,*" No. 98; and at first sight there does not appear much resemblance between them, there being so much difference in the size of the flowers and the height of the plants.

[*3rd Column continued in next page.*]

3rd Column.—The Natural Orders (*continued*).

63. Acanthàceæ
64. Amaranthàceæ
65. Amaryllidæ
66. Amentàceæ
67. Ampelìdeæ
68. Annonàceæ
69. Apocyneæ
70. Araliàceæ
71. Aristolóchieæ
72. Aroideæ
73. Asclepiadeæ
74. Asphodeleæ
75. Aurantiàceæ
76. Balsamineæ
77. Begoniàceæ
78. Berberideæ
79. Bignoniàceæ
80. Bixineæ
81. Boragineæ
82. Bromeliàceæ
83. Byttneriàceæ
84. Cacti
85. Calycantheæ
86. Camellieæ
87. Campanulàceæ
88. Canneæ
89. Capparideæ
90. Caprifoliàceæ
91. Caryophylleæ
92. Casuarineæ
93. Cedreleæ
94. Chenopodeæ
95. Cistineæ
96. Cobæàceæ
97. Commelineæ
98. Compósitæ
99. Coniferæ
100. Convolvulàceæ
101. Cordiàceæ
102. Coriariceæ
103. Cruciferæ
104. Cucurbitàceæ
105. Cycadeæ
106. Cyrtandràceæ
107. Dipsàceæ
108. Ebenàceæ
109. Epacrídeæ
110. Ericeæ
111. Escallonìàceæ
112. Euphorbiàceæ
113. Ficoideæ
114. Fillìceæ
115. Frankeniàceæ
116. Fumariàceæ
117. Galacinàceæ
118. Gentianeæ
119. Geraniàceæ
120. Gesneriеæ
121. Globularineæ
122. Goodenòviеæ
123. Gramineæ
124. Grossulàceæ
125. Hemerocallídeæ
126. Hydrocharideæ
127. Illecebreæ
128. Irideæ
129. Jasmineæ
130. Labiàtæ
131. Laurineæ
132. Leguminòsæ
133. Liliàceæ
134. Limnanthеæ
135. Loaseæ
136. Magnoliàceæ
137. Malvàceæ
138. Melastomàceæ
139. Meliàceæ
140. Musàceæ
141. Myoporineæ
142. Myrtàceæ
143. Nyctagineæ
144. Nymphæàceæ
145. Oleineæ
146. Onagràriæ
147. Oxalideæ
148. Palmeæ
149. Papaveràceæ
150. Passifloreæ
151. Pedalíneæ
152. Pittosporàceæ
153. Plumbagineæ
154. Polemoniàceæ
155. Polygaleæ
156. Polygoneæ
157. Pomàceæ
158. Pontederàceæ
159. Portulàceæ
160. Primulàceæ
161. Proteàceæ
162. Ranunculàceæ
163. Resedàceæ
164. Rhamneæ
165. Rhodoràceæ
166. Rosàceæ
167. Rubiàceæ
168. Rutàceæ
169. Salicarieæ
170. Sanguisorbeæ
171. Santalàceæ
172. Sapindàceæ
173. Saxifrageæ
174. Scitamineæ
175. Scrophularineæ
176. Sempervivеæ
177. Smilàceæ
178. Solaneæ
179. Terebinthàceæ
180. Thymeleæ
181. Tiliàceæ
182. Tropæoleæ
183. Tulipàceæ
184. Umbellíferæ
185. Urticeæ
186. Valerianeæ
187. Verbenàceæ
188. Violàrieæ
189. Zygophylleæ
190. Bombaceæ

191. Combretaceæ — 192. Malpighiaceæ — 193. Styracineæ

4th Column.—Native Country. gar. var. garden variety.

5th Column.—Hardiness and Duration.

h. hardy—*plants for the open borders.*
hh. half-hardy—*such as require a hot-bed.*
t. tender—*pot plants, require shifting.*
f. frame—*require protection till May.*
g. greenhouse—*greenhouse plants.*
s. stove or hothouse—*stove plants.*

A. Annual—*last one year.*
B. Biennial—*last two years.*
P. herbaceous Perennial—*last three or more.*
S. Shrub, or under-shrub.
Pb. Perennial bulb, corm, or tuber.
T. Tree.

Application: hA. *hardy Annual*; hB. *hardy Biennial*; hP. *hardy herbaceous Perennial*; hS. *hardy Shrub*; hPb. *hardy bulbous Perennial*; hT. *hardy Tree*; hhA. *half-hardy Annual*; hhB. *half-hardy Biennial*, &c. &c.; tA. *tender Annual*, &c.; fA. *frame Annual*, &c.; gA. *greenhouse Annual*, &c. sA. *stove Annual*; sB. *stove Biennial*; sP. *stove Perennial*; sS. *stove Shrub*; sPb. *stove bulbous Perennial.*

6th Column.—Colour of the flower. The following are the principal abbreviations:

a.	*ash-grey.*	cr.	*crimson.*	o.	*orange.*	sl.	*slate.*
ap.	*apetalous.*	d.	*dark.*	ptd.	*painted.*	spot.	*spotted.*
az.	*azure.*	div.	*diverse.*	p.	*purple.*	stra.	*straw.*
b.	*blue.*	fish.	*flesh.*	pch.	*peach.*	stri.	*striped.*
blk.	*black.*	gn.	*green.*	pk.	*pink.*	sul.	*sulphur.*
blh.	*blush.*	gy.	*grey.*	r.	*red.*	v.	*violet.*
br.	*brown.*	l.	*light.*	ro.	*rose.*	va.	*variegated.*
bff.	*buff.*	lem.	*lemon.*	saf.	*saffron.*	w.	*white.*
car.	*carmine.*	li.	*lilac.*	s.	*scarlet.*	y.	*yellow.*
cin.	*cinnamon.*	mul.	*mulberry.*	sil.	*silver.*	yh.	*yellowish.*

Example: d. b. *dark blue*; h. w. & y. *blue, white and yellow*; l. r. *light red*; ro. li. *rosy lilac*, &c. &c.

7th Column.—Usual height of the plant in feet; trai. trailer.

8th Column.—Usual month of flowering: 1, January; 2, February; 3, March, &c.; 3-5, March to May, &c. &c.

9th Column.—Price per Packet. No smaller packets can be made than those marked in the Catalogue.

Time of Sowing.—*Hardy Annuals*, Febrnary till June, and in Autumn; when sown early, many of the Annuals flower in May. *Hardy Biennials* and *Perennials*, March till June, and in Autumn. *Half-hardy Annuals*, &c. in February till May, on a moderate hot-bed. Many of the *Biennials* and *Perennials* marked hh frequently stand the winter without protection. The *half-hardy Annuals* may also be sown on a warm border early in May. The *tender Annuals*, as Balsams, &c., require a moderate hot-bed and re-potting to bring them to perfection. See also Calendar of Operations, page 73.

The Greenhouse Climbers marked ** may be planted in the borders in May.

*** Dwarf Plants proper for the edgings of beds. ** Ornamental Climbers.**

† Usually flower the first year, if sown early.

sp. species; *var.* varietas; *pl. pluria*, many; *ex*, from.—lf. leaf; fr. fruit.

The dots | ... | ... | ... | ... | indicate a repetition.

GERMAN FLOWER SEEDS

IN CHOICE ASSORTMENTS.

The Seeds are warranted to be of first-rate quality.

Chinese or German Aster.

CULTURE.—Sow in the middle of March or the beginning of April (according to the season) in cold frame, or in pans in the Greenhouse in a good rich compost: the seed should not be sown too thickly, as the plants require much space to make growth: keep the lights on until the seed germinates, and, if necessary, shade. As the plants increase in size, more air may be given, until they become strong enough to bear the lights off altogether in the daytime in favourable weather. Transplant when the plants are strong enough, say about the middle or end of May; earth up round each plant from time to time, as the roots have a tendency to work their way out of the ground; water frequently with liquid manure, care being taken not to have it too strong.

Quilled Aster.

These are very double, of oval form; the petals have the appearance of quills or tubes; the outer ring is sometimes slightly reflexed, so as to form a sort of guard petal; height from 1½ to 2 feet; habit branching, with a profusion of blossoms: useful for groups in Shrubberies, and for the borders in the Flower Garden.

			s.	d.
No. 1.	12	*extra fine varieties Quilled German Aster, separate*	3	0
2.	12	*do. do. do. do.* *smaller packets*	1	6

Globe-flowered Aster.

These are mostly quilled, and resemble the above, excepting that the flowers are larger and gradually raised towards the centre, so as to form a half-ball. This is the sort usually grown for Exhibition purposes where *quilled* Asters are required.

No. 3.	12	*splendid varieties new Globe German Aster, separate*	3	0
4.	12	*do. do. do. do.* *smaller packets*	1	6

Pyramidal Aster.

The beautiful large flowers appear on this Aster nearly of one height, with few side flowers; has most probably received its name from its resemblance to an inverted pyramid; some blossoms are quilled; height from 2½ to 3 feet.

No. 5.	12	*very fine varieties Pyramidal German Aster, separate*	3	0
6.	12	*do. do. do. do.* *smaller packets*	1	6

French Varieties of Aster.

These are universal favourites, very useful as pot plants in Greenhouse or Conservatory, for bedding purposes, or for Exhibition: we annually receive letters from Correspondents in various parts of the country, stating that they have taken prizes with them at their respective local Floricultural Exhibitions. A very effective bed or riband may be formed by planting two or three rows of Gladiolus, "French seedlings from gandavensis" (see page 52), in April, as a background or centre, as the case may be; next to which, several rows of transplanted plants of French Asters, raised from seed of Nos. 7, 8, 9, or 10; and for an edging, plants of the dwarf varieties Nos. 11 or 12: this will form a very lasting and showy bed for the Autumn. The same ground may be rendered gay in the Spring and Summer by making early sowings of such quick-growing Annuals as Nemophilas, Collinsias, Leptosiphons, &c. &c.; if this plan be adopted, the Asters may be left on the seed-bed and transplanted in July; care being taken to lift a ball of earth with each plant, and to water well when planted. Nos. 7, 8, 9 & 10 contain proportions of the following varieties, arranged in distinct colours:—*Fleur Perfection.* The blossoms of this kind are very large: petals very long, and but slightly reflexed. *Fleur Bombée.* The flowers of this variety are very large and full, and form almost a semi-ball. *Fleur Chrysanthème.* The flowers of this variety are not so large as the preceding: the petals are entirely reflexed: produce more side blossoms than the other varieties. *Fleur Pivoine.* The Pæony-flowered Asters turn their petals towards the centre, and a flower not quite in full bloom resembles a ball. *Fleur Imbriquée.* The petals of these form themselves exactly like tiles, one on the top of the other to the centre of the flower. Nos. 11 and 12 contain proportions of the following varieties, arranged in distinct colours—*Chrysanthème* and *Imbriquée*; the flowers are similar to the preceding varieties, but the plants are only half the height.

No. 7.	24	*superb varieties French Aster, separate*					10	0
8.	24	*do.*	*do.*	*do.*	*smaller packets*		5	0
9.	12	*do.*	*do.*	*do.*			5	0
10.	12	*do.*	*do.*	*do.*	*smaller packets*		2	6
11.	8	*do.*	*dwarf*	*do.*	*do.*		5	0
12.	8	*do.*	*do.*	*do.*	*smaller packets*		2	6

Bouquet Aster.

This plant deserves its name, for each plant is so voluptuously covered with bloom that the green of its foliage is scarcely visible: almost every plant forms itself into a perfect bouquet: height from ¾ to 1¼ foot: highly ornamental in pots.

No. 13.	12	*beautiful varieties new Bouquet Asters, separate*	5	0
14.	12	*do. do. do. do.* *smaller packets*	2	6

Dwarf Aster.

These are from 8 to 12 inches in height, very free-flowering, useful for edgings and pots.

No. 15.	16	*beautiful varieties new Dwarf Aster, separate*	2	0

GERMAN FLOWER SEEDS (*continued*).

New Crown or Cockade Aster.

These are quilled Asters with two colours on each flower—the centres being white, with a broad margin of some dark colour around it: presenting the appearance of a cockade: they can be recommended as being very useful for bouquets.

		s.	d.
No. 16.	4 *showy varieties new Crown Asters, separate*	2	0

New Giant, or Emperor Aster.

This variety has sprung from the Pyramidal Aster, and for size and shape is unsurpassed. It bears only a few flowers on a robust, strong stem, from which the side-sprouts grow in the form of a candelabrum. In favourable cases it produces five flowers, of which the chief blossom is four inches in diameter. Notwithstanding its size, all its flowers are of an equal height.

No. 17.	3 *splendid varieties Emperor Aster, separate*	2	6

Large Collections of Asters.

No. 18.	93 *varieties of Aster, comprising Nos.* 1, 3, 5, 7, 11, 13, 15, 16, and 17	33	0
19.	72 *do. do. do.* „ 2, 4, 6, 8, and 12	11	6
20.	48 *do. do. do.* „ 2, 4, 6, and 10	6	6

Ten-week or German Stocks.

Sow in the early part of March in pans near the glass, or in a frame filled with vegetable loam mixed with one-sixth of river sand to within 4 inches of the lights, so that the young plants may be as near the glass as possible and not drawn up weakly; level the soil nicely, and slightly sprinkle with water; then scatter the seeds evenly, about four to the square inch, giving another slight sprinkling of water; then cover the seeds with about ¼ inch of the same compost finely sifted. Keep the lights closed for a few days and shaded from the sun, gradually giving air as the plants progress until the end of April, when they may be transplanted to pots or groups in the open borders. Stocks may be transplanted several times with advantage in the earlier stages of growth, the shift tending to give them a more dwarf and compact habit.

Last Spring we supplied a Collection of each of our Imported German Stocks to the Royal Horticultural Society of London, for trial in their Gardens; a report of the results will be found in the "November 1860" Number of the Society's Proceedings, and we think that their account of the Seeds we supplied from our general stock will prove gratifying to our readers:—Extract from the Society's Report.—"Notwithstanding the unfavourable season, a very good bloom was obtained. It was found, however, that so little fixedness of nomenclature or even of classification had been hitherto attained, that a detailed report would have been altogether useless, and the Committee came to the conclusion that its attention might be most usefully directed towards making an effort to remedy the evils just referred to, by endeavouring to group the various forms into definite sections. The groups which have been adopted may, it is hoped, be approved and employed by English growers. The seeds were in this case sown on April 9th, in frames. The plants were 'pricked out' and hardened off in the usual way, and were finally planted out for flowering on a prepared south border. They were examined and reported on during the first and second weeks of August, while in the height of their bloom." The classification proposed for the various kinds of annual Stocks, which were the only ones brought under the notice of the Committee, is as follows:—

[*As far as the Season would permit, we have included in each assortment the varieties recommended by the Royal Horticultural Society.*]

Ten-week or German Stocks.

In this group the plants grow about a foot in height; the habit is dwarf, compact, and branching below, and the inflorescence consists of a longer central spike and shorter lateral ones. The choicer kinds in the collection falling under this head belong to two subdivisions, one of which has been called "large-flowered," in contra-distinction to those in which the blossoms are of the usual or average size.

Flowers of usual or average size.

No. 21.	26 *beautiful varieties Dwarf German Stock, separate*	7	0
22.	26 *do. do. do.* *smaller packets*	3	6
23.	16 *selected varieties do. do.*	5	0
24.	16 *do. do. do.* *smaller packets*	2	6

Flowers above the average size.

No. 25.	6 *superb varieties Large-flowered German Stock, separate*	2	6
26.	6 *do. do. do. do.* *smaller packets*	1	6

Dwarf or Miniature Ten-week.

This group has the habit and characteristics of the Dwarf German, but the plants are dwarfer, averaging about 9 inches in height, and they are also more branched. The variety sent as Dwarf Crimson was considered to be one of the finest and most useful varieties in the whole collection. This class of Stocks will be found very useful for pot-culture. The best varieties were—

GERMAN FLOWER SEEDS (*continued*).

Dwarf or Miniature Ten-week Stocks (*continued*).

			s.	d.
No. 27.	6	*splendid varieties Miniature German Stocks, separate*	2	6
28.	6	*do. do. do. do.* ... *smaller packets*	1	6

Branching or Pyramidal Ten-week.

The plants in the varieties referred to this section are taller than the Dwarf German; they attain to an average height of a foot and a half, and they are also more diffusely branched. Among the Annual Stocks they are at once distinguishable by their height and more loosely branched appearance. It is to this group that the term "Intermediate," applied to several distinct forms, appears properly to belong. The variety called "White Branching" proved to be remarkably fine—certainly one of the finest in the collection.

No. 29.	12	*very fine varieties Branching German Stock* ... *separate*	3	0
30.	12	*do. do. do.* ... *smaller packets*	1	6

Autumnal Stock.

No. 31.	12	*very fine varieties Autumnal German Stock* ... *separate*	3	0
32.	12	*do. do. do.* ... *smaller packets*	1	6

Wallflower-leaved Ten-week Stock.

This group has the characteristics of Dwarf German, but the leaves are glabrous instead of hoary. There is no other material difference.

Branching Wallflower-leaved.

This group has the character of the Pyramidal or Branching, but with the leaves glabrous as in the Wallflower-leaved.

Spike-flowered Wallflower-leaved.

This has a narrow unbranched or very shortly branched spike-like inflorescence.

No. 33.	12	*finest varieties Wallflower-leaved German Stock, separate*	3	0
34.	12	*do. do. do. do.* ... *smaller packets*	1	6

Winter or Queen Stock.

No. 35.	12	*extra fine varieties Winter Stock, separate*	3	0
36.	12	*do. do. do.* ... *smaller packets*	1	6

Imperial Stocks.

These Stocks are extremely handsome, tall, robust, branching, Perennial Stocks, and usually bloom several times in the course of the year.

No. 37.	10	*splendid varieties Imperial Stock, separate*	5	0
38.	10	*do. do. do.* ... *smaller packets*	2	6

New Cape or Giant Stock.

No. 39.	6	*finest varieties New Cape or Giant Stock, separate*	2	6

Brompton Stock.

No. 40.	12	*splendid varieties Brompton Stock, separate*	2	6

Large Collections of Stocks.

No. 41.	74	*varieties, comprising* Nos. 21, 25, 27, 29, 31 *and* 33	18	0
42.	40	*do. do.* 24, 26, 28 *and* 30	6	6

Antirrhinum or Snapdragon.

Of this long-established and favourite flower we offer a fine collection, and as it is raised very freely from seed, blooms for many months in the year, and exhibits much variety of colour, it is one of the best Perennials adapted for general cultivation.

No. 43.	12	*extra fine varieties of newest Antirrhinum, separate*	3	0

German Balsams.

Balsams may be sown from the beginning to the middle of April, in pans, or on a slight hot-bed in a light rich loam and vegetable compost, covering the seed about a ¼ of an inch, keeping the soil moist, but not wet. When the plants have formed the second pair of leaves, they may be transplanted, four round the edge of a 6-inch pot, and gradually hardened off for transplanting out of doors; or they may be planted in a cold pit, 4 inches apart, as near the glass as possible, giving more air as the season advances until June, when they may be turned into the open borders, the warmest situations being the most suitable. If for pot-culture, they must be divided and transplanted into single pots, shifting once or twice into larger pots, picking off the flowers in the earlier stages of their growth to give greater vigour to the plant, and watering freely in dry weather.

Double Balsam.

1½ to 2 ft. high, strong branching habit, profuse bloomer, suitable for Conservatory and general Flower Garden in summer.

No. 44.	12	*splendid varieties Double Balsam, separate*	2	6

Camellia Balsam.

More erect in habit than the Double; flowers the size of the Rose Balsam, and spotted with white like the Camellia "Queen Victoria," and a cut flower might be easily mistaken for a Camellia.

No. 45.	12	*newest varieties Camellia Balsam, separate*	3	0

Rose-flowered Balsam.

1½ to 2 ft. high, with large rose-petaled very double blossoms.

No. 46.	8	*beautiful varieties Rose-flowered Balsam, separate*	2	0

Miniature or Dwarf Balsam.

1 to 1½ ft. high, similar to the Double, useful for edgings.

No. 47.	12	*finest varieties Miniature or Dwarf Balsam, separate*	3	0
48.	8	*selected varieties Double and Camellia Balsam*	2	6

GERMAN FLOWER SEEDS (*continued*).

PICOTEE AND CARNATION.

These choice and deliciously scented flowers are constantly rising in repute, and our varied collections are admitted to be unrivalled. *s.* *d.*

No. 49. 50 *splendid varieties of* **German Picotee and Carnation,** 5 *seeds of each, separate* 12 0

COCKSCOMB.

No. 50. 12 *superb new varieties of German Cockscomb* 3 6

HELICHRYSUM OR EVERLASTING FLOWER.

These flowers, when dried, may be employed for Winter Bouquets and general in-door decoration, for which purposes they are in great demand upon the Continent, also, under the French name of "Immortelles," are much used as souvenirs for the decoration of Mausoleums: sow in heat, and transplant to open borders in May; for winter preservation, cut the flowers when upon the point of opening.

No. 51. 12 *finest varieties of Helichrysum, separate* 2 6

ENGLISH HOLLYHOCK.

No. 52. 12 *finest prize varieties of English Hollyhock, separate* 5 0

IPOMÆA OR CONVOLVULUS MAJOR.

No. 53. 12 *beautiful varieties of Ipomæa or Convolvulus major, separate* 2 6

LARKSPUR.

The Larkspur, from its brilliant colours and pretty spiral form, is an admired ornament to the general flower garden: may be grown singly, in clumps or in beds; should be sown in sandy loam: seed saved from selected plants.

No. 54. 12 *extra fine varieties of Dwarf Rocket Larkspur, separate* 2 6
55. 10 *do.* *Dwarf Stock-flowered Larkspur, separate* 2 6
56. 6 *do.* *Tall do. do. do.* 1 6
57. 6 *do.* *Branching Larkspur, separate* 1 6

MARIGOLD.

No. 58. 12 *finest selected varieties of German Marigolds, separate* 2 6

PETUNIA.

Petunias present great variety of colour and profuseness of bloom, and are sweetly scented, and as bedding plants contrast most effectively with Geraniums, Verbenas, &c. &c., and, during fine seasons, bloom for three or four months successively: succeed best when sown on slight hot-bed and grown in a mixture of loam and leaf mould.

No. 59. 12 *beautiful varieties of Petunia, separate* 3 6

PHLOX DRUMMONDII.

These richly coloured flowers bloom for several months continuously; the Phlox is very compact in habit and altogether one of the best Annuals grown. Sow in well-drained pots in mild hot-bed; prick off in boxes, and when fit, pot separately, and turn out in the middle of May into deep well-stirred soil.

No. 60. 12 *extra fine varieties of Phlox Drummondii, separate* 3 6

PERENNIAL PHLOX.

Handsome hardy Perennial; height from 3 to 4 feet, with large heads of richly coloured blossom.

No. 61. 12 *finest new varieties of Perennial Phlox, separate* 3 6

DOUBLE POPPY.

No. 62. 12 *superb varieties of Peony Poppy, separate* 2 6

PORTULACA.

These plants grow close to the ground; and when in full bloom, the earth appears covered with richly-coloured blossoms; they are of great use for covering sandy banks and rock-work: the addition of lime rubbish and burnt earth is beneficial; scarcely any water is required.

No. 63. 12 *beautiful varieties of large-flowered Portulaca, separate* 2 6

SALPIGLOSSIS.

Autumn-blooming plants, with large blossoms delicately veined and mottled, of a rich velvety appearance; they are well adapted for beds or mixed borders: sow on hot-bed, and transplant into rows in light loamy soil.

No. 64. 12 *beautiful varieties of newest Salpiglossis, separate* 2 6

SCABIOUS.

No. 65. 10 *splendid varieties of large-flowered Scabious, separate* 2 6

WALLFLOWER.

The Wallflower is peculiarly valuable from its early blooming and fragrance; and the great care which has been bestowed upon its culture has produced the most satisfactory results, as the following collections will produce flowers fully equal in form to the finest Double Stocks.

No. 66. 12 *superb varieties of German Wallflower, separate* 5 0
67. 12 *do.* *do.* ..... *smaller packets* 2 6

ZINNIA ELEGANS, Single and Double.

The single Zinnia elegans has long been known as an Annual of great brilliancy of colour and very effective in beds or general mixed borders: we have now for the first time the pleasure of introducing a collection of "6 *colours of double-flowered varieties, separate,*" which during the entire of a fine Autumn will bloom magnificently. We can recommend the **Double Zinnia** as the finest Annual that has been introduced for many years.

No. 68. 12 splendid varieties of Single Zinnia elegans, separate 3 6
69. 6 do. do. **Double do.** separate 5 0

JAMES CARTER AND CO.'S GARDENER'S VADE-MECUM FOR 1862.

FULL EXPLANATIONS OF THE ABBREVIATIONS AND GENERAL SYSTEM OF ARRANGEMENT WILL BE FOUND AT PAGES 1 & 2.

THE ACCENTS.—The only accents employed are the long or open (') and the short or close (').
The long accent (')—as (à) in màte, (è) in mète, (ì) in mite, (ò) in nòte, (ù) in mùte, and (y') in my'.
The short accent (')—as (á) in mát, (é) in mét, (í) in díg, (ó) in dóg, and (y') in phy'sic.

In giving orders it is preferable to mention the numbers without the names; but as the numbers are changed every year, it is absolutely necessary to say that they are taken from Catalogue "1862."

MISCELLANEOUS FLOWER SEEDS.

A *dash* (—) indicates a *variety*. Example: No. 93. "Acacia (*dodoniæfolia*) nova," or new variety from Acacia *dodoniæfolia*.

No.	Scientific Name.	Linnean Class.	Linnean Order.	Natural Order.	Native Country.	Hardiness and Duration.	Colour of the Flower.	Height in Feet.	Month of Flowering.	Price per Packet.	General Observations.
								feet		s. d.	
70	Abelmóschus gigánteus	16	35	137	India	gS	y.	3	6-9	6	Usual greenhouse treatment.
71	Abròma angusta	18	45	83	E. Indies	sS	p.	10	8-9	1 0	Sow in light sandy soil in hot-bed.
72	**Abronia umbellata**	5	25	143	California	hhA	ro.	½	7-9	4	Charming Verbena-like Annual.
73	Abùtilon esculentum	16	48	137	Brazils	hhS	...	6	...	1 0	
74	— floribundum	...	...	...	...	...	y.	...	...	1 0	These flowers are extremely beautiful, being richly veined and striped, of a delicate wax-like appearance: they succeed well out of doors in summer, if planted out against a south wall. Sow in hot-bed, grow in peat and loam, and prune back to a few buds every year.
75	— hýbridum	...	...	...	hybrid	...	...	...	...	1 0	
76	**— marmoratum**	...	...	...	...	stri.	...	...	...	1 0	
77	— pulchellum	...	...	...	N. S. Wales	...	w.	8	8-10	1 0	
78	— venòsum striàtum	...	...	...	Brazils	...	stri.	6	7-9	1 0	
79	**— var. Beranger**	...	...	...	gar. var.	...	...	...	...	1 0	
80	**— var. Duc de Malakoff**	...	...	...	...	...	...	...	...	1 0	
81	— vitifòlium	...	...	...	Brazil	...	li.	...	...	1 0	
82	Acàcia albicans	23	51	132	Mexico	gS	w.	5	3-5	4	
83	**acanthocarpa**	...	...	...	N. Spain	sT	pa. r.	10	6-9	1 0	... ...
84	arábica	...	...	...	E. Indies	...	w.	20	7-8	6	
85	**argyrophylla**	...	...	...	Swan River	gS	y.	6	4-5	1 0	... ...
86	armàta	...	...	...	N. Holland	...	...	...	...	3	
87	Bartheriàna	...	...	...	...	...	...	...	...	6	... ...
88	cæsia	...	...	...	E. Indies	...	...	15	5-6	6	
89	**coccinea**	...	...	...	gar. var.	...	pk.	...	...	1 0	... ...
90	cultriformis	...	...	...	N. S. Wales	...	y.	...	4-6	4	
91	**dealbata**	...	...	...	V. D.'s Land	...	...	4	3-6	4	... ...
92	dodoniæfòlia	...	...	...	N. Holland	...	...	6	4-6	4	
93	— nòva	...	...	...	gar. var.	...	...	...	...	6	
94	Douglàsi	...	...	...	N. Holland	...	...	5	4-7	6	This tribe of handsome Shrubs has long been celebrated for its great variety and adaptability for every purpose of garden decoration, either in doors or out of doors. All the Acacias are remarkably fine in foliage, and in this respect are unsurpassed by any other class of Shrubs. A. coccinea, lophantha, and longifolia are the handsomest in foliage: the bloom of coccinea resembles that of armata in form, but is much larger and of a rich pink colour, and it is one of the finest Acacias grown. A. armata and grandis being the most compact in habit, are the best adapted for general pot-culture: A. Julibrissin is hardy and elegant, with tassel-like tufts of rosy flowers. Previous to sowing, soak the seeds in water at 120° for six hours; then sow in heat in sandy peat: but when the plants are well established, use mostly loam.
95	**Drummondi**	...	...	...	Swan River	...	...	4	...	1 0	
96	cbúrnea	...	...	...	E. Indies	...	...	5	...	6	
97	elàta	...	...	...	...	sS	w.	...	5-6	6	
98	excelsa	...	...	...	...	gS	y.	...	...	1 0	
99	falcàta	...	...	...	N. S. Wales	...	...	6	...	6	
100	farnesiàna	...	...	...	St. Domingo	gT	...	15	6-8	3	
101	ferrugínea	...	...	...	E. Indies	sS	w.	...	4-6	6	
102	**grandis**	...	...	...	N. Holland	gS	y.	6	2-5	6	
103	glandulòsa	...	...	...	N. America	...	w.	2	5-7	6	
104	glomeràta	...	...	...	...	...	y.	6	...	6	
105	heteroclyta	...	...	...	C. G. Hope	gT	o.	15	7-8	6	
106	Houstòni	...	...	...	Vera Cruz	gS	p.	10	5-7	6	
107	ixiophy'lla	...	...	...	Swan River	...	y.	2	...	6	
108	Julibrissin	...	...	...	Levant	hT	ro.	20	8-9	3	
109	lanuginòsa	...	...	...	N. Holland	gS	y.	6	3-5	6	
110	**La Trobei**	...	...	...	India	...		...	5-6	6	
111	latifòlia	...	...	...	V. D.'s Land	...	y.	5	3-5	6	
112	leptophy'lla	...	...	...	S. America	sT	...	20	...	6	
113	leucocéphala	...	...	...	...	gS	w.	5	4-6	6	
114	**longifolia**	...	...	...	N. S. Wales	...	y.	6	3-5	6	... ...
115	longissima glauca	...	...	...	...	...	...	4	5-6	6	
116	**lophantha**	...	...	...	N. Holland	...	...	6	5-7	3	... ...
117	— Neumanni	...	...	...	gar. var.	...	...	...	...	6	
118	— speciòsa	...	...	...	...	...	...	...	...	6	... ...
119	**melanoxylon**	...	...	...	V. D.'s. Land	...	...	8	4-6	6	
120	platyptera	...	...	...	India	...				6	... ...
121	pulchella	...	...	...	N. Holland	...	y.	4	4-7	6	
122	rotundifòlia	...	...	...	...	...	...	6	5-6	6	... ...
123	Serissa	...	...	...	E. Indies	gT	w.	20	5-7	6	
124	Sophoræ	...	...	...	V. D.'s Land	gS	y.	10	4-6	6	

No.	*Scientific Name.*	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght feet	M. of Flow.	Price. s.d.	General Observations.
125	Acàcia sp. ex India	23	51	132	India	gS	y.	10	4-6	6	For description and remarks on the cultivation of the various kinds of Acacia, see preceding page.
126	stipulàta	...	...	...	...	...	...	4	...	6	
127	tenuifòlia	...	...	...	N. S. Wales	...	...	5	4-6	6	
128	**xylophylloides**	...	...	...	C. Good Hope	...	...	6	5-7	1 0	
129	Acanthus mollis	14	58	63	Italy	hP	p. & w.	3	7-9	3	Stately herbaceous plants; succeed best in good loam.
130	spinòsus	...	...	...	...	...	...	...	...	3	
131	Achillea Eupatòrium	19	54	98	Caspian Sea	...	y.	2	7-8	3	Sow in sandy loam.
132	Achimenes, *mixed*	...	59	120	S. America	sPb	div.	div.	div.	1 0	Usual stove treatment.
133	Achnodonton Bellardii	3	26	123	Spain	hA	ap.	½	6-7	3	Ornamental grass; garden soil.
134	Achras Sapòta	5	25	...	S. America	sT	w.	30	5-9	6	Usual stove treatment.
135	Aconìtum album	13	28	162	Pyrences	hP	y.	4	6-7	3	Showy hardy Perennials: grow in any good garden soil; also under trees.
136	lycoctònum	...	...	...	Alps	...	...	3	7-8	3	
137	Napellus	...	...	...	Europe	...	h.	4	5-7	3	
138	**Acroclinium roseum**	19	54	98	Swan River	hhA	ro.	1	6-10	3	Everlasting Flowers, very pretty.
139	**album**	...	...	...	gar. var.	...	w.	...	...	3	
140	Adenocarpus telonensis	16	45	132	E. Indies	gS	y. & w.	5	5-8	6	Same culture as the Cytisus.
141	Adenóphora coronàta	5	25	87	Siberia	hP†	b.	2	5-7	6	Bell-flowered plants; will grow in any good garden soil.
142	suavèolens	...	...	...	...	...	pa. b.	...	6-8	6	
143	Ægle Marmelos	13	...	75	E. Indies	sS	w.	6	7-8	6	The Bengal Quince: usual stove culture.
144	Ægilops cylindrica	23	...	123	Hungary	hA	ap.	1	6-7	3	The plant from which wheat was produced.
145	Æthionèma cordifòlium	15	61	103	Levant	...	pa. b.	½	6-7	3	Good garden soil.
146	Buxbaumi	...	...	...	...	...	...	...	...	3	
147	Ageràtum cærùleum	19	53	98	W. Indies	hhA	l. b.	1	6-9	3	Well-known bedding plants, of long duration in bloom: the colour of the Ageratum, bluish lilac, forms an admirable contrast with the more brilliant Verbenas and Geraniums. Sow on heat in the early spring; prick out and transplant in May to the beds where they are to bloom: they flourish freely in any good garden soil.
148	cœlestinum nànum	...	...	...	gar. var.	...	...	½	...	4	
149	Houstonianum	...	...	...	S. America	...	b.	1½	6-9	3	
150	Hudsòni	...	...	...	...	...	...	...	...	3	
151	mexicànum	...	...	...	Mexico	...	...	1	...	3	
152	— album	...	...	...	gar. var.	...	w.	...	...	3	
153	— nànum albiflòrum	...	...	...	...	...	...	½	...	6	
154	— rùbrum	...	...	...	...	...	r.	1	...	6	
155	— uànum cærùleum	...	...	...	...	...	b.	¾	...	6	
156	odoràtum	...	...	...	Mexico	...	...	...	...	3	
157	Agrostis dulcis	3	26	123	Greece	hA	ap.	1	6-8	4	The Agrostis rank high among the Ornamental Grasses from their delicate and graceful growth, and are very useful for Winter or Summer Bouquets. A. nebulosa is a new species, and is extremely graceful. The Agrostis will grow in any good garden soil.
158	elegans	...	...	...	Europe	...	...	...	...	4	
159	laxiflòra	...	...	...	N. America	...	...	...	...	4	
160	**nebulosa**	...	...	...	Europe	...	...	...	...	4	
161	pulchella	...	...	...	Russia	...	...	...	...	4	
162	plumòsa	...	...	...	Europe	...	...	...	...	4	
163	retrofracta	...	...	...	N. Holland	...	...	...	...	4	
164	verticillàta	...	...	...	S. Europe	...	...	...	...	4	
165	Ailanthus glandulòsus	23	52	179	China	hT	g.	20	7-8	6	Leaves admirably adapted for Silkworms.
166	Alchemilla conjuncta	4	25	170	France	hP†	w.	½	...	3	Sow in good garden soil.
167	Alfrèdia cernua	19	53	98	Siberia	...	...	1	6-7	6	
168	Allium azùreum	6	25	74	Altai	hPb	b.	...	5-7	6	A very pretty tribe of bulbous plants: will grow in any good garden soil and under water.
169	fràgrans	...	...	...	W. Indies	...	w.	...	9-10	6	
170	Moly	...	...	...	S. Europe	...	y.	2	6-7	6	
171	Victoriàle	...	...	...	Austria	...	w.	...	5-6	6	
172	Aloe ferox	...	...	125	C. Good Hope	hhS	y.	6	4-5	6	Sow in sandy loam.
173	Alonsòa incisifòlia	14	59	178	Chili	hhA	s.	2	6-10	3	Very showy plants: first-rate for mixed beds. Sow in slight hot-bed in sandy soil, and plant out at the end of May.
174	grandiflora	...	...	...	...	...	...	...	...	3	
175	Warszewiczii	...	...	...	...	...	...	...	...	3	
176	— compacta	...	...	...	gar. var.	...	...	1	...	4	
177	Alstrœmèria aurantìaca	6	25	65	Chili	fPt	c.spot.	2	6-8	3	A beautiful genus of tuberous-rooted plants. Sow under glass in sandy peat; when established and at rest, keep dryish in pots, or protect from much frost in a border. A. chilensis is adapted for rockeries.
178	brasiliensis	...	...	...	Brazil	...	r. & y.	...	9-10	6	
179	chilensis, *mixed*	...	...	...	Chili	hPt	div.	...	6-8	3	
180	Pelegrìna	...	...	...	Peru	fPt	stri.	1	6-9	6	
181	tricolor	...	...	...	Chili	...	w. p. y.	2	...	6	
182	Van Houtti	...	...	...	hybrid	...	div.	div.	...	1 0	
183	Althæa cannàbina	16	48	137	S. Europe	hP	p.	6	6-7	6	Showy Malvaceous plants growing in any good garden soil.
184	narbonense	...	...	...	...	...	...	...	...	6	
185	Alyssum Benthàmi	15	60	103	Europe	hA	y.	1	4-5	3	A. maritimum or Sweet Alyssum is too well known to need comment. A. saxatile compactum, a new variety of the present year, is one of the best early spring-blooming plants in cultivation and can be strongly recommended.
186	marìtimum	...	...	...	England	...	w.	½	7-10	3	
187	saxàtile	...	...	...	Candia	hP†	y.	1	4-5	3	
188	— compactum	...	...	...	gar var.	...	...	¾	...	1 0	
189	Wiersbeckì	...	...	...	Candia	...	...	...	...	3	
190	Amaranthus bicolor	21	40	64	E. Indies	hhA	var. lf.	2	6-9	3	The foliage of these plants is remarkably handsome, which renders them invaluable for producing effect as centres of beds and the background of borders.
191	chinensis	...	...	...	China	...	c.	...	6-8	3	
192	**speciosissimus**	...	...	...	E. Indies	...	var. lf.	...	6-9	6	
193	tricolor	...	...	...	...	...	...	...	...	3	
194	Amaryllis, *new species*	6	25	65	hybrid	hPb	c.	1	4-5	1 0	Grow in sand, loam, and peat.
195	Amblyolèpis setigera	19	54	98	Texas	hA	y.	...	6-8	3	A very fragrant yellow Annual.
196	Ambròsia mexicàna	21	30		Mexico	...	g.	3	7-8	3	Good garden soil.
197	Amethystea cærùlea	2	25	130	Siberia	...	b.	1½	6-8	3	
198	Ammòbium alàtum	19	53	98	N. Holland	hhP†	w.	2	3-8	3	Everlasting flower.

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hight. feet	M. of Flow.	Price. s. d.	General Observations.
199	Anagallis indica	5	25	160	Nepaul	hA	b.	1	5-9	3	These flowers are very beautiful, and, from their long duration in bloom, are valuable as bedding plants: each plant covers itself with a mass of blossom. Sow in sandy loam in hot-bed in the middle of February, pot and harden off, and at the end of May turn out into borders and edgings for sides of baskets, vases, &c. A. Napoléon and Eugénie are recommended by the R. Horticultural Society.
200	fruticòsa	...	...	...	Morocco	hhP†	r.	...	6-10	6	
201	**Monelli Breweri**	...	...	...	gar. var.	...	d. b.	...	...	6	
202	— Engénie	...	...	...	...	...	w. & b.	...	...	6	
203	— Memoria d'Etna	...	...	...	...	...	r.	...	...	6	
204	— large red	...	...	...	...	...	...	...	...	4	
205	— large blue	...	...	...	...	...	d. b.	...	...	4	
206	— Napoléon III.	...	...	...	...	...	d. r.	...	...	6	
207	— Trionfo di Firenze	...	...	...	...	...	pa. b.	...	...	6	
208	Anagy'ris fœtida	10	...	132	Spain	hhS	y.	9	4-5	6	Sow in a little heat in common garden soil.
209	indica	...	...	...	Nepaul	...	...	...	...	6	
210	Anchùsa arvàlis	5	...	81	S. Europe	hA	b.	1½	6-9	3	Useful and ornamental plants, will do well in the open borders in any good garden soil.
211	gigántea	...	...	...	...	...	...	4	...	3	
212	itálica	...	...	...	...	hP†	r. p.	...	...	3	
213	paniculàta	...	...	...	Madeira	...	b.	2	5-6	3	
214	sempervìrens	...	...	...	Britain	...	...	1½	...	3	
215	Andry'ala tenuifòlia	19	53	98	Crimea	...	y.	1	7-8	3	Sow in the open borders.
216	Andrómeda ovalifòlia	10	25	110	N. America	hS	w.	2	5-7	6	Good garden soil.
217	Andropògon Sorghum	23	51	123	Jamaica	sP	ap.	4	7-8	6	Ornamental Grass.
218	Anémone alpina	13	35	162	Europe	hPb	w.	1	6-7	6	... ...
219	coronària	...	...	...	Levant	...	div.	...	1-12	6	
220	canadensis	...	...	...	S. Europe	hP	b.	...	6-7	6	These are among the earliest and prettiest of our spring blossoms. A. coronaria, the common garden Anemone, is too well known to need comment, but is most usually grown from the bulbs. Sow, any time after the seed is ripe, in sandy loam, and keep shaded until vegetation has taken place: thin and transplant in time.
221	Hudsoniàua	...	...	...	N. America	...	w.	½	...	6	
222	Hallèri	...	...	...	Switzerland	...	p.	...	4-5	6	
223	— montàna	...	...	...	...	...	...	1	6-7	6	
224	narcissiflòra	...	...	...	Siberia	...	w.	...	5-6	6	
225	quinquefùlia	...	...	...		...				6	
226	rivulàris	...	...	...	N. India	...	w.	1½	5-6	6	
227	sibírica	...	...	...	Siberia	...	...	¼	6-7	6	
228	stellàta	...	...	...		...				6	
229	virginiàna	...	...	...		...				6	... ...
230	Annòna squamùsa	...	...	68	S. America	sT	w. & g.	20		6	Custard Apple.
231	Anùda Dillenìana	16	48	137	Mexico	hA	b.	1½	6-7	3	Pretty Annuals of very long duration in bloom.
232	Wrightii	...	...	...	...	...	...	...	...	6	
233	Anomathèca cruenta	3	25	128	C. Good Hope	hhPb	d. r.	1	5-9	6	Sow under glass in loam and peat.
234	Anthemis, sp. ex Chili	19	54	98	Chili	hA	y.	...	6-7	6	
235	arábicus	...	...	...	Arabia	...	...	...	...	6	Showy flowers, growing freely in any garden soil.
236	chia	...	...	...	Chili	...	...	...	...	6	
237	purpùrea	...	...	...	...	...	p.	...	...	6	
238	Anthoxanthum grácile	2	26	123	Sicily	...	ap.	½	4-5	3	Ornamental Grass.
239	Antirrhinum màjus, m.	14	59	175	England	hP†	div.	2	6-9	3	... ...
240	**choicest mixed**	...	...	...	gar. var.	...	...	...	...	6	
241	màjus album	...	...	...	...	...	w.	...	...	1 0	These flowers are commonly known under the name of Snapdragon, and are the most serviceable of Hardy Perennials. All the varieties will bloom early out of doors the same season if sown under glass in March and protected a little at first, and make very compact beds. The varieties here specified comprise all the finest kinds in cultivation, and to the admirers of this useful and very ornamental plant will prove gratifying in every respect.
242	— — **nanum**	...	...	...	...	...	...	1	...	6	
243	— **bicolor**	...	...	...	...	...	w. & c.	2	...	6	
244	— **Brilliant**	...	...	...	...	...	s. & w.	...	...	6	
245	— **caryophylloides**	...	...	...	...	...	str.	...	...	6	
246	— **Delila**	...	...	...	...	...	ro. & w.	...	...	6	
247	— **Firefly**	...	...	...	...	...	s. & y.	...	...	6	
248	— **Galathee**	...	...	...	...	...	c. & w.	...	...	6	
249	— **Ophir**	...	...	...	...	...	y.	...	...	6	
250	— **pourpre superbe**	...	...	...	...	...	p.	..	...	6	
251	— **Papillon**	...	...	...	...	...	s. & w.	...	...	6	
252	— **Roi des Feux**	...	...	...	...	...	s.	...	...	6	
253	— **striatum novum**	...	...	...	...	...	stri.	...	...	6	... ...
254	Aphyllanthes monspeliensis	6	25	74	France	hhP	r.	1	6-7	6	Sow in good garden soil.
255	Apollochlamys Bellardieri									6	Columbine. This pretty and interestingly varied genus of plants scarcely meets with the amount of consideration it deserves: when fully established, the Aquilegias will stand frost well, and the earliness and abundance of their blooms ought to render them general favourites. A. alpina and glandulosa are extremely beautiful, and can be strongly recommended. A. Skinneri has the most brilliant colours, viz scarlet and yellow, and is very beautiful. Sow in sandy soil under glass, or covered with a mat: in April, when the seedlings appear, give light, and transplant to mixed borders. A. caryophylloides, No. 258, is a new variety of the Double Columbine, and commended by the Floral Committee of the Royal Horticultural Society.
256	Aquilègia alpina	13	30	162	Switzerland	hP	b. & w.	1½	5-6	6	
257	canadensis	...	...	...	N. America	...	p.	2	5-7	6	
258	**caryophylloides**	...	...	...	gar. var.	...	stri.	...	4-5	6	
259	formòsa	...	...	...	Kamschatka	...	r. & o.	1½	5-7	6	
260	fràgrans	...	...	...	Himalaya	...	y. stri.	1	5-6	6	
261	glandulòsa	...	...	...	Siberia	...	b. & w.	1½	...	6	
262	hybrida atrolilàcea	...	...	...	gar. var.	...	d. li.	2	...	6	
263	— cærùlea	...	...	...	...	...	b.	...	...	6	
264	sibírica	...	...	...	Siberia	...	b. & w.	1½	5-7	6	
265	**Skinneri**	...	...	...	Guatemala	...	s. & y.	...	...	6	
266	viridiflòra	...	...	...	Siberia	...	g.	...	...	6	
267	— atropurpùrea	...	...	...	gar. var.	...	p.	...	...	6	
268	vulgàris Durandi	...	...	...	...	...	stri.	2	4-5	3	
269	— atrolilacìna	...	...	...	...	...	d. li.	...	...	3	
270	— alba	...	...	...	...	...	w.	...	...	6	
271	— — carnea	...	...	...	...	...	flsh.	...	...	3	
272	— kermesìna fl. pl.	...	...	...	...	...	c.	...	...	3	

No.	*Scientific Name.*	L.Cl.	L.O.	N.O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		*s. d.*	
273	Aquilègia vulgaris striàta	13	30	162	gar. var.	hP	stri.	2	4–5	3	For descriptions and observations on the culture of the Aquilegia, see preceding page.
274	vulgaris variegàta	...	...	...	...	...	var.	...	...	3	
275	Wittmanni	...	...	...	...	...	...	...	...	6	
276	choicest mixed	...	...	...	...	...	div.	...	...	6	
277	Arabis alpina	15	61	103	Switzerland	...	w.	¼	...	3	Very pretty early spring plants, well adapted for rockeries, clumps, and edgings.
278	albida	...	...	...	...	...	...	...	...	3	
279	caucásica	...	...	...	Caucasus	...	...	...	...	3	
280	**Aralia papyrifera**	5	30	70	China	sS	...	4	6–7	1 0	Chinese Rice-paper Plant.
281	**Araucaria imbricata**	22	49	99	S. America	hS	y.	20		1 0	Handsome Coniferous Tree.
282	Arbutus Unèdo	10	26	110	Ireland	...	...	10	9–12	3	Well-known hardy Shrub.
283	**Arctotis breviscapa**	19	56	98	Cape G. Hope	bhA	o. & b.	1	6–10	6	Beautiful Annuals: after the character of Gazania splendens.
284	**grandiflora**	...	...	...	...	...	pa. y.	...	...	6	
285	Arèca oleràcea	21	49	148	W. Indies	sT	w.	40		1 0	Palms: sow in heat, in a mixture of sand, loam, and peat.
286	madagascariensis	...	...	...	Madagascar	...	...	...		1 0	
287	Argyræa multiflòra**	5	25	100	E. Indies	gP	p.	10	7–8	6	Splendid Convolvulus-like plants.
288	splendens**	...	...	...	...	...	...	...	...	6	
289	Argyrolòbium Linnæànum	17	45	132	Mexico	hhP	y.	2	7–9	6	Variegated foliage: sow in pans.
290	Argemòne grandiflòra	13	25	149	...	hhA	...	3	...	3	Useful Annuals for beds. Sow in March, and cover with a garden pot.
291	Hunnemanni	...	...	...	gar. var.	...	...	...	...	3	
292	mexicàna	...	...	...	Mexico	...	...	...	...	3	
293	platycèras [**	...	...	...	gar. var.	...	w.	...	...	3	
294	**Aristolochia altissima**	20	41	71		gS	p.	6	8–9	6	Remarkable and handsome climbing plants; the flowers resembling variously shaped horns. A. Sipho does well in the open borders. Soil, loam and peat.
295	**Bonplandi****	...	...	...	Patagonia	...	...	...	...	1 0	
296	ciliòsa**	...	...	...	...	...	p. & g.	...	...	6	
297	Sìpho**	...	...	...	N. America	hhS	d. p.	30	6–7	1 0	
298	Armèria angustifòlia	5	30	153		hP	ro.	½	4–8	6	... ...
299	cephalòtis	...	...	...		...	...	...	...	6	Useful hardy Perennials, adapted for rockwork, edgings, or culture in pots. Sow in sandy soil at the beginning of April.
300	diauthoides	...	...	...	gar. var.	...	...	...	...	6	
301	formòsa fl. alba	...	...	...	...	...	w.	1	...	6	
302	— fl. carnea	...	...	...	...	...	flsh.	...	...	6	
303	grandiflòra	...	...	...		...	ro.	...	...	3	... ...
304	Artemísia arborescens	19	54	98	Levant	hS	y. & g.	10	6–8	4	Common garden soil.
305	Asclèpias curassávica	5	26	73	S. America	hP	s.	3	6–9	3	Sow in hot-bed in February, and harden off for greenhouse: sow the hardy kinds in the open air in April.
306	mexicàna	...	...	...	Mexico	gS	w.	...	7–9	6	
307	salicifòlia	...	...	...	S. America	gP	...	...	6–7	6	
308	Aspérula cilìata	4	25	168	Levant	hA	y.	½	7–8	3	Pretty rock or edging plant.
309	Aster alpinus	19	54	98	Alps	hP	p.	¾	5–8	3	Sow in open borders in March in common garden soil.
310	tenellus	...	...	...	Cape G. Hope	hA	b.	2	9–10	3	
311	Astrágalus chlorostachys	17	45	132	Nepaul	hP	g. & y.	3	8–9	6	Very easily cultivated herbaceous Perennials. Sow in pans, and plant out into borders: common garden soil.
312	galegiformis	...	...	...	S. France	...	p.	¼	4–8	6	
313	leucophæus	...	...	...	Germany	...	w.	...	...	6	
314	purpùreus	...	...	...	S. France	...	p.	...	6–7	6	
315	Astrantia maxima										
316	Athanàsia annua	19	53	98	Barbary	hA	y.	1	6–8	3	African Daisy: sow in open borders.
317	Atriplex cinereum	23	25	94	S. Europe	...		...	...	6	Pretty ornamental-foliaged plants.
318	mimularia	...	...	...	...	...		...	...	6	
319	Aubriètia grandiflora	15	60	103	Levant	hP	p.	¼	3–5	6	Pretty Perennial: sandy soil.
320	**Azalea**, *Ghent vars.*	5	25	165	China	gS	div.	4	...	1 0	Well-known handsome Shrubs; culture the same as for Rhododendrons.
321	pontica	...	...	...	Levant	hS	...	6	5–6	1 0	
322	Baèria chrysostòma	19	54	98	California	hA	y.	1	4–6	3	Sow in March in open borders.
323	Baptisia australis	10	25	132	N. America	hP	b.	4	6–7	6	Usual half-hardy treatment.
324	perfoliàta	...	...	...	Carolina	hhP	y.	3	7–8	6	
325	virgínica	...	...	...	Virginia	...	...	...	...	6	
326	**Barleria cærulea**	14	59	63	E. Indies	sP	b.	1	6–8	1 0	Handsome plants. Sow in pans; plant into pots in a mixture of peat, loam, and rotted cow-dung.
327	**hirsuta**	...	...	...	...	...	...	...	...	1 0	
328	**Prionitis**	...	...	...	...	sS	o.	3	7–8	1 0	
329	Bartònia aurea	12	25	135	California	hA	...	1½	7–11	4	Rich golden Annual: common soil.
330	**Bauhinia acuminata****	10	...	132	E. Indies	sS	w.	8	...	1 0	
331	**alba****	...	...	...	...	...	...	15	...	1 0	... ...
332	**brachycarpa****	...	...	...	...	...	...	...	...	1 0	
333	**diphylla****	...	...	...	...	...	...	...	...	1 0	
334	**parviflora****	...	...	...	...	...	...	20	...	1 0	Very handsome hothouse Climbers. Soak the seeds in warm water previous to sowing, then sow in hot-bed and grow in sandy loam.
335	**porrecta****	...	...	...	...	...	stri.	...	...	1 0	
336	**purpurea****	...	...	...	...	...	p.	...	...	1 0	
337	**Ricardiana****	...	...	...	...	...	w.	...	...	1 0	
338	**— grandiflora****	...	...	...	...	...	...	...	...	1 0	
339	**variegata****	...	...	...	...	...	stri.	...	...	1 0	... ...
340	**sp. ex India**** [ra**	...	...	...	...	...	w.	...	...	1 0	
341	**Beaumontia grandiflo-**	5	...	69	...	...	...	...	...	1 0	One of the best of the hothouse Climbers.
342	Bedfordia salicina									6	
343	Begònia cinnabarina	21	48	77	Bolivia	sPb	o. v.	2	5–7	1 0	Handsome-foliaged plants, the requisites for every Greenhouse or Stove.
344	hùmilis [*Daisy*)	...	...	...		...	s.	...	...	1 0	Fine double Daisy.
345	**Bellis perennis** (*Double*	19	54	98	hybrids	hP	div.	¼	3–8	1 0	
346	Bellium minùtum	...	...	...	Italy	...	w.	1/10	6–9	6	Common garden soil.

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
347	**Benincasa cerifera****	23	51	104	E. Indies	hhA	y.	10	7–9	6	Handsome black-fruited wax-like Gourds.
348	sinensis**	...	...	...	China	...	...	...	...	6	
349	Benthàmia fragífera	4	25	103	E. Indies	hS	y. & h.	4	6–8	3	Grows best in a sheltered situation.
350	Bérberis Beali	6	...	78	gar. var.	...	y.	3	5–6	6	
351	crassifòlia	...	...	...		...	...	...	...	6	These well-known deciduous Shrubs are well worthy of the general cultivation bestowed upon them, as for general utility they are very available. Sow common kinds in sandy loam in March and April. Such kinds as B. nepalensis should be protected in a cold pit until they are fairly up: deep loamy soil suits them best.
352	empetrifòlia	...	...	...	Valparaiso	...	...	...	3–5	6	
353	diversifòlia	...	...	...	Monte Video	...	...	...	...	6	
354	heterophy'lla	...	...	...	Magellan	...	...	...	5–6	6	
355	intermèdia	...	...	...		...	...	...	...	6	
356	japonica	...	...	...		...	...	...	...	6	
357	**Leschenaulti**	...	...	...	Neilgherries	...	...	10	4–5	1 0	
358	nepalensis	...	...	...	Nepaul	...	...	...	5–6	6	
359	sp. ex Buenos Ayres	...	...	...	Buenos Ayres	...	...	4	...	6	
360	Bidens aurea	19	53	98	S. America	hA	...	2	6–8	3	
361	diversifòlia	...	...	...	...	...	...	2	7–8	3	These plants have many of the characteristics of the well-known Coreopsis, and are very useful for mixed borders.
362	grandiflora	...	...	...	...	...	...	...	...	3	
363	ferulæfòlia	...	...	...	Mexico	...	...	...	...	3	
364	leucantha	...	...	...	S. America	...	w.	...	...	3	
365	tenuifòlia	...	...	...	...	...	y.	...	...	3	
366	Bignònia catalpa**	14	59	79	N. America	hS	w.	10	6–8	6	Strikingly handsome Climbers. B. radicans may be grown against a south wall. B. Tweediana has rich golden-yellow blossoms.
367	grácilis**	...	...	...	S. America	gS	...	...	4–5	1 0	
368	tomentùsa**	...	...	...	...	...	...	...	6–8	1 0	
369	**Tweediana****	...	...	...	Buenos Ayres	...	y.	...	...	1 0	
370	rádicans màjor**	...	...	...	S. America	hhS	o.	...	6–9	6	
371	Billbergia zebrina	6	25	82	Rio Janeiro	sP	stri.	1½	6–7	6	Sow in loam and peat.
372	**Biota glauca**	21	49	99	S. Europe	hS	ap.	10	5–6	6	Handsome Thuja-like plants. Sow in loam and peat.
373	**freneloides**	...	...	...	...	...	...	...	...	6	
374	Blìtum capitàtum	1	...	94	Austria	hA	...	2	...	3	Common garden soil.
375	Blumenbàchia insignis	18	48	135	Monte Video	hhA	w.	¾	7–11	3	Slight hot-bed: plant out in May.
376	**Bombax Gossipium**	16	32	190	E. Indies	gT	...	60		1 0	Silk-cotton Tree.
377	Bossiæa alàta	17	45	132	N. S. Wales	gS	y. & r.	3	7–9	1 0	Handsome Greenhouse Shrubs. Soak the seeds in warm water, then sow in hot-bed in sandy loam and peat, and harden off gradually.
378	cordifòlia	...	...	...	N. Holland	...	y. & p.	...	5–6	1 0	
379	heterophy'lla	...	...	...	N. S. Wales	...	y.	...	5–10	1 0	
380	linophy'lla*	...	...	...	...	...	...	...	5–6	1 0	
381	rotundifòlia	...	...	...	Australia	...	...	...	...	1 0	
382	Brachycòme iberidifùlium	19	54	98	Swan River	hhA	b.	1	6–8	3	Swan River Daisy: a pretty and effective bedding plant.
383	album	...	...	...	...	...	w.	...	...	3	
384	Briza geniculàta	3	26	123	Cape G. Hope	...	ap.	...	...	6	Ornamental Grasses, growing freely in the open borders, and very useful for summer and winter bouquets.
385	Brizopyrum sículum	...	...	...	N. America	...	...	...	...	6	
386	Brómus brizæformis	...	...	...	S. Europe	...	...	...	...	6	
387	lanuginòsus	...	...	...	...	...	...	...	...	6	
388	Browallia Cerviakowski	14	59	175	gar. var.	...	b. & w.	1½	7–10	6	These half-hardy Annuals are very striking, and well worth cultivation. Very serviceable for Greenhouse or Conservatory decoration. Sow in hot-bed in light soil in March or April; prick off; pot and re-pot separately in sandy loam and peat.
389	demissa	...	...	...	S. America	...	b.	¾	6–9	3	
390	elàta cærùlea	...	...	...	Peru	...	...	1½	...	3	
391	— alba	...	...	...	...	...	w.	...	...	3	
392	— cærulea grandiflora	...	...	...	gar. var.	...	b.	...	...	6	
393	— tombante	...	...	...	...	...	...	...	...	6	
394	Buddleya Lindleyàna	3	25	175	China	hhS	v.	6	6–7	6	Requires deep, sandy, loamy soil.
395	Buplenrum fruticòsum	5	26	184	S. Europe	hS	g.	3	7–8	3	Curious-foliaged plants: succeed in any good garden soil.
396	graminifòlium	...	...	...	...	...	...	...	...	3	
397	Cacàlia coccínea	19	53	98	S. America	hA	s.	1½	6–7	3	Sow in good garden light soil.
398	— aurea	...	...	...	...	...	y.	...	...	3	
399	**Calampelis miniata****	14	59	79	Chili	hS	car.	10	7–9	3	Very handsome Climbers. Sow in hot-bed, and plant out in May.
400	**scabra****	...	...	...	...	...	o.	...	...	3	
401	Calandrínia díscolor	11	25	159	...	hA	ro.	⅓	...	3	Very useful and pretty Annuals, growing freely in any good garden soil. **C. umbellata** is the most brilliant in colour of all the Annuals, and suited for edgings, clumps, or rockeries.
402	grandiflòra	...	...	...	...	...	p.	1	...	3	
403	rósea	...	...	...	...	...	ro.	...	...	3	
404	speciósa	...	...	...	N. California	...	...	½	6–9	3	
405	**umbellata**	...	...	...	Chili	hhA	c.	¼	...	4	
406	**Calceolaria**, finest hybrid	2	...	175	hybrids	gP	div.	2	...	1 0	Fill the pots half full of drainage, then loam and peat, and then ¼ inch of sand; water well, and when the surface is dry, press it level and scatter the dust-like seed; cover with a little sand, and place a square of glass over the pot in a frame.
407	**new dwarf spotted**	...	...	...	...	...	...	1	...	1 0	
408	**new blotched**	...	...	...	...	...	...	2	...	1 0	
409	pinnàta	...	...	...	Peru	hhA	y.	...	..	6	
410	scabiosæfòlia	...	...	...	Chili	...	...	...	...	3	
411	sp. ex Chili	...	...	...	...	...	...	...	...	3	
412	Calimeris diplopappus	19	54	98	N. America	hP	b.	1½	7–8	6	Good garden soil.
413	Calla æthiopica	6	25	72	Cape G. Hope	hPb	w. & y.	3	1–4	3	A mixture of peat, loam, and sand.
414	Callichròa platyglossa	19	54	98	California	hA	y.	1	7–9	3	Common garden soil.
415	Calliopsis Atkinsoniàna	...	55	...	Columbia	...	y. & b.	2	...	3	These handsome and showy Annuals are, from their brilliant colours and long duration in bloom, worth extensive cultivation. C. Burridgi and atropurpurea are the most brilliant: all the varieties make good ribands and beds.
416	bícolor	...	...	...	N. America	...	...	3	...	3	
417	— atrosanguínea	...	...	...	...	...	d. r.	...	...	3	
418	— grandiflòra	...	...	...	...	...	y.	...	...	3	
419	— marmoràta	...	...	...	gar. var.	...	mar.	...	...	6	
420	— — nàna	...	...	...	...	...	...	1	...	6	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght. feet	M. of Flow.	Price. s. d.	General Observations.
421	Calliopsis bícolor nàna	19	55	98	gar. var.	hA	y. & b.	1	7–9	3	If the seed-pods of the different varieties of Calliopsis be picked as soon as they show themselves, the plants will bloom for a much longer time. Sow early in common soil and cover with garden pots, or make upa slight hot-bed, cover the surface with rotted leaves, and then with three inches of loam and leaf-mould: sow the seed thickly, in rows about three inches apart, and when ready plant out where wanted.
422	— nìgra speciòsa	...	...	...	...	...	d. r.	3	...	3	
423	— — nàna	...	...	...	...	...	...	1	...	6	
424	— quilled	...	...	...	...	...	y. & b.	2	...	6	
425	Ackermanni	...	...	...		...	y.	...	...	3	
426	cardaminifòlia	...	...	...		...	...	...	...	6	
427	coronàta	...	...	...	Texas	...	y. spot.	...	...	3	
428	Drummondii	...	...	...	...	...	y.	...	...	3	
429	filifòlia	...	53	...	...	...	...	3	...	3	
430	**— Burridgii**	...	...	...	gar. var.	...	c. & y.	...	...	3	
431	**— — atropurpurea**	...	...	...	...	...	p. & y.	...	...	6	
432	longipes	...	...	...	Texas	...	y.	2	3–8	6	
433	**Callirhoe digitata**	16	48	137	N. America	...	d. ro.	...	6–10	6	Very beautiful, blooming for four or five months continuously.
434	**— nana**	...	...	...	...	...	...	1	...	6	
435	Callistachys lanceolàta	10	25	132	N. Holland	gS	y.	3	7–8	6	Sow in heat in sandy peat.
436	Calodendrum capensis	5	...	168	Cape G. Hope	gT	pk.	40	7–9	6	Cool greenhouse.
437	Calycánthus præcox	12	35	85	Japan	hS	y. & r.	6	2–12	6	Fragrant and handsome Shrubs: sow in heat and transplant.
438	macrophyllus	...	...	...	California	...	...	...	...	6	
439	sinensis	...	...	...	China	...	...	...	...	6	
440	**Camellia**, finest double	16	48	86	...	S	div.	div.	5–7	1 0	Saved from the finest collection in Italy.
441	Campánula alliariæfolia	5	25	87	Caucasus	hP	b.	1	7–9	6	This is one of the most useful, well-known and appreciated tribe of Perennials: the seeds of all the kinds are very small, and should be only slightly covered: all the perennial varieties, if sown in the beginning of April in nice friable soil, will bloom the second year: many, if sown as mentioned above for Calliopsis, will bloom in the autumn of the first year, as the beautiful C. carpatica and alba, so good for beds and edgings. C. pyramidalis is very elegant, may be trained to any form of growth, and if sown early will bloom the first year: may be grown either in pots or borders. C. grandiflora and grandis bloom more freely, and the long drooping purple blooms of the former are very handsome. C. Vidalli is a new species from the Azores, and is very elegant. Such pretty Annuals as C. Lorei and pentagonia will bloom beautifully in the open borders if sown early and well thinned, or sown thinly in the first instance.
442	bononiensis	...	...	...	Italy	hP†	...	2	5–9	3	
443	**carpatica**	...	...	...	Carp. Alps	...	...	½	6–9	3	
444	**— alba**	...	...	...	...	...	w.	...	...	3	
445	**grandiflora**, *true*	...	...	...	Siberia	...	p.	1	...	6	
446	grandis	...	...	...	Natolia	...	b.	3	8–9	3	
447	lamiifòlia	...	...	...	Iberia	...	pa. y.	...	6–7	6	
448	latifòlia	...	...	...	Britain	...	p.	4	7–8	3	
449	— alba	...	...	...	...	...	w.	...	...	6	
450	**littoralis**	...	...	...	N. Holland	hhB	b.	½	4–8	3	
451	Lorei	...	...	...	Italy	hA	...	1	7–8	3	
452	— alba	...	...	...	...	...	w.	...	...	3	
453	macrantha	...	...	...	Mahuria	hP†	b.	2	...	3	
454	nóbilis	...	...	...	China	hhP	pa. p.	3	...	6	
455	pentagònia	...	...	...	Turkey	hA	b. & p.	1	5–8	3	
456	— alba	...	...	...	...	...	w.	...	...	3	
457	persicifòlia	...	...	...	Europe	hP†	...	3	7–9	3	
458	— maxima	...	...	...	...	...	...	...	...	6	
459	pulcherrima	...	...	...	gar. var.	...	b.	2	6–9	6	
460	**pyramidalis**	...	...	...	Carniola	...	pa. b.	4	6–7	6	
461	**— alba**	...	...	...	...	...	w.	...	...	6	
462	rhomboidea fl. pl.	...	...	...	Switzerland	hP	pa. b.	2	...	6	
463	stricta	...	...	...	Syria	hB	w.	½	6–8	3	
464	strigòsa	...	...	...	Italy	hP†	b.	1	...	6	
465	Trachèlium fl. pl.	...	...	...	Britain	hP	v.	4	...	3	
466	— album plènum	...	...	...	...	...	w.	...	...	3	
467	**Vidalli**	...	...	...	Azores	hhP	...	1½	7–8	6	
468	Canna bícolor	1	...	88	Brazils	hhPt	...	2	4–11	4	... ...
469	coccínea vèra	...	...	...	S. America	...	s.	...	1–12	3	
470	compacta elegantissima	...	...	...	gar. var.	...	o.	...	4–7	6	
471	edùlis	...	...	...	E. Indies	...	s.	4	...	6	This tribe is remarkable for its large, handsome foliage, and, we are inclined to think, has hitherto scarcely met with the amount of attention it deserves. To large gardens in a warm situation the various species of Canna will be found invaluable adjuncts, and their appearance in masses is rich, luxuriant, and tropical. Soak the seeds in water at 125° for about 12 hours: sow in sandy loam and peat, and place in a brisk hot-bed: when well up, thin, and pot separately, and keep under glass. If plants be turned out the second week in June, in a rich soil and sheltered situation, they will combine with other plants of a similar nature in imparting an unequalled mass of rich verdure to an otherwise ordinary-looking garden: the roots can be lifted before the arrival of frost, kept in a cool stove, and planted out again in the ensuing summer.
472	**Fintelmanni**	...	...	...	gar. var.	...	y.	...	...	1 0	
473	flaccida	...	...	...	E. Indies	...	s.	...	...	6	
474	**gigantea vera**	...	...	...	S. America	...	r. & y.	7	1–12	1 0	
475	indica	...	...	...	E. Indies	...	s.	4	...	3	
476	— rùbra	...	...	...	...	...	...	...	...	6	
477	— species nòva	...	...	...	...	...	...	...	...	6	
478	**Kartsteiniana**	...	...	...	gar. var.	...	d. r.	...	...	6	
479	lætal	...	...	...	...	...	...	...	...	6	
480	lagunensis	...	...	...	Laguna	...	y. spot.	5	8–11	3	
481	**Lamberti**	...	...	...	Trinidad	...	s.	4	5–6	6	
482	leptophy'lla	...	...	...	S. America	...	c.	3	1–12	4	
483	**limbata**	...	...	...	Brazils	...	r.	...	...	4	
484	lùtea	...	...	...	E. Indies	...	y.	...	...	3	
485	— picta	...	...	...	...	...	y. & s.	...	...	3	
486	**nepalensis**	...	...	...	Nepaul	...	y. spot.	...	...	1 0	
487	Schuberti	...	...	...	gar. var.	...	r.	...	...	3	
488	speciòsa	...	...	...	S. America	...	...	...	8–10	3	
489	species nòva	...	...	...	E. Indies	...	s.	...	...	6	
490	— ex Guatemala	...	...	...	Guàtemala	...	...	...	...	6	
491	**spectabilis**	...	...	...	gar. var.	...	...	...	...	6	
492	**subrualta rubra**	...	...	...	...	...	d. r.	...	...	6	
493	variábilis	...	...	...	India	...	...	...	1–12	3	... ...
494	Sellòwi	...	...	...	S. America	...	s.	...	...	3	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Dur. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s.d.	
495	Canna Warszewiczii	1	25	88	Cen. America	hhPt	s.	4	8-11	3	For culture, see preceding page.
496	Cánnabis gigántea	22	40	185	India	hhA	g.	6	6-7	6	Ornamental grass.
497	Cápparis spinòsa	13	25	89	S. Europe.	hhS	ro.	3	5-8	6	Sow in heat and transplant.
498	Capsicum microphy'llum	5	...	17S	Iudia	hhA	s.	2	...	6	Ornamental fruit; pretty for conservatory.
499	Cardiospermum Halicac.**	...	...	172	...	gA	w. & g.	4	7-8	3	Usual greenhouse treatment.
500	**Carduus nigrescens**	19	53	98	Europe	hB	p.	...	...	3	C. nigrescens is a sweet-scented pink-flowered Thistle; the other varieties are well adapted for mixed borders.
501	Benedictus	...	...	...	...	hA	w.	3	...	3	
502	Marianus	...	...	...	...	...	...	...	...	3	
503	**Carica papaya** ...	22	45	104	India	sS	g.	20	...	1 0	Indian Fruit: stove treatment.
504	Carthàmus tinctòrius	19	53	98	Britain	hB	p.	5	...	3	Common garden soil.
505	**Carissa carandas**	5	25	60	E. Indies	sT	w.	15	...	1 0	Indian Fruit: stove treatment.
506	Cassia alàta	10	...	132	W. Indies	gS	y.	12	6-7	6	
507	auriculàta	...	...	...	E. Indies	...	...	6	7-9	6	... ...
508	corymbòsa	...	...	...	...	...	...	...	7-8	6	
509	eremóphila	...	...	...	...	...	...	...	...	6	
510	fistula	...	...	...	...	...	...	...	...	6	This is a very handsome genus of Ornamental Shrubs, useful for either Greenhouse or Conservatory decoration; and many of the species may be employed to adorn the out-door garden if planted out in June and removed before the appearance of frost. Sow in hot-bed, and soak the seeds before sowing. C. tenuifolia has long spikes of bloom densely covered with deep golden flowers.
511	glauca	...	...	...	...	...	...	4	...	6	
512	**grandiflora**	...	...	...	...	...	...	...	6-9	6	
513	lævigàta	...	...	...	...	...	...	...	...	6	
514	Marylandica	...	...	...	America	...	...	...	...	6	
515	occidentàlis	...	...	...	W. Indies	...	...	2½	5-8	6	
516	palmistifòlia	...	...	...	E. Indies	...	...	4	...	6	
517	quadrivalvis	...	...	...	...	...	...	...	...	6	
518	sumatràna	...	...	...	Sumatra	...	...	3	6-9	6	
519	**tenuifolia**	...	...	...	E. Indies	...	...	4	...	6	... ...
520	tomentosa	...	...	...	...	...	...	...	...	6	
521	Casuarina muricàta	21	36	92	...	gT	ap.	15		6	Curious-foliaged Greenhouse plant.
522	Catanánche cærùlea	19	53	98	S. Europe	hP†	b.	2	7-10	3	Sow in sandy loam.
523	— bicolor	...	...	...	...	...	b. & w.	...	...	3	
524	lùtea	...	...	...	Candia	hA	y.	¾	6-9	3	
525	Cathartocarpus fistula	10	25	132	India	gT	...	20	6-7	6	Very ornamental Greenhouse Shrubs; good pot plants for Greenhouse or Conservatory decoration.
526	grandis	...	...	...	...	...	...	...	...	6	
527	nodòsus	...	...	...	...	...	...	...	...	6	
528	Ceanòthus africanus	5	...	164	hybrid	hhS	w.	2	7-10	6	Sow in cold pit in April, in sandy peat, then prick off and pot into sandy loam; prune back every spring.
529	americànus	...	...	...	...	...	...	...	...	6	
530	azùreus	...	...	...	Mexico	...	l. b.	10	4-6	6	
531	Cèdrus Deodàra [dalis	21	49	90	Nepaul	hT	ap.	100		1 0	Ornamental Conifer: sow on heat.
532	**Celosia aurea pyrami-**	5	25	64	Japan	hhP	y.	3	7-10	1 0	Magnificent plants for Greenhouse or Conservatory decoration: succeed well if treated in the same manner as Balsams.
533	**New crimson fea-**	...	...	...	...	...	e.	...	...	1 0	
534	**argentea** [thered	...	...	...	India	hhA	sil.	...	...	6	
535	Cènia turbinàta	19	54	98	Cape G. Hope	hA	ro.	½	...	3	Good garden soil.
536	— flàva	...	...	...	...	...	y.	...	...	3	
537	Centaurea americàna	...	55	...	Arkansas	...	li.	3	6-9	3	
538	Crocodylium	...	...	...	Levant	...	p.	1½	7-8	3	
539	dealbàta	...	...	...	Caucasus	hP	...	2	...	3	Of the annual species of Centaurea, C. americana, depressa, and rosea are the best: the perenuial species will bloom the second year. C. macrocephala has a large globular orange-yellow blossom: the bloom of C. phrygia is similarly shaped, but the colour is purple. All the kinds are well worth cultivation. Grow in any good garden soil.
540	depressa	...	...	...	...	hA	b.	1	6-8	3	
541	— ròsea	...	...	...	gar. var.	...	r.	...	...	3	
542	elongàta	...	...	...	Barbary	hP	v.	2	8-9	3	
543	glastifòlia	...	...	...	Siberia	...	y.	4	6-9	3	
544	invulucràta	...	...	...	Europe	hA	...	...	...	3	
545	Lippi	...	...	...	Egypt	...	l. p.	...	...	3	
546	macrocéphala	...	...	...	Caucasus	hP	y.	3	...	3	
547	montàna	...	...	...	Austria	...	b.	1½	...	3	
548	phry'gia	...	...	...	Switzerland	...	p.	...	...	3	
549	Centaurídium Drummondi	...	...	...	Europe	...	y.	2	...	3	Good garden soil.
550	Centranthus macrosiphon	1	25	186	Granada	hA	r.	...	6-8	3	
551	— albus	...	...	...	gar. var.	...	w.	...	...	3	Showy, pretty and free-blooming Annuals: growing freely in any good garden soil.
552	— carneus	...	...	...	...	...	flsh.	...	...	3	
553	— nànus	...	...	...	...	...	...	1	...	3	
554	Centrosema braziliensis**	17	45	132	E. Indies	gS	p	4	7-8	6	Handsome Greenhouse Climber.
555	Cephalària tartárica	4	25	107	Russia	hB	y.	6	5-7	3	Good garden soil.
556	**Cephalotaxus Fortuni**	22	49	99	Japan	hT	ap.	40		2 6	Handsome Conifer (seed rare).
557	Cerastium tomentòsum	10	30	91	S. Europe	hP†	w.	½	6-9	1 0	Silvery foliage; good for edging.
558	Ceratochlòa péndula	3	26	123	N. America	hA	ap.	1¼	7-9	6	Ornamental Grasses.
559	ìnuloides	...	...	...	...	...	...	...	...	6	
560	Cereis Siliquastrum	10	25	132	S. Europe	hT	p.	18	5-6	4	Sow in cold pit, then harden off: good for lawns.
561	— album	...	...	...	...	...	w.	...	...	4	
562	Cerinthe màjor	5	...	81	S. France	hA	y.	3	7-8	3	Useful hardy plants, succeeding well in any good garden soil.
563	minor	...	...	...	...	...	...	1½	...	3	
564	gymnandra	...	...	...	...	...	...	3	...	3	
565	Cestrum aurantìacum	...	...	178	Guatemala	gS	o.	...	9-12	6	Sow in hot-bed in sandy soil: fine greenhouse ornaments.
566	ròseum	...	...	...	Mexico	...	ro.	...	...	6	
567	Chænostòma fastigiatum	14	59	175	Cape G. Hope	hhA	...	¾	7-10	4	Sow in gentle heat: very pretty for edgings or rock-work.
568	polyanthum	...	...	...	...	...	pk.	1	...	3	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght. feet	M. of Flow.	Price. s. d.	General Observations.
569	Chænostòma viscòsum	14	50	175	Cape G. Hope	hhA	ro.	1	7–10	4	Sow on heat and transplant.
570	**Chamærops humilis**	23	52	148	S. Europe	gS	g. & w.	6	2–4	6	Dwarf Fan Palm: grows outdoors in summer.
571	Chelònc barbàta	14	54	175	Mexico	hP	o. s.	3	6–9	3	Fine scarlet Perennials: same culture as for Pentstemon.
572	— coccínea	...	...	...	...	s.	...	...		6	
573	Chenopòdium atríplicis	5	26	94	China	hA	...	...	7–9	3	Hardy ornamental-foliaged plant.
574	Chirònia baccífera	...	25	118	Cape G. Hope	gS	y.	2	7–8	6	Sow in sandy peat and loam in hot-bed, and grow in well-drained pots.
575	frutescens	...	...	...	...	...	r.	1½	6–9	6	
576	Chirònium Opóponax	...	...	...		gA				6	
577	Chloris fimbriàta	23	51	123	E. Indies	hhA	ap.	1	6–7	4	... ...
578	**barbata**	...	...	...	S. Europe	...	...	...	...	6	
579	dolichostachya	...	...	...	...	...	...	...	...	4	Ornamental Grasses, extremely curious in growth: grow in any good garden soil.
580	polydactyla	...	...	...	Jamaica	...	...	¾	...	4	
581	radiàta	...	...	...	W. Indies	...	...	½	...	4	
582	submùtica	...	...	...	Mexico	...	...	1	7–8	4	... ...
583	Chorizèma cordàta	10	25	132	Australia	gS	y.	2	3–4	3	One of the prettiest plants for the decoration of Greenhouse or Conservatory. Soak the seeds in warm water, and sow in sandy peat in hot-bed; harden off when up, and grow in fibry sandy peat.
584	ilicifòlia	...	...	...	N. Holland	...	...	3	3–10	3	
585	varia	...	...	...	Swan River	...	y. & r.	4	6–7	3	
586	— rotundifòlia	...	...	...	...	...	o. & r.	...	...	4	
587	— splendens	...	...	...	...	...	y. & r.	...	...	4	
588	Chrysanthemum carneum	19	54	98	Caucasus	hP	fish.	2	...	6	Nos. 590 and 591 are the well-known Chrysanthemums of the Exhibitions, and the seed offered is saved from a collection of the finest varieties. The other varieties are very ornamental plants for mixed borders.
589	centrospermum	...	...	...	gar. var.	hA	y.	...	...	3	
590	**mixed large-flowd.**	...	...	...	China	hP	div.	3	10–12	1 0	
591	**mixed Pompone**	...	...	...	...	...	...	1	...	1 0	
592	lacustre	...	...	...		hA	y.	2	6–7	3	
593	multicaule	...	...	...		...	...	...	...	6	
594	' Sibthorpi	...	...	...		...	...	...	...	3	
595	Chrysostòma hypochondria	...	...	...		...		...	...	6	Good garden soil.
596	Chrysùrus aureus	3	26	123	Levant	...	ap.	½	7–8	3	Ornamental Grass.
597	Cinnamòmum japónicum	9	25	131	Japan	gT	g. & w.	10	3–6	6	Cinnamon Tree.
598	**Cineraria, choicest**	19	54	98	Caucasus	gS	div.	2	2–5	1 0	Saved from the best varieties: C. maritima is a fine silvery-foliage bedding plant.
599	**maritima**	...	...	...	Cape G. Hope	hP	y.	3	6–8	6	
600	Cirsium macrocéphalum	...	53	...	Numidia	hP†	b.	2	7–8	6	Good for mixed borders or shrubberies: sow in any garden soil.
601	pulcherrimum	...	...	...	N. America	...	y.	4	...	3	
602	Cistus álbidus	13	25	95	Spain	hS	p. b.	2	6–7	3	The Cistus is usually known under the name of Rock Rose, and is useful and ornamental in all situations. Sow the seeds in sandy soil in April, and protect with glass until fairly up: small kinds do best on rock-work and banks in sandy loam, and though hardy, it would be advisable to take a few cuttings or layers every year and protect them during the winter, in case any of the exposed plants die.
603	crispus	...	...	...	S. Europe	...	y.	...	...	3	
604	criosépalon	...	...	...	...	...	...	½	5–7	6	
605	guttàtus	...	...	...	England	hA	...	...	6–7	6	
606	ladaníferus	...	...	...	Spain	hS	w.	4	...	6	
607	monspeliensis	...	...	...	S. Europe	...	...	2	...	6	
608	Narnicus	...	...	...	...	...	...	...	...	6	
609	salvifòlius	...	...	...	...	hS	...	...	...	3	
610	tauricus	...	...	...	Crimea	...	p.	...	...	3	
611	Tuberaria	...	...	...	S. Europe	hhP†	w.	¾	...	3	
612	villòsus	...	...	...	...	hS	p.	3	...	6	
613	**finest mixed rock**	...	...	...	div.	...	div.	div.	...	3	
614	Citrus decumàna	14	48	75	India	gS	w.	15	5–7	6	Forbidden Fruit or Pommeloc: sow in heat and transplant.
615	myrtifòlius	...	...	...	Asia	...	...	3	...	3	
616	Cladánthus arábicus	19	54	98	Barbary	hA	d. y.	1½	7–8	3	Good garden soil.
617	Clarkia élegans	8	25	146	California	...	ro. p.	2	7–9	3	... ...
618	— fl. pl.	...	...	...	gar. var.	...	...	...	...	3	Few Annuals are more deservedly approved of than the Clarkia, which is one of the easiest grown and freest-blooming Annuals in cultivation. 627, C. integripetala, is a vast improvement upon the older kinds; and No. 625, C. pulchella flore pleno, is an entire novelty, and has received a *first-class certificate* from the Royal Horticultural Society of London. No. 628, C. integripetala marginàta, is a very handsome variety. All the kinds grow freely out of doors.
619	— rósea	...	...	...	...	...	ro.	...	...	3	
620	— — fl. pl.	...	...	...	...	...	...	...	...	3	
621	pulchella	...	...	...	N. America	...	...	1½	6–10	3	
622	— alba	...	...	...	gar. var.	...	w.	...	...	3	
623	— grandiflòra	...	...	...	...	...	ro.	...	...	3	
624	— — alba	...	...	...	...	...	w.	...	...	3	
625	— **flore pleno**	...	...	...	...	...	...	...	...	1 0	
626	— **Tom Thumb**	...	...	...	...	...	ro.	¾	...	6	
627	**integripetala**	...	...	...	...	...	...	1½	...	6	
628	— **marginata**	...	...	...	...	...	bor.	...	...	6	
629	marginata	...	...	...	...	...	...	...	...	3	
630	**pulcherrima**	...	...	...	...	...	d. r.	...	...	6	... ...
631	Claytònia perfoliàta	5	...	159	N. America	...	ro.	½	5–8	3	Good garden soil.
632	Clematis flammula**	13	35	162	France	hS	p. & y.	20	7–10	3	A handsome class of hardy Climbers, succeeding in almost any situation, but for general use it will be as well to attend to the following directions. Sow in a dry sheltered place, and plant out in sandy loam; if the soil has a calcareous tendency, it will be advantageous: they all look well against a wall or trellis-work.
633	integrifòlia**	..	...	...	Hungary	hP	...	2	6–8	3	
634	leptophylla**	...	...	...	S. Europe	...	w.		...	6	
635	microphylla**	...	...	...	...	...	...		...	6	
636	Viorna**	...	...	...	N. America	hS	p.	15	5–6	6	
637	vitalba**	...	...	...	England	...	w.	20	6–9	6	
638	viticella**	...	...	...	Spain	...	p.	...	...	6	
639	— rùbra**	...	...	...	gar. var.	...	r.	...	...	6	
640	Cleome arbòrea	15	61	89	Caracas	gS	w.	8	6–8	3	Sow in hot-bed, and transplant out of doors in June. C. arborea requires warm greenhouse treatment.
641	speciosissima	..	...	...	Carthage	...	...	2	...	3	
642	trachysperma	...	...	...	Caracas	hhA	...	...	7–8	3	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow	Price.	General Observations.
								feet		s. d.	
643	Cleòme uniglandulòsa	15	61	89	S. America	hA	w.	2	7–8	3	Sow in hot-bed and transplant in June.
644	viscòsa	...	...	...	Ceylon	...	flsb.	...	...	3	
645	Clerodendron infortunàtum	14	59	187	...	sS	s.	3	7–9	1 0	
646	lùcidum	...	...	...	India	...	w.	...		1 0	
647	nutans	...	...	...	E. Indies	...	...	6	11-12	1 0	Sow in hot-bed, and transplant out of doors in June: desirable flowers.
648	odoràtum	...	...	...	Nepaul	...	r.		7–8	1 0	
649	— album	...	...	...	...	...	w.	6	...	1 0	
650	sp. ex Mauritio	...	...	...	Mauritius	...	...	...	...	1 0	
651	Clianthus magnificus	17	45	132	N. Zealand	hhS	s.	4	5–6	6	C. Dampieri is one of the most magnificent blooming plants in cultivation. Sow in heat and grow in loam and peat.
652	Dampieri	...	...	...	N. Holland	gS	s.& blk.	1	4–5	2 6	
653	puniceus	...	...	...	N. Zealand	hhS	c.	4	5–6	1 6	
654	Clintònia élegans	16	40	87	Columbia	hhA	b.	½	6–9	3	These are charming little plants, very beautiful for edgings, borders, pots or rock-work: sow on a little heat, with as much care as for Calceolaria, as the seed is very fine.
655	pulchella	...	...	...	...	...	b. w. y.	...	...	6	
656	— atrocinerea	...	...	...	gar. var.	...	d. grey	...	...	6	
657	— atropurpurea	...	...	...	...	...	d. p.	...	...	6	
658	— alba [flora	...	...	...	...	...	w.	...	...	6	
659	— azurea grandi-	...	...	...	...	...	b.	...	...	6	
660	Clitoria cœlestis**	17	45	132	E. Indies	gS	...	6	7–8	6	... ...
661	gesnatia**	...	...	...	...	...	...	...	...	6	
662	— atrocærulea**	...	...	...	...	...	d. b.	...	...	6	Splendid Greenhouse Climbers, which deserve much more extended cultivation than they have hitherto received. Soak the seeds in lukewarm water, then sow in sandy peat and loam in hot-bed. We believe the collection now offered to be the most extensive in the kingdom.
663	heterophylla**	...	...	...	...	sA	b.	1	...	6	
664	Ternàtea**	...	...	...	...	gS	...	6	...	6	
665	— alba**	...	...	...	...	...	w.	...	...	6	
666	— — grandiflora**	...	...	...	...	...	...	...	...	6	
667	— atrocærulea**	...	...	...	...	...	d. b.	...	...	6	
668	— lilàcea**	...	...	...	...	...	li.	...	...	6	
669	— pallida**	...	...	...	...	...	l. b.	...	...	6	
670	virginiàna**	...	...	...	America	...	b.	...	...	6	... ...
671	Cobæa scandens**	5	25	95	Mexico	hhP	p.	20	5–10	6	Fine Climber: sow the seed edgeways.
672	Cochlearia glastifolia	15	60	103	S. Europe	hhP†	b.	¼	4–10	6	Very ornamental for pots or rockeries.
673	acaulis	...	...	...	...	...	...	¼	...	6	
674	Coix lachryma	21	38	123	E. Indies	sP	ap.	2	6–7	3	Job's Tears: Ornamental Grass.
675	Collinsia bartsiæfòlia	14	59	175	California	hA	p.	½	5–8	3	
676	— alba	...	...	...	gar. var.	...	w.	1½	...	3	... ...
677	bícolor	...	...	...	California	...	w. & p.	...	5–9	3	
678	— alba pura	...	...	...	gar. var.	...	w.	...	...	3	Well-known and universally admired Annuals; may be treated in every way the same as Calliopsis. C. bicolor and major are the prettiest and most generally used, but C. grandiflora is rather brighter in colour; all the varieties, however, are very desirable.
679	— atrorùbens	...	...	...	...	...	d. r.	...	...	3	
680	— candidissima	...	...	...	...	...	w.	...	...	6	
681	— carnea	...	...	...	...	...	flsh.	...	...	3	
682	— major	...	...	...	...	...	w. & b.	...	...	3	
683	heterophy'lla	...	...	...	Columbia	...	p. & w.	...	7–9	3	
684	grandiflòra	...	...	...	...	...	p. & b.	...	5–7	3	
685	multicolor	...	...	...	California	...	cr. li.w.	...	5–9	3	... ...
686	— marmoràta	...	...	...	gar. var.	...	mar.	...	...	3	
687	Collònia coccínea	5	25	154	Chili	...	s. & y.	...	6–11	3	
688	grácilis	...	...	...	America	...	...	2	...	3	Sow in common garden soil: good for bees.
689	grandiflòra	...	...	...	N.W. Amer.	...	saff.	...	...	3	
690	stenosìphon	...	...	...	...	...	...	...	...	3	
691	Colvillea racemòsa	17	45	132	Madagascar	gT	s.	45	4–5	6	Noble Greenhouse plant.
692	Combrètum grandiflorum	8	25	191	Sierra Leone	gS	...	5	2–5	6	Usual Greenhouse treatment.
693	Commelina cœlestis	3	...	97		hPt	b.	1½	6–9	3	Pretty tuberous-rooted plants: if sown in heat and planted out of doors in June, will bloom the first year.
694	— alba	...	...	...		...	w.	...	...	3	
695	— variegàta	...	...	...		...	var. lf.	...	...	3	
696	Convallària majàlis	6	...	177	Britain	...	w.	½	5–6	3	Lily of the Valley.
697	Convólvulus althæoìdes	5	...	100	Levant	hP	pk.	2	7–8	6	Very hardy; grow in any good garden soil.
698	cantábricus	...	...	...	S. Europe	...	flsh.	1	3–9	6	
699	Cordia angustifòlia	...	...	101	E. Indies	sT	y.	15	6–8	1 0	Sow in heat in peat.
700	lævis	...	...	...	Trinidad	...	r.	14	...	1 0	
701	Sebestena	...	...	...	W. Indies	sT	o.	15	...	1 0	
702	Coris monspeliensis	...	...	160	S. Europe	hhB	li.	½	7–9	6	Sow in well-drained pots.
703	Coronilla glauca	17	45	132	France	gS	y.	2	5–9	6	Herbaceous plants, requiring a light rich soil.
704	juncea	...	...	...	...	hS	...	3	6–7	6	
705	secundàcea	...	...	...	...	...	...	...	...	6	
706	Cosmanthus fimbriàtus	5	25	81	N. America	hA	li. & w.	1	7–10	3	Sow in good garden soil.
707	Cósmea atropurpùrea	19	55	98	gar. var.	hhA	d. p.	2	...	3	Sow in slight hot-bed, and transplant in May.
708	bipinnàta	...	...	...	Mexico	...	p.	...	...	3	
709	lùtea	...	...	...	...	...	y.	...	10-11	3	
710	Cótula aurea	...	54	...	Spain	hA	...	¼	7–9	3	Common garden soil.
711	Crèpis parviflòra	...	53	...	S. Europe	...	...	1	...	3	Good garden soil.
712	Crucianella stylòsa	4	25	167	Persia	hP†	p.	1½	6–8	3	Common garden soil.
713	Cryptomeria japonica	21	49	99	Japan	hT	ap.	100	5–7	6	Ornamental Conifers: sow in cold pit in peat and loam.
714	Lobbi	...	...	...	...	...	...	...	...	1 0	
715	Cùcumis acutángulus	...	...	104	E. Indies	hhA	y.	8	6–9	3	For culture see page 16.
716	áradac	...	...	...		...	...	...	...	3	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
717	Cùcumis dípsaeus	21	49	104	Egypt	hhA	y.	9	6-9	3	A most interesting tribe of plants, remarkable for luxuriance and rapidity of growth, which, if the soil be rich, is truly marvellous. Treat the same as the Cucumber, and train against a wall or trellis, or in any way that may be desired. C. flexuosus, commonly known as the Snake Cucumber, is most singularly interesting in its fruit.
718	flexuòsus	...	...	...	E. Indies	...	...	10	5-9	3	
719	grossulariæfòlius	...	...	...	...	...	...	8	6-9	6	
720	medullíferus	...	...	...	...	...	...	...	...	3	
721	Mèlo-chito	...	...	...	...	...	...	4	5-9	3	
722	— *large fruits*	...	...	...	...	...	...	...	...	6	
723	— *red fruits*	...	...	...	...	...	...	...	...	6	
724	Momordica .	...	...	...	...	...	...	...	...	6	
725	perennis [sa	...	...	...	N. America	hhP	...	10	6-9	3	
726	Cucurbita leucantha depres-	...	...	...	gar. var.	hhA	...	...	...	3	The tribe of Cucurbita, or Gourds, are well known as producing some of the most curiously shaped of all fruits, and being, like the Cucumis, of extremely rapid growth, are very desirable for covering the trellis-work of arbours, &c. &c., the varied and fantastic forms of the fruit adding a peculiar charm to the luxuriance of the foliage.
727	— longissima	...	...	...	...	...	...	...	...	3	
728	massue	...	...	...	...	...	...	...	...	3	
729	maliformis	...	...	...	...	...	...	...	...	3	
730	Melopepo variegata	...	...	...	...	...	...	...	...	3	
731	— maxima	...	...	...	...	...	...	...	...	3	
732	plâtre de Corse	...	...	...	...	...	...	...	...	3	
733	poire à poudre	...	...	...	...	...	...	...	...	3	
734	Siphon	...	...	...	...	...	...	...	...	3	
735	Cùphea Donkelaeri	11	25	169		hhP†	v. & y.	2	...	6	The Cuphea has long been deservedly admired as a bedding plant, in which capacity it has few superiors. Sow the seeds in a hot-bed, and harden off at the end of May, when they may be employed for beds the same season. C. eminens is a most beautiful species, with long tubular flowers of scarlet and yellow; it has a graceful branching habit, each branch clustering with blossoms. C. ocymoides and zimpani are two very handsome bedding va-
736	**eminens**	...	...	...	Mexico (?)	...	s. & y.	1½	...	1 0	
737	miniàta	...	...	...	S. America	...	ver.	2	...	6	
738	**ocymoides**	...	...	...	gar. var.	...				6	
739	platycentra	...	...	...	Mexico	...	s. w. p.	1½	7-10	6	
740	purpùrea	...	...	...		hhA	div.	...	6-9	4	
741	silenoìdes	...	...	...	Mexico	...	l. p.	...	...	4	
742	strigillòsa	...	...	...	...	hhP†	r. & y.	...	...	6	
743	**viscosissima**	...	...	...	S. America	hhA	p.	...	...	6	
744	**zimpani**	...	...	...	gar. var.	...	d. v.	...	...	6	
745	Cupressus austràlis	21	49	99	Cashmere	hT	ap.	10		6	rieties.
746	Govenìana	...	...	...	California	...	...	20		6	... ...
747	glauca pendula	...	...	...	E. Indies	...	...	50		6	The Cypress of historic and Continental reputation, very ornamental, with a rich dark green foliage. Sow in pans or boxes in sandy loam in a cold pit, and transplant in summer.
748	pendula (funèbris)	...	...	...	China	...	...	...		6	
749	— glauca	...	...	...	E. Indies	...	...	...		6	
750	sempervirens	...	...	...	Canada	...	...	20	5-6	6	
751	— pyramidàlis	...	...	...	...	...	...	...	...	6	
752	torulòsa	...	...	...	Himalaya	...	...	...		6	... ...
753	— élegans	...	...	...	...	...	...	10		6	
754	**Cyclamen Coum**	5	25	160	S. Europe	hPb	r.	¼	1-4	1 0	These are well-known most beautiful bulbous plants, universally admired. Sow in sandy loam, and keep at first in a cold pit.
755	europæum	...	...	...	Britain	...	l. r.	¼	8-9	1 0	
756	**persicum, mixed**	...	...	...	Cyprus	hhPb	div.	½	2-4	1 0	
757	Cyclanthèra pedàta	21	49	104	E. Indies	hhA	y.	10	7-9	6	Curious bird-shaped Gourd.
758	Cynanchum nìgrum	5	26	73	S. Europe	hP	w.	3	6-8	6	Good garden soil.
759	Cynoglossum cœlestinum	...	25	81	N. India	hP†	b. & w.	2	5-8	3	Herbaceous border plants: grow well in any good garden soil.
760	dauricum	...	...	...	Crimea	...	w.	3	5-7	3	
761	Cypèrus alopecuroides	3	26	123	Cape G. Hope	hhP	ap.	2	4-7	6	Ornamental Grasses; will also grow under water.
762	pàtulus	...	...	...	S. Europe	...	...	1	6-7	6	
763	procèrus	...	...	...	...	...	...	...	...	6	
764	spectábilis	...	...	...	...	...	...	...	...	6	
765	Cytisus alpìnus	17	45	132	Europe	hT	y.	30	5-6	6	Extremely useful and ornamental Shrubs for decorating the Conservatory and improving the appearance of the general Flower Garden. C. alpinus and Laburnum are respectively known as the Scotch and English Laburnum of the gardens.
766	Attleyànus	...	...	...	gar. var.	hS	...	5	7-8	6	
767	chrysobòtrys	...	...	...	...	...	...	...	...	6	
768	Laburnum	...	...	...	Switzerland	hA	...	20	5-6	6	
769	spinòsus	...	...	...	S. Europe	hS	...	2	...	6	
770	triflòrus	...	...	...	Spain	...	...	...	...	6	
771	Dahlia rèpens	19	54	98	Mexico	hhA	p.	1	7-9	3	No. 772, the well-known Dahlia: sow in sandy loam and leaf-mould, and plant out.
772	**finest double**	...	...	...	...	hPb	div.	div.	9-11	1 0	
773	Datùra aurea	5	25	178	Texas	hhA	y.	2	6-9	6	... ...
774	Bertolòni	...	...	...						6	
775	carthagenensis	...	...	...	Carthagena	hhA	w.	2	7-9	3	... ...
776	ceratocaulon	...	...	...	S. America	...	...	...	...	3	These plants are particularly remarkable for the extraordinary size of their blooms. D. Wrightii is very handsome, delicate blue and white shaded. D. chlorantha has a magnificent large double golden-yellow flower, richly scented, and is altogether a very fine plant. Sow on brisk heat, pot off into loam and leaf-mould, and plant out at the end of June.
777	**chlorantha fl. pl.**	...	...	...	Texas	...	y.	...	6-9	6	
778	fastuòsa fl. pl.	...	...	...	Egypt	...	p.	3	...	3	
779	— alba fl. pl.	...	...	...	...	...	w.	...	...	3	
780	ferox	...	...	...	China	hA	...	...	7-9	3	
781	humàta	...	...	...						3	
782	lævis	...	...	...	Africa	hA	w.	2	6-9	3	
783	Metel	...	...	...	Asia	...	...	3	...	3	
784	quercifòlia	...	...	...	Mexico	...	li.		7-10	3	
785	Stramònium	...	...	...	England	...	w.	3	6-9	3	... ...
786	Tátula	...	...	...	N. America	...	b.	...	7-10	3	
787	**Wrightii** (*meteloìdes*)	...	...	...	Asia	hhA	w.	2	6-10	4	... ...
788	Daubentonia magnifica	17	45	132	gar. var.	sS	s.	4	6-8	1 0	Fine plants for Stove or warm Greenhouse: sow in pans and transplant.
789	punicea	...	...	...	Mexico	...	p.	...	5-9	1 0	
790	tripetiana	...	...	...	Brazil	...	s.	...	6-8	1 0	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H Dur.	Col. of Fl.	Hght. feet	M. of Flow.	Price. s. d.	General Observations.
791	Delphínium cardiopétalon	13	28	162	Pyrenees	hA	b.	1	6–7	3	The tribe of Delphinium, to which the well-known Larkspur belongs, is one of the handsomest and most useful of all Perennials, and for large gardens is invaluable. D. cardiopetalon is a pretty dwarf variety, well suited for bedding. The varieties of D. chinense are almost too well known to need comment; but we offer this year several new varieties, which are quite distinct from the older sorts and very beautiful. D. formosum and Hendersoni are remarkably fine kinds, with very large and richly coloured blooms, and if sown early will flower the first year: both sorts are admirably adapted for beds. No. 801, D. grandiflorum cœlestinum, is a charming new variety of a delicate sky-blue colour. Sow in sandy loam in open border.
792	chinense, *blue*	...	...	...	Tartary	hP		2	7–10	3	
793	— album	...	...	...	gar. var.	...	w.	...	...	6	
794	— azùreum, red spot	...	...	...	...	...	b. & r.	...	...	6	
795	— cærùleum, red spot	...	...	...	...	...	r. & b.	...	...	6	
796	dasycarpum	...	...	...	Caucasus	...	b.	4	7–8	3	
797	Donkelærii	...	...	...	hybrid	...	...	2	6–8	3	
798	elàtum	...	...	...	Siberia	...	...	6	6–9	3	
799	formosum	...	...	...	gar. var.	hP†	b. & w.	3	...	3	
800	grandiflòrum	...	...	...	Siberia	hP	d. b.	2	...	3	
801	— cœlestinum	...	...	...	gar. var.	...	l. b.	...	...	6	
802	Hendersoni	...	...	...	hybrid	...	b. & w.	3	...	6	
803	hy'bridum	...	...	...	...	...	b.	...	...	3	
804	pictum	...	...	...	gar. var.	...	b. & w.	...	...	3	admirably adapted for beds. No. 801, D.
805	triste	...	...	...	Dahuria	...	br.	2	7–9	3	
806	villòsum	...	...	...	Caucasus	...	b.	3	...	3	
807	Wheeleri	...	...	...	hybrid	...	...	...	...	6	
808	Desmodium gyrans	17	15	132	E. Indies	sB	p.	...	7–8	1 0	Very handsome Greenhouse Evergreen.
809	Dianthus atrorùbens	10	26	91	Italy	hP†	e.	1	7–9	4	
810	barbàtus	...	...	...	Germany	hP	div.	1½	6–10	6	The varieties of Dianthus barbatus are the well-known and universally grown Sweet Williams, and the seed we offer of them has been saved from the finest collections in Europe.
811	— scarlet	...	...	...	gar. var.	...	s.	...	...	6	
812	— double	...	...	...	...	...	div.	...	...	6	
813	— Hunt's superb	...	...	...	...	...	...	...	...	6	
814	— dark crimson	...	...	...	...	...	d. c.	...	...	6	
815	— striped	...	...	...	...	...	stri.	...	...	6	
816	caucásicus	...	...	...	Caucasus	hP†	p.	1	6–9	6	
817	Caryophy'llus	...	...	...	England	hhP	div.	...	...	1 0	
818	— choicest double	...	...	...	gar. var.	...	...	...	...	2 6	... ...
819	— Flake	...	...	...	...	...	...	...	...	2 6	
820	— Bizarre	...	...	...	...	...	...	...	...	2 6	
821	— Tree or perpe-	...	...	...	...	...	...	...	...	2 6	The tribe of Dianthus is incomparably the most useful of all Perennials, and for variety and beauty ranks second to none; for no flower can surpass, in delicacy of marking and form and deliciousness of fragrance, the richly-hued Carnation or Picotee, which has always been one of the most esteemed of Florists' flowers. D. atrorubens is of a beautiful dark-red colour, and well adapted for beds. D. Caryophyllus and its varieties are the much-admired Carnations and Picotees, for the seed of which our House has been celebrated for more than twenty-six years: and this year our varieties are, if possible, finer than ever. D. chinensis and varieties are known as Indian Pinks, perhaps one of the most useful class of plants existing. The dwarf varieties No. 835 to 839 are quite new, and are really invaluable additions to this already celebrated tribe of plants. D. Heddewigi and laciniatus are new sorts from Japan, and have a multitude of blooms averaging 3 inches in diameter, and of the most brilliant colours. D. moschatus fl. pl. is the double Garden Pink. D. deltoides, giganteus, and collinus are good for rockeries. General mode of treatment for Dianthus may be taken as follows. Sow the seed in spring in gentle heat or in light rich soil, lightly covered, in a situation where it can be protected from bright sun or dashing rain until fairly up; during the summer, transplant to a well-prepared border, placing the plants about a foot apart, and let them have a slight protection during winter. Sweet Williams, if sown early, even out of doors, will bloom the first season.
822	— yellow [tual	...	...	...	...	...	...	...	...	2 6	
823	— punctàtus	...	...	...	England	...	...	...	...	1 0	
824	— — choicest	...	...	...	gar. var.	...	...	...	...	2 6	
825	— — white ground	...	...	...	...	...	...	...	...	2 6	
826	— — yellow	...	...	...	...	...	...	...	...	2 6	
827	chinensis	...	...	...	China	hP†	...	...	...	6	
828	— albus	...	...	...	gar. var.	...	w.	...	...	4	
829	— albo-marginàtus	...	...	...	...	...	mar.	...	...	4	
830	— albo-pictus	...	...	...	...	...	...	...	...	4	
831	— atropurpùreus	...	...	...	...	...	...	...	...	4	
832	— Heddewigi	...	...	...	Japan	...	div.	...	...	6	
833	— imperiàlis	...	...	...	gar. var.	...	...	...	...	6	
834	— laciniatus fl. pl.	...	...	...	Japan	...	...	...	...	6	
835	— nànus albus, fl. pl.	...	...	...	gar. var.	...	w.	¼	...	6	
836	— — albo-striatus	...	...	...	...	...	stri.	...	...	6	
837	— — atropurpureus	...	...	...	...	...	d. p.	...	...	6	
838	— — purpureus	...	...	...	...	...	p.	...	...	6	
839	— — rubro-striatus	...	...	...	...	...	stri.	...	...	6	
840	— superb mixed	...	...	...	...	...	div.	1	...	6	
841	Carthusiànus	...	...	...	hybrid	...	...	2	...	6	
842	collinus	...	...	...	Hungary	hP	w.	¾	7–9	6	
843	corsicus	...	...	...	Corsica	...	pk.	2	6–8	6	
844	deltoides	...	...	...	Britain	hhP	fish.	¾	6–10	6	
845	— albus	...	...	...	...	...	w.	...	...	6	
846	— ruber	...	...	...	...	...	r.	...	...	6	
847	Garnierianus	...	...	...	hybrid	hP	div.	1	...	6	
848	giganteus	...	...	...	Greece	...	p.	3	7–8	6	
849	gnttàtus	...	...	...	Caucasus	...	r.	1	6–10	6	
850	hispánicus, *mixed*	...	...	...	Spain	...	div.	...	7–10	3	
851	hy'bridus corymbòsus	...	...	...	hybrid	...	...	...	...	6	
852	— double blood-red	...	...	...	...	...	d. r.	...	...	6	
853	latifòlius splendens	...	...	...	...	...	div.	2	...	6	
854	moschàtus	...	...	...	Europe	...	w. & r.	1	...	6	
855	— double garden Pink	...	...	...	gar. var.	...	...	...	...	1 0	
856	plumàrius	...	...	...	Europe	...	w. & p.	...	...	6	
857	pulchellus	...	...	...	Siberia	...	w. & r.	...	...	6	
858	superbus	...	...	...	Europe	...	w.	2	7–9	6	
859	— nànus	...	...	...	...	...	div.	1	...	6	... ...
860	Veitchi	...	...	...	byhrid	...	c. & w.	1½	...	6	
861	Didiscus cærùleus	5	26	181	N. Hollaud	hhA	b.	...	6–9	6	Very pretty. Sow in gentle heat and transplant.
862	pilòsus	...	...	...	...	...	...	...	...	6	
863	Digitàlis aurea	14	59	175	Greece	hP†	gold.	3	7–9	6	Commonly known as Foxglove, a very useful class of Perennials.
864	ferrugínea	...	...	...	Italy	...	br.	4	...	3	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
865	Digitàlis gloxinoides	14	59	175	gar. var.	hp†	div.	3	7–9	3	Usually called Foxglove; a showy and handsome class of Perennials, look fine on banks and open spaces in woods. Sow in open border and transplant, when they will bloom the same season.
866	grandiflòra	...	...	...	Switzerland	...	li. y.	4	...	3	
867	lùtea	...	...	...	France	...	y.	2	...	3	
868	nivedens	...	...	...	hybrid				..	3	
869	purpùrea	...	...	...	Britain	hp†	p.	4	...	3	
870	— alba	...	...	...	...	...	w.	...	...	3	
871	— punctàta	...	...	...	...	...	spot.	...	...	3	
872	Dillwýnia ciněrea	10	25	132	N. S. Wales	hhS	y.	2	3–7	6	Sow on heat, and transplant.
873	Diosma alba	5	...	168	Cape G. Hope	gS	w.	...	...	6	Handsome Shrubs for Greenhouse decoration.
874	capitàta	...	...	...	...	...	p.	...	5–6	6	Sow on heat, and transplant.
875	Diospyros virginiàna	25	52	108	N. America	hT	y. & g.	20	6–7	4	Mixture of sand, loam, and peat.
876	Dipsàcus ferox	4	25	107	S. Europe	hB	p.	3	7–8	6	Sow in good light soil.
877	laciniàtus	...	...	...	Germany	...	...	6	...	6	
878	Diplachne fasciculàris	3	26	123	N. America	hA	ap.	2	7–9	3	Good garden soil.
879	Dipteracanthus spectábilis	14	59	63	Peru	sS	pa. b.	...	8–9	6	Sow in loam and peat.
880	**Dodecatheon Meadia**	5	25	160	Virginia	hP	div.	½	4–6	1 0	American Cowslip, very beautiful.
881	élegans	...	...	...	...	...	...	...	...	1 0	
882	Dólichos Lablab nana**	17	45	132	E. Indies	gA	...	6	7–9	6	Handsome Greenhouse Climbers: the flowers of D. melanophthalmus are of a violet rose colour. Previous to sowing the seeds, soak them in warm water.
883	lignòsus**	...	...	...	...	...	...	12	...	3	
884	**melanophthalmus****	...	...	...	...	...	v.	...	...	1 0	
885	martiniceusis**	...	...	...	...	...	...	...	...	6	
886	purpùreus**	...	...	...	...	...	p.	...	...	6	
887	Dràba boreàlis	15	39	103	S. Europe	hP	w.	¼	...	6	Light rich soil.
888	Dracocéphalum canescens	14	58	130	Georgia	...	p.	1	7–8	3	Various kinds of Sweet-smelling Balm. Sow in sandy soil.
889	moldávicum	...	...	...	Moldavia	hA	b. & w.	2	6–7	3	
890	— album	...	...	...	...	...	w.	...	...	3	
891	Duranta Ellisia	...	59	187	W. Indies	sS	b.	6	7–8	6	Sow in peat and loam in hot-house.
892	Plumièri	...	...	...	S. America	...	...	15	8–9	6	
893	**Ebenus cretica**	16	45	132	Candia	hhS	pk.	1½	6–9	6	Splendid plant, with long spikes of flowers.
894	Échinops banáticus	19	57	98	Hungary	hP	w.	3	7–9	3	Ornamental Thistles; well adapted for Shrubberies: sow in garden soil and transplant.
895	cornígerus	...	...	...	Russia	...	...	2	7–8	3	
896	exaltàtus	...	...	...	Europe	...	...	...	...	3	
897	**Echites paniculata**	5	25	69	E. Indies	sS	...	10	6–9	1 0	Handsome Climbers: sow in bot-bed.
898	Échium cándicans	...	...	81	Madeira	gS	b.	3	5–6	3	Sow in hot-bed, and grow in sandy loam and peat. Hardy varieties, sow in good garden soil.
899	ferocíssimum	...	...	...	...	...	...	6	5–7	6	
900	salmánticum	...	...	...	Spain	hP	pk.	1	5–6	6	
901	violàceum	...	...	...	...	...	v.	3	...	6	
902	Eleusine corocàna	3	26	123	E. Indies	hA	ap.	2	7–9	3	Ornamental Grasses; light and graceful in growth; very useful for summer or winter bouquets.
903	índica	...	...	...	...	...	...	1	...	6	
904	oligostáchya	...	...	...	Egypt	...	...	...	...	6	
905	sp. ex China (*Fortune*)	...	...	...	China	..	...	...	...	6	
906	Elymus Caput-Medusæ	...	...	...	S. Europe	...	...	...	...	3	
907	hystrix	...	...	...	...	...	...	...	...	3	
908	gigánteus	...	...	...	...	...	...	...	...	3	
909	Engelmannia pinnatífida	19	53	98	Chili	...	y.	½	...	6	Musk-scented.
910	Entèlia arborescens	13	25	133	N. Zealand	gT	w.	20	5–6	6	Sow in mild heat.
911	Epàcris, *finest mixed*	5	...	109	Australia	gS	div.	div.	div.	2 6	Same culture as the Erica.
912	Eragrostis cylindriflòra	3	26	123	S. Europe	hA	ap.	1½	6–7	3	Ornamental Grasses; succeed in any good garden soil.
913	élegans	...	...	...	Italy	...	...	2	7–9	3	
914	megastáchya	...	...	...	S. Europe	...	...	1½	7–8	3	
915	namaquensis	...	...	...	China	...	...	1	...	3	
916	**Erianthus Ravennæ**	...	...	...	S. Europe	hP	...	5	6–9	1 0	Fine Grass, similar to the Pampas Grass.
917	Erica arbòrea	8	25	110	...	hhS	w.	...	2–6	6	These well-known handsome plants are commonly called Heaths. Prepare the pots carefully: if water is needed, use a very fine rose, or, rather, flood the pot by pouring the water gently on a shell; when moveable, prick off six round a small pot, and keep close until growing; then, at all times, give plenty of air, unless when frosty: use fibry sandy peat with little bits of charcoal and sandstone to keep the soil open, and be particular with the drainage. The European kinds will grow out of doors in sandy peat and loam, and make fine beds and edgings.
918	baccans	...	...	...	Cape G. Hope	gS	p.	1½	4–6	6	
919	calycina minor	...	...	...	...	...	...	2	5–7	6	
920	coccínea	...	...	...	...	...	s.	1½	1–12	6	
921	conferta	...	...	...	...	...	w.	...	2–10	6	
922	lateràlis	...	...	...	...	...	v.	...	3–7	6	
923	margaritàcea	...	...	...	...	...	w.	...	5–9	6	
924	multiflòra	...	...	...	...	...	p.	...	5–8	6	
925	Plukenetti	...	...	...	...	...	v.	...	4–7	6	
926	pyrolæflòra	...	...	...	...	...	w.	...	5–9	6	
927	ramentàcea	...	...	...	...	...	d. r.	...	5–12	6	
928	tubiflòra	...	...	...	...	...	pk.	2	4–7	6	
929	— species nòva	...	...	...	...	...	...	...	...	6	
930	multiflòra	...	...	...	France	hS	fish.	...	6–11	6	
931	— var. tubiflòra	...	...	...	...	...	...	...	...	6	
932	stricta	...	...	...	S. Europe	...	p.	...	8–11	6	
933	Erigeron Beyrichi	19	51	98	...	...	...	1	6–8	6	Grow in good light soil.
934	Karwinskiànum	...	...	...	...	...	...	...	...	6	
935	Erinus alpinus	14	26	175	Pyrenees	hP	b.	¼	3–4	6	Very pretty for rockeries.
936	Eriobòtrya japónica	12	...	166	Japan	gT	w.	15	...	6	Ornamental for Greenhouse.
937	Eryngium aquifòlium	5	26	184	Spain	hP	h.	1	7–8	6	Grow in any good garden soil.
938	plàoum	...	...	...	Europe	...	l. b.	3	7–9	3	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hight.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
939	Eryngium rígidum [num	5	26	184	Europe	hP	b.	1	7-8	6	Common garden soil.
940	**Erysimum arkansa-**	15	60	103	Arkansas	hP†	l. y.	1½	5-10	6	E. arkansanum has fine heads of golden blossom,
941	Barbàrea variegàtum	...	...	...	Britain	...	y.	...	5-8	3	like a dwarf Perennial Phlox. E. Barbarea
942	Perowskiànum [dron	...	...	...	Palestine	hA	o.	...	6-9	3	has ornamental foliage.
943	**Erythrina coralloden**	17	45	132	W. Indies	sT	s.	20	5-6	1 0	These superb Shrubs have magnificent bunches
944	**crista galli**	...	...	...	Brazils	gS	...	...	5-7	1 0	of crimson scarlet blossom, and are generally
945	**Hendersoni**	...	...	...	gar. var.	...	...	...	5-6	1 0	known as the Coral Trees. E. crista galli will
946	**laurifolia**	...	...	...	S. America	...	...	10	8-10	1 0	succeed in borders in the summer, S. of London.
947	Eschscholtzia californica	13	29	149	California	hP†	y.	1	7-10	3	The pretty bright-yellow and orange blossoms
948	compacta	...	...	...	...	...	y. & or.	...	...	3	of the Eschscholtzia are to be met with in
949	crocea	...	...	...	...	...	y.	...	...	3	almost every garden. E. tenuifolia is deli-
950	— alba	...	...	...	gar. var.	...	w.	...	...	3	cately formed and specially adapted for rock-
951	**tenuifolia**	...	...	...	California	...	y.	½	...	3	eries and edgings.
952	Eucalyptus diversifòlia	12	25	142	N. S. Wales	gT	w.	30	5-8	6	Soak the seeds previous to sowing them.
953	Euchariдium concinnum	8	...	146	N. America	hA	p.	1	4-9	3	
954	grandiflòrum	...	...	...	...	...	...	...	...	3	Pretty cheerful-looking Annuals, growing
955	— **album**	...	...	...	gar. var.	...	w.	...	...	6	freely in any good garden soil.
956	— **roseum**	...	...	...	...	...	ro.	...	...	6	
957	**Eucnida bartonioides**	18	48	135	America	hhA	y.	...	6-8	6	Very pretty pot plant.
958	Eugenia caryophyllata	12	25	142	E. Indies	sT	g.	10	3-7	1 0	
959	Jambos	...	...	...	...	...	g. & y.	20	2-7	1 0	Fine plants: sow in loam and peat.
960	Euónymus japónicus	5	25	165	Japan	hhS	g.	6	7-9	6	
961	tingens	...	...	...	...	hS	...	...	6-7	6	Ornamental Shrubs: grow in rich garden soil.
962	Eupatòrium aromáticum	19	53	98	N. America	hP	w.	4	...	6	
963	corymbòsum	...	...	...	Europe	...	...	...	...	6	Easily cultivated hardy Perennials: succeed
964	Frasèri	...	...	...	Carolina	gS	...	1½	...	6	best in sandy loam.
965	Euphorbia crioclàda	11	28	112	S. Europe	hP	ap.	1	4-5	1 0	Sow in gentle heat, and grow in fibrous sandy
966	Myrsinites	...	...	...	...	...	...	...	4-6	1 0	loam.
967	Eury'bia argophy'lla	19	54	98	N. Holland	gP				6	
968	liràta	...	...	...	...	...				6	Usual greenhouse treatment.
969	ramulòsa	...	...	...	...	...	w.	2	7-10	6	
970	Enstrephus latifòlius	6	25	74	N. S. Wales	sP	pa. p.	3	6-7	6	Sow in heat.
971	Eutòca multiflòra	5	...	81	California	hA	pk.	1½	5-7	3	
972	viscida	...	...	...	...	...	d. b.	1	...	3	Free-flowering Annuals: grow in good garden
973	— albo-striàta	...	...	...	gar. var.	...	stri.	...	...	3	soil.
974	Wrangeliàna	...	...	...	California	...	b.	...	...	3	
975	Fèdia cornucòpiæ	2	...	186	S. Europe	...	r.	...	6-7	3	
976	scorpioides	...	...	...	...	...	...	...	...	3	Common garden soil.
977	Felicia angustifòlia	19	54	98	C. G. Hope	hhS	pa. b.	6	5-7	6	Sow in heat, and transplant.
978	**Fenzlia dianthiflora**	5	25	81	California	hhA	ro. li.	½	6-10	1 0	
979	**Festuca glauca**	3	26	123	S. Europe	hP	ap.	1	6-7	6	
980	rigida	...	...	...	...	...	...	...	...	6	Ornamental Grasses. F. glauca has bright
981	viridis	...	...	...	...	...	...	...	...	6	silvery foliage.
982	Filices, finest mixed	24	62	114	div.	sP	div.	div.	div.	1 0	Stove Ferns, in fine variety.
983	**Fiornia pulchella**	3	26	123		hA	ap.	1	6-7	6	Ornamental Grass.
984	Fœniculum vulgàre	5	...	184	Britain	hP	y.	6	7-8	3	Good garden soil.
985	Francòa appendiculàta	8	29	117	Chili	hhP	ro. c.	2½	...	3	Very singular herbaceous plant.
986	**Frenela macrosta-**	21	49	99	V. D.'s Land	hS	ap.	3		6	
987	**triquetra** [chya	...	...	...	...	...	...	...		6	Fine hardy Conifers: sow in loam and peat.
988	**Fuchsia, choicest**	8	25	171	hybrid	hhPb	div.	div.	1-12	1 0	Saved from finest named varieties.
989	Fumària sempervìrens	17	41	116		hB			5-6	6	Good garden soil.
990	Gaillardia aristàta	19	55	98	N. America	hP†	y.	1	7-10	3	
991	bícolor	...	...	...	Carolina	...	o.	2	...	3	Showy and universally admired Perennials,
992	**hybrida** grandiflòra	...	...	...	hybrid	...	c. & y.	...	7-9	6	flowering the first year, and among the
993	picta	...	...	...	Louisiana	hhP†	...	...	...	3	gayest ornaments of summer flower beds.
994	— albo-marginàta	...	...	...	gar. var.	...	c.w.&y.	...	...	4	G. hybrida grandiflora is the largest and
995	— coccínea	...	...	...	...	...	s.	...	...	4	handsomest: and the dwarf habit of G.
996	— Josèphus	...	...	...	...	...	o.	...	...	4	picta nana renders it of great service in
997	— lùtea	...	...	...	...	...	y.	...	...	4	mixed borders. G. picta and its varieties
998	— nàna	...	...	...	...	...	c. & y.	1	...	4	should be raised on a little heat, and not
999	— splendidissima	...	...	...	...	...	s. & y.	2	...	6	turned out of doors before the middle of
1000	pinnatífida	...	...	...	N. America	hP†	y.	...	6-8	3	May: so long as the soil be light, its com-
1001	Richardsoni	...	...	...	...	hP	o.	1½	5-10	3	ponent parts are immaterial.
1002	Wellsiàna	...	...	...	...	...	y. & r.	...	...	3	
1003	Galèga officinàlis	17	45	132	Spain	...	b.	4	6-9	3	
1004	— alba	...	...	...	gar. var.	...	w.	...	...	3	Pretty pea-shaped flowers: grow freely in
1005	— lilacina	...	...	...	...	...	li.	...	...	3	good garden soil.
1006	Galinsògia trilobàta	19	54	98	Peru	hA	o.	½	8-10	3	Good garden soil.
1007	Gardòquia betonicoìdes	14	58	130	Mexico	hP	p.		6-10	6	Sweet-scented Perennial.
1008	Gaura Lindheimèria	8	25	146	Texas	hhA	w. & p.	2	7-8	3	Good free-flowering Annuals for Shrubberies.
1009	Genista bracteolàta	17	45	132	S. Europe	hS	y.	...	6-9	6	
1010	canariensis	...	...	...	Canaries	...	...	...	5-9	3	Very useful and ornamental Shrubs for Green-
1011	candicans	...	...	...	Spain	...	...	...	4-7	6	house, Conservatory, or Flower Garden deco-
1012	ephedroides	...	...	...	Sardinia	...	...	4	6-9	6	ration: handsome both in bloom and foliage.

No.	*Scientific Name.*	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price	General Observations.
								feet		*s. d.*	
1013	Genista floribunda alba	17	45	132	S. Europe	hS	y.	3	6–9	6	Sow the seeds in shallow pans and plant out when small; or it is preferable to sow the seeds when they are intended to bloom: the tender varieties should be sown under glass and grown in pots.
1014	foliòsa	...	...	...	...	...	...	...	...	6	
1015	mantica	...	...	...	...	...	...	...	6–8	6	
1016	monosperma	...	...	...	...	hhS	w.	4	6–7	6	
1017	rhodophèna	...	...	...	...	...	g.	2	5–7	6	
1018	Scorpius	...	...	...	...	hS	...	4	3–4	6	
1019	Spachiàna	...	...	...	...	...	...	...	...	6	
1020	Gentiàna acaulis	5	25	118	Wales	hP	d. b.	¼	3–5	3	Very useful Perennials. G. acaulis, which has large deep-blue Gloxinia-shaped flowers, if sown in deep rich loam, makes a splendid edging in early summer: all the small kinds make interesting rock plants.
1021	asclepiàdea	...	...	...	Austria	...	...	1	7–8	3	
1022	— alba	...	...	...	...	...	w.	...	...	3	
1023	cruciàta	...	...	...	N. America	...	b.	1½	...	3	
1024	hybrida	...	...	...	Switzerland	...	y. & r.	...	...	3	
1025	lùtea	...	...	...	Alps	...	y.	4	6–7	3	
1026	Septemfida	...	...	...	Persia	...	d. b.	1	7–8	3	
1027	**Gesneria, finest mix'd**	14	59	120	S. America	sPb	div.	div.	1–12	1 0	Splendid Hothouse bulbous plants.
1028	Gcum coccineum	12	35	166	Chili	hP	s.	2	6–9	4	Very showy, long-blooming, hardy plants: sow in sandy loam, and give slight protection at first.
1029	— atrosanguíneum	...	...	...	...	...	d. s.	...	...	6	
1030	— **macrophyllum**	...	...	...	...	...	...	...	...	6	
1031	— superbum	...	...	...	...	...	...	...	...	4	
1032	— japónicum	...	...	...	...	...	...	...	...	6	
1033	Gilia achilleæfòlia	5	25	81	California	hA	p.	1½	8–10	3	Very pretty dwarf Annuals: may be sown at any time, and will bloom in almost any situation: look well around Standard Roses on lawns or grass plots; also grow well in plots, and may be placed in a rockery. G. tricolor and its varieties are the prettiest. G. achilleæfolia alba is one of the purest white flowers, and is quite new.
1034	— alba	...	...	...	gar. var.	...	w.	...	...	3	
1035	capitàta	...	...	...	N. America	...	b.	2½	6–10	3	
1036	— alba	...	...	...	gar. var.	...	w.	...	...	3	
1037	— màjor	...	...	...	...	...	b.	...	...	3	
1038	nivàlis	...	...	...	N. California	...	w.	¾	6–11	3	
1039	sp. ex California	...	...	...	...	...	b.	1½	...	3	
1040	tricolor	...	...	...	California	...	3-col.	1	7–9	3	
1041	— alba	...	...	...	...	...	w.	...	...	3	
1042	— ròsea	...	...	...	...	...	ro.	...	...	3	
1043	Gladiòlus, *finest mixed*	3	...	128	hybrid	hPb	div.	3	...	1 0	Sow on heat in light soil.
1044	Globulària Aly'pum	4	...	121	S. Europe	hP	p.	2	8–10	6	Good garden soil.
1045	**Gloxinia**, choicest mixed	14	59	120	hybrids	hPb	div.	div.	div.	1 0	Hothouse flowers of great beauty.
1046	Godètia bifrons	8	25	146	Texas	hA	p. & e.	2	8–9	3	... ...
1047	insignis	...	...	...	N. America	...	spot.	½	7–10	3	All the varieties of Godetia are well deserving of the most extensive cultivation, indeed no garden for Annuals should be without them; their profuseness of bloom and delicate tints of colour have long rendered them universal favourites. G. rosco-alba has a bright crimson spot on each petal, which has a peculiarly pretty effect. All the Godetias will grow in any good garden soil; but their effect is greatly enhanced if they are treated in the manner given for Calliopsis.
1048	lépida	...	...	...	California	...	pk.	...	8–9	3	
1049	Lindleyàna	...	...	...	N. America	...	p.	...	6–11	3	
1050	purpùrea	...	...	...	...	...	...	1	5–8	3	
1051	quadrivulnera	...	...	...	...	...	pk.	1½	...	3	
1052	Romanzòvi	...	...	...	...	...	p.	1	...	3	
1053	ròsea alba	...	...	...	Nepaul	...	r. & w.	...	...	3	
1054	— alba pùra	...	...	...	gar. var.	...	w.	...	...	3	
1055	rubicunda	...	...	...	California	...	pa. r.	2	6–8	3	
1056	Schemiui	...	...	...	...	...	...	...	...	3	
1057	tenella	...	...	...	Chili	...	p.	½	4–8	3	
1058	tenuifòlia	...	...	...	...	...	...	1	6–9	3	
1059	venòsa	...	...	...	...	...	ro.	...	...	3	
1060	vimínea	...	...	...	California	...	p.	3	...	3	
1061	Willdenòvii	...	...	...	...	...	ro.	...	...	3	... ...
1062	Gomphrèna procumbens	5	25	64	Quito	sP	w.		6–7	6	Usual stove treatment.
1063	Gonospermum élegans	19	54	98	Britain	hP†	y.	2	7–8	6	Good garden soil.
1064	Goodia latifòlia	16	45	132	V. D.'s Land	gS	...	3	4–5	6	Usual stove treatment.
1065	medicaginea [noides	...	...	...	...	...	...	...	...	6	
1066	**Grammanthes** gentia	5	30	176	C. G. Hope	hhA	s.	½	7–10	6	Very neat, pretty, and effective dwarf Annuals: sow on hot-bed, and transplant into good garden soil.
1067	— **cinnabarina**	...	...	...	gar. var.	...	c.	...	...	6	
1068	— **lilacina**	...	...	...	...	...	li.	...	...	1 0	
1069	— **lutea**	...	...	...	C. G. Hope	...	y.	...	...	6	
1070	Grindèlia robusta	19	54	98	Mexico	hhP	...	2	7–9	6	Good garden soil.
1071	Grislea tomentòsa [des	8	25	169	E. Indies	sS	r.	3	5–6	6	Usual stove treatment.
1072	Guitterczia gymnospermoi-	...	...	...		hA				3	
1073	Gymnogramma chrysophyl.	24	62	114	E. Indies	sP	ap.	1		1 0	Usual Fern culture. True Gold Fern.
1074	**Gynerium argenteum**	22	37	123	S. America	hP	...	20	7–9	1 0	Pampas Grass: sow in light soil in heat, and transplant.
1075	ascendens	...	...	...	...	...	...	...	...	1 0	
1076	Gypsóphila élegans	10	26	91	Crimea	hA	w.&pk.	2	6–9	3	Very pretty hardy Annuals: will grow in any good garden soil. G. muralis is adapted for rock-work.
1077	— ròsea	...	...	...	gar. var.	...	ro.	...	...	3	
1078	muràlis	...	...	...	Germany	...	pk.	½	...	3	
1079	Steveni	...	...	...	Siberia	hP	w.	4	6–7	3	
1080	viscòsa	...	...	...	Europe	hA	...	...	...	3	
1081	Habrothamnus élegans	5	25	178	Mexico	gS	e.	5	...	6	Handsome Greenhouse Shrub.
1082	Hackia brachyrhyncha	19	54	98		hhA	y.	1	7–10	6	
1083	Hebenstreitia tenuifòlia	14	59	187	C. G. Hope	gS	w.	...	5–6	6	Sow on heat.
1084	Hedy'chium Gardnerianum	1	25	174	E. Indies	sP	y.	7	6–8	6	Usual stove culture.
1085	Heimia salicifòlia	11	...	169	Mexico	...	...	5	8–9	6	
1086	Helènium Douglàsi	19	54	98	California	hA	...	3	6–8	3	Good garden soil.

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price	General Observations.
								fcet		s. d.	
1087	Helènium tenuifòlium	19	54	98	California	hA	y.	3	6-8	3	Good garden soil.
1088	Helianthemum canescens	13	26	95	S. Europe	hP	r.	½	5-7	3	Sow in light soil.
1089	Heliánthus argyrophy'llus	19	55	98	Texas	hA	pa. y.	5	7-10	3	Silver-leaved and Californian Sunflower: grow
1090	californicus [chum	...	...	...	California	...	d. y.	6	...	3	in any garden soil.
1091	Helichrysum brachyrhy'n-	...	54	...		hhA	y.	1	...	6	Everlasting Flowers. These flowers are pecu-
1092	bracteàtum	...	...	...	N. Holland	...	...	...	...	3	liarly interesting and desirable as dried
1093	— album [imum	...	...	...	...	...	w.	...	...	3	specimens: handsome bouquets may be
1094	compositum max-	...	...	...	gar. var.	...	div.	...	...	6	formed of them for indoor decoration during
1095	macranthum	...	...	...	N. Holland	...	w.	2	...	3	the winter, if the blooms be gathered when
1096	— nanum	...	...	...	gar. var.	...	r.	1	...	6	upon the point of opening: treatment the
1097	— rubrum	...	...	...	...	...	...	2	...	6	same as for Calliopsis. The Greenhouse
1098	monstròsum	...	...	...	N. Holland	...	div.	1	6-8	6	varieties should be sown under glass, and
1099	speciosissimum	...	...	...	Cape G. Hope	gS	w.	8	7-8	6	grown in a mixture of loam and peat in the
1100	Stæhelina	...	...	...	...	...	...	1½	1-12	6	greenhouse.
1101	Heliophila arabioides	15	61	103	...	hhA	b.	¾	6-7	4	Very pretty little plants for bedding or edging:
1102	dissecta	...	...	...	...	...	...	1	...	4	sow under glass, and transplant: H. arabi-
1103	trifida	...	...	...	...	...	...	¾	...	4	oides is the best.
1104	Heliopsis scàbra	19	54	98	N. America	hP	y.	5	7-9	6	Good garden soil.
1105	Heliotròpium corymbòsum	5	25	81	gar. var.	hhP†	d. b.	1	6-10	4	
1106	grandiflòrum	...	...	...	...	...	b.	...	...	3	
1107	— Anna Turrell	...	...	...	...	...	v.	...	...	6	The Heliotrope, from its fragrance, is very
1108	— Roi des Noirs	...	...	...	...	...	blk.	...	...	6	generally admired, and with Geraniums and
1109	pernviànum	...	...	...	Peru	...	li.	2	...	4	Calceolarias forms a good bedding plant.
1110	Triomphe de Liège	...	...	...	gar. var.	...	d. b.	1	...	4	Sow in heat and transplant.
1111	Voltaireànum	...	...	...	...	...	...	...	...	4	
1112	Heràcleum gigánteum	15	46	184	Siberia	hB	w.	12	6-7	3	Good for Shrubberies and game covers.
1113	Wilhelmi	...	...	...	...	...	...	...	...	3	
1114	Hermannia angulàris	16	40	83	Cape G. Hope	gS	y.	3	4-5	6	Sow on heat.
1115	Hibiscus africànus	16	35	137	Africa	hA	w.&dk.	2	6-10	3	Stove varieties, sow in heat, and grow in
1116	calisàreus	...	...	...	...	...	...	...	...	3	sandy mellow loam in hothouse in winter.
1117	palustris	...	...	...	N. America	hP	pk.	3	7-9	6	Greenhouse kinds, sow under glass, and
1118	— ròseus	...	...	...	...	...	ro.	...	...	6	keep indoors from October to May. Hardy
1119	syriacus	...	...	...	Syria	hS	p.	8	8-9	6	shrubby varieties, sow in April in cold pit,
1120	virgínicus	...	...	...	Virginia	hP	r.	2	7-9	6	and protect for the first season, then plant
1121	Cameròni	...	...	...	Madagascar	sS	ro.	1	6-7	6	where wanted, giving them good rich deep
1122	coccíneus	...	...	...	...	...	c.	3	...	6	loam. Annuals and Perennials, sow about
1123	collinus	...	...	...	E. Indies	...				6	the beginning of April in good garden soil;
1124	gigánteus	...	...	...		hP				6	but to make the most of the annual kinds,
1125	Harrisòni	...	...	...		sS				6	such as africanus, sow about the middle of
1126	heterophyllus	...	...	...	N. S. Wales	...	w.	6	8-9	6	March, in heat, under glass, and transplant
1127	immutábilis	...	...	...	E. Indies	...	...	...	...	6	good plants, nine inches apart, in the begin-
1128	insignis	...	...	...	...	...	...	10	7-9	6	ning of May: either in a bed or in rows, we
1129	Lindleyi	...	...	...	India	...	p.	6	12-1	6	know of few plants that will surpass H.
1130	macrophy'llus	...	...	...	E. Indies	...	y.	12	6-7	6	africanus when the sun shines upon it. All
1131	Manihot	...	...	...	China	gS	...	4	7-9	6	the varieties of Hibiscus are deserving of
1132	moschentos	...	...	...	N. America	gP	p.	2	8-10	6	extensive cultivation, and it is rarely that a
1133	— albus	...	...	...	...	...	w.	...	...	6	greenhouse of any pretensions will be found
1134	— ròseus	...	...	...	...	...	ro.	...	...	6	without them: a good collection may be
1135	Thunbergi	...	...	...	...	gS	y.	3	6-8	6	seen in bloom at the Royal Botanic Gardens
1136	vitifòlius	...	...	...	E. Indies	sB	...	2	7-10	6	at Kew.
1137	Hieràcium verbascifòlium	19	53	98	Europe	hP	...	...	6-7	3	Good garden soil.
1138	Holcus saccharàtus	23	51	123	China	hhA	ap.	12	7-8	3	Chinese Sugar Grass, for ornament and fodder.
1139	10 var. separate	...	...	...	...	...	...	...	...	3	
1140	Hordeum jubatum	3	26	123	N. America	hA	...	1	6-8	6	Ornamental Grass.
1141	Hùmea élegans [riæfòlia	19	53	98	N. S. Wales	hhP†	r.	6	6-10	6	Fine graceful plant.
1142	**Hunnemannia** fuma-	13	25	149	Mexico	...	y.	1	6-9	6	Blooms like Tulipa sylvestris.
1143	Hyacínthus amethystinus	6	...	74	S. Europe	hPh	b.	¾	4-5	6	Light sandy soil.
1144	Hymenánthera tenuifòrum	5	...	124	N. America	hS	y.	6	...	6	Good garden soil.
1145	Hymenóxis californica	19	54	98	California	hA	...	1	7-10	3	Common garden soil.
1146	Hyoscy'amus pictus	5	25	178	Britain	hB	y. & b.	1¼	6-7	3	
1147	Hypéricum olympicum	19	53	98	...	hP	y.	1½	6-8	6	Pretty Perennials: very free growing.
1148	montànum	...	...	...	...	...	...	...	...	6	
1149	Ibèris lagascària	15	60	103	Spain	hA	w.	1	6-7	3	Candytufts; very pretty in early Spring: sow
1150	semperflòrens	...	...	...	Candia	hP	...	¾	4-6	3	in any good garden soil.
1151	sempervirens	...	...	...	...	...	...	...	...	3	
1152	Ilex japónica	4	29	127	Japan	hT	ap.	3		6	Mixed soil of loam and peat.
1153	Impàtiens glanduligera	5	25	76	England	hA	y.	2	6-9	3	
1154	Incarvíllea sinensis*#	14	59	79	China	hhS	o.	20	7-9	6	Fine Climber: same culture as Calampelis.
1155	Indigófera anstràlis	17	45	132	Botany Bay	gS	pk.	3	3-6	6	Handsome Greenhouse ornaments. I. tinctoria
1156	coccínea endecaphy'lla	...	...	...	Sierra Leone	...	s.	4	7-8	6	is the Indigo of commerce. Sow in hot-bed,
1157	cytisoides	...	...	...	Cape G. Hope	...	r.	2	...	6	and grow in peat and loam in greenhouse.
1158	Dosua	...	...	...	Nepaul	...	ro.	1	4-7	6	The Red Spider should be carefully looked
1159	filifòlia	...	...	...	Cape G. Hope	...	p.	2	7-8	6	after; may be destroyed by Parmenter's Pre-
1160	macrocarpa	...	...	...	...	...	...	...	...	6	paration: see page 112.

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		*s.d.*	
1161	Indigófera ròsea	17	45	132	E. Indies	gS	ro.	4	6–8	6	For description, &c., of the Indigofera, see preceding page.
1162	Roxburghi	...	...	...	...	...	...	...	...	6	
1163	tinctòria	...	...	...	...	...	pk.	3	6–9	6	
1164	violàcea	...	...	...	...	...	v.	5	...	6	
1165	**Inopsidium acaule**	15	60	103	S. Europe	hhP	b.	¼	4–10	6	Charming plant for pots, vases, or rockeries.
1166	Ipomæa Bona Nox**	5	25	100	W. Indies	hhA	w.	10	7–10	3	Convolvulus. Of all flowers in general cultivation, the Ipomæa ranks pre-eminent for delicate and intrinsic beauty: the brilliant and varied hues of its many species and varieties are marvellously beautiful, and their fine foliage and graceful forms render them inseparable adornments for every Greenhouse, Conservatory, Hothouse, or general garden throughout the kingdom. As *all* the plants belonging to this tribe are handsome, it is a work of great difficulty to select any for particular recommendation; we will, however, specify a few that are the most marked in their characteristics. I. rubro-cærulea is perhaps unequalled for the size and beauty of its blossoms of a brilliant sky-blue colour. I. Quamoclit, I. coccinea, and their varieties would mingle admirably with the well-known Canary Creeper. I. hederacea and varieties are very beautiful; but the most interesting variety of late introduction is I. limbata elegantissima, which has a five-pointed star of intense violet-blue, with a broad margin of pure white. Such kinds as digitata, grandiflora, and rubro-cærulea require strong heat to raise seedlings, but will afterwards grow well in a moderate greenhouse. Greenhouse varieties of this charming tribe do not require much heat: Half-hardy kinds should be sown on slight hot-bed, and transplanted out of doors in May: light rich loamy soil is suitable for all.
1167	chryseides**	...	...	...	China	gP	y.	4	6–10	1 0	
1168	digitàta**	...	...	...	W. Indies	...	p.	10	8–10	6	
1169	ficifòlia**	...	...	...	Buenos Ayres	gPb	• h.	3	10–12	6	
1170	**grandiflora****	...	...	...	E. Indies	gA	w.	8	9–12	1 0	
1171	Hardingi**	...	...	...	hybrid	gPt	p.	10	5–6	1 0	
1172	**Leari****	...	...	...	S. Europe	gA	b. v.	9	...	1 0	
1173	macrorhìza**	...	...	...	Guinea	gP	pk.	10	7–8	1 0	
1174	quercifòlia**	...	...	...		gA	w.	15	7–9	6	
1175	reniformis**	...	...	...	N. Holland	...	y. & v.	20	...	6	
1176	**rubro-cærulea****	...	...	...	Mexico	gP	sky b.	8	9–11	6	
1177	**— alba****	...	...	...	...	...	w.	...	...	1 0	
1178	species ex Pegu	...	...	...	Pegu	...	...	...	...	1 0	
1179	tuberòsa**	...	...	...	W. Indies	...	pa. y.	10	7–9	1 0	
1180	**tyrianthina****	...	...	...	California	...	d. p.	...	7–10	1 0	
1181	Willdenòvi**	..	...	...	E. Indies	...	p.	...	6–8	6	
1182	coccínea**	...	...	...	W. Indies	hhA	s.	...	6–9	3	
1183	— lùtea**	...	...	...	...	...	y.	...	...	3	
1184	Ferrandiniàna**	...	...	...	hybrid	...	b.	...	...	3	
1185	hederàcea**	...	...	...	N. America	...	...	...	7–10	3	
1186	**— superba**** [**	...	...	...	gar. var.	...	b. & w.	...	...	6	
1187	**— — atrovioláceа**	...	...	...	...	...	d.v.&w	...	...	6	
1188	**— — lilacina****	...	...	...	...	...	li. & w.	...	...	6	
1189	limbàta**	...	...	...	Java	...	v. & w.	2	...	3	
1190	**—elegantissima****	...	...	...	gar. var.	...	d.p.&w	3	...	6	
1191	Nil**	...	...	...	America	...	l. h.	10	7–9	3	
1192	— grandiflòra**	...	...	...	gar. var.	...	b.	...	...	3	
1193	purpùrea**	...	...	...	America	...	div.	6	...	3	
1194	— atrovioláceа**	...	...	...	gar. var.	...	d. v.	...	...	3	
1195	— Burridgi**	...	...	...	...	...	c.	...	...	3	
1196	— Dicksòni**	...	...	...	...	...	b.	...	...	3	
1197	— ròsea**	...	...	...	...	...	ro.	...	...	3	
1198	Quàmoclit**	...	...	...	N. India	...	s.	...	...	3	
1199	— alba**	...	...	...	...	...	w.	...	...	3	
1200	— ròsea**	...	...	...	...	...	ro.	...	...	6	
1201	**Ipomopsis Beyrichi**	...	...	81	Carolina	fP†	s. & y.	3	8–9	3	Most beautiful plants for beds, with long spikes of scarlet and orange flowers. Sow in well-drained pots in fibry loam: keep in greenhouse in winter, and plant out in June.
1202	**elegans**	...	...	...	...	...	s.	...	...	3	
1203	**picta**	...	...	...	...	...	s. & y.	...	...	3	
1204	**— aurantiaca**	...	...	...	...	...	or.	...	...	3	
1205	**— superba**	...	...	...	...	...	s.	...	...	3	
1206	Isótoma axillàris	...	...	87	N. Holland	hhP	b.	1	6–9	4	Very pretty, long-blooming plants, good for beds. Sow in heat, prick out, harden off, and plant out in May.
1207	petræa	...	...	...	...	...	r.	...	...	4	
1208	— cærùlea	...	...	...	...	...	b.	...	...	4	
1209	Isopy'rum fumarioìdes	13	35	162	Siberia	hA	w. & g.	...	6–7	3	Good garden soil.
1210	Ixòdia alàta	19	53	98		gS	w.	2	4–9	6	Usual greenhouse treatment.
1211	**Ixora Bandhuca**	4	25	167	E. Indies	sS	flsh.	3	7–8	6	Magnificent stove plants: sow in hot-bed, and grow in peat and loam with plenty of bottom heat.
1212	**barbata**	...	...	...	...	...	s.	...	...	6	
1213	**coccinea**	...	...	...	...	...	...	4	8–9	6	
1214	**parviflora**	...	...	...	...	...	w.	20	8–10	6	
1215	**undulata**	...	...	...	...	...	...	4	6–8	6	
1216	Jasmìnum frùticans**	2	...	129	S. Europe	hS	y.	3	4–10	6	Jessamine. Sow under glass and transplant.
1217	Juníperus ly'cia	22	49	99	...	...	ap.	10	5–6	6	Juniper Tree: well-known useful Shrubs. Sow in gentle heat, and plant into pots when sufficiently large: very good for Shrubberies, &c.
1218	macrocarpa	...	..	...	Greece	...	...	...	...	6	
1219	Oxycèdrus	...	...	...	S. France	...	...	...	...	6	
1220	squamòsa	...	...	...	Nepaul	...	...	5	...	6	
1221	virginiàna	...	...	...		...	...	...	...	6	
1222	Justícia multiflòra	2	25	63	E. Indies	sS	pk.	2	7–8	6	Handsome Tree.
1223	Kaulfussia amelloìdes	19	54	98	Cape G. Hope	hA	b.	¾	...	3	Dwarf hardy Annuals: good garden soil.
1224	— alba	...	...	...	gar. var.	...	w.	...	...	3	
1225	— ròsea	...	...	...	...	...	ro.	...	...	3	
1226	**Kennedya apetala****	17	45	132	N. Holland	gS	ap.	6	6–7	6	These Climbers are among the most striking of Greenhouse ornaments, and deserve more extensive cultivation than has hitherto been extended to them, and few plants are more serviceable for Conservatory decoration; their bright colours impart a most cheerful appearance during the early part of the season, and if trained round fanciful wire shapes a peculiarly interesting effect is produced.
1227	**andomoriensis****	...	...	...	...	...	p.	...	...	6	
1228	**bimaculata****	...	...	...	N. S. Wales	...	...	3	6–8	6	
1229	**Comptoniana****	...	...	...	N. Holland	...	b.	12	3–8	6	
1230	**digitata****	...	...	...	Swan River	...	...	6	4–5	1 0	
1231	**eximia****	...	...	...	Java	...	s. & y.	...	5–6	1 0	
1232	**longifolia****	...	...	...	Swan River	...	r.	...	4–5	6	
1233	**longiracemosa****	...	...	...	N. S. Wales	...	pk.& o.	3	6–7	6	
1234	**Lindleyana****	...	..	...		...	v.	...	...	1 0	

No.	Scientific Name.	L.Cl.	L.O.	N.O	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
1235	**Kennedya mariana****	17	15	132	N. S. Wales	gS	s.	4	6-7	6	
1236	**Makoyana****	...	...	...	...	...	b.	3	6-8	1 0	... ...
1237	**Marryattæ**** [**	...	...	...	Australia	...	s.	4	6-7	6	... ...
1238	**monophylla alba**	...	...	...		...	w.	...	...	6	
1239	**ovata****	...	...	...	N. Holland	...	p.	6	5-8	6	General instructions for sowing:—Steep the seeds in warm water for six hours, sow in sandy peat and loam, and place in hot-bed in April: harden off the seedlings by degrees, in order that they may stand in the Greenhouse or Conservatory during summer.
1240	**— nova****	...	...	...	...	...	...	...	...	1 0	
1241	**— alba****	...	...	...	...	...	w.	...	...	6	
1242	**prostrata****	...	...	...		...	s.	...	...	6	
1243	**rotundifolia****	...	...	...	N. S. Wales	...	...	5	6-9	6	
1244	**rubicunda****	...	...	..	...	...	r.	10	3-8	6	
1245	**Sieberiana****	...	...	...		...	...	...	...	6	... ...
1246	**Sieboldti****	...	..	...		...	...	...	...	6	... ...
1247	Knautia orientàlis	4	25	107	Levant	hA	...	1	6-9	6	Good garden soil.
1248	Kölreutèria paniculàta	8	...	172	China	hT	y.	10	7-8	6	
1249	Lagerstrœmia índica	13	...	169	E. Indies	sS	p.	6	8-10	6	Splendid Stove-plant: usual hothouse treatment.
1250	regina	...	...	...	...	...	r.	12	...	6	
1251	Lagùrus ovàtus	3	26	123	Guernsey	hA	ap.	1	6-7	3	Ornamental Grass (Hare's-tail).
1252	**Lantana, finest French**	14	59	187	divers	hhS	div.	div.	div.	1 0	Beautiful bedding plants: sow in hot-bed, and transplant.
1253	*Impératrice Eugénie*	...	...	...	gar. var.	...		2	6-8	6	
1254	**Lapageria rosea****	6	25	177	Chiloe	gP	ro.	10	9-3	2 6	The finest Climber in cultivation.
1255	Lasiopétalon solanàceum	5	...	83	N. Holland	gS	w.	3	4-7	6	Usual greenhouse treatment.
1256	Lasthènia californica	19	54	98	California	hA	y.	½	5-10	3	Common garden soil.
1257	Láthyrus azùreus**	17	15	132		...	b.	4	5-8	4	All the varieties of Lathyrus are very ornamental, and being hardy and of quick growth, they are of great use in covering trellises or in the formation of arbours.
1258	latifòlius**	...	...	...	England	hP	pk.	6	6-9	3	
1259	— albus**	...	...	...	...	...	w.	...	...	4	
1260	mutábilis**	...	...	...	Siberia	...	pa. r.	4	6-8	4	
1261	Laurus Ceràsus	12	25	166	Levant	hS	w.	12	4-5	3	All the varieties of Laurus are very ornamental: grow best in a mixture of loam and peat.
1262	colchica	9	...	131	...			...	...	3	
1263	índica	...	...	...		hT	...	...	...	3	
1264	lusitánica	...	...	...	S. Europe	...	...	...	...	3	
1265	nóbilis	...	...	...	Italy	...	g. & w.	15	...	3	
1266	Lavándula Spìca	14	58	130	S. Europe	hP	li.	2	7-9	6	Fragrant plants: sow on heat, and transplant.
1267	Stœchas	...	...	...	...	hS	...	1½	5-9	4	
1268	Lavatèra arboreseens	8	48	137	Britain	hhP	p.	6	7-10	6	Good garden soil.
1269	armeniaca	...	...	...		hP			...	6	
1270	marítima	...	...	...	S. Europe	hhS	w.	2	4-6	6	
1271	Lebeckia cytisoìdes	17	45	132	Cape G. Hope	gS	pk.	3	4-7	6	
1272	Leptandra virgínica	2	25	175	Virginia	hP	w.	5	7-10	3	Common garden soil.
1273	Leptosìphon androsàceus	3	...	81	California	hA	div.	1	6-10	3	A most useful class of hardy Annuals. L. densiflorus albus is one of the purest of white flowers, and blooming in masses is admirable for beds. L. aureus is an extremely pretty dwarf plant of a rich golden colour, suited for pots, rock-work, or edgings. All the varieties are of easy cultivation, growing freely in any good garden soil.
1274	— albus	...	...	...	...	...	w.	...	...	3	
1275	— lilacinus	...	...	...	...	...	li.	...	...	3	
1276	**aureus**	...	...	...	...	...	o.	½	...	4	
1277	densiflòrus	...	...	...	...	...	p.	1	...	3	
1278	— albus	...	...	...	gar. var.	...	w.	...	...	3	
1279	— nànus	...	...	...	...	...	p.	½	...	3	
1280	lùteus	...	...	...	California	...	y.	⅜	...	3	
1281	*new dwarf hybrids*	...	...	...	hybrid	...	div.	½	...	1 0	
1282	Leptorhýnchus squamàtus									6	
1283	Leptospermum flaveseens	12	25	142	N. S. Wales	gS	w.	5	5-7	6	Fine Greenhouse plants.
1284	lanígerum	...	...	...	...	...	...	...	...	6	
1285	Leucánthemum leratiànum									6	
1286	Leucodendrnn decòrum	4	25	161	Cape G. Hope	gT	y.	3		6	Ornamental Greenhouse plants. Sow on heat, and transplant.
1287	plumòsum	...	...	...	...	...	...	4	6-8	6	
1288	Ligustrum japónicum	2	...	145	Japan	hS	w.		5-6	3	Good for shrubberies.
1289	Lílium enlchicum	6	...	133	China?	gPb			7-10	6	Sow on heat in light soil.
1290	Mártagon	...	...	...		hPb	div.	2	5-6	6	
1291	Limnanthes alba	10	...	134	California	hA	w.	½	6-10	3	Elegant and slightly fragrant Annuals, very free-blooming, contrasting well with Nemophilas: good for beds, clumps, or edgings: easy of cultivation, growing freely in any good garden soil.
1292	Douglàsi	...	...	...	...	...	y. & w.	...	...	3	
1293	grandiflòra	...	...	...	...	...	...	...	...	3	
1294	ròsea	...	...	...	...	...	ro.	...	...	3	
1295	sulphùrea odoràta	...	...	...	...	...	sul.	...	...	3	
1296	aurea nòva	...	...	...	...	...	y.	...	...	3	
1297	Linària bipartìta	14	59	175	Barbary	hhA	p.	...	6-9	3	... ...
1298	—alba	...	...	...	gar. var.	...	w.	...	...	3	
1299	**— splendida**	...	...	...	...	...	var.	...	...	6	Very pretty flowers. L. bipartita and varieties are among the prettiest Annuals grown, and when in full bloom resemble small compact bushes of blossoms: the tender varieties may be sown under glass, and the others in the open borders.
1300	Hendersòni	...	...	...	...	...		1	...	3	
1301	Perezi	...	...	...	...	...		...	...	3	
1302	purpùrea	...	...	...	S. Europe	hP	p.	¼	7-9	3	
1303	pyrenaica	...	...	...	...	...		1	...	3	
1304	reflexa	...	...	...	...	...		...	...	3	
1305	triornithóphora	...	...	...	Portugal	hhP†	p.	¾	6-9	3	
1306	spartea	...	...	...	Spain	hA	y.	1	6-10	3	... ...
1307	speciòsa	...	...	...	Barbary	hhP†	p.	½	...	3	
1308	triphýlla	...	...	...	Sicily	hA	y. & p.	1	...	3	

No.	Scientific Name.	L.Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hight.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
1309	Lindheimèria texàna	19	54	98	Texas	hA	y.	2	8–10	3	Good garden soil.
1310	**Linum alpinum**	5	40	91	Austria	hP	b.	½	7–8	6	
1311	campanulàtum	...	...	...	Europe	...	y.	½	6–8	6	
1312	**flavum**	...	...	...	Austria	hkP	...	½	...	6	
1313	grandiflòrum	...	...	...	S. Europe	hP	b.	1	...	3	
1314	— album	...	...	...	...	...	w.	...	...	3	
1315	**— scarlet**	...	...	...	Algeria	hhA	c.	...	6–10	4	
1316	Lewisi	...	...	...	N. America	hP	b.	3	6–8	3	
1317	— variegàtum	...	...	...	gar. var.	...	var.	...	...	3	
1318	**luteum corymbi-**	...	...	...	Crimea	hA	y.	1	6–7	4	
1319	narbonense [florum	...	...	...	S. France	hhP	b.	2	5–7	6	
1320	perenne	...	...	...	England	hP	p.	3	6–8	3	
1321	— album	...	...	...	...	...	w.	...	...	3	
1322	Lippia purpùrea	14	59	187	Mexico	gS	r.	...	6–7	6	Usual greenhouse treatment.
1323	Lisianthus Russellianus	5	25	118	...	gA	p.	...	10–12	1 0	Splendid Greenhouse Annual.
1324	Loàsa aurantìaca**	18	48	135	Tucuman	hhA	o.	20	7–10	3	Beautiful Climbing Plants, suitable for covering trellis or wire-work: sow in hot-bed and plant out.
1325	Herberti**	...	...	...	hybrid	...	s.	6	...	3	
1326	tricolor	...	...	...	Chili	hA	y.	2	6–9	3	
1327	Lobèlia campanulàta	5	25	87	Cape G. Hope	hhP	b.	¼	6–10	4	A most elegant and useful genus of dwarf plants of easy culture, well adapted for bedding, edging, pots, or rockeries; Lobelias, in fact, are employed as universally in the general Summer garden as Scarlet Geraniums, to beds of which they form a neat and effective edging: the varieties of L. Erinus are generally used for this purpose; yet by some the varieties of L. ramosa are preferred, which, though larger in bloom, are neither so elegant nor compact. L. speciosa is the finest of all, from its intense dark-blue colour with a clear white spot and its dark-coloured foliage. The varieties of L. gracilis are the best adapted for rock-work, pots, or suspended baskets to droop over. The seed of Lobelia, being very small, cover very slightly when sown: sow in hot-bed, prick out, and gradually harden off: if grown in pots, let them be well trained. A light rich soil is suitable for all the varieties.
1328	Erinus	...	...	...	...	...	...	...	...	4	
1329	— compacta	...	...	...	gar. var.	...	d. b.	½	...	6	
1330	— grandiflòra	...	...	...	...	...	...	¼	...	4	
1331	— marmoràta	...	...	...	...	...	b. & w.	½	...	4	
1332	— maxima	...	...	...	...	...	b.	...	...	4	
1333	— oculàta alba	...	...	...	...	...	w. & b.	...	...	4	
1334	— ramosoìdes	...	...	...	...	...	...	...	...	4	
1335	—ròsea	...	...	...	...	...	ro.	...	...	4	
1336	**— speciosa**	...	...	...	...	...	d. b.	...	...	6	
1337	**formosa**	...	...	...	N. S. Wales	...	...	...	...	6	
1338	grácilis	...	...	...	...	hhA	b.	trai	7–10	3	
1339	— alba	...	...	...	gar. var.	...	w.	...	...	3	
1340	**— erecta**	...	...	...	...	...	l. b.	¼	...	6	
1341	— ròsea nòva	...	...	...	...	...	ro.	trai	...	4	
1342	heterophy'lla	...	...	...	V. D.'s Land	...	d. b.	1½	...	6	
1343	propinqua	...	...	...	hybrid	hhP†	s.	4	6–10	6	
1344	ramòsa	...	...	...	Swan River	...	d. b.	2	7–10	4	
1345	— alba	...	...	...	gar. var.	...	w.	...	...	4	
1346	— nàna	...	...	...	...	...	d. b.	1	...	4	
1347	— rùbra	...	...	...	...	...	r.	2	...	4	
1348	— triquètra	...	...	...		...	d. b.	1	...	6	
1349	Lonicera balearica	...	...	90	S. Europe	hS	st.	10	4–5	6	Sow in good friable soil.
1350	Lopèzia coronàta	1	...	146	Mexico	hA	r.	1½	7–9	3	Good garden soil.
1351	miniàta [dens**	...	...	...	...	gS	p.	3	9–11	6	Usual greenhouse treatment.
1352	**Lophospermum scan-**	14	59	175	...	hhP†	...	10	6–10	6	Extremely handsome Climbers. Sow in hot-bed in light sandy loam, prick off, pot and re-pot, and by the end of May transfer to cool Greenhouse, Conservatory, or favourable positions in the garden.
1353	**— Cliftoni****	..	...	...	hybrid	...	d. ro.	...	...	6	
1354	**— Hendersoni****	...	...	...	...	...	ro.	...	...	6	
1355	**— Jacksoni****	...	...	...	...	...	...	...	...	6	
1356	**— Rhodochiton****	...	...	...	Mexico	...	s.	...	...	1 0	
1357	Lòtus cytisoìdes	17	45	132	S. Europe	hA	y.	1	7–8	4	Very pretty pea-shaped flowers. L. corniculatus multiflorus is a profuse bloomer, fine yellow blossoms for borders or rockeries. L. Jacobæus is exceedingly neat and pretty as a pot plant, the flowers being almost an ivory-black.
1358	corniculàtus	...	...	...	Britain	hP	...	1½	6–8	6	
1359	hirsùtus	...	...	...	...	hhP	...	2	...	4	
1360	Jacobæus	...	...	...	C. Verd Isles	hhS	blk.	1	1–12	3	
1361	— lùteus	...	...	...	...	...	y.	...	...	3	
1362	rectus	...	...	...	S. Europe	hP	fish.	3	6–9	4	
1363	sericeus	...	...	...	Mussooree	hA	y.	½	7–8	6	
1364	suavèolens	...	...	...						6	
1365	Lupinus affinis	...	...	...	California	hA	b. & w.	½	6–10	3	Lupine. This class of plants is perhaps more generally known and cultivated than any other, and merits the favour accorded to it. L. hybridus insignis and superbus are really fine plants with long spikes of richly coloured blossoms. L. Menziesi has perhaps the handsomest spike of bloom of all, the plant when well grown forming a candelabrum with beautiful sulphur-coloured flowers. L. subcarnosus is exceedingly rich in colour, viz. ultramarine blue, crimson, and purple, and is worthy of more extended cultivation. L. nanus, nanus albus, and affinis, from dwarf habit, are peculiarly suited for beds, in which position they show well. L. Hartwegi and its varieties are good in habit and colour.
1366	californiens	...	...	...	...	...	...	...	...	3	
1367	Hartwègi	...	...	...	Mexico	...	d. b.	2	6–9	3	
1368	— albus	...	...	...	gar. var.	...	w.	...	...	3	
1369	— cœlestinus	...	...	...	...	...	l. b.	...	...	3	
1370	**— persicus**	...	...	...	...	...	b. var.	...	...	6	
1371	— ròseus	...	...	...	...	...	ro.	...	...	3	
1372	hirsutíssimus	...	...	...	California	...	li. r.	...	...	3	
1373	**hybridus insignis**	...	...	...	hybrid	...	d. r.	...	...	3	
1374	**— Dunnetti su-**	...	...	...	...	...	r. b. & y.	...	...	3	
1375	leptophyllus [perbus	...	...	...	California	...	l. b.	1	7–10	3	
1376	Menzièsi	...	...	...	...	...	sul.	...	6–9	6	
1377	Moritziànus	...	...	...	Amerıca	...	b.	2	...	3	
1378	mutábilis	...	...	...	Bogota	...	b. & y.	4	7–9	3	
1379	— Cruckshanksi	...	...	...	Peru	...	var.	...	...	3	
1380	**— variecolor**	...	...	...	gar. var.	...	div.	...	...	3	
1381	nànus	...	...	...	California	...	var. b.	½	...	3	
1382	— albus	...	...	...	gar. var.	...	w.	...	...	3	

No.	Scientific Name.	L.Cl.	L.O.	N.O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
1383	Lupinus pubescens	17	45	132	California	hA	v.	2	7-8	3	L. mutabilis variecolor is a singularly interesting variety, the same seed producing a great variety of distinct colours, varying from pure white to purplish crimson. Sow in garden soil in April; but to have such varieties as Hartwegi and Cruckshanksi splendid, sow in heat in March, grow separately in pots, and turn out into good rich soil in the month of May: it is preferable, as a general rule, to sow the annual varieties where it is intended they shall bloom. L. magnificus is very handsome. L. arboreus is a fine shrub, with spikes of bright-yellow flowers. L. polyphyllus and albus are respectively known as the blue and white perennial Lupine.
1384	— élegans	...	...	...	gar. var.	...	p.v.&w.	...	...	3	
1385	**subcarnosus**	...	...	...	Texas	...	li. c. p.	1	6-10	4	
1386	succulentus	...	...	...		...	b.	...	...	4	
1387	venustus	...	...	...	America	...	li. & p.	2	7-8	3	
1388	arbòreus	...	...	...	California	hS	y.	6	...	6	
1389	Douglàsi	...	...	...	...	hP	b.	2	6-10	3	
1390	élegans	...	...	...	Mexico	...	o. & w.	...	...	3	
1391	grandifòlius	...	...	...	N. America	...	p.	2½	...	3	
1392	guatemalensis	...	...	...	Guatemala	...	d. v.	2	...	3	
1393	magnificus	...	...	...	gar. var.	...	d.b.&w.	4	...	6	
1394	polyphy'llus	...	...	...	Columbia	...	b.	...	6-8	3	
1395	— albiflòrus	...	...	...	...	...	w.	...	...	3	
1396	mixed Annual	...	...	...	div.	hA	div.	div.	...	6	
1397	— Perennial	...	..	...	...	hP	...	...	...	6	
1398	Lusania calycìna	5	25	178	Uraguay	hhP	w. & b.	½	...	6	Good garden soil.
1399	Lychnis chalcedónica	10	30	91	Russia	hP†	s.	2	6-7	3	Handsome and useful Perennials. L. chalcedonica is to be met with in nearly every garden, and deserves its position. L. fulgens is brilliant in the extreme. L. Haageana is a new hybrid. L. corsica is suitable for rock-work. Sowall the Lychnides in a nice sheltered place, and plant out.
1400	— alba	...	...	...	...	...	w.	...	...	3	
1401	— mutábilis	...	...	...	...	...	var.	...	...	3	
1402	corsica	...	...	...	Corsica	...	r.	½	...	3	
1403	Flos Jòvis	...	...	...	Germany	hP	...	1½	...	3	
1404	**fulgens**	...	...	...	Siberia	hhP†	s.	...	...	6	
1405	**Haageana**	...	...	...	hybrid	hP†	r.	...	6-8	1 0	
1406	Lysimachia Ephémerum	5	25	160	Spain	hP	w.	2	7-9	6	Showy border plants. Sow in good garden soil.
1407	Lythrumròseum superbum	11	...	169	Britain	...	ro.	4	...	3	
1408	virgàtum	...	...	...	...	...	...	...	...	3	
1409	Maclùra aurantìaca	21	39	185	N. America	hT	ap.	20	...	3	Osage Orange.
1410	Madària élegans	19	54	98	N.W.America	hA	y.	1½	...	3	Sow in garden soil in shady situations.
1411	corymbòsa	...	...	...	California	...	w.	...	...	3	
1412	Magnòlia grandiflòra	13	35	136	Carolina	hT	...	20	6-7	6	Splendid Tree, richly scented blossoms.
1413	Magydàris tomentósa					hhS				6	Fine ornamental plant.
1414	Málope trífida	16	48	137	Barbary	hA	p.	1½	7-10	3	Free-blooming, showy Annuals; succeeding in almost any soil.
1415	— grandiflòra	...	...	...	...	...	c.	2	...	3	
1416	— alba	...	...	...	...	...	w.	...	..	3	
1417	Malpighia glàbra	10	28	192	W. Indies	sT	r.	16	3-7	6	Barbadoes Cherry.
1418	Malva capensis	16	48	137	C. G. Hope	hhS	...	10	1-12	6	Plants of similar character to the Malope, but Perennials: sow under glass, harden off, and transplant.
1419	crenulàta	...	...	...	S. Europe	hP	...	4	6-8	3	
1420	— variegàta	...	...	...	...	...	var.	...	...	3	
1421	Morèni	...	...	...	Italy	...	r.	...	7-8	3	
1422	zebrina	...	...	...	S. Europe	hA	p.	6	6-7	3	
1423	Mandevillea suavèolens**	5	25	69	Buenos Ayres	gS	w.	20	6-8	4	Fine fragrant Greenhouse Climber.
1424	Manùlea fœtida	14	59	175	C. G. Hope	gA	...	1½	6-9	6	Highly ornamental plants.
1425	violàcea	...	...	...		sP	v.	2	7-9	6	
1426	Marty'nia angulàris	...	...	151	America	hhA	l. p.	...	7-8	3	Extremely handsome, large-flowered Annuals, deserving of the most extensive cultivation. M. fragrans is beautifully striped.
1427	Craniolària	...	...	...	S. America	...	w.	...	...	3	
1428	**fragrans**	...	...	...	Mexico	...	p. stri.	...	...	3	
1429	lùtea	...	...	...	Brazils	...	y.	...	...	3	Sow in mild hot-bed, pot off into small pots, and keep warm until growing freely.
1430	proboscídea	...	...	...	America	...	l. b.	¾	...	3	
1431	Maurándya antirrhiniflòra	...	...	175	Mexico	gS	p.	10	4-9	6	These superb Climbers, in conjunction with the different vars. of Lophospermum, cannot be too highly recommended. Sow in sandy, peaty soil, or loam and leaf-mould in slight hot-bed, prick off into pots, and encourage growth by re-potting. About May remove to cool greenhouse, conservatory, or train in columns in the flower-garden, removing them before the arrival of frost.
1432	Barclayàna	...	...	...	...	...	s.	...	...	6	
1433	— alba	...	...	...	seedlings	...	w.	...	...	6	
1434	— Emeriana	...	...	...	...	...	p.	...	...	6	
1435	— — violacea	...	...	...	...	...	v.	...	...	6	
1436	— kermesina	...	...	...	...	...	c.	...	...	6	
1437	— Luceyana	...	...	...	...	...	ro.	...	...	6	
1438	— purpurea	...	...	...	...	...	d. p.	...	...	6	
1439	semperflorens	...	...	...	Mexico	...	p.	...	10-12	6	
1440	— violacea	...	...	...	gar. var.	...	v.	...	...	6	
1441	Melampòdium macranthum	19	56	98		hA				3	Good garden soil.
1442	Mèlia Azedarach	10	25	139	Syria	hhS	b.	40	6-8	6	Very handsome Shrub.
1443	Melianthus màjor	14	59	168	C. G. Hope	gS	br.		5-7	6	Usual greenhouse treatment.
1444	Mèlica pyramidàlis	3	25	123	Barbary	hP	ap.	1½	6-7	6	Ornamental Grasses.
1445	Browneàna	...	...	...	Italy	...	...	...	...	6	
1446	Melissa officinàlis	14	58	130	S. Europe	...	w.	1	6-10	3	Sow in light rich soil.
1447	grandiflòra	...	...	...	...	...	...	...	...	3	
1448	Mesembryánthemum capi-	12	27	113	C. G. Hope	hhA	pa. y.	...	5-9	3	Dwarf-growing Annuals of great beauty, well suited for edgings and covering banks or rockeries fully exposed to the sun. Sow in hot-bed in sandy loam; when fit, prick off, and about May plant out in sandy soil.
1449	**glabrum** [tàtum	...	...	...	...	...	y.	¾	7-10	3	
1450	pinnatífidum	...	...	...	...	...	...	...	6-10	3	
1451	pomeridiànum	...	...	...	...	...				3	
1452	**tricolor**	...	...	...	...	...	c.	¾	6-10	3	
1453	— album	...	...	...	...	...	w.	...	...	3	
1454	Méspilus japónicus	...	...	166	Japan	hhT	...	10	5-6	6	Loquat Tree of Japan.
1455	pyracanthifòlia	...	...	...	N. America	hT	...	...	6-7	6	Good garden soil.
1456	**Milium multiflorum**	3	25	123	S. Europe	hP	ap.	1½	...	6	Very pretty ornamental Grass.

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght. feet	M. of Flow.	Price. s.	d.	General Observations.
1457	**Mimulus** cardinàlis	14	59	175	N.W. Amer.	hhP†	s.	2	7–9	4		Strikingly handsome flowers, among the gayest ornaments for conservatory, greenhouse, or general flower-garden. M. moschatus is the well-known Musk Plant. Sow under glass in a little heat, prick off the seedlings.
1458	— atrosanguíneus	...	...	...	gar. var.	...	d. s.	...	...	6		
1459	lùteus	...	...	...	America	...	y.	...	6–9	6		
1460	moschàtus	...	...	...	Columbia	...	l.	¾	...	3		
1461	**finest mixed**	...	...	...	gar. var.	...	div.	...	...	6		
1462	Momórdica Balsámina**	21	49	104	India	hhA	y.	6	6–8	6		Very curious trailing plants, with foliage like the Canary-bird Creeper: the fruit of M. Balsamina is very curious and handsome.
1463	Charántia**	...	...	...	E. Indies	...	...	...	...	4		
1464	Elatèrium**	...	...	...	S. Europe	...	...	...	...	6		
1465	Morìna longifòlia	2	25	107	India	hhP†	r.	3	7–11	6		Light rich soil.
1466	Morna élegans	19	53	98	Swan River	hhA	y.	2	6–8	3		Usual greenhouse treatment.
1467	Mulgèdium fiuibriàtum	...	...	...		hA	...	...	...	3		
1468	Muraltia Heistèria	17	41	155	C. G. Hope	hhS	p.	6	1–12	6		Sow in heat and transplant.
1469	Murucùja oculàta	16	42	150	E. Indies	gP			6–8	6		Everlasting Flower.
1470	Myopòrum dulce									6		
1471	Myosòtis alpestris	5	25	81	Switzerland	hP†	b.	½	6–9	3		Forget-me-not. These beautiful little flowers are too well known to need recommendation; will grow around fountains, over damp rockeries, or in any moist situation. M. azorica has the largest bloom.
1472	— alba	...	...	...	...	...	w.	...	...	4		
1473	**azorica**	...	...	...	Azores	...	d. b.	...	8–11	6		
1474	palustris	...	...	...	Britain	...	b. & y.	¾	4–8	3		
1475	— alba	...	...	...	...	...	w.	...	...	4		
1476	Myrrhis odoràta	...	26	184	...	hP	...	1½	5–6	4		Good garden soil.
1477	Myrtus communis	12	51	142	S. Europe	hS	..	6	7–8	3		Myrtle, sweet-scented.
1478	Nemèsia floribunda	14	59	175	C. G. Hope	hhA	w. & y.	1	6–9	3		
1479	versícolor	...	...	...	...	...	var.	...	...	3		Exceedingly pretty and profuse-blooming plants. N. compacta and alba should be grown in every garden. Sow on hot-bed, and grow in peat and loam; turn out about the end of May.
1480	— alba	...	...	...	gar. var.	...	w.	...	...	3		
1481	**— compacta**	...	...	...	...	...	var.	½	...	6		
1482	**— — alba**	...	...	...	...	...	w.	...	...	6		
1483	**— — insignis**	...	...	...	...	...	b.	...	...	1	0	
1484	**— — La superbe**	...	...	...	...	...	ro.	...	...	1	0	
1485	**Nemophila** atomària	...	...	81	California	hA	w.spot.	½	6–10	3		These extremely pretty Annuals are more cultivated than any other, and for ease in culture and profuseness of bloom are unsurpassed. N. discoidalis, insignis, grandiflora, and maculata are the finest varieties. Nemophila will grow in any soil and may be sown several times during the year, and may be induced to bloom very early if treated in the manner given for Calliopsis.
1486	— cœlestis	...	...	...	...	...	b. spot.	...	...	3		
1487	**— — oculàta**	...	...	...	gar. var.	...	b.w.blk	...	...	6		
1488	discoidàlis	...	...	...	California	...	blk. w.	...	...	3		
1489	— marmoràta	...	...	...	gar. var.	...	mar.	...	...	3		
1490	insignis	...	...	...	California	...	b.	...	...	3		
1491	— alba	...	...	...	gar. var.	...	w.	...	...	3		
1492	— grandiflora	...	...	...	...	...	b.	...	...	3		
1493	**— — alba**	...	...	...	...	...	w.	...	...	3		
1494	— marginàta	...	...	...	...	...	w. & b.	...	...	3		
1495	— striàta	...	...	...	...	...	stri.	...	...	3		
1496	maculàta	...	...	...	California	...	w. & p.	...	...	3		
1497	**— folio variegata**	...	...	...	gar. var.	...	...	...	...	6		
1498	phacelioìdes	...	...	...	N. America	hP†	b.	1	...	3		
1499	**Nerium Oleander**	5	25	69	S. Europe	hhS	ro.	8	...	6		Fine flowering Shrubs. Sow in heat and put out of doors in summer.
1500	**tinctorium**	...	...	...	...	...	...	...	...	6		
1501	Nepèta macrantha	14	58	130	Siberia	hP†	b.	1	6–8	3		Hardy Herbaceous Plants, growing freely in any good garden soil.
1502	Mussini	...	...	...	Britain	...	...	...	...	3		
1503	odoràta	...	...	...	...	...	...	...	...	3		
1504	violàcea	...	...	...	Persia	...	v.	2	7–8	3		
1505	Nicandra physaloìdes	5	25	178	Peru	hhA	p.	...	7–9	6		Good garden soil.
1506	Nicotiàna nàna	...	...	...	America	hA	ro.	3	...	3		Varieties of American Tobacco, fine large foliage; succeed well in any good garden soil.
1507	Oronòko	...	...	...	...	...	...	...	...	3		
1508	rústica	...	...	...	...	...	g.	...	...	3		
1509	scarlet	...	...	...	...	...	r.	...	...	3		
1510	virgínica	...	...	...	...	...	...	...	...	3		
1511	**Nierembergia gracilis**	...	...	...	Uraguay	hhP	w. & b.	½	6–10	1	0	Most elegant for clumps or edgings. Sow in heat and transplant.
1512	intermèdia	...	...	...	Panama	...	pa. y.	1	8–10	1	0	
1513	Nigella damascèna	13	30	162	S. Europe	hA	l. b.	2	6–9	3		Love-in-a-mist. Hardy, compact and pretty foliage, similar to the Larkspur. N. h. alba and atropurpurea are two new, distinct and desirable varieties.
1514	cœlestìna	...	...	...	gar. var.	...	...	...	...	3		
1515	**— nana, fl. pl.**	...	...	...	...	...	...	1	...	4		
1516	hispánica	...	...	...	Spain	...	b. & w.	1½	6–10	3		
1517	**— alba**	...	...	...	gar. var.	...	w.	...	...	6		
1518	**— atropurpurea**	...	...	...	...	...	d. p.	...	...	6		
1519	romàna	...	...	...	S. Europe	...	b.	2	...	3		
1520	— nàna	...	...	...	...	...	...	1	...	3		
1521	Nolàna paradoxa	5	25	81	Chili	...	...	1½	7–9	3		Very pretty trailing plants, after the character of the Convolvulus minor. N. p. violacea has delicate lavender-coloured flowers with a yellow centre: all are quite hardy, and will grow in any good garden soil.
1522	**— violacea**	...	...	...	gar. var.	...	...	...	...	3		
1523	atriplicifòlia	...	...	...	Peru	...	b. w. y.	½	...	3		
1524	— alba	...	...	...	...	...	w.	...	...	3		
1525	prostràta	...	...	...	...	...	b.	...	...	3		
1526	Nònea ròsea [stis	...	...	...	Crimea	...	ro.	1½	6–10	3		Good garden soil.
1527	**Nyctanthes arbor-tri**	2	...	129	E. Indies	gS	w.	15		6		Extremely graceful Greenhouse plant.
1528	**Nycterina capensis**	14	59	175	C. G. Hope	hhP†	...	¾	7–10	6		Most beautiful dwarf plants, covered with blossom, extremely compact, and well suited for rockeries or edgings.
1529	**selaginoides**	...	...	...	...	...	pk.	...	...	6		
1530	**— alba**	...	...	...	...	...	w.	...	...	6		

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
1531	Nymphæa alba	13	25	133	Britain	hP	w.	aq.	6-7	6	Water Lily: sow in loam in pans, covered with
1532	dentàta [aca	...	...	...	Guinea	sP	...	...	7-8	1 0	water, and place in warm hot-bed.
1533	**Obeliscaria auranti-**	19	55	98	gar. var.	hP†	y.	2	8-10	4	Curious hardy Herbaceous Plants: grow in any
1534	pulcherrima	...	...	...	Texas	...	c. & y.	...	...	4	good garden soil.
1535	Œnothèra **acaulis**	8	25	146	Chili	...	w.	½	4-9	6	... ...
1536	biennis	...	...	...	N. America	...	y.	4	6-9	3	
1537	— var. hirsutissima	...	...	...	California	...	or.	2	...	6	... ...
1538	bistorta Veitchi	...	...	...	...	hhA	y. & c.	1	7-9	6	
1539	campylocarpa	...	...	...	...	hP†	o. r.	2	6-9	6	The tribe of Œnotheras, or Night-blowmers,
1540	— **grandiflora**	...	...	...	gar. var.	...	...	...	...	6	contains many superior kinds of flowers:
1541	concinna	...	...	...	Florida	hhA	l. ro.	¼	7-9	3	viz., O. acaulis, which has very large and
1542	consólida	...	...	...		...	y.	1	...	3	beautiful silvery-white blossoms almost as
1543	Drummondi	...	...	...	Texas	hP†	...	2	7-10	3	transparent as mother-of-pearl. O. macro-
1544	— **nana**	...	...	...	...	...	...	trai	...	6	carpa and taraxacifolia have magnificent
1545	grandiflora	...	...	...	N. America	...	...	4	6-9	3	yellow blooms. O. Drummondi nana is an
1546	Jamesi	...	...	...	California	...	...	2	...	6	extraordinarily free bloomer, and flowers
1547	Kunthiàna	...	...	...	...	...	...	1	...	3	for four months continuously: colour a
1548	**Lamarckiana**	...	...	...	...	...	...	3	...	1 0	rich sulphur. O. grandiflora (*Lamarck*)
1549	longifòlia	...	...	...	Buenos Ayres	hB	...	...	7-9	6	has a superb spike of bloom, and we have
1550	macrocarpa	...	...	...	N. America	hP	...	1	6-7	6	seen some with upwards of 400 buds and
1551	**micrantha**	...	...	...	California	hA	...	...	5-9	6	blossoms upon them: it is certainly one of
1552	**Missouriensis**	...	...	...	...	hP†	...	3	...	6	the showiest yellow flowers grown. O.
1553	odoràta	...	...	...	S. America	...	...	2	4-8	3	bistorta Veitchi is a pretty edging plant, and
1554	ròsea vel coccínea	...	...	...	Peru	hhP	ro.	1	5-8	3	may be grown in rockeries. Sow the per-
1555	Selloviàna	...	...	...	Monte Video	...	y.	1½	7-9	3	ennial varieties on slight hot-bed and
1556	stricta	...	...	...	Mexico	hhA	...	...	6-8	3	transplant to borders in May: annual kinds
1557	**taraxacifolia alba**	...	...	...	Chili	hP†	w.	½	4-9	6	may be sown in the open borders: good
1558	— lutea	...	...	...	Peru	...	y.	...	5-8	6	deep sandy loam suits all.
1559	tetráptera	...	...	...	Mexico	hA	w.	1	6-8	3	... ...
1560	undulàta	...	...	...	America	hP	y.	2	...	3	
1561	Olea sylvestris	2	...	145	S. Europe	gS	w.	10	...	6	... ...
1562	verrucòsa	...	...	...	...	...	...	...	...	6	Olive: grow in sandy soil.
1563	Onobry'chis petræa	17	45	132	...	hP	...	2	...	6	Good garden soil.
1564	Onònis pubescens	...	...	...	Spain	hA	v.	½	...	3	
1565	viscòsa	...	...	...	S. Europe	...	y. & p.	1	7-8	3	Free-growing Annuals.
1566	Oròbus coccíneus	...	...	...	N. America	hP†	s.	...	4-5	3	Common garden soil.
1567	Osteospermum neriifolium	19	56	98	Cape G. Hope	gS	y.	3	7-8	6	Usual greenhouse treatment.
1568	Osy'ris alba	22	38	171	S. Europe	...	w.	...	6-8	6	
1569	**Oxalis floribunda**	10	30	147	Brazils	fPb	ro.	½	4-9	6	Very dwarf, pretty, profuse-blooming plants,
1570	— alba	...	...	...	...	...	w.	...	...	6	well adapted for covering banks or edgings.
1571	**rosea**	...	...	...	Chili	...	ro.	...	...	6	O. tropæoloides has a dark ornamental
1572	**tropæoloides**	...	...	...	Cape G. Hope	hhA	y.	¼	6-9	6	foliage, similar to the Shamrock.
1573	Oxyùra chrysanthemoìdes	19	54	98	California	hA	...	1½	...	3	Showy hardy Annual.
1574	Ozothamnus ferrugineus	...	53	...	V. D.'s Land	hhS	...	1	4-9	6	
1575	Pæònia arictìna	13	25	162	Levant	hP	p.	2	5-6	6	Good garden soil.
1576	Palafoxia texàna	19	53	98	Texas	hhA	br. r.	...	6-7	3	Common garden soil.
1577	Paliùrus aculeàtus	5	25	164	S. Europe	hS	pa. g.	4	...	6	
1578	Pánicum colònum	3	26	123	E. Indies	hA	ap.	½	6-8	6	
1579	concinnum	...	...	...	...	...	...	...	...	6	... ...
1580	Crus-Galli	...	...	...	Britain	...	...	1½	...	6	
1581	eriogònum fimbriàtum	...	...	...	N. Holland	...	...	1	...	6	
1582	fimbriàtum	...	...	...	S. Europe	...	...	...	...	6	... ...
1583	glaucum	...	...	...	...	...	...	...	...	6	
1584	itálicum	...	...	...	...	...	...	...	...	6	Ornamental Grasses; well suited for winter
1585	nigrescens	...	...	...	...	...	...	...	...	6	bouquets; of very easy culture: see Agrostis.
1586	origanum	...	...	...	...	...	...	...	...	6	
1587	plicàtum	...	...	...	...	...	...	...	...	6	... ...
1588	sanguinàle	...	...	...	...	...	...	...	...	6	
1589	verticillàtum	...	...	...	...	...	...	...	...	6	... ...
1590	Papàver bracteàtum	13	25	149	Siberia	hl'†	r.	3	5-6	3	
1591	croceum	...	...	...	Altaia	...	o.	1	5-7	3	... ...
1592	fimbriàtum [mum	...	...	...	gar. var.	...	r.	2	...	3	
1593	involucràtum maxi-	...	...	...	...	...	...	...	...	3	These perennial Poppies are very ornamental.
1594	Marshalli	...	...	...	...	...	var.	...	...	4	P. pulcherrimum and orientale are the best.
1595	— splendens	...	...	...	...	...	...	...	...	4	Sow thinly where the plants are to remain,
1596	nudicaule	...	...	...	Siberia	...	y.	1½	6-8	3	and cover with a pot until well up.
1597	orientàle	...	...	...	Levant	hP	r.	3	5-6	3	
1598	pilòsum	...	...	...	Russia	...	o.	2	...	3	
1599	pulcherrimum	...	...	...	Siberia	...	r.	3	...	4	... ...
1600	Paspàlum élegans	3	26	123	Brazils	hhA	ap.	1½	7-8	3	Ornamental Grass.
1601	Passiflora cærùlea**	16	40	150	C. G. Hope	hS	b.	30	6-10	6	
1602	edùlis**	...	..	...	W. Indies	gS	w.	...	7-8	6	Passion-flower. These flowers are admirable
1603	fœtida**	...	...	...	...	...	w. & g.	10	7-9	6	ornaments to the Conservatory, Greenhouse,
1604	grácilis**	...	...	...		gA	w.	6	8-9	1 0	or Hothouse.

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
1605	Patersònia longiscapa	15	38	128	N. S. Wales	gP	b.	1½	5–7	6	Good garden soil.
1606	Paulownia imperiàlis	14	59	175	Japan	hT	w. & p.	20	4-5	6	Noble hardy Tree.
1607	Pavònia hastàta [*brids*	16	18	137	E. Indies	sS	r.	2		6	Sow on heat in hothouse.
1608	**Pelargonium,** *choice hy-*	...	42	119	hybrid	gS	div.	3	6–9	1 0	Choice Geraniums. Sow in light soil in hot-bed, and harden off by degrees. P. Odier has a distinct scarlet blotch on each petal.
1609	**Fancy varieties**	...	...	...	...	...	...	...	...	1 0	
1610	**Odier's var.,** *spotted*	...	...	...	...	...	...	...	...	1 0	
1611	**zonale** (*scarlet*)	...	...	...	...	hhS	s.	2	4–10	6	
1612	Pennisètum itálicum	3	25	123	S. Europe	hA	ap.	...	6–8	3	Ornamental Grasses.
1613	longisty'lum	...	...	...	...	...	...	...	...	3	
1614	villòsum	...	...	...	...	...	...	...	...	3	
1615	Pentapètes phœnícea	16	45	83	India	gP	s.	...	7–8	6	Usual greenhouse treatment.
1616	Pentstèmon Adamsòni	14	59	175	gar. var.	hP	ro.	3	...	6	These Herbaceous plants are very handsome, and deservedly rising in repute as bedding plants, their long tubular flowers being very ornamental. P. Murrayanus is the most brilliant of all. P. Hartwegi and its varieties, and P. pulchellus and its varieties, are the freest-blooming kinds, and can be strongly recommended. Many of these will bloom early in the autumn out of doors, if sown early in March in a hot-bed and planted out in May. Sown in a border in April, they should receive a little protection during the first winter; and it would be better to have glass over such varieties as Hartwegi, &c.
1617	confertus	...	...	...	...	...	...	...	...	6	
1618	cordifòlius	...	...	...	California	...	s.	1	6–10	6	
1619	digitàlis [des]	...	...	...	Arkansas	...	w.	1½	7–9	3	
1620	Hartwègi (gentianoi-	...	...	...	Mexico	...	div.	3	7–10	6	
1621	— coccíneus	...	...	...	gar. var.	...	s.	...	...	6	
1622	hirsùtus	...	...	...	N. America	...	l. p.	1	8–9	6	
1623	Mackayànus	...	...	...	Ohio	...	p.w.&y	...	7–8	6	
1624	**Murrayanus**	...	...	...	S. Felipe	...	s.	3	7–10	1 0	
1625	nítidus	...	...	...	Texas	...	p.w.&y	1	6–10	6	
1626	ovàtus	...	...	...	N. America	...	b.	4	6–8	6	
1627	— albus	...	...	...	gar. var.	...	w.	...	...	6	
1628	procèrus	...	...	...	N. America	...	p.	1	...	6	
1629	**pulchellus**	...	...	...	Mexico	...	div.	1½	8–9	6	
1630	— **roseus**	...	...	...	gar. var.	...	ro.	...	...	6	
1631	— **violaceus**	...	...	...	...	...	v.	...	...	6	
1632	Wrighti	...	...	...	...	...	d. ro.	...	...	6	
1633	**Perilla nankinensis**	...	58	130	China	hA	p. leaf	3	6–8	3	Rich dark bronze ornamental foliage: good for bedding.
1634	ocymoìdes	...	...	...	India	...	w.	2	...	3	
1635	Petùnia argentea	5	25	178	S. America	hhP†	sil.	...	7–10	6	Petunias, from their richness of colour, duration in bloom, and fragrance, are admirable bedding plants, and contrast effectively with Scarlet Geraniums, Verbenas, &c. &c. P. grandiflora and its varieties are saved only from the finest flowers. All the kinds when raised from seed may be treated as Half-hardy Annuals. See instructions given for Calliopsis. The green-bordered varieties, No. 1645, are very interesting: the mixed varieties are saved from the finest collections in Europe.
1636	nyetaginiflòra	...	...	...	...	...	w.	...	...	3	
1637	phœnícea	...	...	...	Buenos Ayres	...	p.	...	...	3	
1638	— grandiflòra	...	...	...	gar. var.	...	...	...	...	3	
1639	— — alba	...	...	...	...	...	w.	...	...	6	
1640	— — atroviolàcea	...	...	...	...	...	d. v.	...	...	6	
1641	— — kermesìna	...	...	...	...	...	c.	...	...	6	
1642	— — purpùrea	...	...	...	...	...	p.	...	...	6	
1643	— — ròsea	...	...	...	...	...	ro.	...	...	6	
1644	— — striàta	...	...	...	...	...	stri.	...	...	6	
1645	— **green-edged**	...	...	...	...	...	gr. bor.	...	...	6	
1646	**splendid, mixed**	...	...	...	...	...	div.	...	...	6	
1647	Phacèlia congesta	...	...	81	S. Europe	hA	b.	...	...	3	Hardy Annuals. Should be sown in good garden soil where it is intended they should bloom.
1648	conspicua	...	...	...	California	...	...	...	6–9	3	
1649	tanacetifòlia	...	...	...	...	...	o.	...	...	3	
1650	— alba	...	...	...	gar. var.	...	w.	...	...	3	
1651	Phalacræa cœlestìna	19	53	98	W. Indies.	hhA	b.	1	6–8	6	Good garden soil.
1652	Phálaris paradoxa**	3	26	123	Levant	hA	ap.	½	6–7	6	
1653	Phaseòlus Caracalla**	17	45	132	India	gP	li.	1½	8–9	1 0	Handsome Climbers with ornamental foliage and large bunches of blossom.
1654	coccíneus nòvus**	...	...	...	gar. var.	hhA	s.	5	7–9	1 0	
1655	humifùsus**	...	...	...	...	...				1 0	
1656	Phlòmis Russellìanus	14	58	130	Levant	hP	br.	3	6–9	6	Good garden soil.
1657	**Phlox Drummondi,**	20	5	25	154	Texas	hhA	div.	1	...	6	The varieties of Phlox Drummondi are noted for extreme richness of colour, profuseness of blossom, length of duration in bloom, and general compactness, and whether in clumps or masses look equally beautiful. The varieties in **black type** may be specially recommended for producing the greatest effect. Our mixed packet, No. 1657, contains a great variety of colours. Sow in well-drained pots in mild hot-bed; prick off in boxes, and when fit, pot separately, and turn out in the middle of May into deep, well-stirred soil. The perennial species, which are very handsome, require protection during winter.
1658	— **alba** [vars.	...	...	...	gar. var.	...	w.	...	...	6	
1659	— **atrococcinea**	...	...	...	...	...	d. s.	...	...	6	
1660	— **atropurpurea**	...	...	...	...	...	d. p.	...	...	6	
1661	— **coccinea**	...	...	...	...	...	s.	...	...	6	
1662	— **Leopoldiana**	...	...	...	...	...	e. & w.	...	...	6	
1663	— **Magenta**	...	...	...	...	...	c.	...	...	6	
1664	— **marmorata**	...	...	...	...	...	mar.	...	...	6	
1665	— **Napoleon III.**	...	...	...	...	...	d. c.	...	...	6	
1666	— **oculata alba**	...	...	...	...	...	w. & c.	...	...	6	
1667	— — **purpurea**	...	...	...	...	...	p. & w.	...	...	6	
1668	— **Radowitzki**	...	...	...	...	...	stri.	...	...	1 0	
1669	— **rosea**	...	...	...	...	...	ro.	...	...	6	
1670	**Victoria Regina**	...	...	...	...	...	p.	...	...	6	
1671	**zinnabarina**	...	...	...	...	...	v.	...	...	6	
1672	**decussata,** *finest*	...	...	...	N. America	hP	d. p.	1½	...	1 0	
1673	*French perennial vars.*	...	...	...	hybrids	...	div.	3	...	1 0	
1674	**Phormium tenax**	6	...	74	N. Zealand	gP	g. & w.	6	8-9	1 0	New Zealand Flax.
1675	**Phygelius capensis**	14	59	175	Caffraria	hP	c. & y.	2	6–10	1 0	Very handsome Hardy Perennial.
1676	Phylica plumòsa	5	25	161	C. G. Hope	gS	w.	...	3–5	6	Usual greenhouse treatment.
1677	Phillyrea angustifòlia	2	...	145	S. Europe	hS	...	8	5–6	3	Good garden soil.
1678	latifòlia	...	...	...	...	...	...	15	...	3	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hight.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
1679	Phy'salis peruviàna	5	25	178	S. America	gP	w.	1½	4–10	6	Usual greenhouse treatment.
1680	Pinus excelsa	21	49	99	Nepaul	hT	ap.	100		6	
1681	Gerardiàna	...	...	...	Himalayas	...	...	50		6	Fine ornamental hardy Conifers. Sow in pans and boxes under protection, placing the seeds an inch apart: keep under protection the first winter.
1682	halepensis	...	...	...	Europe	...	...	...		6	
1683	Pindrow	...	...	...	Himalayas	...	...	100		6	
1684	Webbiàna	...	...	...	Nepaul	...	...	90		6	
1685	Pinea	...	...	...	Britain	...	...	50		3	
1686	Piptathèrum Thomàsi	3	26	123	S. Europe	hA	...	1	6–9	3	Ornamental Grass.
1687	Pistàcia Lentiscus	22	40	179	...	hlrT	...	15	5–6	6	Sow in heat and transplant.
1688	Pittospòrum undulàtum	5	25	152	N. S. Wales	gS	w. & y.	3	2–6	6	Usual greenhouse treatment.
1689	viridiflòrum [nicus	...	...	...	...	...	...	...	...	6	
1690	**Platystemon califor-**	3	...	149	California	hhA	y.	1	7-9	6	Extremely pretty Annual; good for rockeries.
1691	**Pleroma elegans**	10	...	138	Brazils	sS	v.	4	6–9	2 6	Superb plant
1692	Plumièria acuminàta	5	...	69	E. Indies	...	r. & y.	20	6–7	6	Usual stove culture.
1693	**Poa brizopyroides**	3	26	123	S. Europe	hA	ap.	1	6–9	6	Ornamental Grass.
1694	Podaly'ria sericea	10	25	132	C. G. Hope	gS	p.	6	1–10	6	Usual greenhouse treatment.
1695	styracifòlia	...	...	...	...	...	pk.	1	5–6	6	
1696	**Podolepis affinis**	19	54	98	N. Holland	hhA	y.	...	6–8	6	
1697	auriculàta	...	...	...	...	...	...	...	...	6	
1698	chrysanthemoìdes	...	...	...	...	...	...	...	...	3	Pretty half-hardy Annuals: sow in slight hot-bed and transplant.
1699	grácilis	...	...	...	N. S. Wales	...	pk.	3	7–9	3	
1700	— alba	...	...	...	...	...	w.	...	...	3	
1701	rugàta	...	...	...	...	...	...	...	...	3	
1702	**Poinciana Gilliesi**	10	25	132	S. America	hhS	y.	10	6–7	1 0	Magnificent plants: sow in hot-bed, and grow in loam and peat.
1703	**regia**	...	...	...	Madagascar	sT	c.	20		1 0	
1704	Polemònium cærùleum	5	...	154	Britain	hP	b.	1	6–8	3	Pretty hardy Perennials. P. cæruleum is known as the Jacob's Ladder of gardens. Grow in any good garden soil.
1705	— album	...	...	...	...	...	w.	...	...	3	
1706	villòsum	...	...	...	Siberia	...	b.	½	6–10	3	
1707	Polycolymna Stuarti	19	54	98	Australia	hhA	y. & w.	1½	7–9	3	Everlasting Flower.
1708	Poly'gala attenuàta	17	43	155	Cape G. Hope	gS	p.	6	5–8	6	
1709	bracteolàta	...	...	...	...	...	...	...	...	6	... ...
1710	cordàta	...	...	...	...	...	...	3	...	6	
1711	dalmasiàna	...	...	...	...	...	...	6	5–10	6	
1712	grandiflòra	...	...	...	...	...	...	4	...	6	Showy Greenhouse Shrubs: sow in mild hot-bed and grow in fibry peat mixed with a little loam.
1713	— superba	...	...	...	...	...	...	...	...	6	
1714	grandis	...	...	...	...	...	v.	...	...	6	
1715	macrophy'lla	...	...	...	...	...	...	...	...	6	
1716	myrtifòlia	...	...	...	...	...	p.	3	4–5	6	
1717	Pourtalèsi	...	...	...	...	...	...	...	...	6	... ...
1718	speciòsa	...	...	...	...	...	...	...	...	6	
1719	Pomaderris apétala	5	25	161	N. Holland	...	pa. y.	7	5–6	6	Usual greenhouse treatment.
1720	Pontedèria cordàta	6	...	158	N. America	hP		2	6–8	6	Aquatic.
1721	Portulàca aurea	11	...	159	S. America	hhA	o.	½	6–9	1	
1722	**aurea striata nova**	...	...	...	gar. var.	...	o. & c.	...	...	6	Portulacas are remarkable for brilliancy and richness of colour, and are adapted for beds, clumps, edgings, pots, vases, or rock-work. P. aurea striata and Blensoni are the newest and handsomest varieties. Sow in sandy peat, leaf-mould, and burnt earth; prick off and plant in rows in the middle of June, placing an inch or two of lime-rubbish, burnt earth, and sand over the border, to prevent the plants from damping off. These plants require scarcely any water.
1723	grandiflòra	...	...	...	Chili	...	y. & p.	...	...	4	
1724	Thellusòni	...	...	...	Mendoza	...	c.	...	...	4	
1725	— alba	...	...	...	gar. var.	...	w.	...	...	4	
1726	— **Blensoni**	...	...	...	...	...	ver.	...	...	6	
1727	— **caryophylloides**	...	...	...	...	...	stri.	...	...	6	
1728	— coccínea	...	...	...	...	...	s.	...	...	4	
1729	— lùtea	...	...	...	...	...	y.	...	...	4	
1730	— ròsea	...	...	...	...	...	ro.	...	...	4	
1731	— — pallida	...	...	...	...	...	l. ro.	...	...	4	
1732	— striatiflòra	...	...	...	...	...	stri.	...	...	4	
1733	— Thorburni	...	...	...	...	...	y.	...	...	4	
1734	splendens	...	...	...	Chili	...	ro.p.&l.	...	...	4	
1735	Potentilla aurea	12	35	166	Alps	hP	gold	...	5–7	3	... ...
1736	alpestris	...	...	...	...	...	...	...	...	3	
1737	atropurpùrea	...	...	...	gar. var.	...	p.	2	...	6	These are very handsome Herbaceous Plants, and from their hardiness and showy character are exceedingly useful and ornamental: they may be employed to advantage in filling up vacant nooks and corners; even in single plants, and in all situations, their neatness of foliage and long duration in bloom render them objects of desire. The dwarf varieties will be found useful in rockeries. Some of the best kinds are printed in **black type**. Sow in a well-mixed border, and transplant in the autumn or the following spring.
1738	atrosanguínea	...	...	...	Nepaul	...	c.	1½	...	3	
1739	**Fintelmanni**	...	...	...	hybrid	...	y.	2	7–8	6	
1740	insignis	...	...	...	...	...	...	...	...	6	
1741	macrantha [rea	...	...	...	Switzerland	...	w.	1½	5–6	6	
1742	**maculatasulphu-**	...	...	...	hybrid	...	y. spot.	2	6–8	6	
1743	— plèna	...	...	...	...	...	...	...	...	6	
1744	Mackayàna	...	...	...	...	...	y. &pk.	1½	...	6	
1745	MacNabiàna	...	...	...	...	...	o. r.	...	7–9	6	
1746	**Menziesi**	...	...	...	...	...	s.	3	8-9	6	
1747	missourica	...	...	...	N. America	...	y.	1	6–9	6	
1748	nepalensis	...	...	...	Nepaul	...	...	...	...	6	
1749	Planti	...	...	...	E. Indies	...	...	...	...	6	
1750	**pulcherrima**	...	...	...	hybrid	...		...	...	6	
1751	**Thomasi**	...	...	...	Italy	...	y.	...	...	3	... ...
1752	Prenanthes viminea	19	53	98		...	...	3	7–8	6	Good garden soil.

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
1753	Prímula cortusoìdes	2	25	160	Siberia	hP†	r.	1	5–7	6	Fringed Chinese Primrose. Sow under glass
1754	**sinensis,** *choice fringed*	...	...	...	seedlings	gA	div.	...	10–2	1 0	in heat; grow in sandy loam and very sweet
1755	**— dark carmine**	...	...	...	...	...	d. car.	...	...	2 6	leaf-mould: keep in shady but not damp
1756	**— rose**	...	...	...	...	...		...	...	2 6	place, and near the glass in winter in green-
1757	**— white**	...	...	...	...	...	w.	...	...	2 6	house.
1758	vulgàris (*Primrose*)	...	...	...	Britain	hP	div.	¾	3-4	6	Common field Primrose.
1759	Prostanthèra nìvea	14	58	130	N. S. Wales	gS	p.	2	7–8	6	Usual greenhouse treatment.
1760	Pròtea, *fine mixed*	4	25	161	E. Indies	...	div.	div.	div.	6	Magnificent Evergreen Greenhouse Shrubs.
1761	Prunella grandiflòra	14	58	130	Austria	hP†	l. b.	½	7–9	6	Good garden soil.
1762	Prunus Lauro-ceràsus	12	25	166	Levant	hS	w.	12	4–5	3	
1763	Psìdium Cattleyànum	13	...	181						6	
1764	Psoràlea aculeàta	17	45	132	C. G. Hope	gS	b.	4	6–7	6	
1765	aphy'lla	...	...	...	...	...	...	2	...	6	
1766	capitàta	...	...	...	...	...	p.	...	7–8	6	Ornamental Greenhouse Shrubs. Sow in slight
1767	pinnàta	...	...	...	...	...	b.	6	5–7	6	hot-bed in April, pot off, and grow in fibry
1768	spicàta	...	...	...	...	...				6	peat and loam in a cool shady place.
1769	strobolìna	...	...	...	...	...	b.	6	5–7	6	
1770	Ptarmica grandiflòra					gP				6	Usual greenhouse treatment.
1771	Pultenæa daphnoìdes	10	25	132	N. S. Wales	gS	y.	2	6–7	6	
1772	Pùnica Granàtum	12	...	142	S. Europe	hS	s.	18	6–9	6	P. nanum forms a charming little bush, covered
1773	**— nanum**	...	...	...	...	...	...	2	...	6	with scarlet blossoms.
1774	Pyrèthrum carneum	19	54	98	...	hP	fish.	...	...	3	Feverfew: very ornamental Perennials; con-
1775	Parthènium fl. pl.	...	...	...	Britain	...	w.	...	...	6	trasting well with scarlet Geraniums, &c.
1776	*finest French vars.*	...	...	...	seedlings	...	div.	...	...	1 0	
1777	Rafnia triflòra	17	45	132	C. G. Hope	gP	p.	3	6–7	6	Sow on heat.
1778	Ranunculus, *mixed*	11	35	162	Levant	hPb	div.	¾	5–6	6	Requires a deep, rich soil.
1779	Resèda erecta	...	28	163	S. Europe	hA	buff.	1½	6–9	3	
1780	myriophýlla	...	...	...	Italy	hP	st.	2	6–8	3	Various kinds of Mignonette.
1781	Phyteuma	...	...	...	S. Europe	hA	ap.	1½	6–9	3	
1782	Rhamnus Alaternus	5	25	164	...	hS	g.	20	4–6	3	Ordinary garden soil.
1783	**RhodantheManglesii**	19	54	98	Swan River	hhA	ro. & y.	1	5–11	6	Handsome Everlasting Flower.
1784	Rhododendron arbòreum	10	25	165	Nepaul	hhT	s.	20	5–6	1 0	
1785	— album	...	...	...	...	...	w.	...	...	1 0	These remarkably handsome Shrubs are to be
1786	campanulàtum	...	...	...	...	hhS	p.	4	4–5	1 0	met with at nearly all Floral Exhibitions, of
1787	maximum	...	...	...	gar. var.	...	...	...	...	1 0	which they form a chief feature. Sow in
1788	ponticum	...	...	...	...	...	div.	...	...	1 0	heat in pans, transplant, and grow in a
1789	**finest hybrids**	...	...	...	hybrids	hS	...	...	5–7	1 0	mixture of loam and peat.
1790	Ricìnus africànus	21	49	112	Africa	hhA	g.	15	7–8	4	
1791	— albus	...	...	...	...	...	w.	...	...	4	... ...
1792	brasiliensis	...	...	...	gar. var.	...	r.	...	...	6	
1793	leneocarpus	...	...	...	...	...	...	...	...	4	... ...
1794	**lividus**	...	...	...	C. G. Hope	...	p.	8	...	4	
1795	**macrocarpus**	...	...	...	...	...	s.	...	...	6	These rapid-growing plants are highly orna-
1796	Obermanni	...	...	...	gar. var.	...	g.	7	...	4	mental for large gardens, and for back-
1797	pumíceus	...	...	...	...	...	e.	...	...	4	grounds and centres of beds are extremely
1798	purpùreus	...	...	...	...	...	p.	...	...	4	useful: their large and handsome foliage
1799	**— major**	...	...	...	...	...	...	...	...	6	and various-coloured fruit render them
1800	sanguíneus	...	...	...	...	...	r.	...	...	4	striking and desirable. Sow on heat and
1801	— minor	...	...	...	...	...		...	...	4	transplant.
1802	spectábilis	...	...	...	...	...	g.	...	...	4	... ...
1803	tunicensis	...	...	...	...	...		...	...	4	
1804	**undulatus**	...	...	...	...	...	g.	...	...	6	... ...
1805	víridis	...	...	...	...	...	...	...	...	4	
1806	Rìvea bona nox	5	25	100	W. Indies	...	w.	10	7–10	3	Pretty Climber.
1807	Roscneria hy'brida									6	
1808	Rubingia parviflòra									6	
1809	Rudbeckia amplexicaulis	19	55	98	Louisiana	hA	y.	3	7–9	3	
1810	bícolor	...	...	...	...	...	...	...	...	6	Curious Herbaceous plants. Sow out of doors
1811	fulgida	...	...	...	N. America	hP	...	...	...	6	in April.
1812	laeiniàta	...	...	...	...	...	...	6	...	6	
1813	Neumanni	...	...	...	...	...	...	2	...	6	
1814	Ruscus aculeàtus	22	49	74	England	hS	g.	1	6–12	6	Good garden soil.
1815	racemòsus	...	...	...	...	...	...	...	...	6	
1816	Ruta bracteòsa	10	25	168	S. Europe	hP	...	3	6–9	6	
1817	**Sabbatia campestris**	5	...	118	Texas	hhA	ro. y.	½	7–9	1 0	Strikingly beautiful tender Annual.
1818	Sagalgina trilobàta									6	
1819	**Salpiglossis,** *choice mix.*	14	59	178	gar. var.	hhA	div.	2	7–9	6	
1820	Barclayàna	...	...	...	Chili	...	r.	...	...	6	
1821	**— atrococcinea**	...	...	...	gar. var.	...	d. s.	...	...	6	Beautiful Annuals, with large richly-coloured,
1822	**— atropurpurea**	...	...	...	...	...	d. p.	...	...	4	delicately veined and mottled blossoms: on
1823	— azùrea	...	...	...	...	...	b.	...	...	4	close inspection the blooms will be found
1824	— — picta	...	...	...	...	...	...	...	...	6	to have a rich velvety softness seldom seen
1825	— coccínea	...	...	...	...	...	s.	...	...	4	on other flowers. Salpiglossis delight in a
1826	— — splendens	...	...	...	...	...	...	...	...	6	rich light soil, and may be treated in general in the same manner as Calliopsis.

No.	Scientific Name.	L. Cl.	L. O.	N. O	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
1827	Salpiglossis sulphùrea	14	59	176	gar. var.	hhA	y.	2	7–9	4	
1828	nana atropurpu-	...	...	...	...	...	p.	...	...	6	For observations on Salpiglossis see preceding page.
1829	cærulea [rea	...	...	...	...	...	b.	1	...	6	
1830	coccinea	...	...	...	...	...	s.	...	...	6	
1831	sulphurea	...	...	...	...	...	y.	...	...	6	
1832	Salsòla austràlis	5	26	94	Australia	hA		...	...	3	Good garden soil.
1833	Salvia amabilis	2	25	130	S. Europe	hP	r.	2	5–8	6	All the varieties of this genus are pretty, and
1834	argentea	...	...	...	Crete	...	w.	3	5–7	6	some very beautiful. S. splendens has fine
1835	aurea	...	...	...	C. G. Hope	hhP	y.	...	4–5	6	large scarlet blossoms. S. splendens com-
1836	bícolor	...	...	...	Barbary	hP	s. & w.	2	6–7	6	pacta is the finest Salvia grown, being lite-
1837	coccínea	...	...	...	S. America	hhA	s.	...	6–10	4	rally covered with blossom. S. coccinea and
1838	— nàna	...	...	...	gar. var.	...	...	1	...	6	its varieties are very free bloomers, and their
1839	— nova var.	...	...	...	...	...	...	2	...	6	universal appearance in nearly every gar-
1840	— hybrida	...	...	...	...	...	...	...	...	6	den proves their merits. S. patens is the
1841	— splendens	...	...	...	...	...	...	...	...	6	brightest and purest of all blue-flowered plants,
1842	— superba	...	...	...	...	...	...	...	...	6	and holds a pre-eminent position among bed-
1843	gigántea	...	...	...	Europe	hB	w.	4	7–8	6	ding plants. S. Rœmeriana has a neat crim-
1844	Kochiàna	...	...	...	...	...	r.	...	...	3	son blossom, though of a much dwarfer habit
1845	patens	...	...	...	Mexico	hhB	b.	2	7–9	1 0	than the varieties previously recommended.
1846	Rœmeriàna	...	...	...	...	hhA	c.	½	6–9	4	Half-hardy varieties, such as coccinea and
1847	splendens	...	...	...	...	hhP	s.	3	...	1 0	splendens, sow on heat and transplant, and
1848	— compacta	...	...	...	gar. var.	...	...	1½	...	1 0	grow in loam and peat. S. argentea has large
1849	verticillàta	...	...	...	Germany	hP	b.	2	5–6	4	silvery leaves.
1850	Sanguisorba canadensis	4	...	185	Canada	...	w.	3	6–7	6	Good garden soil.
1851	carnea	...	...	...	...	...	r.	2	...	6	
1852	Sauvitàlia procumbens	19	54	98	Mexico	hA	y.	½	7–8	3	Pretty dwarf hardy Annual.
1853	Saponaria calabrica	10	26	91	Calabria	...	v.	...	6–10	6	The best and longest-blooming of all dwarf An-
1854	— alba	...	...	...	gar. var.	...	w.	...	...	1 0	nuals, producing masses of minute cross-shaped
1855	ròsea	...	...	...	...	...	ro.	...	...	6	rose-coloured blossoms: admirable for bedding.
1856	ocymoides	...	...	...	Levant	hP	r.	¼	...	6	No. 1854 is a new pure white variety.
1857	Saxífraga, fine mixed	10	...	173	div.	...	div.	div.	div.	6	A fine class of Mountain plants, admirable for
1858	vaccaria	...	...	...	Britain	...	r.	1	5–7	6	rockeries.
1859	Schinus Molle	22	45	179	Peru	hhS	g.	12	7–8	6	Produces curious white berries.
1860	Schizanthus Grahàmi	2	25	175	Chili	hhA	r. & o.	2	6–8	4	
1861	Hookeri	...	...	...	...	...	...	...	...	4	... ...
1862	retusus	...	...	...	...	...	s. & o.	...	...	4	
1863	— albus	...	...	...	...	...	w.	...	...	4	These, if sown in a little heat at the end of
1864	grácilis	...	...	...	...	...	p.	...	...	3	March, and planted out at the begin-
1865	— lilacinus nòvus	...	...	...	gar. var.	...	li.	...	...	6	ning of May, will make fine large beds in
1866	hùmilis	...	...	...	Valparaiso	...	li. & c.	¾	6–11	3	the autumn; if sown in September, potted
1867	oculàtus grandiflòrus	...	...	...	gar. var.	...	dp.&ro.	1	6–10	6	off separately, and kept over the winter in
1868	pinnàtus	...	...	...	Chili	hA	ro. p.	...	...	3	the greenhouse, they will there form fine
1869	— obtusifòlius	...	...	...	...	...	...	...	...	3	objects from May onwards: grow in rich
1870	— Priesti	...	...	...	...	...	w.	...	...	3	sandy loam. Hardy kinds sow in the
1871	— porrigens	...	...	...	...	...	...	...	...	3	open borders.
1872	— pulchellus	...	...	...	...	...	var.	...	...	3	... ...
1873	— venustus	...	...	...	...	...	...	...	...	3	
1874	Schizopétalon Walkèri	15	60	103	...	...	w.	½	5–8	3	Very pretty fragrant Annual.
1875	Schistanthe pedunculàta	6	25	65						3	
1876	Sclerothamnus diffùsus	10	...	132	N. Holland	gS	y.	1	4–7	6	Usual greenhouse treatment.
1877	Scilla bifòlia	6	...	74	England	hPb	d. p.	...	2–4	6	Sow in light rich loam
1878	Scorzonèra tingitàna	19	53	98	Europe	hP	y.	...	5–6	3	Good garden soil.
1879	Scutellària commutàta	14	58	130	Hungary	...	p.	...	7–9	6	
1880	Scyphanthus elegans	18	48	135	Chili	hhP	y.	2	...	6	Beautiful Loasa-like Climber.
1881	Sedum cæruleum [**	10	30	176	Africa	hP	b.	¼	7–8	3	Stonecrop: the different varieties of Sedum
1882	Jacquini	...	...	...		...	...	1	...	3	are extremely useful for rockeries and co-
1883	kamtschatkense	...	...	...	Kamtschatka	...	o.	½	...	3	vering ornamental mounds; and their neat
1884	maximum	...	...	...	Spain	...	w.	2	...	3	foliage and innumerable pink, blue, and
1885	pulchrum	...	...	...	Europe	...	...	...	...	3	yellow blossoms render them objects of
1886	rupestre	...	...	...	N. America	...	...	½	...	3	great admiration.
1887	Setària macrochæta	3	26	123		hA	ap.	2	...	3	Ornamental Grass.
1888	Sida angustifòlia	16	48	137	Brazil	gP	y.	1½	7–9	6	
1889	Bæriana	...	...	...	S. Europe	...	...	...	...	6	... ...
1890	grandiflra	...	...	...		gT	...	20	11–12	6	
1891	gravèolens	...	...	...	E. Indies	gB	v.	1	7–8	6	Handsome free-flowering Malvaceous Plants;
1892	indica	...	...	...	India	sA	...	1½	...	6	fine ornaments for the greenhouse or stove.
1893	pulchella	...	...	...	W. Indies	gP	y.	4	...	6	
1894	pyracantha	...	...	...	Brazil	gS	...	3	6–7	6	
1895	tiliàcea	...	...	...	China	gA	...	2	7–8	6	... ...
1896	Silène atroròsea	10	28	91	gar. var.	...	ro.	...	...	3	
1897	Bergèri	...	...	...	...	...	...	...	...	6	Catchfly. The tribe of Silene comprises many
1898	compacta	...	...	...	Caucasus	...	pk.	1½	7–9	3	bright ornaments for the general flower-gar-
1899	integrifòlia	...	...	...	gar. var.	...	ro.	...	...	6	den, both in brilliancy of colour and length
1900	maritima	...	...	...	Britain	hP	w.	¾	...	3	of duration in bloom.

No.	Scientific Name.	L.Cl.	L.O.	N.O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
								feet		s. d.	
1901	Silène nàna	10	28	91	gar. var.	hA	ro.	1	6–9	3	
1902	orientalis	...	...	...	...	...	...	2	...	6	... ...
1903	ornàta	...	...	...	Cape G. Hope	hB	.p.	1	5–9	3	
1904	— alba	...	...	...	...	...	w.	...	...	3	
1905	pendula	...	...	...	Sicily	hA	r.	...	...	3	The dwarf varieties, such as S. Schafta, are adapted for rockwork, beds, or mixed borders. S. pendula is an extremely free bloomer, and can be strongly recommended as exceedingly effective. S. pseudo-Atocion is a very fine flower, admirably adapted for the formation of beds, and contrasts well with Nemophila insignis. All are very free growing, but are more showy if carefully treated by being sown under protection in light rich soil and transplanted to borders in May.
1906	— alba	...	...	...	...	...	w.	...	...	3	
1907	picta	...	...	...	gar. var.	...	r.	2	6–9	3	
1908	procumbens	...	...	...	Siberia	hP	pk.	¾	6–7	6	
1909	pseudo-Atocion	...	...	...	N. Africa	hA	...	½	...	6	
1910	pulchella	...	...	...	...	...	...	1	...	3	
1911	quinquevúlnera	...	...	...	England	...	blood.	...	6–8	3	
1912	règia	...	...	...	N. America	hP	c.	1½	5–8	3	
1913	rubella	...	...	...	Portugal	hA	fish.	½	5–6	3	
1914	— alba	...	...	...	...	...	w.	...	...	3	
1915	Schafta	...	...	...	Russia	hP	r. & p.	...	6–10	3	... ...
1916	squamigera	...	...	...	...	...	y.	1	...	3	
1917	Silphium commutàtum	19	55	98	N. America	...	...	6	7–10	6	
1918	Smilax aspera	22	40	177	S. Europe	...	w. & g.	8	8–9	6	Good garden soil.
1919	mauritánica	...	...	...	...	hhP	...	...	...	6	
1920	Solànum atropurpùreum	5	25	178	gar. var.	gS	d. r.	3	6–9	6	
1921	auriculàtum	...	...	...	Madagascar	...	v.	4		6	... ...
1922	Balbisi	...	...	...	S. America	...	w.	...	7–8	6	
1923	betaceum	...	...	...	...	...	pk.	...	6–7	6	
1924	cabilicnse argenteum	...	...	...	Brazil	...	...	3	...	6	
1925	Capsicastrum	...	...	...	S. America	...	w.	1	7–9	6	These plants may be considered as Half-hardy, and are particularly ornamental in their fruit, which varies from the size of a Spanish Nut to a Tomato. S. jasminoides is a very elegant Climber for greenhouse decoration. S. Capsicastrum is also a very interesting ornamental plant for the decoration of the greenhouse or conservatory, and resembles a miniature Orange Tree. Sow in sandy loam and peat in hot-bed, and grow afterwards in good garden soil wherever it may be desirable.
1926	citrullifòlium	...	...	...	...	...	...	4	...	6	
1927	gigánteum	...	...	...	Cape G. Hope	gT	v.	15	6–7	6	
1928	heterogànum	...	...	...	S. America	...	w.	2	...	6	
1929	Hystrix	...	...	...	...	...	...	...	...	6	
1930	índicum	...	...	...	India	...	p.	6	7–8	6	
1931	Jacquini	...	...	...	E. Indies	gA	...	2	9–11	6	
1932	jasminoides**	...	...	...	S. America	gS	pa. b.	8	8–12	6	
1933	laciniatum	...	...	...	N. Holland	...	v.	3	7–8	6	
1934	pseudo-Capsicum	...	...	...	Madeira	...	w.	4	6–9	6	
1935	pyracanthum	...	...	...	Madagascar	...	r.	...	8–9	6	
1936	sodomènm	...	...	...	Africa	...	v.	3	6–7	6	... ...
1937	species nova	...	...	...	gar. var.	...	...	...	...	6	
1938	texànum	...	...	...	Texas	hhA	li.	2	6–10	6	
1939	vescum	...	...	...		gS	p.	...	...	6	... ...
1940	Sollya heterophýlla**	...	...	152	N. Holland	...	b.	5	7–8	6	
1941	salicifòlia**	...	...	...	...	...	...	...	...	6	Sow on a little heat, and grow in loam and peat.
1942	Sophòra japónica	10	...	132	Japan	hT	w.	40	8–9	6	Mixture of loam and peat.
1943	Sorghum bicolor	23	51	123	Persia	hA	ap.	3	7–8	3	
1944	cernuum	...	...	...	...	...	...	...	...	3	Ornamental Grass.
1945	Spartium junceum	17	45	132	S. Europe	hS	y.	6	7–9	6	
1946	linifòlium	...	...	...	Spain	...	...	3	1–6	6	Good garden soil.
1947	Spergula pilifera	10	30	91	Corsica	hP	w.	¼	6–8	6	
1948	saginoides	...	...	...	...	...	...	...	...	6	Admirable substitutes for Grass; see p. 118.
1949	Sphenógyne speciòsa	19	55	98	S. America	hA	pa. y.	1	7–8	3	Very showy Annual.
1950	Spiræa angustifòlia	12	27	166		hS	ro.	3	...	6	
1951	callòsa	...	...	...	China	...	...	4	...	6	Fine ornaments for Shrubberies: sow in cold pit in April, and protect at first; grow in good, deep, loamy soil.
1952	Fortùni	...	...	...	...	...	...	...	...	6	
1953	Lindleyàna	...	...	...	N. America	...	pk.	8	...	6	
1954	venusta	...	...	...	...	...	...	...	...	6	
1955	Sporóbolus tenacíssimus	3	26	132	E. Indies	hhS	ap.	½	7–9	6	Sow on heat.
1956	Spraguea umbellata	5	25	64	California	hhA	ro.	...	7–10	1 0	Beautiful Amaranthus-like flower.
1957	Stáchys coccínea	14	58	130	S. America	...	s.	3	6–8	6	Culture similar to that for Salvia.
1958	Státice bellidifòlia	5	50	153	Greece	hP	l. b.	½	...	6	
1959	Bonduelli	...	...	...		hhP†	y.	1	...	4	These Herbaceous Plants are very beautiful, and are worthy of more extensive cultivation than has hitherto been bestowed upon them. S. Bonduelli has fine masses of yellow blossom. S. Halfordi is a beautifully compact plant, with large leaves and fine heads of blue flowers; good for conservatory or greenhouse decoration. S. incana is a charming plant forming a mass of bloom, the shape of the entire plant resembling an inverted basin. Sow all the varieties in a cold pit, and keep shaded until the plants appear; grow in well-drained pots, in a mixture of fibry sandy loam, peat, broken sandstone, &c. &c.
1960	formòsa	...	...	...	Europe	hP	pk.	...	5–10	4	
1961	Fortùni	...	...	...	China	hhP	y.	...	7–10	6	
1962	globulariæfòlia	...	...	...	Sicily	...	w.	...	5–9	6	
1963	Halfordi	...	...	...	gar. var.	gS	b.	2	7–9	1 0	
1964	incana	...	...	...	Egypt	hhP	pk.&w.	1	6–8	6	
1965	latifòlia	...	...	...	Siberia	hP	b.	...	5–7	6	
1966	lychnidifòlia	...	...	...	S. Europe	...	pk.	...	4–8	6	
1967	pseudo-Armèria	...	...	...	gar. var.	...	...	...	...	3	
1968	sareptina	...	...	...	S. Europe	...	...	...	...	6	
1969	sinuata	...	...	...	Levant	hhP†	l. o. y.	...	5–9	6	
1970	texana	...	...	...	Texas	hP†	b. & ro.	...	...	6	
1971	Tormentilla	...	...	...	Europe	...		...	...	6	
1972	trinervis	...	...	...		...		...	...	6	
1973	Stenactis bellidifòlia	19	53	98	California	...	p.	2	7–10	3	Common garden soil.
1974	speciòsa	...	...	...	...	...	...	...	...	3	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hight.	M. of Flow.	Price.		General Observations.
								feet		s.	d.	
1975	Sterculia platanifolia	22	37	83	China	gS	g.	30	6-7	3		Sow on heat.
1976	Stevia serrata	19	53	98	Mexico	hP	flsh.	1½	7-9	3		Good garden soil.
1977	Stipa capillata	3	26	123	Europe	hP†	ap.	2	7-8	3		Ornamental Grasses. S. pennata is the well-known Feather Grass: all the varieties are graceful.
1978	juncea	...	...	...	France	...	...	...	...	3		
1979	pennata	...	...	...	Britain	...	...	...	...	3		
1980	Streptocarpus Rexi	2	25	106	Cape G. Hope	sP	h.	½	1-12	1	0	Sow on heat.
1981	Styrax officinalis	10	...	193	Italy	hS	w.	12	7-8	3		Garden soil.
1982	Sutherlandia frutescens	17	45	132	Cape G. Hope	hhS	s.	3	6-7	6		Fine Shrubs, similar to Clianthus, and may be similarly treated.
1983	australis, *new*	...	...	...	...	...	...	...	...	1	0	
1984	Swainsonia alba	...	...	...	N. S. Wales	...	w.	2	7-9	6		These Shrubs are highly ornamental, both in foliage and blossom. Steep the seeds in water at 125° for six hours; then sow on gentle heat, and harden off for greenhouse, conservatory, or south wall in garden.
1985	alba violacea	...	...	...	gar. var.	...	v.	...	...	6		
1986	Greyana	...	...	...	N. S. Wales	...	p. & w.	...	7-8	6		
1987	lessertiæfolia	...	...	...	N. Holland	...	p.	...	6-8	6		
1988	Osborni	...	...	...	...	...	r. & y.	...	8-10	6		
1989	— grandiflora	...	...	...	...	...	...	...	...	6		
1990	rosea	...	...	...	N. S. Wales	...	ro.	...	7-9	6		
1991	Tagelia bituminosa	10	25	...	E. Indies	...	y.	3	...	6		
1992	Tagetes lucida	19	54	98	S. America	hhP	o.	...	7-10	3		Sow in heat, and transplant to borders in April.
1993	signata	...	...	...	Peru	hhA	y.	2	8-9	3		
1994	tenuifolia	...	...	...	...	...	...	...	...	3		
1995	Tecoma stans	15	59	79	America	gS	...	12	7-9	6		Usual greenhouse treatment.
1996	Telekia cordifolia	19	54	98	Hungary	hP	...	4	6-8	6		Good garden soil.
1997	Telephium Imperatii	5	28	159	S. Europe	...	w.	½	...	6		
1998	Templetonia glauca	17	45	132	N. Holland	gS	ro.	3	4-5	6		Rare and fine: same culture as for Swainsonia.
1999	retusa	...	...	...	...	...	r.	2	3-6	6		
2000	Teucrium flavum	14	58	130	S. Europe	gP	...	...	7-9	6		Sow in pans, and transplant.
2001	Thalia dealbata	1	25	88	S. Carolina	hP	b.	4	...	6		Aquatic.
2002	Thuja articulata	21	49	99	Barbary	hhT	ap.	15	2-5	6		These are very handsome Trees, and are ornamental from their earliest growth; they are in general hardy, and in a soil made of loam and peat flourish luxuriantly: they may be grown as pot plants to ornament conservatories or balconies; in the general garden also they are very attractive. We can cordially recommend all the varieties to the admirers of compact evergreen Shrubs.
2003	Bermudiana	...	...	...	Bermuda	...	...	6	5-6	6		
2004	Biota compacta	...	...	...	Japan	...	...	5	2-5	6		
2005	— aurea	...	...	...	...	...	...	...	...	1	0	
2006	— hybrida	...	...	...	S. Europe	...	...	10	...	6		
2007	— intermedia	...	...	...	Japan	...	...	15	...	6		
2008	— orientalis	...	...	...	China	...	...	25	5-6	6		
2009	— — aurea	...	...	...	...	...	...	3	...	1	0	
2010	— plicata	...	...	...	NootkaSound	...	...		...	6		
2011	— pyramidalis	...	...	...	Italy	...	...	20	...	6		
2012	— strieta	...	...	...	China	...	...	15	...	6		
2013	— tartarica	...	...	...	Tartary	...	...		2-3	6		
2014	nepalensis	...	...	...	Nepaul	hT	...	20		6		
2015	Thunbergia alata**	14	59	63	E. Indies	gA	bff. & d.	4	5-9	4		Extremely ornamental Climbers, much admired, very free bloomers. Sow in strong hot-bed in April, after moistening the seed; pot first into sandy loam and peat, afterwards use a good portion of poor lime-rubbish, which will cause masses of bloom to be thrown up. Good for trellis, stems of trees, &c., in a greenhouse, or out of doors in summer in a warm situation: water freely.
2016	— alba**	...	...	...	gar. var.	...	w. & d.	...	...	4		
2017	— americana**	...	...	...	...	...	buff	...	...	4		
2018	— aurantiaca**	...	...	...	...	...	o.	...	...	4		
2019	— Bakeri**	...	...	...	...	...	w.	...	...	4		
2020	— flava**	...	...	...	...	...	y.	...	...	4		
2021	— Fricri**	...	...	...	...	...	w.	...	...	4		
2022	— intus candida**	...	...	...	...	...	...	...	...	4		
2023	— mesolenca**	...	...	...	...	...	o. & y.	...	...	4		
2024	— sulphurea**	...	...	...	...	...	sul.	...	...	4		
2025	fragrans**	...	...	...	E. Indies	...	w.	...	...	1	0	
2026	lamiifolia**	...	...	...	...	...	...	...	...	1	0	
2027	Tithonia tagetiflora	19	55	98	Vera Cruz	hhPb	o.	1	7-10	4		Light rich soil.
2028	Tournefortia heliotropioides	5	25	91	Buenos Ayres	sS	pa. li.	2	5-6	1	0	Splendid Stove Shrub.
2029	Trachelium caeruleum	...	...	87	Italy	hBf	b.	...	7-9	3		Pretty Campanula-like plants.
2030	— album	...	...	...	...	...	w.	...	...	3		
2031	Tricholaena rosea [brina	3	26	123	S. Europe	hA	ap.	...	7-8	6		Ornamental Grass.
2032	Trichosanthes colu-	21	49	104	E. Indies	hhA	w.	4	6-9	6		True Serpent Cucumber.
2033	Trifolium arvense	17	45	132	N. Africa	hA	ap.	1	...	6		Ornamental Grasses. T. arvense, see list of Novelties, page 114.
2034	atropurpureum	...	...	...	Italy	...	p.	..	...	3		
2035	aurantiacum	...	...	...	...	...	y.	...	...	3		
2036	pannonicum [des	...	...	..	Hungary	...	w. & y.	...	6-7	3		
2037	Tripsacum dactyloi-	21	38	123	Virginia	hP	ap.	4	8-9	6		
2038	Tritoma Uvaria	6	25	125	Cape G. Hope	hPb	s. & o.	2	...	1	0	Superb bulbous plant: sow in pans.
2039	Tropæolum Jarratti**	8	...	182	Santiago	gPb	s. & y.	12	7-9	1	0	These elegant climbing plants, which are yearly rising in repute, are very beautiful. The brilliance of the Lobbianum varieties renders them invaluable adjuncts to the greenhouse, conservatory, and general flower-garden. General treatment: sow under glass in April, protect from frost, and plant out in May; the tuberous-rooted varieties require greater care and stronger heat, with a rich, open soil.
2040	Lobbianum**	...	...	...	Columbia	hhA	o. & s.	6	...	4		
2041	— *Caroline Schmidt***	...	...	...	gar. var.	...	s.	...	...	4		
2042	— *Lilli Schmidt***	...	...	...	...	...	...	...	...	4		
2043	— *Brilliant***	...	...	...	...	...	d. s.	...	...	6		
2044	— *Schultzi***	...	...	...	...	...	...	...	...	6		
2045	— Cavour**	...	...	...	...	...	o. spot.	...	...	1	0	
2046	— Comte de Morny**	...	...	...	...	...	stri.	...	...	1	0	
2047	— Garibaldi**	...	...	...	...	...	s. spot.	...	...	1	0	
2048	— Géant d. Batailles**	...	...	...	...	...	car.	...	...	1	0	

No.	Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght. feet	M. of Flow.	Price. s.d.	General Observations.
2049	[Eugenie** Tropæolum Lobb., Imp.	8	25	182	gar. var.	hhA	var.	6	7–9	1 0	T. peregrinum, or *Conory-bird Creeper*, must not be crowded with other plants, otherwise it will not succeed well. T. minus and varieties are good for edgings. T. Brilliant and Schultzi have rich scarlet flowers, with dark foliage, the contrast being strikingly effective. T. Cavour, *fine brilliant red, bordered with yellow.* T. Impératrice Eugénie, *finely formed, fine clear red, spotted and striped with yellow.* T. pentaphyllum *makes an elegant out-door climber, with trefoil foliage and handsome bloom.* For general observations on the description and cultivation see page 33. The varieties under T. majus are better known as improved varieties of the tall Nasturtion. T. Scheuermannianum is of a very fine cream-colour with crimson blotches. T. carneum is delicately flamed; and the new bronze variety is a most curious plant.
2050	— *Monsieur Colmet***	...	...	...	...	...	y.&car.	...	...	1 0	
2051	— *Napoléon III.***	...	...	...	...	...	ver.str.	...	...	1 0	
2052	— *Perroguanum***	...	...	...	...	...	s.&blk.	...	...	1 0	
2053	— Pres. Davis**	...	...	...	...	...	car.&y.	...	...	1 0	
2054	— *Queen Victorio***	...	...	...	...	...	stri.	...	...	1 0	
2055	— Roi des Noirs**	...	...	...	...	...	blk.	...	...	1 0	
2056	— *Triom. de Gand***	...	...	...	...	...	s.	...	...	6	
2057	Moritziànum**	...	...	...	Cumana	gPb	y. & r.	...	7–8	1 0	T. pentaphyllum *makes an elegant out-door climber, with trefoil foliage and handsome bloom.* For general observations on the description and cultivation see page 33. The varieties under T. majus are better known as improved varieties of the tall Nasturtion. T. Scheuermannianum is of a very fine cream-colour with crimson blotches. T. carneum is delicately flamed; and the new bronze variety is a most curious plant.
2058	pentaphýllum**	...	...	...	Buenos Ayres	...	r.g.&p.	4	7–9	6	
2059	speciòsum**	...	...	...	Chiloe	hhP†	s.	10	6–9	1 0	
2060	tricolor**	...	...	...	Valparaiso	gPb	s. & p.	12	...	1 0	
2061	majus, *new bronze***	...	...	...	gar. var.	hA	dark.	10	6–10	6	
2062	— Scheuermanniànum**	...	...	...	...	...	spot.	...	...	3	
2063	— — carneum**	...	...	...	...	...	var.	...	...	6	
2064	minus	..	...	...	Peru	...	o. & y.	½	...	3	
2065	— coccíneum	...	...	...	gar. var.	...	p.	...	...	6	
2066	peregrinum**	...	...	...	Peru	hhA	y.	10	...	6	
2067	Tuckermannia speciòsa	19	54	98		hA	...	2	...	3	Good garden soil.
2068	Tweedia cærùlea**	2	26	175	Buenos Ayres	hhP†	b.	3	7–10	6	Pretty Climber.
2069	Unìola latifòlia	3	...	123	Brazil	gS	pk.		6–7	6	Ornamental Grass.
2070	Unòna lævigàta [ceum	13	35	68	E. Indies	...	w.	5		6	Greenhouse treatment.
2071	Venidium calendula-	19	56	98	Cape G. Hope	hhA	s.	1	7–8	3	Fine bedding plant.
2072	Verbena Aublètia	14	59	187	N. America	...	pk.	...	...	6	The Verbena is deservedly a universal favourite; the seed of the mixed varieties No. 2082 is saved only from the finest flowers. Treat as tender Annuals: sow in sandy loam and leaf-mould in March; give bottom heat to prevent damping, and prick off into border in May, in good rich soil.
2073	bononiensis	...	...	...	Buenos Ayres	...	b.	...	7–9	6	
2074	citriodòra	...	...	...	Chili	gS	l. p.	3	5–7	1 0	
2075	Drummondi	...	...	...	Texas	hP	li.	1½	7–8	3	
2076	pulchella	...	...	...	Buenos Ayres	...	...	...	...	3	
2077	— violàcea	...	...	...	...	hhP	v.	1	6–9	3	
2078	scarlet	...	...	...	hybrid	...	s.	...	6–10	6	
2079	teucrioides	...	...	...	...	...	w.	...	6–9	6	
2080	venòsa	...	...	...	Buenos Ayres	...	ro.	2	5–9	3	
2081	veronicæfòlia	...	...	...	Mexico	hA	b.	¼	7–8	3	
2082	finest mixed [sis	...	...	...	hybrids	hhP	div.	1	6–10	1 0	
2083	Vernonia noveboracen-	19	53	98	N. America	hP	p.	6	9–11	1 0	Fine ornamental-flowering Shrub.
2084	Verónica amethystìna	2	59	175	S. Europe	...	b.	4	7–9	6	A very ornamental race of Herbaceous Plants, elegant in foliage, graceful in habit, and cheerful in bloom, and look well when planted singly: several of the varieties we now offer are seldom to be obtained in seed. V. syriaca, if sown early, forms an extremely pretty edging for small beds. All the varieties may be sown in the open borders; but V. syriaca is best raised on a little heat and then transplanted.
2085	cáucàsica	...	...	...		...			...	6	... ...
2086	Delfossi	...	...	...		...			...	6	
2087	Hendersòni	...	...	...		...			...	6	... ...
2088	hy'brida	...	...	...	England	...	b.	1	...	6	
2089	— liabandi	...	...	...	...	...	...	...	...	6	
2090	imperiàlis	...	...	...		...			...	6	
2091	incisa	...	...	...	Siberia	...	b.	2	6–8	3	
2092	latifòlia	...	...	...	Austria	...	w. & b.	1	5–6	6	
2093	Lindleyàna	...	...	...	N. Zealand	hhP	w.	3	...	6	
2094	meldensis	...	...	...		hP				6	
2095	speciòsa	...	...	...		...				6	
2096	spicàta	...	...	...	England	...	b.	1	7–9	3	
2097	— alba	...	...	...	...	...	w.	...	...	3	
2098	syriaca	...	...	...	Syria	hA	b. & w.	¼	...	6	
2099	— alba	...	...	...	...	...	w.	...	...	6	
2100	variegàta	...	...	...		hP			...	6	
2101	Verschaffelti	...	...	...		...			...	6	
2102	violàcea purpùrea	...	...	...		...	v.	2	...	6	
2103	Vesicaria polyantba	15	60	103	Europe	...	y.	1	4–6	6	Good garden soil.
2104	Viburnum Tinus	5	28	90	S. Europe	hS	w.	4	3–12	3	
2105	Vicia sylvática	17	45	132	Britain	hP	w. & b.	6	7–8	3	
2106	Victòria règia	13	25	144	Amazon	sA	ro.&w.	aq.	6–9	2 6	The grandest known Aquatic.
2107	Viminària Priessi	10	...	132	N. Holland	gS	y.	3	...	6	Curious Greenhouse plants: light soil.
2108	denudàta	...	...	...		...	...	...	...	6	
2109	Vinca ròsea	5	...	69	E. Indies	...	r. & w.	1	4–10	4	Compact and handsome plants: sow on heat, and transplant to borders in summer.
2110	— alba	...	...	...	...	...	w.	...	...	4	
2111	Viola odoràta	...	...	188	Britain	hP	p.	½	3–5	6	Sow in pans, and prick out into pots.
2112	Viscària cœli-ròsa	10	30	91	Levant	hA	ro.	1	7–9	3	A genus of very pretty, profuse-blooming plants, adapted for growing either in beds, edgings, or clumps. Sow in good garden soil. V. Dunnetti and oculata nana are strongly recommended by the Royal Horticultural Society.
2113	— alba	...	...	...	gar. var.	...	w.	...	...	3	
2114	— nàna	...	...	...	...	...	ro.	½	...	3	
2115	oculàta	...	...	...	Algiers	...	pk. & r.	2	7–10	3	
2116	— Dunnetti	...	...	...	gar. var.	...	w.	...	...	6	
2117	— nana	...	...	...	...	...	pk.	⅔	...	6	
2118	— *new scarlet*	...	...	...	...	...	s.	2	...	6	
2119	Vitex Agnus-castus	14	59	187	Sicily	hhS	w. & b.	6	9–10	3	Sow on heat, and transplant.
2120	Vittadínia trilobàta	19	54	98	Australia	hA	li.	1	6–10	3	Australian Daisy: sow on open borders.
2121	cuneàta	...	...	...	...	...	...	...	...	3	
2122	Westringia grandiflòra	14	68	130	N. S. Wales	hhS			...	6	Light rich soil.

Scientific Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	General Observations.
No.							feet		*s. d.*	
2123 Westringia longifòlia [a	14	68	130	N. S. Wales	hhS	ro.& w.	2	8–9	6	Sow in light rich soil.
2124 **Whitlavia grandiflor**	5	25	91	California	hA	v.	1	6–10	3	One of the best of the Hardy Annuals.
2125 **Yucca gloriosa**	6	...	123	S. America	hhS	w. & g.	8	8–9	1 0	Magnificent Aloe-like plants. Sow on heat in light rich soil and transplant.
2126 aloifòlia	...	...	...	...	...	...	...	...	1 0	
2127 pinnatífida	...	...	...	...	...	...	...	...	1 0	
2128 Zamia caffra	21	48	105	Cape G. Hope	gP	ap.	3		1 0	Very curious: usual greenhouse treatment.
2129 Zauschnèria califórnica	8	25	146	California	hhP†	s.	1	6–10	1 0	Fine scarlet Salvia-like plant.
2130 Zemœna glauca									6	Usual greenhouse treatment.
2131 Zinnia élegans, *mixed*	19	54	98	Mexico	hhA	div.	2	6–9	6	The Zinnia is one of the most brilliant of Annuals, and has long been a general favourite. No. 2142, "**mixed double varieties**" are immense improvements on the single, and are perhaps the finest introductions for many years. The seed we offer has been saved from our original Indian importation, and is gathered from the best double flowers only. Sow in mild hot-bed in April, pot off into an airy situation, and transplant to inch borders in May.
2132 — alba	...	...	...	gar. var.	...	w.	...	...	4	
2133 — aurantìaca	...	...	...	...	...	o.	...	...	4	
2134 — coccínea	...	...	...	...	...	s.	...	...	4	
2135 — — màjor	...	...	...	...	...	...	...	...	4	
2136 — flàva	...	...	...	...	...	y.	...	...	4	
2137 — kermesìna	...	...	...	...	...	c.	...	...	4	
2138 — minìata	...	...	...	...	...	car.	...	...	4	
2139 — purpùrea	...	...	...	...	...	p.	...	...	4	
2140 —ròsea	...	...	...	...	...	ro.	...	...	4	
2141 — sulphùrea	...	...	...	...	...	sul.	...	...	4	
2142 **choicest double**	...	...	...	India	...	div.	3	...	1 0	

FLOWERS HAVING POPULAR NAMES.

Under this heading we have specified the various flowers under the names by which they are generally known, to which we have also affixed the Scientific Names, to show the genus to which they belong; and as most of the kinds are of such a nature as will with ordinary care succeed in almost any soil or situation, the remarks on culture, soil, &c., will necessarily be brief.

Popular Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght.	M. of Flow.	Price.	*Scientific Name.*	*Culture, Soil, &c.*
No.							feet		*s.d.*		
2143 Aster, **Bouquet**	19	54	98	gar. var.	hhA	div.	2	7–10	1 0	*Aster chinensis ramòsus*	... ...
2144 Chinese, mixed	...	...	...	China	...	...	...	...	3	*chinensis, pl. var.*	
2145 **Cockade,** mixed	...	...	...	gar. var.	...	...	...	...	1 0	*— corònis oculàtus*	... ...
2146 dwarf	...	...	...	...	...	...	1½	...	6	*— nànus*	
2147 **Emperor,** giant	...	...	...	...	...	p.	2	...	1 0	*— imperiàlis giganteus*	... ...
2148 German, quilled, m.	...	...	...	...	...	div.	...	...	6	*— fistulòsus, pl. var.*	
2149 **Globe,** mixed	...	...	...	...	...	...	...	...	6	*— globulàris, pl. var.*	
2150 **La Superbe**	...	...	...	...	...	ro.	...	...	1 0	*— superbus*	For culture, soils, &c., see page 3.
2151 **Peony-flowered**	...	...	...	...	...	div.	...	...	1 0	*— pæoniæflòrus, pl. v.*	
2152 **Perfection,** mix.	...	...	...	...	...	...	...	...	1 0	*— incomparàbilis*	
2153 **Porcupine,** carm.	...	...	...	...	...	car.	...	...	1 0	*— spicàlus miniàlus*	... ...
2154 — rose	...	...	...	...	...	ro.	...	...	1 0	*— — ròscus*	
2155 pyramidal	...	...	...	...	...	div.	...	...	6	*— pyramidàlis, pl. var.*	... ...
2156 Ranunculus-flow'd.	...	...	...	...	...	...	...	...	6	*— ranunculæflòrus*	
2157 very dwarf	...	...	...	...	...	...	1	...	6	*— nanissimus, pl. var.*	... ...
2158 Auricula, fine Alpine	5	25	160	Switzerland	hP	p.	½	5–7	6	*Primula Auricula, pl. var.*	Sow on gentle heat.
2159 finest prize	...	...	...	gar. var.	fP	div.	...	...	2 6	*Auricula eximia*	
2160 Balsam, finest double	...	...	76	E. Indies	tA	...	2	6–9	6	*Balsàmina hortensis fl. pl.*	... ...
2161 **Camellia,** mixed	...	...	...	gar. var.	...	...	...	...	6	*hortensis Camelliæflora*	
2162 dwarf, mixed	...	...	...	...	...	...	1	...	6	*— nàna, pl. var.*	For culture, soil, &c., see page 5.
2163 Rose-flowered, m.	...	...	...	...	...	...	2	...	6	*— rosæflora, pl. var.*	
2164 — Isabel	...	...	...	...	...	ro.	...	...	6	*— — Isabel*	
2165 — orange	...	...	...	...	...	or.	...	...	6	*— — aurantiaca*	... ...
2166 Belvedere (Cypress)	6	26	94	Britain	hA	ap.	1½	...	3	*Kochia scopària*	Common garden soil.
2167 Canary Creeper	8	25	182	Peru	hhA	y.	10	6–10	6	*Tropæolum peregrìnum*	
2168 Candytuft, fragrant	15	66	103	Crete	hA	w.	1	5–8	3	*Ibèris odoràta*	
2169 purple	...	...	...	S. Europe	...	p.	...	...	3	*umbellàta*	
2170 new crimson	...	...	...	gar. var.	...	c.	...	...	3	*— kermesìna*	Among the showiest of Hardy Annuals: sow in good garden soil.
2171 Rocket	...	...	...	S. Europe	...	w.	...	...	3	*— coronària*	
2172 rose	...	...	...	gar. var.	...	ro.	...	...	3	*— ròsea*	
2173 white	...	...	...	England	...	w.	...	...	3	*amàra*	
2174 Canterbury Bell, pur.	5	25	87	Germany	hP†	p.	2½	...	3	*Campánula Mèdium*	... ...
2175 white	...	...	...	gar. var.	...	w.	...	...	3	*Mèdium alba*	
2176 double blue	...	...	...	...	...	b.	...	...	3	*— flòre plèno cærùlea*	Same treatment as Campanula.
2177 — lilac	...	...	...	...	...	li.	...	...	3	*— — lilacina*	
2178 — white	...	...	...	...	...	w.	...	...	3	*— — alba*	
2179 Capsicum, mixed	...	...	178	India	hhA	f. var.	2	...	6	*Capsicum annuum, pl. v.*	Sow on heat.
2180 Carnation, double	10	26	91	England	hP	div.	...	...	1 0	*Dianthus Caryophyllus*	For culture see Dianthus.
2181 **choicest double**	...	...	...	gar. var.	...	...	...	...	2 6	*Caryophyllus eximius*	
2182 **— perpetual**	...	...	...	...	...	...	...	3–10	2 6	*— semperflorens*	

No.	Popular Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght. feet	M. of Flow.	Price. s. d.	Scientific Name.	Culture, Soil, &c.
2183	Catchfly, red	10	28	91	England	hA	r.	1	6-9	3	*Silène Armèria rùbra*	Common garden soil.
2184	new pink	...	...	...	...	...	pk.	...	...	3	*ròsea*	
2185	white [lor	...	...	...	...	...	w.	...	...	3	*alba* [*lum*	
2186	Chrysanthemum trico-	19	54	98	Barbary	...	y.br.w.	...	...	3	*Chrysanthemum carinà-*	Very showy Annuals; grow in any good garden soil.
2187	tricolor, Burridge's	...	...	...	gar. var.	...	c. & w.	...	...	3	*carinàtum Burridgi*	
2188	— improved	...	...	...	...	...	...	...	...	6	— — *melior*	
2189	— venustum	...	...	...	...	...	w. & c.	...	...	3	— *venustum*	
2190	— yellow	...	...	...	Barbary	...	y.	...	...	3	— *flàvum*	
2191	— double white	...	...	...	Sicily	...	w.	2½	...	3	— *album plenum*	
2192	— — yellow	...	...	...	...	...	y.	...	...	3	— *flavum plenum*	
2193	— — quilled white	...	...	...	gar. var.	...	w.	...	...	3	— *fistulòsum album*	
2194	Clary, purple	10	25	130	S. Europe	...	p.	1	...	3	*Salvia Horminum pur.*	Sow in good garden soil.
2195	red	...	...	...	gar. var.	...	r.	...	...	3	*rùbra*	
2196	white	...	...	...	...	...	w.	...	...	3	*alba*	
2197	Cockscomb, dwarf cr.	5	...	64	Asia	tA	c.	...	...	4	*Celòsia cristàta nàna*	Sow in hot-bed.
2198	Columbine, double	13	30	162	Britain	hP†	...	2	6-8	3	*Aquilègia fl. vulgàris pl.*	Garden soil.
2199	Convolvulus major, m.	5	25	100	America	hhA	...	10	7-10	6	*Ipomœa purpùrea, pl.var.*	... ...
2200	major, splendid, m.	...	...	...	gar. var.	...	...	...	...	1 0	*purpùrea eximia*	
2201	— blue	...	...	...	...	...	b.	...	...	4	— *cærùlea*	For the culture of these beautiful flowers see half-hardy varieties of Ipomæa.
2202	— crimson	...	...	...	...	...	c.	...	...	4	— *kermesìna*	
2203	— rose	...	...	...	...	...	ro.	...	...	4	— *ròsea*	
2204	— striped	...	...	...	...	...	stri.	...	...	4	— *striàta*	
2205	— violet	...	...	...	...	...	v.	...	...	4	— *violàcea*	
2206	— white	...	...	...	...	...	w.	...	...	4	— *alba*	... ...
2207	minor	...	...	...	S. Europe	hA	b.	1	6-10	3	*Convolvulus tricolor*	
2208	— dark purple	...	...	...	gar. var.	...	d. p.	...	...	4	*tricolor atropurpùreus*	... ...
2209	— large-flowered	...	...	...	...	...	b.	...	...	3	— *grandiflòrus*	
2210	— striped	...	...	...	...	...	stri.	...	...	3	— *striàtus*	Extremely showy; grow well in any good garden soil.
2211	— white [strosus	...	...	...	...	...	w.	...	...	3	— *albus*	
2212	— tricolor mon-	...	...	...	...	...	b.	...	...	1 0	— *monstròsus*	
2213	— subcæruleus	...	...	...	...	...	lav.	...	...	6	— *subcærùleus*	
2214	— double white	...	...	...	...	...	w.	...	...	6	— *albus plenus*	... ...
2215	— elegans	...	...	...	...	...	d. v.	...	...	6	— *élegans*	
2216	Cowslip, fine mixed	...	...	160	Britain	hP†	div.	¾	5-8	3	*Prímula elàtior, pl. var.*	Common soil.
2217	Cyanus, fine mixed	19	55	98	...	hA	...	1½	6-9	3	*Centaurea Cyànus, pl.var.*	Showy Annuals; grow in any garden soil.
2218	dark purple	...	...	...	...	...	d. p.	...	...	3	*Cyànus atropurpùrea*	
2219	new rose	...	...	...	...	...	ro.	...	...	3	— *ròsea nòva*	
2220	— sky-blue	...	...	...	...	...	li. b.	...	...	3	— *cærùlea nòva*	
2221	— striped	...	...	...	...	...	stri.	...	...	3	— *striàta nòva*	
2222	Egg Plant, purple	5	25	178	Arabia	hhA	p. fr.	2	...	3	*Solànum ovígerum*	Sow in heat and plant out.
2223	white	...	...	...	...	..	w. fr.	...	...	3	*ovígerum album*	
2224	Everlasting Flowers	19	54	98	div.	hP†	div.	...	7-8	6	*Helichrysum, sp. et var.*	See Helichrysum.
2225	Flos Adonis	13	35	162	S. Europe	hA	c.	...	7-9	3	*Adònis æstivàlis*	Good garden soil.
2226	Forget-me-not	5	25	81	Britain	...	b. & y.	¾	...	3	*Myosòtis palustris*	See Myosotis.
2227	Foxglove, finest mixed	14	59	175	Europe	...	div.	3	7-8	3	*Digitàlis, pl. sp. et var.*	See Digitalis.
2228	Fraxinella, red	10	25	168	S. Europe	hP	r.	...	6-8	3	*Dictamnus Fraxinella*	Common garden soil.
2229	white [red	...	...	...	...	...	w.	...	...	3	*Fraxinella alba*	
2230	French Honeysuckle,	17	45	132	Italy	hP†	s.	2	6-9	3	*Hedysàrum coronàrium*	Common garden soil.
2231	white	...	...	...	...	...	w.	...	..	3	*coronàrium album*	
2232	Geranium, finest m.	16	42	119	hybrid	gS	div.	3	...	1 0	*Pelargònium hýbridum*	See Pelargonium.
2233	mixed scarlets	...	...	...	Cape G. Hope	hhS	s.	...	...	6	*zonàle, pl. var.*	
2234	Globe Amaranthus, p.	5	25	64	India	gA	p.	2½	7-9	3	*Gomphrèna globòsa purp.*	Sow on hot-bed, prick off, and grow in pots in rich sandy loam.
2235	flesh-coloured	...	...	...	...	...	flsh.	...	...	3	*globòsa carnea*	
2236	orange	...	...	...	Mexico	...	or.	...	...	3	— *aurantìaca*	
2237	variegated	...	...	...	India	...	var.	...	...	3	— *variegàta*	
2238	white	...	...	...	...	...	w.	...	...	3	— *alba*	
2239	Globe Thistle	19	57	98	Austria	hP	l. b.	5	6-9	3	*Echinops sphærocéphalus*	Common soil.
2240	Gourd, Bottle, 2 var.	21	49	104	India	fA	w.	trai	7-9	6	*Cucúrbita Lagenària*	See Cucurbita.
2241	Hercule's Club	...	...	...	...	...	...	...	...	6	*Lagenària elàva Hercùlis*	
2242	new miniature	...	...	...	Java	...	y.	...	...	6	— *vittàta*	
2243	orange-shaped	...	...	...	Chili	...	...	...	...	6	*aurantìaca*	
2244	pear-shaped	...	...	...	...	...	...	...	...	6	*pyriformis*	
2245	Groundsel, American	19	54	98	Cape G. Hope	hA	div.	1	...	6	*Senècio élegans, pl. var.*	See Jacobæa.
2246	Hawkweed, red	...	53	...	Italy	...	r.	...	...	3	*Crèpis rùbra*	Showy Annuals; grow in any good garden soil.
2247	white	...	...	...	...	...	w.	...	...	3	*rùbra alba*	
2248	yellow	...	...	...	France	...	y.	...	...	3	*Tolpis barbàta*	
2249	silvery	...	...	...	...	...	sil.	...	...	3	*barbàta argentea*	
2250	Heartsease, extra-fine	5	25	188	Britain	hP†	div.	½	6-10	1 0	*Viola tricolor hy'brida*	Light rich soil.
2251	— new French	.	...	...	...	...	...	...	...	1 0	*var. gallicæ novæ*	
2252	Hollyhock, Chinese, c.	16	48	137	China	hA	c.	2	7-9	3	*Althæa chinensis, kerm.*	Good garden soil.
2253	new prize, mixed	...	...	...	gar. var.	hP	div.	6	6-9	1 0	*ròsea nòva eximia*	
2254	Honesty, pur. & white	15	60	103	Germany	hB†	p. & w.	3	5-7	3	*Lunària biennis, 2 sp.*	Common soil.
2255	Ice Plant	12	27	113	Greece	...	w.	...	7-8	3	*Mesembry. crystallìnum*	Good soil.
2256	Jacobæa, mixed	19	54	98	Cape G. Hope	hA	div.	1	7-9	5	*Senècio élegans, pl. var.*	

No.	Popular Name.	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hight.	M. of Flow.	Price.	Scientific Name.	Culture, Soil, &c.
								feet		s.d.		
2257	Jacobæa, dble crimson	19	54	98	gar. var.	hA	c.	1	7–9	3	*Senècio élegans kerm.*	Sow in slight hot-bed and transplant in May, or sow in open borders in April.
2258	— purple	...	...	...	...	...	p.	...	...	3	*— purpùreum*	
2259	— red	...	...	...	Cape G. Hope	...	r.	...	...	3	*— rùbrum*	
2260	— rose	...	...	...	gar. var.	...	ro.	...	...	3	*— ròseum*	
2261	— violet	...	...	...	...	...	v.	...	...	3	*— violàceum*	
2262	— white	...	...	...	...	...	w.	...	...	3	*— album*	
2263	Jacob's Ladder, blue	5	25	154	Britain	hP	b.	...	6–8	3	*Polemònium cærùleum*	Common garden soil.
2264	Larkspur, dwarf, m.	13	28	162	Switzerland	hA	div.	...	7–9	3	*Delphínium Ajàcis hùmile*	Handsome hardy Annuals; grow in any good garden soil.
2265	dwarf German, m.	...	...	...	gar. var.	...	...	...	...	6	*Ajàcis Germánicum*	
2266	tall Stock-fld.	...	...	...	...	...	...	...	...	6	*— mathiolæflora*	
2267	dwarf do.	...	...	...	...	...	...	...	...	6	*— — nana*	
2268	Hyacinth-fld., mix'd	...	...	...	Europe	...	...	...	...	6	*— hyacinthoìdes*	
2269	Pyramidal, mixed	...	...	...	gar. var.	...	...	1¼	...	6	*clùtius pyramidàle*	L. tricolor elegans is the finest Larkspur grown.
2270	German, branch., m.	...	...	...	England	...	...	2	...	6	*Consólida, pl. var.*	
2271	tricolor elegans	...	...	...	hybrid	...	3-col.	...	...	6	*tricolor élegans*	
2272	Lavatera, red	16	48	137	S. Europe	...	r.	3	7–8	3	*Lavatèra trimestris*	Common garden soil.
2273	white	...	...	...	...	...	w.	...	...	3	*trimestris alba*	
2274	Love Grass	3	26	123	...	...	ap.	...	...	3	*Eragrostis élegans*	See Agrostis.
2275	Love-lies-bleeding, red	21	40	64	E. Indies	...	r.	2	...	3	*Amaranthus caudàtus*	Common garden soil.
2276	white	...	...	...	...	...	w.	...	...	3	*caudàtus albus*	
2277	Lupines, Dutch blue	17	45	132	Buenos Ayres	...	b.	...	7–9	3	*Lupinus canaliculàtus*	... ...
2278	large blue	...	...	...	S. Europe	...	...	...	...	3	*hirsùtus*	
2279	— rose	...	...	...	...	...	ro.	...	...	3	*pilòsus*	Grow in any good garden soil.
2280	— white	...	...	...	...	...	w.	...	...	3	*— albus*	
2281	small blue	...	...	...	...	...	b.	1½	...	3	*angustifolius*	
2282	white	...	...	...	Levant	...	w.	...	...	3	*albus*	
2283	yellow	...	...	...	Sicily	...	y.	...	...	3	*lùteus*	... ...
2284	Marigold, French, m.	19	54	98	Mexico	hhA	div.	...	7–10	6	*Tagètes pátula, pl. var.*	
2285	French, dwarf	...	...	...	gar. var.	...	d. b.	1	...	6	*pátulu nàna*	... ...
2286	— new orange	...	...	...	...	...	o.	1½	...	6	*— aurantìaca nòva*	
2287	— superb striped	...	...	...	...	...	stri.	...	...	6	*— striàta superba*	The greatest care has been bestowed upon our Marigolds, and the seed is saved only from the finest double flowers. Sow on heat and transplant.
2288	— miniature	...	...	...	...	...	br.	½	...	6	*— nanissima*	
2289	— — new striped	...	...	...	...	...	stri.	...	...	6	*— — striàta nòva*	
2290	— — new yellow	...	...	...	...	...	y.	...	...	6	*— — flàva nòva*	
2291	African, mixed	...	...	...	Mexico	...	div.	2	...	6	*erecta, pl. var.*	
2292	— lemon	...	...	...	...	...	lem.	...	...	6	*— citrìna*	
2293	— orange	...	...	...	...	...	o.	...	...	6	*— aurantìaca*	
2294	Cape	...	...	...	Cape G. Hope	hA	w. & p.	...	...	6	*Calèndula plaviàtis*	
2295	hybrid	...	...	...	...	...	w.	...	7–8	6	*hy'brida*	... ...
2296	superb garden	...	...	...	S. Europe	...	o.	...	...	6	*officinàlis saperba*	
2297	Marvel of Peru, m.	5	25	143	India	hhPb	div.	...	6–9	3	*Mirábilis Jálapa, pl. var.*	... ...
2298	gold-striped	...	...	...	...	...	stri.	...	...	3	*Jálapa aurea striàta*	
2299	red	...	...	...	...	...	r.	...	...	3	*— rùbra*	These densely-foliaged and profuse-blooming Perennials flower the first year: sow in hot-bed or in open borders in May.
2300	— striped	...	...	...	...	...	stri.	...	...	3	*— rùbra striùta*	
2301	scarlet	...	...	...	...	...	s.	...	...	3	*— coccínea*	
2302	silver-striped	...	...	...	...	...	stri.	...	...	3	*— argentea striàta*	
2303	white	...	...	...	...	...	w.	...	...	3	*— alba*	
2304	yellow	...	...	...	...	...	y.	...	...	3	*— flàva*	
2305	sweet-scented	...	...	...	Mexico	...	w.	...	...	3	*longiflora*	
2306	— purple	...	...	...	...	...	p.	...	...	3	*— purpùrea*	... ...
2307	Mignonette, oz. 6*d.*	11	28	163	Egypt	hA	buff	1	7–9	3	*Resèda odoràta*	Common garden soil.
2308	new, large, oz. 1*s.*	...	...	...	gar. var.	...	...	1½	...	3	*odoràta grandiflora*	
2309	Musk-Plant	14	59	175	Columbia	hhPt	y.	¾	...	3	*Mímulus moschàtus*	Good soil.
2310	Nasturtions, tall	8	25	182	Peru	hA	o.	6	...	3	*Tropæolum màjus*	Admirable for trellises and garden walls.
2311	tall carmine	...	...	...	gar. var.	...	car.	...	...	3	*màjus miniàtum*	
2312	— crimson	...	...	...	...	...	c.	...	...	3	*— kermesìnum*	
2313	— orange, new	...	...	...	...	...	o.	...	...	3	*— aurantìacum*	
2314	dwarf	...	...	...	Peru	...	s.	1	...	3	*— nànum*	The Tom Thumb varieties of Nasturtions are very beautiful, and make very showy bedding plants.
2315	— scarlet	...	...	...	gar. var.	...	...	...	...	3	*— — coccíneum*	
2316	**Tom Thumb**	...	...	...	...	...	...	¼	...	6	*— — Cartèri*	
2317	**— Beauty**	...	...	...	...	...	spot.	...	...	6	*— — Beauty*	
2318	**— crimson**	...	...	...	...	...	c.	...	...	6	*— — kermesìnum*	
2319	**— spotted**	...	...	...	...	...	spot.	...	...	6	*— — punctàtum*	
2320	**— yellow**	...	...	...	...	...	y.	...	...	6	*— — flàvum*	
2321	Palma Christi	21	49	112	E. Indies	hhA	buff	6	7–8	3	*Ricinus communis màjor*	Light rich soil.
2322	Pea, Lord Anson's	17	45	132	Cape Horn	hA	b.	...	...	3	*Láthyrus magellánicus*	Grow freely in good garden soil.
2323	Lord Anson's white	...	...	...	...	...	w.	...	...	6	*magellánicus albus*	
2324	Tangier	...	...	...	Barbary	...	s.	4	...	3	*tingitànus*	
2325	— striped	...	...	...	...	...	stri.	...	...	3	*— striàtus*	
2326	Pea, Sweet, lb. 3*s.*	...	...	...	divers	...	div.	6	5–10	3	*Láthyrus odoràtus, pl. v.*	These pretty flowers may be grown either in pots or borders, and admit of being forced well.
2327	black	...	...	...	Sicily	...	blk.	...	...	3	*odoràtus niger*	
2328	**blue-edged**	...	...	...	hybrid	...	b. & pk.	...	...	6	*— cærùl. marginàtus*	
2329	Painted Lady	...	...	...	Ceylon	...	ro. & w.	...	...	3	*— pictus*	
2330	purple	...	...	...	Sicily	...	p.	...	...	3	*— purpùreus*	

No.	*Popular Name.*	L.Cl.	L.O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght. feet	M. of Flow.	Price. s. d.	*Scientific Name.*	*Culture, Soil, &c.*
2331	Pea, purple-striped	17	45	132	Sicily	hA	stri.	6	5–10	3	*Láthyrus purp. striàtus*	These pretty flowers may be grown either in pots or borders, and admit of being forced well.
2332	scarlet	...	...	...	Ceylon	...	s.	...	...	3	*— coccíneus*	
2333	— striped	...	...	...	...	...	stri.	...	...	3	*— — striàtus*	
2334	white	...	...	...	...	...	w.	...	...	3	*— albus*	
2335	Persicaria, red	8	28	156	E. Indies	...	r.	4	...	3	*Polýgonum orientàle*	Common garden soil.
2336	white	...	...	...	...	...	w.	...	...	3	*orientàle album*	
2337	Picotee, double	10	26	91	England	hP	div.	2	...	1 0	*Dianthus Caryophýllus*	For culture, &c., see Dianthus.
2338	finest double	...	...	...	gar. var.	...	...	...	...	2 6	*Caryophyllus punct.*	
2339	Pink, double Garden	...	...	...	Europe	...	...	1	...	1 0	*moschàtus fl. pl.*	
2340	Polyanthus, extra fine	5	25	160	Britain	...	...	½	5–7	1 0	*Prímula clàtior polyantha*	Rich garden soil.
2341	new large yellow	...	...	...	...	...	y.	...	...	1 0	*— flàva nòva maxima*	
2342	Poppy, double mixed	13	...	149	England	hA	div.	2	7–8	3	*Papàver somníferum fl.pl.*	... ...
2343	double scarlet	...	...	...	...	...	s.	...	...	3	*somníferum coccíneum*	
2344	— striped	...	...	...	...	...	stri.	...	...	3	*— striàtum*	Well-known showy Annuals; grow freely in any good garden soil.
2345	— white	...	...	...	...	...	w.	...	...	3	*— album*	
2346	— new Peony	...	...	...	...	...	div.	...	...	3	*— pæoniæflòrum*	
2347	— new Ranunculus	...	...	...	...	...	...	...	...	3	*— ranunculiflòrum*	
2348	— dwarf French	...	...	...	...	...	...	1	...	3	*Rhœas*	
2349	— — scarlet	...	...	...	...	...	s.	...	...	3	*— coccíneum*	... ...
2350	Primrose, Chin., fring.	5	...	160	China	gP†	div.	...	10–7	1 0	*Prímula sinensis fimbriàta*	See Primula.
2351	Prince's Feather, large	21	40	64	Nepaul	hA	p.	3	7–8	3	*Amaranthus speciòsus*	Common garden soil.
2352	common	...	...	...	Virginia	...	...	2	...	3	*hypochondríacus*	
2353	Quaking Grass, large	3	26	123	Europe	...	ap.	1	...	3	*Bríza maxima*	Good garden soil.
2354	slender	...	...	...	England	....	...	...	...	3	*grácilis*	
2355	Rocket, purple	15	61	103	Europe	hP†	p.	1½	6–9	3	*Hésperis matronàlis*	Good garden soil.
2356	sweet	...	...	...	...	...	w.	...	...	3	*tristis*	
2357	Rose Campion, red	10	30	91	Italy	...	r.	2	6–8	3	*Lychnis coronària*	Common garden soil.
2358	white and rose	...	...	...	gar. var.	...	w.& ro.	...	...	3	*coronària albo-ròsea*	
2359	Scabious, dark purple	4	25	107	E. Indies	...	d. p.	...	6–9	3	*Scabiòsa atropurpùrea*	Handsome showy plants: sow on heat and transplant.
2360	new dwarf	...	...	...	...	hA	div.	1	...	3	*nàna nòva*	
2361	**new scarlet**	...	...	...	...	hP†	s.	2	...	6	*coccínea nòva*	
2362	finest German, m.	...	...	...	...	...	div.	...	...	6	*eximia, pl. var.*	
2363	Sensitive Plant	23	51	132	Brazil	gS	pk.	...	...	6	*Mimòsa pudìcu*	Sow on heat.
2364	Snowdrop	6	25		Britain	hPb	w.	½	1–3	6	*Galanthus nivàlis*	Light soil.
2365	Stock, German, ex. fine	15	61	103	S. Europe	hhA	div.	1	6–9	1 0	*Mathìola annua densiflòra*	
2366	German, crimson	...	...	...	gar. var.	...	c.	...	...	4	*annua kermesìna*	... ...
2367	— — dwf. Bouquet	...	...	...	...	...	...	...	...	6	*— nàna ramòsa*	
2368	— dark blue	...	...	...	...	...	d. b.	...	...	4	*— atrocærùlea*	
2369	— rose	...	...	...	...	...	ro.	...	...	4	*—ròsea*	
2370	— scarlet	...	...	...	...	...	s.	...	...	4	*— coccínea*	... ...
2371	— — **white**	...	...	...	...	...	w.	...	...	4	*— alba*	
2372	large-flowered	...	...	...	...	...	div.	...	...	6	*— grandiflòra, pl. v.*	
2373	Wallflower-lvd., m.	...	...	...	England	...	...	...	...	6	*— cheirifòlia (yræca)*	... ...
2374	intermediate	...	...	...	gar. var.	...	...	1¼	8–10	6	*— intermèdia, pl. var.*	
2375	— scarlet	...	...	...	...	...	s.	...	...	6	*— — coccínea*	
2376	— purple	...	...	...	...	...	p.	...	...	6	*— — purpùrea*	... ...
2377	— **Covent Gard.**	...	...	...	...	...	s.	...	...	1 0	*— — formòsa*	
2378	— — **white**	...	...	...	...	...	w.	...	...	1 0	*— — alba*	
2379	new miniature, m.	...	...	...	...	...	div.	½	6–9	6	*— pygmæa nòva, pl. v.*	For general observations on the culture of the Stock, see page 4.
2380	— scarlet	...	...	...	...	...	s.	...	...	6	*— — coccínea*	
2381	Ten-week **giant** sc.	...	...	...	...	hA	...	2	...	6	*— ramòsa gigántea*	
2382	— **giant** purple	...	...	...	...	...	p.	...	...	6	*— — gigan. purpùrea*	... ...
2383	— common mixed	...	...	...	S. Europe	...	div.	1¼	...	3	*— — pl. var.*	
2384	— — purple	...	...	...	gar. var.	...	p.	...	...	3	*— — purpùrea*	
2385	— — scarlet	...	...	...	...	...	s.	...	...	3	*— — coccínea*	... ...
2386	— — white	...	...	...	...	...	w.	...	...	3	*— — alba*	
2387	Brompton, mixed	...	...	...	England	hB	div.	3	5–7	6	*simplicicaulis, pl. var.*	... ...
2388	— purple	...	...	...	...	...	p.	...	...	3	*— purpùrea*	
2389	— scarlet	...	...	...	...	...	s.	...	...	3	*— coccínea*	
2390	— white	...	...	...	...	...	w.	...	...	6	*— alba*	... ...
2391	hybrid perpetual, m.	...	...	...	hybrid	...	div.	1½	...	4	*semperflorens hy'brida*	
2392	Imperial, mixed	...	...	...	...	hhP	...	...	...	6	*imperiàlis, pl. var.*	
2393	— crimson	...	...	...	gar. var.	...	c.	...	...	6	*— kermesìna*	... ...
2394	Sunflower, dwarf	19	55	98		hA	y.	3	...	3	*Helianthus annuus*	
2395	double tall	...	...	...	S. America	...	...	6	7–9	3	*annuus, fl. pl.*	... ...
2396	Californian	...	...	...	California	...	...	...	...	3	*— gigánteus*	Showy Annuals. The seeds good for Bees.
2397	**Leviathan**	...	...	...	gar. var.	...	...	10	...	6	*— monstròsus*	
2398	**new orange**	...	...	...	...	...	o.	6	...	6	*— aurantìacus nòvus*	... ...
2399	**Texan**	...	...	...	Texas	...	...	...	...	6	*— Texanus*	
2400	Sweet Alyssum	15	60	103	England	...	w.	½	7–10	3	*Alyssum marítimum*	Good garden soil.
2401	Sweet Briar	12	35	166	Britain	hS	pk.	4	5–7	3	*Rosa rubiginòsa*	Ditto.
2402	Sweet Sultan, purple	19	55	98	Persia	hA	p.	2	7–8	3	*Centaurea moschàta*	Very showy Annuals, sow in good garden soil.
2403	white	...	...	...	...	...	w.	...	...	3	*moschàta alba*	
2404	yellow	...	...	...	Levant	...	y.	...	...	3	*— suavèolens*	

No.	*Popular Name.*	L. Cl.	L. O.	N. O.	Native Country.	H. & Dur.	Col. of Fl.	Hght. feet	M. of Flow.	Price. s. d.	*Scientific Name.*	*Culture, Soil, &c.*
2405	Venus's Look.-glass,b.	5	25	87	S. Europe	hA	b.	½	6-8	3	*Campánula Spéculum*	Profuse-blooming Annuals; grow in any garden soil.
2406	blush	...	...	...	...	...	ro.	...	...	3	*Spéculum earnea*	
2407	white	...	...	...	...	...	w.	...	...	3	*— alba*	
2408	Venus's Navel-wort	...	...	81	Portugal	...	...	...	...	3	*Cynoglossum linifòlium*	Garden soil.
2409	Virginian Stock, red	15	61	102	S. Europe	...	r.	...	...	3	*Malcòmia marítima*	Common garden soil.
2410	new rose	...	...	...	gar. var.	...	ro.	...	...	3	*marítimaròsea*	
2411	— dwarf white	...	...	...	...	...	w.	¼	...	4	*— alba nàna*	
2412	white	...	...	...	S. Europe	...	...	½	...	3	*— alba*	
2413	Wallflower, blood	...	...	...	...	hP	r.	1½	3-6	3	*Cheiranthus Cheiri*	Same culture as the Brompton Stock. See page 4.
2414	dark red	...	...	...	gar. var.	...	d. r.	...	...	3	*Cheiri atrosanguineus*	
2415	purple	...	...	...	...	...	p.	...	...	3	*— purpùreus*	
2416	violet	...	...	...	...	...	v.	...	...	3	*— violàceus*	
2417	yellow	...	...	...	...	...	y.	...	...	3	*— flàvus*	
2418	double German,mix.	...	...	...	...	...	div.	1	...	1 0	*— flòre plèno, pl. var.*	
2419	Winter Cherry	5	25	178	S. Europe	hP†	w.	2½	6-8	3	*Phýsalis Alkekengi*	Common soil.
2420	Xeranthemum, purple	19	54	98	...	hA	p.	2	7-9	3	*Xeránthemum annuum*	Everlasting Flowers: for culture see Helichrysum.
2421	white	...	...	...	...	...	w.	...	...	3	*annuum album*	
2422	— new	...	...	...	N. Holland	...	...	...	...	3	*Helichrỳsum bracteàtum*	
2423	yellow	...	...	...	...	...	y.	...	...	3	*bracteàtum [album*	

Dwarf Annuals, by weight, for Bedding, Edging, or covering large banks.

		s.	d.
Bartonia aurea, *golden yellow*	per oz.	1	0
Calandrinia speciosa, *rose*	,,	1	0
Calliopsis bicolor nana, *crimson and yellow*	,,	1	0
Clarkia pulchella, *rose*	,,	0	9
pulchella alba, *white*	,,	0	9
Collinsia bicolor, *purple and white*	,,	0	9
bicolor alba, *white*	,,	1	0
Delphinium cardiopetalon, *blue*	,,	2	0
Diauthus atrorubens, *dark crimson*	,,	2	0
Erysimum Perowskianum, *orange*	,,	0	9
Eschscholtzia crocea, *orange*	,,	1	0
crocea alba, *white*	,,	1	0
Eucharidium grandiflorum, *pink*	,,	1	0
Eutoca viscida, *blue*	,,	1	0
Gilia tricolor, *variegated*	,,	0	6
Godetia insignis, *pink*	,,	1	0
roseo-alba, *white, spotted*	,,	1	0
Hibiscus africanus, *cream, bronze centre*	,,	1	0
Leptosiphon aureus, *golden yellow*	,,	2	6
densiflorus, *purple*	,,	0	9
densiflorus albus, *white*	,,	1	0
lutens, *sulphur-coloured*	,,	2	0
Linaria bipartita, *delicately variegated*	,,	1	6
Limnanthes grandiflora, *yellow and white*	,,	0	9
Lobelia gracilis, *blue*	,,	2	6
gracilis alba, *white*	,,	2	6

		s.	d.
Lupinus nanus, *blue*	per oz.	0	6
subcarnosus, *crimson and blue*	,,	2	0
venustus, *blue*	,,	1	0
Nemophila insignis, *blue*	,,	0	6
maculata, *white, spotted with purple*	,,	0	9
Nemesia compacta, *variegated*	,,	4	0
Nolana atriplicifolia, *blue and yellow*	,,	0	9
Phlox Drummondi, *mixed colours*	,,	4	0
Portulaca, *mixed colours*	,,	4	0
Saponaria calabrica, *rose*	,,	2	0
oecymoides	,,	6	0
Schizopetalon Walkeri, *white, fragrant*	,,	3	0
Silene pendula, *crimson*	,,	0	6
Viscaria oculata, *red and rose*	,,	1	0
Whitlavia grandiflora, *purple*	,,	2	0
Candytuft, *crimson*	,,	0	9
Convolvulus minor, *blue*	,,	0	6
minor, *dark purple*	,,	0	6
Indian Pink, *various colours*	,,	2	0
Larkspur, *dwarf German, mixed colours*	,,	1	6
Mignonette ..... per lb. 6*s.*	,,	0	6
new, large	,,	1	0
Pea, Sweet, *mixed colours* ..... per lb. 2*s.* 6*d.*	,,	0	3
Sweet Alyssum, *white*	,,	1	6
Venus's Looking-glass, *blue*	,,	1	0
Virginian Stock, *red*	,,	0	6

Carter's Scarlet Tom Thumb Nasturtion ..... per oz. **2s. 6d.**
New Dwarf Spotted Nasturtion ..... ,, **1s. 6d.**
True Crimson Linum grandiflorum ..... ,, **3s. 0d.**
Perilla nankinensis, ornamental foliage, rich purple bronze ..... ,, **2s. 0d.**

SHOWY FLOWERS ADVISABLE TO BE GROWN IN LARGE QUANTITIES.

		s.	d.
Antirrhinum (*Snapdragon*), *mixed colours*	per oz.	3	0
Cosmidium Burridgianum, *crimson bronze and yellow*	,,	1	6
Delphinium formosum, *richest blue and white*	,,	1	0
Dianthus barbatus (*Sweet William*), *mixed colours*	,,	1	0
Tropæolum peregrinum (*Canary-bird Creeper*)	,,	3	0
Zinnia elegans, *mixed colours*	,,	4	0
Convolvulus major, *mixed colours*	,,	1	0
do. do. *new striped*	,,	1	0
Larkspur, *mixed branching*	,,	1	0

		s.	d.
Lupines, *yellow*	per oz.	0	6
Nasturtions, TALL, *mixed colours*	,,	0	6
Sweet Pea, *black*	,,	0	6
do. *Painted Lady, rose and white*	,,	0	6
do. *scarlet*	,,	0	6
do. *white*	,,	0	6
Stock, 10-*week*, *mixed colours*	,,	1	6
Wallflower, *dark brown*	,,	1	0
do. *yellow*	,,	1	0

MIXED PACKETS OF FLOWER SEEDS.

For the convenience of those of our Customers who prefer a *mixed* variety of colours in the Flower Beds, &c., we subjoin the following, each packet of which comprises the best varieties of its kind.

Hardy Annuals.

No.			s.	d.
2424	Calliopsis	per packet	0	3
2425	Candytuft	„	0	3
2426	Clarkia elegans	„	0	3
2427	pulchella	„	0	3
2428	Collinsia	„	0	3
2429	Convolvulus minor	„	0	3
2430	Godetia	„	0	3
2431	Jacobæa	„	0	6
2432	Larkspur, *dwarf stock-flowered*	„	0	6
2433	*dwarf German*	„	0	6
2434	*branching*	„	0	6
2435	*tall stock-flowered*	„	0	6
2436	Lupinus, *commaa*	per packet	0	3
2437	*newest sorts*	„	0	6
2438	Nasturtions, *tall***	„	0	3
2439	*dwarf*	„	0	6
2440	Nemophila	„	0	3
2441	Poppy, *superb new*	„	0	3
2442	*dwarf French*	„	0	3
2443	Scabious, *German*	„	0	6
2444	Schizanthus	„	0	3
2445	Sweet Peas** per lb. 2*s.* 6*d.*	„	0	3
2446	Sweet Sultan	„	0	3
2447	Venus's Looking-Glass	„	0	3

Half-hardy Annuals.

2448	Anagallis, *splendid*	per packet	0	6
2449	Aster, German	„	0	6
2450	Globe	„	0	6
2451	new dwarf	„	0	6
2452	— Peony-flowered	„	1	0
2453	— Perfection	„	1	0
2454	Brachycome	„	0	3
2455	Convolvulus major**	„	0	6
2456	*splendid*, 20 *var.***	„	1	0
2457	Gaillardia	„	0	6
2458	Helichrysum, *Everlasting Flowers*	„	0	6
2459	Ipomœa**	„	0	6
2460	Lobelia, *dwarf*	per packet	0	6
2461	Marigold, French, *superb double*	„	0	6
2462	African, *superb double*	„	0	6
2463	Petunia, *finest, large flowers*	„	0	6
2464	Phlox Drummondi, *extra fine*	„	0	6
2465	Portulaca	„	0	6
2466	Salpiglossis	„	0	6
2467	Stock, *dwarf German*	„	0	6
2468	*new large-flowered*	„	0	6
2469	— *very dwarf*	„	0	6
2470	*intermediate*	„	0	6
2471	Zinnia elegans	„	0	6

Perennials, Biennials, and Shrubs.

2472	Anemone, *Pappy*	per packet	0	6
2473	Antirrhinum	„	0	6
2474	Aquilegia	„	0	6
2475	Auricula, *prize*	„	2	6
2476	Campanula	„	0	6
2477	Canterbury Bell	„	0	3
2478	Carnation, *extra fine*	„	2	6
2479	Chrysanthemum, *Chinese*	„	1	0
2480	Dahlia, *superb double*	„	1	0
2481	Daisy, *Belgian*	„	1	0
2482	Delphinium, *Chinese*	„	0	6
2483	*tall*	„	0	6
2484	Digitalis, *Foxglove*	„	0	3
2485	Gaillardia	„	0	6
2486	Heartsease, *Pansy, extra*	„	1	0
2487	Hollyhock, *prize*	„	1	0
2488	Indian Pink	per packet	0	6
2489	Lupinus, *newest*	„	0	6
2490	Mimulus, *dwarf*	„	0	6
2491	Œnothera, *dwarf*	„	0	6
2492	Pentstemon	„	0	6
2493	Phlox, *new French*	„	1	0
2494	Picotee, *extra fine*	„	2	6
2495	Polyanthus, *show flowers*	„	1	0
2496	Potentilla	„	0	6
2497	Rose, 50 *varieties*	„	2	6
2498	Stock, *Brampton*	„	0	6
2499	*Imperial*	„	0	6
2500	Sweet William, *Hunt's newest*	„	1	0
2501	Verbena, *newest hybrids*	„	1	0
2502	Wallflower, *single*	„	0	6
2503	*double*	„	1	0

Greenhouse Seeds.

2504	Acacia	per packet	0	6
2505	Balsam, *finest double*	„	0	6
2506	*Camellia*	„	0	6
2507	Calceolaria, 100 *var.*	„	1	0
2508	*new dwarf*	„	2	6
2509	Cineraria, *superb var.*	„	1	0
2510	Epacris, *superb*	„	2	6
2511	Erica, *superb*	„	2	6
2512	Fuchsia, *extra fine*	„	1	0
2513	Geranium, *finest*	„	1	0
2514	Helichrysum	per packet	0	6
2515	Heliotropium, *newest*	„	0	6
2516	Ipomœa**	„	0	6
2517	Kennedya**	„	0	6
2518	Lophospermum**	„	0	6
2519	Maurandya**	„	0	6
2520	Passiflora**	„	0	6
2521	Primula, *fringed*	„	1	0
2522	Thunbergia**	„	0	6
2523	Tropæolum Lobbianum, var.**	„	1	0

SELECT ASSORTMENTS OF ENGLISH AND CONTINENTAL FLOWER SEEDS.

For the accommodation of those of our Customers who wish for several varieties of a Flower, but who are at a loss to know the most desirable sorts to select, we annex the following; and in consideration of an *Assortment* of *several varieties of the same Flower* being taken, we have somewhat *reduced the prices* from those charged for *single packets*: each *Assortment* will contain the most *suitable* and *newest* varieties.

Hardy Annuals.

No.				s.	d.
2524	6 *varieties*	Calliopsis	for	1	3
2525	4 *do.*	Candytuft	„	0	9
2526	4 *do.*	Clarkia elegans	„	0	9
2527	6 *do.*	Clarkia pulchella	„	2	0
2528	4 *do.*	Collinsia	„	1	0
2529	4 *do.*	Convolvulus minor	„	0	9
2530	4 *do.*	Gilia	„	0	9
2531	4 *do.*	Godetia	„	0	9
2532	4 *do.*	Hibiscus	„	0	9
2533	4 *do.*	Jacobæa	„	1	0
2534	6 *do.*	Larkspur, *dwarf*	„	1	6
2535	4 *do.*	Leptosiphon	„	1	0
2536	4 *do.*	Lupinus, *old sorts*	„	0	9
2537	4 *varieties*	Lupinus	for	1	6
2538	4 *do.*	Nasturtion, *tall*	„	1	0
2539	4 *do.*	*dwarf, newest*	„	1	6
2540	6 *do.*	Nemophila	„	1	3
2541	4 *do.*	Nolana	„	1	0
2542	4 *do.*	Poppy	„	1	0
2543	4 *do.*	Scabious	„	1	0
2544	4 *do.*	Schizanthus	„	0	9
2545	4 *do.*	Silene	„	0	9
2546	4 *do.*	Sunflower	„	1	6
2547	6 *do.*	Sweet Peas	„	1	6
2548	3 *do.*	Venus's Looking-glass	„	0	9
2549	4 *do.*	Xeranthemum	„	1	0

Half-Hardy Annuals.

2550	12 *vorieties*	Aster, *Globe*	for	1	6
2551	12 *do.*	*new Peony-flowered*	„	2	6
2552	6 *do.*	Balsam, *double*	„	1	6
2553	6 *do.*	Convolvulus major	„	1	6
2554	4 *do.*	Gaillardia, *newest*	„	1	3
2555	4 *do.*	Helichrysum	„	1	0
2556	6 *do.*	Ipomæa**	„	2	0
2557	6 *do.*	Lobelia, *newest*	„	2	0
2558	4 *do.*	Marigold, *double French*	„	1	6
2559	4 *do.*	*double African*	„	1	6
2560	4 *vorieties*	Mesembryanthemum	for	1	3
2561	6 *do.*	Petunia	„	2	0
2562	6 *do.*	Phlox Drummondi	„	2	0
2563	6 *do.*	Portulaca	„	2	0
2564	6 *do.*	Salpiglossis	„	2	0
2565	6 *do.*	Stock, *German*	„	1	6
2566	6 *do.*	*new large-flowered*	„	1	6
2567	6 *do.*	*miniature*	„	2	0
2568	6 *do.*	*intermediate*	„	1	6
2569	6 *do.*	Zinnia elegans	„	1	6

Perennials, Biennials, and Shrubs.

2570	6 *varieties*	Antirrhinum	for	1	6
2571	4 *do.*	Aquilegia	„	1	6
2572	4 *do.*	Campanula	„	1	0
2573	4 *do.*	Canterbury Bell	„	0	9
2574	4 *do.*	Delphinium	„	1	6
2575	6 *do.*	Dianthus, *newest dwarf*	„	3	6
2576	4 *do.*	Digitalis	„	1	0
2577	4 *do.*	Eschscholtzia	„	1	0
2578	4 *do.*	Everlasting Peas**	„	1	0
2579	4 *do.*	Forget-me-not	„	1	3
2580	4 *do.*	Gaillardia	„	1	3
2581	4 *do.*	Gentiana	„	1	0
2582	12 *do.*	Hollyhock, *prize*	„	5	0
2583	4 *vorieties*	Indian Pink	for	1	6
2584	6 *do.*	Lobelia, *newest*	„	2	0
2585	6 *do.*	Lupinus	„	1	6
2586	6 *do.*	Marvel of Peru	„	1	6
2587	6 *do.*	Mimulus, *various*	„	2	0
2588	4 *do.*	Œnothera, *dwarf*	„	1	6
2589	6 *do.*	Pentstemon	„	3	0
2590	6 *do.*	Potentilla	„	1	6
2591	3 *do.*	Stock, *Brompton*	„	0	9
2592	12 *do.*	*Imperiol*	„	2	6
2593	4 *do.*	Sweet William	„	1	0
2594	6 *do.*	Verbena	„	2	0
2595	12 *do.*	Wallflower	„	2	6

Greenhouse Seeds.

2596	4 *vorieties*	Acacia	for	1	3
2597	4 *do.*	Anagallis, *newest*	„	2	6
2598	3 *do.*	Calceolaria	„	5	0
2599	3 *do.*	Cockscomb	„	1	0
2600	6 *do.*	Erica	„	2	0
2601	4 *do.*	Geranium	„	3	0
2602	4 *do.*	Globe Amarauth	„	1	0
2603	4 *do.*	Helichrysum	„	1	3
2604	6 *do.*	Heliotropium	„	2	0
2605	4 *varieties*	Hibiscus	for	1	6
2606	8 *do.*	Ipomæa**	„	7	6
2607	6 *do.*	Kennedya**	„	2	6
2608	4 *do.*	Lophospermum**	„	1	6
2609	4 *do.*	Maurandya**	„	2	0
2610	4 *do.*	Passiflora**	„	2	0
2611	4 *do.*	Primula, *fringed*	„	5	0
2612	4 *do.*	Thunbergia	„	1	3
2613	6 *do.*	Tropæolum	„	5	0

CHOICE CARNATION AND PICOTEE SEEDS.

From Plants selected from the finest Collections in Europe.

Carnation Seed supplied from our Establishment has long borne a high character; and we have much gratification in assuring our Customers that the following Collections are finer than usual, and, we may confidently assert, the finest ever submitted to public notice; they are grown *for us expressly* by an eminent Horticulturist in the South of Germany; the plants from which the seed is saved have been personally selected from the finest collections in England, France, Italy, and Germany by one of our Firm, who has travelled nearly the whole of Europe: we can confidently recommend the subjoined, as forming the choicest and most complete Collections ever submitted to public notice; and we are also enabled, from the extent of our arrangements, to offer them at a *reduced price*.

No.					s.	d.
2614	12 choicest varieties Bizarre Carnations, 10 seeds of each variety, as follows				3	0
	bronze, blue stri.	*white, rose and bronze.*	*violet, cin. and black.*	*red, rose and violet.*		
	lemon, red and brown.	*rose, red and violet.*	*yel., rose and silver.*	*carmine, blue and black.*		
	white, lilac and carmine.	*light violet and black.*	*yel., red and brown.*	*grey and flesh-coloured.*		
2615	12 choicest varieties Fameuse Carnations, 10 seeds of each variety, as follows				3	6
	white and lilac.	*li. bronze, brown and white.*	*white and blood.*	*nankeen and rose.*		
	bronze and white.	*white and crimson.*	*wh., violet and flesh.*	*wh., cin. and cerise.*		
	white, scar. and cerise.	*purple and cerise.*	*bronze and white.*	*gold and rose, rare.*		
2616	12 superb varieties Faxe and Bizarre Faxe Carnations, 10 seeds of each variety, as follows				3	6
	blood-red and black.	*chamois and violet.*	*cham., grey and purple.*	*yel., scar. and black.*		
	pk., sil. and blk. bronze.	*pink and sienna.*	*li., yel. and sienna.*	*orange, blue and car.*		
	yel., red and grey.	*dark cham. and scar.*	*sienna, pur. and crim.*	*yel., blue and brown.*		
2617	12 choicest varieties Flake Carnations, 10 seeds of each variety, as follows				3	0
	white and violet.	*scarlet and grey.*	*wh. and cinnamon.*	*blue and scarlet.*		
	dk. br. and blk. pur.	*carmine and blue.*	*grey and crimson.*	*white and rose.*		
	crimson and dk. violet.	*white and peach.*	*bronze and dk. brown.*	*violet and grey.*		
2618	12 choicest varieties Yellow Bizarre and Self Carnations, 10 seeds of each variety, as follows				3	6
	yel., flesh and rose.	*buff self.*	*yel. rose purple.*	*yel., pur. and slate.*		
	salmon bizarre.	*sal. rose purple.*	*lemon self.*	*yel. bizarre.*		
	yellow self.	*orange bizarre.*	*yel. and lavender.*	*ro. lav. bizarre.*		
2619	12 choicest varieties Yellow Flake Carnations, 10 seeds of each variety, as follows				3	6
	buff and rose.	*salmon and red.*	*yel. and scarlet.*	*yel. and purple.*		
	yel. and crimson.	*orange and scarlet.*	*salmon and rose.*	*yel. and carmine.*		
	yel. and pink.	*yel. and rose.*	*yel. and lavender.*	*sal. and maroon.*		
2620	12 choicest varieties Yellow Fancy Carnations, 10 seeds of each variety, as follows				3	6
	ycl. and car. mottled.	*ycl. and slate.*	*yel., flesh and pur.*	*yel., lavender mottled.*		
	or., flesh and scarlet.	*sal. and scarlet.*	*yel., rose and slate.*	*yel., scarlet mottled.*		
	yel. and pink, shaded.	*yel., ro. shaded.*	*yel., scar. spotted.*	*sal., shaded cerise.*		
2621	12 choicest varieties White-ground Picotees, 10 seeds of each variety, as follows				3	0
	wh. and dk. violet.	*white and scarlet.*	*white and rose.*	*white and violet.*		
	wh. and steel.	*wh. and dk. carmine.*	*white and blue.*	*white and purple.*		
	wh. and peach.	*wh. and cinnamon.*	*white and bronze.*	*white and chestnut.*		
2622	12 superb varieties Yellow-ground Picotees, 10 seeds of each variety, as follows				3	6
	yel. and li. violet.	*yel. and cinnamon.*	*yel. and dk. rose.*	*yel. and grey.*		
	ycl. and dk. violet.	*yel. and bronze.*	*yel. and carmine.*	*yel. and br. lilac.*		
	yel. and vio. pur.	*ycl. and scarlet.*	*ycl. and chestnut.*	*yel. and dk. brown.*		
2623	12 choicest varieties White-margined Picotees, 10 seeds of each variety, as follows				3	0
	wh., grey and rose.	*wh., rose and black.*	*wh., ro. and violet.*	*wh., grey and rose.*		
	wh., flesh and dk. crim.	*wh., cin. and dk. brown.*	*wh., li. and dk. brown.*	*wh., bronze and pur.*		
	wh., scar. and blue.	*wh., li. and dk. lilac.*	*wh., steel and rose.*	*wh., cerise and pur.*		
2624	12 choice varieties Perpetual Self Carnations, 10 seeds of each colour, as follows				3	0
	rose.	*bronze.*	*deep rose.*	*maroon.*		
	cerise.	*pale rose.*	*scarlet.*	*carmine.*		
	scarlet.	*yellow.*	*purple.*	*crimson.*		
2625	12 choice varieties Perpetual Fancy Carnations, 10 seeds of each, as follows				3	0
	rosy violet.	*dark carmine and lilac.*	*orange.*	*rose shaded.*		
	carmine, mottled.	*rose and black.*	*peach and crimson.*	*cherry and pink.*		
	pink and purple.	*dark purple.*	*shaded pink.*	*cerise and purple.*		
626	12 choice varieties Perpetual Flake Carnations, 10 seeds of each, as follows				3	0
	rose.	*deep crimson.*	*yell. striped.*	*light scarlet.*		
	flesh and maroon.	*striped.*	*brown flesh.*	*light purple.*		
	scarlet and maroon.	*rose and purple.*	*pink and lilac.*	*peach and crimson.*		
2627	12 choice varieties Perpetual Bizarre Carnations, 10 seeds of each, as follows				3	0
	rose and lilac.	*scarlet and yellow.*	*rose and scarlet.*	*flesh and crimson.*		
	crimson.	*yell. and rose.*	*dark purple.*	*crimson and slate.*		
	pink and purple.	*pink and maroon.*	*purple.*	*fancy.*		
2628	12 choice varieties Perpetual Picotees, 10 seeds of each variety, as follows				3	0
	crimson edge.	*fancy rose edge.*	*brown lilac edge.*	*fancy purple edge.*		
	purple edge.	*claret edge.*	*red edge.*	*chocolate edge.*		
	rose edge.	*fancy maroon edge.*	*scarlet edge.*	*fancy chocolate edge.*		

TREE SEEDS FOR PLANTATIONS, SHRUBBERIES, AND EXPORTATION.

For the convenience of our Colonial Correspondents, fresh seed of the undermentioned is kept in stock.

No.		
2629	Alder	*Alnus glutinòsa.*
2630	Arbor Vitæ, American	*Thùja occidentàlis.*
2631	Chinese	*orientàlis.*
2632	Ash, Mountain (Rowan)	*Py'rus aucupària.*
2633	Bay Tree	*Laurus nóbilis.*
2634	Bead Tree	*Melia Azedarach.*
2635	Bean Trefoil	*Anayy'ris fœtida.*
2636	Birch, upright	*Bétula alba.*
2637	—, weeping	*pendula.*
2638	Bladder Senna	*Colútea arborescens.*
2639	Broom, Spanish	*Spartium junceum.*
2640	Cedar, Deodar	*Cèdrus Deodàra.*
2641	Chaste Tree	*Vitex Agnus castus.*
2642	Chestnut, Horse	*Æsculus Hippocastànum.*
2643	—, Spanish	*Castànea vesca.*
2644	Christ Thorn	*Patiùrus aculeàtus.*
2645	Cypress, upright	*Cupressus sempervìrens.*
2646	—, pyramidal	*pyramidàlis.*
2647	Fir, Scotch	*Pinus sylvestris.*
2648	—, Aleppo Pine	*halepensis.*
2649	—, Pinaster or Cluster	*Pinaster.*
2650	—, Chili	*Araucaria imbricàta.*
2651	—, Stone	*Pinus Pinea.*
2652	Hawthorn	*Cratægus Oxyacantha.*
2653	Holly	*Ilex Aquifòlium.*
2654	Jasmine, yellow	*Jasmìnum fruticans.*
2655	Judas Tree	*Cercis siliquastrum.*
2656	Juniper, long-fruited	*Juniperus macrocarpa.*
2657	—, brown-berried	*Oxycedrus.*
2658	—, Lycian	*Lycia.*
2659	Juniper, sealy	*Juniperus squamàta.*
2660	—, tall	*excelsa.*
2661	Laburnum, English	*Cy'tisus Laburnum.*
2662	—, Scotch	*atpìnus.*
2663	Larch	*Larix europæa.*
2664	Laurel, common	*Ceràsus Labùrnum.*
2665	—, Portugal	*atpinus.*
2666	Laurestinus	*Vibùrnum Tinus.*
2667	Lilac	*Syringa vulgàris.*
2668	Oak, American	*Quercus americànus.*
2669	—, cluster	*conglomeràta.*
2670	—, Cork	*Suber.*
2671	—, English	*pedunculàta.*
2672	—, evergreen	*Ilex.*
2673	—, Fulham	*dentàta.*
2674	—, live	*vìrens.*
2675	—, Lucombe's	*Lucombèana.*
2676	—, scarlet	*coccinea.*
2677	—, Turkey	*Cerris.*
2678	—, jagged-leaved	*argula.*
2679	Olive Tree	*Olea sylvestris.*
2680	Phillyrea, narrow	*Phillyrea angustifòlia.*
2681	Privet	*Ligustrum vulgare.*
2682	Red Cedar	*Juniperus virginiàna.*
2683	Spindle Tree	*Euonymus europæa.*
2684	Stereulia, plane-leaved	*Sterculia platanifòlia.*
2685	Strawberry Tree	*Arbùtus Unèdo.*
2686	Sweet Briar	*Rosa rubiginòsa.*
2687	Thorn, black (Sloe)	*Prùnus spinòsa.*
2688	—, Cockspur	*Cratægus Crus-galli.*
2689	Tree of Heaven	*Ailanthus glandulòsus.*

FRUIT SEEDS (all of 1861 saving).

No.			s.	d.
2690	Apple Pips	per packet		6
2691	Apricot	„		6
2692	**Blackberry, Lawton Giant**	„		6
2693	Currant, *black*	„	1	0
2694	*red*	„	1	0
2695	*white*	„	1	0
2696	Gooseberry, *Champagne*	„	1	0
2697	*Golden-drop*	„	1	0
2698	*Greengage*	„	1	0
2699	*Red Lion*	„	1	0
2700	Grape, *finest-flavoured*	„	1	0
2701	Mulberry, *black*	„		6
2702	*white*	„		6
2703	Nectarine	per packet		6
2704	Peach	„		6
2705	Pear Pips	„		6
2706	Plum, *Greengage*	„		6
2707	*Orleans*	„		6
2708	Quince	„		6
2709	Raspberry, *red*	„		6
2710	Strawberry, *red Alpine*	„		6
2711	*British Queen*	„	1	0
2712	*Elton Pine*	„		6
2713	*Keen's Seedling*	„	1	0
2714	*Princess Alice Maud*	„	1	0
2715	*Princess Royal*	„	1	0

PRIZE ENGLISH HOLLYHOCK SEED.

The undermentioned have been saved by an English amateur who has devoted many years to the assiduous cultivation of this highly ornamental plant, now rising more than ever into repute. It is worthy of remark, that Hollyhock Seed saved from *good varieties* proves very *true* to colour and form.

No. 2716. 12 choice varieties, as follows 5 0

General Bem, *rosy scarlet.*
Hon. Mr. Ashley, *lilac peach.*
Memnon, *scarlet.*
Lizzy, *clear peach.*
Miss Ashley, *creamy fawn.*
Celestial, *pale blush.*
Blushing Bride, *pink blush.*
Sylvia, *rose pink.*
Pink Perfection, *rich pink.*
Fearless, *pale cream.*
Solfaterre, *sulphur.*
Queen of the Whites.

No. 2717. 24 choice varieties, as follows 10 0

Blushing Bride, *pink blush.*
Sylvia, *rose pink.*
Miss Nightingale, *primrose.*
Glory, *rich crimson.*
Leucantha, *straw, tinted with apricot.*
Fearless, *pale creamy fawn.*
Vesta, *deep pink.*
Glory of Cheshunt, *light rosy red.*
Pearl, *delicately tinted pink.*
Beauty of Broxbourne, *deep crimson.*
Queen of Whites, *pure white.*
Sceptre d'Or, *yellow, scarlet base.*
Queen of Buffs, *pale buff, compact.*
Saffrano, *clear saffron.*
Alba pulchella, *delicate white.*
Pink Perfection, *rich pink.*
Pourpre de Tyre, *rich purple.*
Lilacina, *lilac.*
Black Prince, *shining black.*
Venus, *pale flesh pink.*
Purple Perfection, *bright purple.*
Lady Willoughby d'Eresby, *cream.*
Saturn, *apricot.*
Empress, *fawn with apricot base.*

No. 2718. 8 choice varieties 3 0

COLLECTIONS OF FLOWER SEEDS.

J. C. & Co. *feel assured that the following Collections will give entire satisfaction, as they are executed in the most liberal manner.*

HARDY ANNUALS.

	s. d.		s. d.
100 finest selected varieties, separate	20 0	25 finest selected varieties, separate	5 0
50 do. do. do. „	10 0	12 do. do. do. „	2 6

HALF-HARDY ANNUALS.

100 finest selected varieties, separate	30 0	25 finest selected varieties, separate	7 6
50 do. do. do. „	15 0	12 do. do. do. „	4 0

HARDY PERENNIALS.

100 finest selected varieties, separate	25 0	25 finest selected varieties, separate	6 6
50 do. do. do. „	12 6	12 do. do. do. „	3 6

HALF-HARDY PERENNIALS.

25 finest selected varieties, separate	7 6	12 finest selected varieties, separate	4 0

GREENHOUSE SEEDS.

25 choice selected varieties, separate	10 6	12 choice selected varieties, separate	6 0

STOVE SEEDS.

25 finest selected varieties, separate	10 6	12 finest selected varieties, separate	6 0

GREENHOUSE CLIMBERS.

12 beautiful varieties, separate	7 6	6 beautiful varieties, separate	4 0

HARDY CLIMBERS.

12 finest varieties, separate	2 6	6 finest varieties, separate	1 6

SUITABLE FOR ROCK-WORK.

12 fine selected varieties, separate	4 0	6 fine selected varieties, separate	2 0

AQUATICS.

6 splendid varieties, separate, including Victoria Regia 10 0

ORNAMENTAL GRASSES.

12 fine selected varieties, separate	2 6	6 fine selected varieties, separate	1 6

HARDY ORNAMENTAL-FOLIAGED PLANTS.

6 fine varieties, separate ..... 3*s.* 6*d.*

ANNUALS FOR FORMING LARGE BEDS.

12 large packets, separate	10 0	6 large packets, separate	5 0

NEW ANNUALS.

12 extra-fine varieties, separate	10 0	6 extra-fine varieties, separate	5 0

INDIAN SEEDS.

25 fine selected varieties, separate	10 0	12 fine selected varieties, separate	5 0

EVERLASTING FLOWERS (Immortelles).

12 splendid varieties, separate	4 0	6 splendid varieties, separate	2 6

CALIFORNIAN SEEDS.

25 fine selected varieties, separate	5 0	12 fine selected varieties, separate	2 6

CONIFERS.

6 extra-choice varieties	12 0	6 fine varieties	5 0

SWEET-SCENTED ANNUALS.

12 selected varieties, separate	2 6	6 selected varieties, separate	1 6

HALF-HARDY CLIMBERS.

12 finest selected varieties	4 0	6 finest selected varieties	2 6

SUNDRY HARDY GREENHOUSE AND STOVE PLANTS.

ACHIMENES.

This highly ornamental genus, whose beauties are so well known, will succeed well in any rich light soil, and may be grown in all places where an ordinary Cucumber or Melon frame is used, in which they may be started. Most of the species are dwarf, compact, and branching in habit, and as objects of ornament are equal to any herbaceous tropical plants. Our selections form a large Collection; for list of names see our Plant and Bulb Catalogue.

Per doz., dry roots, one of each..... 4*s*.
" " two of each ..... 6*s*.
Per doz., dry roots, three of each ..... 9*s*.
Sufficient to make 12 good pots for exhibition... 12*s*.

ACACIA.

These favourite Greenhouse ornaments present an almost endless variety of form, are very free blooming, and of easy culture; ornamental both in bloom and foliage. Our selection, in 6 varieties, at 1*s*. each.

AGAPANTHUS.

Highly ornamental, free, umbelliferous flowering Plants, suitable for cold frame or Greenhouse; very useful for single specimens and for pedestals. During summer and autumn require abundance of water while growing.

Umbellatus..... each, 1*s*. Umbellatus albus... each, 2*s*. 6*d*. Umbellatus foliis variegatis ...each, 2*s*. 6*d*.

AGATHÆA CŒLESTIS VARIEGATA.

New, neat, dwarf, and compact in habit, with box-like foliage margined with white. A most desirable bedding plant for edgings..... 6*s*. per doz. 9*d*. each.

ARAUCARIA.

These are amongst the most striking and ornamental of Greenhouse Conifers; in growth and foliage remarkably handsome.

Araucaria Bidwilli..... 7*s*. 6*d*. A. Cunninghami ..... 7*s*. 6*d*.

AZALEAS (Indian).

These splendid flowering Shrubs are indispensable to all collections for winter and early spring flowering. Distinct named collections, one of a sort, our own selection, well set with flower-buds, 18*s*., 21*s*., to 30*s*. per doz.

AZALEAS (Belgian).

Very desirable, fragrant, free blooming; admirably adapted for early forcing. First-rate named varieties, in distinct colours, 1*s*., 1*s*. 6*d*., and 2*s*. each.

BEGONIA.

A very interesting tribe of ornamental-foliaged Stove Plants, of very easy culture; no stove should be without a collection of them. For list of names see Plant Catalogue.

Our selection, winter-flowering varieties ..... 1*s*. 6*d*. to 2*s*. 6*d*. each.
" ornamental-foliaged varieties..... 1*s*. 6*d*. to 2*s*. 6*d*. "

BOUVARDIAS.

These plants freely produce large clusters of blossoms, varying in colour from pure white to vivid scarlet. The hybrids named below are most serviceable as Conservatory winter-flowering plants.

Oriana, Delicata, Laura, and Hogarth.....8*d*. each.

CALCEOLARIAS (Shrubby Varieties).

Many of the large-flowered highly-coloured varieties are extremely serviceable as pot-plants for Greenhouse decoration. 9*s*. per doz.

CALCEOLARIAS (Herbaceous).

From finest strain of seed, 6*s*. per doz.

CAMELLIAS.

Fine plants, *well set with flower-buds*, selected from a collection of over 200 finest established varieties. With flower-buds, 2*s*. 6*d*., 3*s*. 6*d*., to 5*s*. each.

CANNAS.

These are magnificently-foliaged plants for Greenhouse and for planting out in summer, their luxuriant gorgeous foliage imparting a rich tropical appearance; in great variety. For list of names see Bulb and Plant Catalogues. 1*s.* each.

CARNATIONS.

Novel varieties selected from a very celebrated Continental Collection; quite a new strain in this interesting Class, containing many distinct types, and highly recommended. Per doz. pairs 18*s.* to 24*s.*

CARNATIONS (Tree or Perpetual).

Our own selection from over 100 first-rate named distinct varieties, the production of a most eminent grower, including all the best-established varieties. 1*s.* 6*d.* to 2*s.* 6*d.* each; 15*s.* to 24*s.* per doz.

CINERARIAS.

These new varieties the finest of the season.

	s.	*d.*		*s.*	*d.*
Reynold's Hole	5	0	Maid of Astolat	5	0
Miss Eyles	5	0	The Colleen Bawn	5	0
Bridesmaid	5	0	Lurline	5	0

Older-established varieties 9*s.* per doz.

CINERARIA MARITIMA.

Finely cut silvery foliage, very ornamental; well adapted, from its distinct and beautiful silvery appearance, for single specimens for Greenhouse decoration, also for margins of beds or rockwork. 9*d.* each; 6*s.* per doz.

CITRUS JAPONICA (Otaheite Orange).

For winter flowering, very fragrant, 2*s.* 6*d.* to 3*s.* 6*d.*

COBÆA SCANDENS VARIEGATA.

A most beautiful rapid-growing Greenhouse Climber, very effective; the most distinctly variegated of any Greenhouse Climber known. 2*s.* 6*d.* each.

COLEUS VERSCHAFFELTI.

Unquestionably the most strikingly beautiful plant that has been introduced this season. The foliage is elegantly laciniate, on young plants deep crimson margined with bright green, which, as the plants attain size and age, become entirely of a rich glowing crimson. Of most easy culture, requiring only a warm Greenhouse, of rapid growth, and a most desirable plant for specimens for exhibition. 2*s.* 6*d.* each.

CYCLAMEN.

This well-known genus is highly effective for decorative purposes in the Greenhouse or Conservatory; the following are well-established in pots.

Africanum (microphyllum)	1	0	Persicum	1	0
Europæum (lilac)	1	0	,, album	1	0
Latifolium	1	6	,, punctatum	1	0
Odoratum	1	6	Repandum	1	6

DAHLIAS.

Extra strong pot-roots of **Show, Fancy, Bedding,** and **Pompone** varieties from our unrivalled Collection, containing more than 200 named varieties; the finest selection from all the collections known.

Show varieties	9*s.* to 12*s.*	Pompone	9*s.* to 12*s.*
Fancy ,,	9*s.* ,, 12*s.*	Bedding	9*s.*

DEUTZIA GRACILIS.

This very beautiful pure white favourite, in pots, for early foreing, extra strong plants, 1*s.* to 1*s.* 6*d.* each.

NEW FUCHSIAS.

Minnie Banks. The most perfect variety yet offered for habit, growth, and bloom; sepals white, broad, and elegantly recurved to a half circle. Corolla opening goblet-shape, and expanding to an elegant cup-shape, of a clear rich rose tint. 10*s.* 6*d.*

Comet. A bold and effective large flower, with well-recurved broad scarlet sepals and a remarkably large violet-tinted purple corolla, of an elegant large cup or parachute outline, one inch and a half in width. 10*s.* 6*d.*

Selections from the best new varieties of 1861, raised by Messrs. Banks, Cornellisen, and Smith. 1*s.* 6*d.* each; 12*s.* per doz.

Annie.
Always Ready.
Black Prince.
Comte de Hainault.
Forget-me-not.
Figaro.
General Boremans.
King of Purples.
Lord Elcho.
Mammoth.
Marie Cornellisen.
Prince Leopold.
Perseverance.
Pioneer.
Star of the Night.
Triomphe de Cornellisen.
Victor Emmanuel.
White Lady.

FERNS.

Well established in pots suitable for Fern Cases or Stove and Greenhouse Rockwork, as well as for single specimens.

Our selection, 9*s.* per doz.; purchasers' selection, 12*s.* per doz. Single Plants, 1*s.* to 1*s.* 6*d.* each.

Asplenium flaccidum.
flabelliforme.
viviparum.
Adiantum assimile.
Moritzianum.
hispidulum.
setulosum.
Blechnum australe.
brasiliense.
gracile.
Cyrtomium falcatum.
Doodia lonulata.
Diplazium lasiopteris.
Gymnogramma albo-lutea.
Martensi.
ochracea.
Wittenhalleana, 10*s.* 6*d.*
Hypolepis Dicksonioides.
Lastrea glabella.
paludosa.
Microlepis polypodioides.
Nephrodium molle.
Pteris **alba lineata**, 3*s.* 6*d.*
arguta.
argyrea, 2*s.* 6*d.*
longifolia.
macrophylla.
sulcata.
tremula.
tricolor, 2*s.* 6*d.*
Phlebodium aureum.
glaucum.
Sitolobium davallioides.

For full Collection, see list in Plant Catalogue. For Fern Baskets, see page 51.

GAZANIA SPLENDENS.

One of the best of Bedding Plants, of deep orange colour, with central disk of black with white spots; very dwarf and free flowering. Plants for propagating, for spring bedding, 6*s.* per doz.

GLOXINIAS.

A most lovely genus; treatment same as for Achimenes. We have devoted the greatest care to the cultivation of these charming flowers, and are now able to offer the following new varieties of 1861, in pots, very distinct from any before out. Those marked * are erect, the others drooping varieties. Blooming plants in pots, our selection, 15*s.* per doz.; 1*s.* 6*d.* each; extra strong, 2*s.* 6*d.* each.

*A. Bonnard.
*A. de Kinkler.
Abel Carrière.
Auguste Ender.
C. M. Vanderstraal.
Carlo Malenchini.
Camille Piotrowski.
Caroline von Trefurt.
*Charles Raes.
Comte F. Dydynski.
Edward Pynaert.
Ernest Benary.
F. Puig.
Frederick Mylins.
*Gouverneur de Backer.
Karl Fellman.
Karl Enke.
*Lady Grosvenor.
Lady H. Vane.
*Leon de Freminville.
*Luigi Gullino.
Madame A. Leon.
*Madame Pomery.
Madame Celeste Winans.
Marquis de St. Innocent.
MacNary.
Pierre von Eckhaute.
Prince A. Demidoff.
*Victor Lemoin.

N.B. For older varieties, see Bulb and Plant Catalogues.

GERANIUMS, CLOTH-OF-GOLD.

The finest of all the golden variegated varieties; has now stood the test of three seasons, and is justly admired by all who have seen its great superiority over Golden Chain and all others of that class; it is undoubtedly destined to supersede Golden Chain entirely, being much easier propagated, as free in growth as Tom Thumb, and much more effective than any other yellow-foliaged variety. 2*s.* each; 18*s.* per dozen.

Crystal Palace Scarlet. The most perpetual blooming of all the scarlet varieties; per doz. 6*s.*

Imperial Crimson.
Mrs. Vernon.
Fothergilli.
} The best bedding varieties of the Nosegay section; 6*s.* per doz.

GYNERIUM ARGENTEUM (*Pampas Grass*).

A splendid ornamental flowering Grass, exceedingly effective; worthy of cultivation in every garden, its immense stalks of silvery plumes invariably attracting admiration.

Extra strong plants to flower next year, 2*s.* 6*d.*
Ditto ditto .....1*s.* 6*d.*
Well established in pots .....,...9*d.* to 1*s.* each.

HERBACEOUS AND ALPINE PLANTS.

		s.	*d.*
Double Primroses, in colours .....per doz.		6	0
Hepaticas, in colours.....	,,	6	0
Violets, in sorts	,,	6	0
Daisies, fine large double, in varieties ...	,,	3	0

		s.	*d.*
Phlox, Perennial varieties .....per doz.		6	0
— —, new varieties	,,	12	0
Antirrhinums, in fine variety	,,	6	0

HARDY HERBACEOUS PERENNIALS.

Our selection, from a collection of over 1200 varieties: for list of names see Plant Catalogue. Our selections for borders, rockwork, or any particular situation, from 4*s.*, 6*s.*, and 9*s.* per dozen.

HOLLYHOCKS.

Fine established plants of the following well-known varieties, extra strong; per doz. 6*s.*; 9*d.* each.

Carnea, *flesh.*
Cloth of Gold, *orange yellow.*
Enchantress, *blush.*
Fearless, *pale creamy fawn.*
Florence Nightingale, *primrose.*
General Bem, *rosy scarlet.*
General Havelock, *ruby scarlet.*
Gloria Mundi, *crimson.*
Honourable Mrs. Ashley, *lilac peach.*
Joan of Arc, *silvery blush.*
Juno, *salmon red.*
Lady Scott, *rosy carmine.*
Lady Jocelyn, *cherry crimson.*
Lily of the Valley, *white.*
Miss Bradley, *blush.*
Memnon, *rosy scarlet.*
Nimrod, *claret.*
Pearl, *pearly white.*
Queen of Denmark, *orange buff.*
Royal Albert, *pale fawn.*
Rosy Morn, *bright rose.*
Susannah, *silvery white.*
Sulphur Queen, *sulphur, chocolate base.*
Triumphant, *deep scarlet.*
Unique, *carmine.*
Walden Gem, *ruby crimson.*
Village Maid, *crimson peach.*

MANDEVILLEA SUAVEOLENS.

Favourite white-blossomed fragrant Greenhouse Climber; small plants 1*s.* each; strong 2*s.* 6*d.*.

PANCRATIUM ILLYRICUM.

Extra fine-flowering bulbs 9*d.* each; 8*s.* per dozen.

PELARGONIUMS.

Large-flowered **Show** varieties from a first-rate collection, from 1*s.* each.

Our selection, 12 varieties, all distinct, 6*s.*
Ditto ditto extra good, 12*s.*
Ditto ditto newer kinds, 18*s.*

Large-flowered **French** and **English** spotted varieties; selections and prices as in Shows.

French Fancy varieties, a fine assortment; selections and prices as in the two former sections.

PINKS.

Pinks in named varieties, selected from a first-rate collection; per dozen pairs 6*s.* to 9*s.*

PICOTEES.

Novel varieties from same source as the Carnations, 18*s.* to 24*s.* per dozen pairs.

TRITOMA (Kniphofia).

One of the most showy, hardy, herbaceous, late-flowering border plants known, bearing long spikes of crimson and yellow flowers; strong-flowering roots.

Tritoma uvaria grandiflora, 1*s.* to 1*s.* 6*d.* each.

VERBENAS.

New varieties of 1861, strong plants, 12*s.* per dozen.
Older do. do. 6*s.* do.

SCILLA IMPERATRICE EUGENIE.

Extra strong flowering bulbs, 1*s.* each.

STRAWBERRIES.

New Varieties.

Sanspareil, 40*s.* per 100.
Eclipse, 12*s.* per doz.
Crimson Queen, 7*s.* 6*d.* per 100.
Frogmore, Late Pine, 30*s.* per 100.
Rifleman, 30*s.* per 100.

Extra Strong in pots for forcing (6*s.* per dozen).

British Queen. Black Prince. Keen's Seedling.

Older Varieties for planting.

		s.	*d.*
Admiral Dundas	per 100	5	0
Black Prince	,,	3	6
British Queen	,,	3	6
Caroline Superb	,,	5	0
Filbert Pine	,,	5	0
Keen's Seedling	,,	3	6
Oscar	per 100	3	6
Princess Alice Maude	,,	3	6
Sir C. Napier	,,	5	0
Sir Harry	,,	3	6
Wonderful	,,	5	0
Wizard of the North	,,	3	6

CACTI.

We have pleasure in submitting to the notice of our customers these curious, beautiful and easily cultivated plants, which if better known would be universally grown; the singularly grotesque form and gorgeous beauty of many of the varieties render them objects of striking attractiveness, and their peculiarities contrast admirably with the other kinds of Greenhouse and Stove plants. Nearly all the varieties thrive well on out-of-the-way shelves, in places where other plants would be burnt up, requiring but little attention; one removal in the course of the season, into a mixture of old spent loam; very old mortar and brick rubbish is highly advantageous; very little water is required, except when they are making their young growth.

Our selection of good varieties 9*s.*, 12*s.* and 24*s.* per dozen.

ORCHIDS.

We have cultivated a very fine collection of Orchids, but as the price depends so much upon the size of the plants, we did not think it advisable to give a detailed price-list, but shall be happy to send the prices of any sorts upon application. We can offer

12 good and distinct varieties, *our selection*, from £5 to £12.

VINES.

We have much pleasure in offering strong and particularly well-ripened Canes of the under-mentioned Vines, all our own growth. The great advantage derived by planting thoroughly ripened Canes has induced us to pay great attention to our crop this season, and we are consequently enabled to offer them much stronger than usual.

We have also a fine stock of extra-strong short-jointed, well-ripened plants, grown purposely for forcing in pots, and capable of producing 6 to 8 bunches of grapes each next year: the cultivation of Vines in pots is becoming so general now, that comments on the many advantages of that system are unnecessary; by planting out Vines of this size in Vinery borders one season is gained.

Hardy varieties for planting against walls or trellises. A whole season is often lost, or the plants very much checked, if the wood is not thoroughly ripened when first planted out; we shall take great care not to send any but what are in proper condition. All other varieties not named in this list can be supplied at the usual prices; those marked H are the most hardy and best suited for out-door planting.

Strong Canes for planting, 3*s.* 6*d.*, 5*s.*, and 7*s.* 6*d.*
Extra-strong Canes for fruiting and forcing in pots, 10*s.* 6*d.* to 12*s.* 6*d.*
Hardy strong Canes for walls, 3*s.* 6*d.* to 5*s.*

	Black Hamburgh	Berries, round deep purple, rich and juicy; one of the finest grapes for cold Vinery.
	Black Barbarossa	Large deep purple, bunches very large; fine late grape for winter.
H	Black Prince	Roundish oval, sweet and rich, handsome long bunch; a good bearer.
	Black Damascus	Very large, long oval, good substance, dark purple.
H	Chasselas Musque (or Josling's St. Albans)	Round, white, with rich Muscat flavour; requires plenty of air.
	Chasselas Royal	Amber, round, rich, juicy, and sweet.
	Grizzly Frontignan	Round, yellow, shaded red, fine Frontignan flavour.
	Muscat of Alexandria	Oval, very large, pale amber, finest-flavoured grape grown; requires heat.
H	Precoce de Malingre	Round, white and sweet, very early and free bearer.
H	Royal Muscadine	Round, very juicy, free bearer; does equally well for vineries, pots, or open borders.
	White Frontignan	Greenish white, round, fine Frontignan flavour; an abundant bearer.
	White Nice	Round, greenish white, sweet, but not rich; bears enormous bunches.

LILIUM GIGANTEUM.

This is by far the most stately of all the Lilies for cool greenhouse or conservatory decoration; from 4 to 8 feet in height, with large, glossy, dark green, heart-shaped leaves, and terminal racemes of drooping, trumpet-shaped, white flowers, marked with violet-crimson streaks. It has proved hardy in some countries, and we think there is great evidence of its being found ultimately hardy in all localities.

Fine strong flowering bulbs..... each 12*s.* 6*d.*

NOTICE.—As many of the Plants offered will be cheaper in May, James Carter & Co. particularly request that their next General Catalogue of Bedding and other Plants may be applied for.

It will be published on the 1st of May, and forwarded gratis and post free on application.

HANGING FERN BASKETS.

The above Hanging Baskets, many of new design, are extremely ornamental for Greenhouses, Stoves, or Conservatories. The above prices marked on the baskets are for the baskets *filled* with Ferns; we can also supply *empty* baskets from 1*s.* to 3*s.* 6*d.* each, according to size; we have also many other designs not figured in the above engraving for want of space.

HANGING FLOWER BASKETS.

We can also supply Baskets of the above patterns, filled with Hyacinths, Tulips, Crocus, &c., at from 3*s.* 6*d.* to 10*s.* 6*d.* each.

BULBS FOR SPRING PLANTING.

GLADIOLI.

Bulbs ready to send out at the end of October.

We have great pleasure in introducing to the notice of our Customers the following splendid collections of Gladioli, which have been selected by us from the stocks of the most celebrated French and Dutch cultivators; *we wish also to call attention to their moderate price.*

Pot culture.—Pot in light turfy loam and sand, with good drainage, mixing this compost with well-rotted leaf-mould, in about the proportion of one-third; prepare a bed of litter from the stable, which cover with tan or any dry and light composition, and place a frame on it, in which plunge the pots: give plenty of air, and withhold water until the bulbs have made root and the leaves appear; it may then be carefully given, when there is no danger of frost. Should the winter prove very severe, bank the frame up well with dung or litter, and cover the lights with straw or Bass Mats. If it should not be convenient to carry out the above directions, the following will be found a very good method of cultivation: pot in sandy loam as above, and place the pots in Greenhouse or Conservatory, near the glass, taking care that the degree of temperature is sufficient to keep out frost.

Garden culture.—Prepare your beds or borders by well digging them a spit deep, burying a stratum of good leaf-mould or rotten manure at the bottom. The surface soil should be rendered open by mixing sand with it and being well broken in digging: plant the bulbs in clumps or rows according to fancy, about six inches deep, taking care to cover them one inch deep with sand previous to re-covering with mould. After the roots are planted, rake the ground well, giving it a southern inclination if possible; keep free from weeds, and stir surface occasionally; in severe weather cover the bed with two or three inches of dry litter. In the later stages of growth, the bulbs should be kept moderately moist.

French Seedlings from Gandavensis.

These varieties, from their free-flowering habits, strong trusses of bloom, and magnificent richness of colour, are among the handsomest Autumnal ornaments to the garden, and beyond a doubt the finest of all the Gladioli tribe.

Fine free-blooming varieties from Gandavensis (*for Clumping*).

The following seedlings from Gandavensis are more robust in habit than the Ramosus varieties, and are richer in colour. All weak-growing kinds we have discarded, and offer the under-mentioned splendid varieties at an unprecedentedly low price. For centres of beds, planting among the Rhododendrons or in Shrubberies, their effect is magnificent.

	s. d.
Brenchleyensis, *vermilion* .....doz.	5 0
Courantii fulgens, *crimson*.....	2 6
Don Juan, *orange red, yel. spots*	5 0
Emma, *carmine, shaded*.....	5 0
Fanny Rouget, *rose, wh. & car.*	3 0

	s. d.
Fulgens aurea picta .....doz.	3 6
Gandavensis, *scarlet and yellow*	2 6
Madame Coudère, *car., shaded*	3 6
Madame Henrineq, *yel. & lilac*	5 0

	s. d.
Monsieur Blouet, *rosy carmine* doz.	3 6
3 *of each of the above* 10 *sorts*,	9*s.* 6*d.*
6 *do.* *do.* *do.*	17*s.* 6*d.*
12 *do.* *do.* *do.*	32*s.* 6*d.*

Newer varieties from Gandavensis (*for Clumping*)

Adonis, *yellow and carmine* ...doz.	6 0
Aglae, *salmon*	5 0
Archimède, *red, carmine striped*	5 0
Aristote, *carnation rose, varieg.*	5 0
Comtesse de Bresson, *red, var.*	6 0

Daphné, *cherry, striped carm.* doz.	7 0
Egérie, *salmon and dark rose*...	6 0
Gil Blas	6 0
Hélène, *french white, pur. stri.*	6 0
Janaire, *orange red*	5 0

Monsieur Corbay, *pur. striped* doz.	6 0
Pollonia, *rose and carmine* ...	5 0
3 *of each of the above* 12 *sorts*,	17*s.*
6 *do.* *do.* *do.*	32*s.*
12 *do.* *do.* *do.*	58*s.*

Selected varieties of French Seedlings from Gandavensis.

	doz.	each.
Berenice, *beautiful rose red, variegated*	10 0	1 0
Calendulaceus, *salmon rose*	10 0	1 0
Canari, *light yellow, rose striped*	10 0	1 0
Châteaubriand, *cherry red, variegated*	10 0	1 0
Docteur Andry, *bright orange*	10 0	1 0
Edith, *carnation, striped*.....	10 0	1 0
Endymion, *rose, tinted purple*	10 0	1 0
Esope, *red, purple striped*	10 0	1 0
Eugène Verdier, *crimson, purple spotted*	10 0	1 0
Fischerianum, *striped rose*	10 0	1 0
Galathée, *carnation striped*	10 0	1 0
Goliath, *light red, carmine striped*	10 0	1 0
Gassendi, *carmine, spotted*	10 0	1 0
Hébé, *carnation, striped carmine*	10 0	1 0
Impératrice, *carnation striped*	10 0	1 0
Jeanne d'Arc, *white, tinted rose*	10 0	1 0
John Bull, *white spotted*	12 0	1 3
Le Bariole, *carmine striped*	10 0	1 0
Léon Leguay, *rose, carmine spotted*	10 0	1 0
Madame A. Lebfevre, *fine light rose*	10 0	1 0

	doz.	each.
Madame Binder, *pure white, rose striped*	12 0	1 3
Madame Eugénie Mésard, *rose striped*	10 0	1 0
Madame Victor Verdier, *rose, violet spotted* ...	10 0	1 0
Mars, *bright scarlet*	10 0	1 0
Mathilde de Landvoisin, *white, carmine striped*	12 0	1 3
Mazeppa, *rose, yellow striped*	10 0	1 0
Melas, *rose, red var*.....	10 0	1 0
Monsieur Vinchon, *salmon, red and white*	10 0	1 0
Nemesis, *clear bright rose, white stripe*	10 0	1 0
Neptune, *red, variegated carmine*	10 0	1 0
Ninon de l'Enclos, *carnation and rose*	12 0	1 3
Oracle, *brilliant cherry rose*	10 0	1 0
Osiris, *purple and white*	10 0	1 0
Othello, *light orange red*	10 0	1 0
Pégase, *carnation and chamois*	10 0	1 0
Pénélope, *french white, carmine striped*	10 0	1 0
Prémices de Montrouge, *bright red*	10 0	1 0
Rebecca, *white and lilac*	12 0	1 3
Sulphureus, *sulphur-coloured*	12 0	1 3
Vesta, *white and carmine*.....	10 0	1 0

GLADIOLI (*continued*).

Newest and choicest varieties of French Seedlings from Gandavensis.

	each s. d.
Anatole Levanneur, *violet red, spotted*	1 6
Berthe Rabourdin, *pure white, carmine spots*	3 0
Bossuet, *orange, rose spotted*	5 0
Calypso, *carnation striped rose*	2 3
Ccline, *rosy white, marbled*	2 6
Cérès, *pure white and purple*	3 0
Charles Rouillard, *bright carmine*	1 6
Clémence, *satin rose, carmine striped*	2 0
Comte de Morny, *dark cherry-red*	3 0
Comtesse Paul de Ségur, *rose, carmine striped*	2 6
Diane, *delicate carnation and rose*	3 0
Duc de Malakoff, *orange red and sulphur*	3 0
Eldorado, *fine pure yellow*	6 0
Erato, *delicate rose, carmine striped*	3 0
Eugénie Verdier, *crimson rose*	3 6
Eveline Bryère, *salmon, spotted carmine*	1 6
Florian, *cerise, white lines*	2 0
General McMahon, *orange cherry, red spots*	2 0
Isoline, *carnation, carmine spots*	2 3
Junon, *white, striped lilac*	6 0
Ketcleer, *brilliant carmine*	1 6
L'Eclair, *vermilion, deep carmine spots*	1 9
Le Poussin, *light red, beautifully marked*	6 0
Léonard de Vinci, *violet rose, striped*	8 0
Linné, *orange cherry, yellow spots*	3 6
Lord Granville, *yellow, spotted*	1 6
Lord Raglan, *fine large, salmon*	2 0
Louis Van Houtte, *velvety carmine, purple spots*	1 6
Madame Basseville, *cherry and white*	3 6
Madame Briot, *satin rose, carmine spots*	1 6
Madame de Vatry, *sulphur, white and carmine*	3 0
Madame Haquin, *yellow, white and lilac*	2 3
Madame Hardy, *rose, violet spots*	3 0
Madame Lesèble, *white, purple spots*	5 0
Madame Pauline, *white, red spotted*	1 6
Madame Rabourdin, *rose carmine, flaked with white*	7 6
Madame Souchet, *delicate flesh, deep rose spots*	3 0
Madame Vilmorin, *rose, white centre, dark rose edgings, beautiful carmine stripes*	7 6
Maria du Mortière, *white, slightly striped with rose, violet purple spots*	6 0
Marie, *pure white, carmine spotted*	3 6
Midas, *red spotted*	1 6
Molière, *dark carmine*	5 0
Napoléon III., *bright scarlet, striped*	3 0
Olympe Lescuyer, *orange and rose*	3 0
Ophir, *dark yellow and purple*	3 0
Pline, *liyht cherry and white*	3 6
Pluton, *deep scarlet, white spots*	5 0
President Decaisne, *cerise, carmine spots*	2 0
Princesse Mathilde, *light rose and carmine*	3 0
Rembrandt, *bright deep scarlet*	3 0
Raphaël, *deep red vermilion*	5 0
Solfaterre, *fine pure yellow*	7 6
Thérèse, *bright rose*	1 6
Vélida, *light rose and lilac*	3 0
Vicomtesse de Belleval	3 0
Vulcain, *scarlet purple velvet*	2 3

New Seedlings from Ramosus.

	s. d.
Amsterdam, *brilliant orange, rose, fine white mark*	0 8
Batavia, *brill. dark red, lower petals sear., wh. mark*	0 8
Cavaignac, *rose, shaded with brilliant or., white mark*	1 6
Christianus, *bright pink rose, broad mark*	0 6
Dictator, *fine orange, broad mark*	0 9
Duc d'Orléans, *rose, dark shade, pure white mark*	0 9
Duke of Devonshire, *fine orange rose, broad mark*	1 0
Dumont d'Urville, *brilliant rose, with dark shade, wh.*	0 9
Eclatante frappante, *crimson, delicate mark, pure wh.*	1 0
Ernest Maltravers, *bright or. rose, narrow white mark*	0 9
Gloriosus, *orange red, narrow mark*	0 9
Goethe, *bright lilac rose, large pure white mark*	0 9
Henricus, *fine rosy red, shaded with lilac, violet*	1 0
Insignis, *brilliant sear., margined with rosy carmine*	0 6
Jenny Lind, *scar., nar. wh. line, edged crim. and car.*	0 9
Lafayette, *narrow petals, fine red, bordered with violet*	0 9
La Fille du Régiment, *or. red, wh., edged with carm.*	0 9
Lamartine, *pale orange and rose, long white mark*	1 6
Laurens Koster, *dark red, small mark, bord. with vio.*	0 9
Lehmann, *orange red, broad short mark*	1 6
Lindley, *brilliant orange rose, mark long, bor. ro. vio.*	1 0
Lisette, *pink lilac rose, mark wh., with vio. and carm.*	0 9
Lord Grey, *violet rose, wh., viol. edye and brill. carm.*	0 9
Lord John Russell, *brilliant orange rose, mark white*	0 9
Lord Peel, *lilac orange red, mark narrow white*	0 9
Lord Wellington, *brilliant orange rose, fine mark*	1 0
Louis Philippe, *brilliant orange rose, broad short mark*	0 9
Mehemet Ali, *bright or. with dark shade, small mark*	0 9
Meline, *dark ro., large mark, bor. with crim. and sear.*	2 6
Monstrosus, *bright rose, large mark, bord. with lilac*	0 9
Oscar, *most brilliant scarlet, mark short, pure white*	0 9
Paulowna, *bright orange rose, lower petals darker*	0 9
Paxton, *bright rose, orange shade, clear white mark*	1 0
Prince de Lichnovsky, *brilliant scarlet, white mark*	1 0
Prince of Wales, *dark red, fine mark*	0 9
Princess of Orange, *bright lilac ro. or., pure wh. mark*	0 9
Princess Sophia, *bright ro. shaded with or., mark long*	0 6
Professor Blume, *brilliant orange rose, pure wh. mark*	1 0
Queen Victoria, *bright carm. rose, large wh. mark*	0 4
Reticulatus, *bright pink rose, broad mark*	0 9
Robin Hood, *bright lilac or. red, narrow wh. mark*	0 9
Rosa Superba, *brilliant carmine rose*	0 9
Rouge Clairc, *orange red*	0 9
Rouge Eblouissante, *bright violet rose, lower petals or.*	0 9
Speciosus, *pale orange rose, long white mark*	0 6
Unique Rouge, *dark orange rose, pure white mark*	0 6
Van Dam van Isselt, *rosy pink, long pure white mark*	1 0
Van Hall, *bright lilac orange red, narrow white mark*	0 9
Violet Superbe, *delicate lilac rose, white mark*	0 9
Vitallina, *pale pink rose, long narrow white mark*	0 6
Von Humboldt, *fine lilac ro., narrow pure white mark*	0 9
Von Siebold, *bright pale orange, long white mark*	1 0
Walter Scott, *fine dark red, marked white and lilac*	0 9
Washington, *bright rosy lilac, white bord. with lilac*	1 6
Wilhelmus, *pale rose orange, long white mark*	0 6
Zenobia, *brilliant carmine rose, short white mark*	0 9

50 finest varieties, our own selection, for £2 2*s.*
25 do. do. £1 1*s.*
12 do. do. 11*s.*

NEW DWARF HYBRIDS.

Fine ornaments in pots or vases, for Greenhouse or Conservatory decoration.

	each s. d.
Balaklava, *rosy lilac, carmine feather*	1 0
Bertha, *bright rose, dark rose feather*	1 0
Chauvc-souris, *lilac rose, slight feather*	0 9
Erato, *cream and white, dark rose tube*	0 6
Euterpe, *delicate pink, distinct feather*	0 9
Heuriette, *orange rose, white feather*	1 0
Impératrice Eugénie, *rosy cream, var.*	1 6
Inkermann, *orange pink, carmine edged*	0 6
Maréchal Canrobert, *pink, rose and white*	1 0
Maréchal Pelissier, *mauve-shaded*	1 0
Sebastopol, *dark red, small feather*	0 6
Terpsichore, *mauve-colour*	0 6
Thalia, *delicate pink, lilac feather*	0 9
Taglioni, *rose pink, variegated feather*	1 0

The above splendid collection for 10*s.*

MIXED GLADIOLI.

Finest mixed French seedlings from Gandavensis ..... per 100 17*s.* 6*d.*, per doz. 2*s.* 6*d.*

SUNDRY HARDY AND GREENHOUSE BULBS.

AMARYLLIS.

		s.	d.
Ackermanni, *crimson*	each	3	6
Aulica, *scarlet and green*	„	3	6
platypetala	„	5	0
Crocata, *orange scarlet*	„	3	0
grandiflora, *vermilion*	„	3	6
superba, *scarlet*	„	4	0
Formosissima (*Jacobæa Lily*)	per doz.	5	0
Johnsoni, *scarlet and white*	each	3	6
striata, *striped*	„	3	6
Lutea (*Sternbergia lutea*)	per doz.	2	6
Prince of Orange	each	4	0
Revoluta	„	4	0
Vittata, *striped*	„	4	0
superba	„	4	0
Mixed Seedlings, *flowering bulbs*	„	3	6

ANEMONES.

Finest Double.

100 in 100 selected varieties		24	0
Finest double scarlet	per 100	10	0
— — mixed	„	6	0
Finest single scarlet	„	6	0
— — mixed	„	4	0

Double (for Clumping).

Blanche et Rouge, *red, var.*	per doz.	2	6
Celestine, *fine blue*	„	2	6
Feu Superbe, *brilliant scarlet*	„	2	6
Harold, *purple blue*	„	2	6
Josephine, *dark scarlet*	„	2	6
L'Eclair, *scarlet*	„	2	6
L'Ornement de la Nature, *deep blue*	„	2	6
Lord High Admiral, *crimson*	„	2	6
Lord Nelson, *violet blue*	„	2	6
12 *of each of the above* 9 *sorts*		20	0
6 *of each of the above* 9 *sorts*		10	6
3 *of each of the above* 9 *sorts*		5	6

ARUM.

Dracontium, *green*	each	0	6
Dracunculus, *brown*	„	0	6
Italicum, *light yellow*	„	0	4
Tenuifolium, *white*	„	0	6

BRAVOA.

Geminiflora, *crimson*	each	1	0

CALANTHE.

Discolor, *white*	each	1	0

CALLA.

Æthiopica, *white*	each	1	0

COMMELINA.

Cœlestis, *blue*	per doz. 2*s.*, each	0	3
alba, *white*	„ 2*s.* „	0	3

CLIVIA.

		s.	d.
Nobilis, *scarlet and yellow*	each	2	6

CORYDALIS.

Eximia	each	1	6

CRINUM.

Capense, *pink*	each	1	0

CYPRIPEDIUM.

Calceolus, *yellow*	each	2	6

DOG'S-TOOTH VIOLETS (Erythronium).

Red	per doz.	1	0
White	„	1	6
Yellow (Erythronium americanum)	each	0	9

EUCOMIS.

Punctated, *spotted*	each	6	0
Regia, *green*	„	4	0

FUNKIA.

Cucullata	each	0	6
Albo-marginata	„	1	0
Viridi-marginata	„	0	6
Japonica	„	1	0
Lanceolata	„	0	6
Ovata	„	0	6
Subcordata	„	0	6
Undulata	„	0	6
medio picta	„	1	0

GESNERIAS.

Blassi, *dark scarlet*	each	2	0
Cinnabarina, *orange scarlet*	„	2	0
Densiflora	„	2	6
Donckelaari, *crimson and white throat*	„	3	6
Nigella hispanica	„	2	6
Zebrina, *yellow and scarlet*	„	1	0
splendens, *scarlet and yellow*	„	2	0
splendidissima	„	2	6

GLORIOSA.

Planti	each	3	6

HÆMANTHUS.

Coccineus, *red*	each	2	6
Puniceus, *scarlet*	„	2	0

HELONIAS.

Bullata, *purple*	each	0	6

SUNDRY HARDY AND GREENHOUSE BULBS (*continued*).

ISMENE.

		s.	d.
Calathina, *white*	each	1	0
Undulata, *white*	„	0	6

LILIUM.

		s.	d.
Aurantiacum	per doz.	3	6
Canadense	each	1	0
Catesbæi	„	1	0
Croceum	„	0	6
Excelsum	„	2	6
Eximium	„	1	0
giganteum	7*s.* 6*d.* to	12	6
Japonicum	„	7	6
Venustum	„	2	0

LILIUMS (Large).

		s.	d.
Lancifolium album	each	1	6
punctatum	„	2	0
rubrum	„	2	0

LILY OF THE VALLEY.

		s.	d.
Single white	per doz.	1	0

ORCHIS.

		s.	d.
Conopsea	each	0	9
Latifolia	„	0	9
Maculata	„	0	9
Morio	„	1	0

RANUNCULUS, PERSIAN DOUBLE.

	s.	d.
100 finest named varieties, separate	20	0
50 „ „ „ „	12	0
Extra fine mixed, per 100	5	0
25 finest named varieties, separate	6	6
12 „ „ „ „	3	6
Fine mixed, per 100	3	0

For Clumping.

	per 100.		doz.	
Commodore Napier, *fine edged*	10	0	1	6
Fireball, *deep scarlet*	10	0	1	6
Mont Blanc, *pure white*	18	0	2	6
Œil Noir, *finest black*	25	0	3	0
Ophir d'Or, *yellow spotted*	10	0	1	6
Sunflower, *bright yellow*	10	0	1	6
12 *of each of the above* 6 *sorts*			10	6
6 *of each of the above* 6 *sorts*			5	6

New Scotch.

		s.	d.
Fine mixed	per 100 12*s.*, doz.	1	6

RANUNCULUS, Turban.

	s.	d.	s.	d.
	per 1000.		100.	
Dark crimson or black	17	6	2	0
New white, *Hercules*			10	0
Scarlet, *Romano*	17	6	2	0
Séraphique, *citron*	17	6	2	0
Yellow, *Merveilleuse*	20	0	2	6
Finest mixed, all varieties			3	6

RHEXIA.

		s.	d.
Virginica, *purple*	each	0	6

SAUROMATUM.

		s.	d.
Guttatum	each	5	0

SISYRINCHIUM.

		s.	d.
Odoratissimum	each	1	0

TIGRIDIA.

		s.	d.
Canariensis	each	0	9
Cœlestis	„	0	9
Pavonia	per doz.	3	0
conchiflora	„	2	6
Speciosa	„	3	0

TRITONIA.

		s.	d.
Aurea, *orange*	each	0	6

TUBEROSES, DOUBLE.

		s.	d.
Fine solid roots	per doz.	3	0

VALLOTA.

		s.	d.
Purpurea, *fine scarlet, strong*	each	2	0

ZEPHYRANTHES.

		s.	d.
Atamasco	per doz.	3	0
Rosea	each	0	9

BULBS GROWING ON FOR EARLY BLOOMING.

For the convenience of those of our Customers who might be prevented from ordering Bulbs at the usual planting Season, we potted and put into glasses last October a number of Hyacinths, Narcissus, &c., which we have kept growing on at our Nursery, and offer as under.

HYACINTHS, best named varieties, in pots				per doz.,	9*s.* to	12	0
Do.	do.	do.	in ordinary glasses	„	12*s.* to	15	0
Do.	do.	do.	in the new-shaped glasses	„	18*s.* to	24	0
Do.	do.	do.	in moss ready for planting in pots or glasses	„	9*s.* to	12	0
POLYANTHUS NARCISSUS, best varieties, in pots				„		12	0
TULIPS, finest varieties, in pots				„	9*s.* to	18	0

JAMES CARTER & CO.'S COLLECTION OF GARDEN SEEDS FOR 1862,

OR

COMPLETE ASSORTMENTS OF VEGETABLE SEEDS FOR ONE YEAR'S SUPPLY.

In the following Collections it will be observed that there are *fewer kinds* than is usual in similar Assortments, as we have considered that it would be more satisfactory to our Customers to have *increased quantities* of a smaller number of varieties. We have omitted, therefore, any sort of Vegetable that is not usually grown in Kitchen Gardens, and have *doubled the size of the packets* of the remaining most approved varieties.

These Collections are always kept ready, and can be supplied at a moment's notice.

	No. 1. 10*s.* 6*d.*	No. 2. 20*s.*	No. 3. 40*s.*	No. 4. 60*s.*	No. 5. 100*s.*
Beans, best varieties for succession	2 pints.	2 quarts.	3 quarts.	5 quarts.	10 quarts.
——, French and Runners	1 pint.	2 pints.	3 pints.	3 pints.	7 pints.
Beet, including Carter's St. Osyth, recommended by the Royal Horticultural Society.	.....	1 pkt.	1 oz. & 1 pkt.	1 oz. & 1 pkt.	3 oz. & 1 pkt.
Borecole, including Cottager's Kail and Asparagus Kail	2 pkts.	3 large pkts.	3 large pkts.	3 large pkts.	5 large pkts.
Brussels Sprouts, best Imported	1 pkt.	1 pkt.	1 large pkt.	1 large pkt.	1 large pkt.
Broccoli, for succession, including Grange's Autumn white and Snow's Superb	3 pkts.	3 pkts.	3 large pkts.	6 large pkts.	8 large pkts.
Cabbage, for succession, including Carter's Earliest	2 pkts.	3 large pkts.	4 large pkts.	5 large pkts.	8 large pkts.
——, Savoy, best sorts	1 pkt.	2 pkts.	3 pkts.	2 oz.	3 oz.
Capsicum	.....	.....	.....	1 pkt.	1 pkt.
Carrot, for forcing and general crop	2 oz.	3 oz.	6 oz.	10 oz.	18 oz.
Cauliflower, including Standholder and Walcheren	1 pkt.	1 pkt.	2 large pkts.	3 large pkts.	3 large pkts.
Celery, including the Incomparable dwarf white	1 pkt.	2 pkts.	2 large pkts.	2 large pkts.	3 large pkts.
Cress, plain	4 oz.	½ pint.	½ pint.	1 pint.	1 quart.
——, curled	.....	.....	4 oz.	½ pint.	1 pint.
——, New Australian Garden	1 pkt.	1 pkt.	1 pkt.	1 oz.	2 oz.
——, American	.....	1 pkt.	1 pkt.	1 pkt.	1 pkt.
Cucumber, including Carter's Champion and Lynch's Star of the West	.....	1 pkt.	3 pkts.	3 pkts.	4 pkts.
Endive, of sorts	.....	1 pkt.	2 pkts.	1½ oz.	3 oz.
Leek, Musselburg Giant	.....	1 pkt.	1 pkt.	1 pkt.	1 oz.
Lettuce, including Carter's Giant white	2 pkts.	3 pkts.	4 pkts.	4 pkts.	8 pkts.
Mustard	4 oz.	½ pint.	1 pint.	1 pint.	2 quarts.
Melon, including Carter's Excelsior, which gained the first prize at the Crystal Palace	.....	1 pkt.	2 pkts.	2 pkts.	4 pkts.
Onion, including the Giant Madeira and Reading	1 oz.	2 oz.	6 oz.	8 oz.	15 oz.
Parsley, Myatt's garnishing	1 pkt.	1 oz.	2 oz.	2 oz.	3 oz.
Parsnip, fine selected	1 oz.	1 oz.	2 oz.	4 oz.	8 oz.
Peas, best varieties for succession, including Carter's Earliest, Prizetaker, Champion of England, and Carter's Victoria	4 pints.	4 quarts.	7 quarts.	12 quarts.	20 quarts.
Radish, best sorts for succession	4 oz.	6 oz.	10 oz.	14 oz.	1 quart.
Rampion	.....	.....	1 pkt.	1 pkt.	1 pkt.
Spinach, Summer and Winter	½ pint.	1 pint.	1 pint.	2 quarts.	2 quarts.
Salsafy	.....	.....	1 pkt.	1 large pkt.	1 large pkt.
Scorzonera	.....	.....	1 pkt.	1 large pkt.	1 large pkt.
Turnip, best for succession	1 oz.	2 oz.	4 oz.	6 oz.	10 oz.
Tomato, including the new upright variety	.....	1 pkt.	1 pkt.	1 pkt.	3 pkts.
Vegetable Marrow, including the New Custard	1 pkt.	2 pkts.	2 large pkts.	2 large pkts.	2 large pkts.
Herbs, Sweet and Pot	.....	4 pkts.	5 pkts.	5 pkts.	8 pkts.
Couve Tronchuda	1 pkt.	.....	1 pkt.	1 pkt.	1 pkt.

NEW VARIETIES OF VEGETABLE SEEDS.

NEW WHITE SPROUTING BROCCOLI.

This is a remarkable variety of late *white* sprouting Broccoli. The plant grows to an immense size, and produces from the axil of every leaf a good-sized head, while the crown is terminated by one of large size. These heads, or sprouts, amount sometimes to as many as fifty when a plant is well grown. During the late inclement winter this Broccoli maintained its character for hardiness, and gave additional proof of its value by bearing most abundant crops. Season—January to March. Price per packet 1*s*.

EARLY HANDSWORTH POTATO.

A very superior kind for forcing in pots and frames, the very earliest for open ground, and a great acquisition for market-gardening purposes. It is very dwarf, growing not more than from 4 to 8 inches high. It is thus reported in the *Gardener's Chronicle*, 1858, p. 457:—"Out of 71 varieties grown for trial in the Horticultural Society's Garden, the Early Handsworth was by 10 days the earliest;" also at p. 656, "Among Potatoes the Early Handsworth deserves particular notice. It comes in some 10 days earlier than the Ash-leaf Kidney, is excellent in quality, and a very prolific, round, white kind; six plants produced 6 lbs. of Potatoes; its great recommendation, however, is its earliness .....1*s*. per peck.

PHEASANT'S-EYE POTATO.

Earlier than Regents, prolific, and very floury; *can be specially recommended*.....2*s*. 6*d*. per peck.

DELMAHOY SECOND-EARLY POTATO.

A handsome large-sized Potato, very floury and of good flavour; is one of the best varieties in cultivation as a second-early Potato, and will produce nearly double the crop of any other kind; is free from disease, and a good keeper .....2*s*. per peck.

NEW VARIETIES OF VEGETABLE SEEDS (*continued*).

SUTTON'S STUDENT PARSNIP.

This was originated by Professor Buckman, of the Royal Agricultural College, Cirencester, from the Wild Parsnip of Britain. Professor Buckman has, amongst his numerous experiments in the Botanic Gardens of the College, for many years carried on a system of "selection," by which means he has produced several culinary plants much superior in flavour to the varieties in general cultivation. The Student Parsnip is one of these, and will be found a great acquisition to the public when it is brought into general use. Price, per packet, 1s.

IVERY'S NON-PLUS-ULTRA CELERY.

"*Celery grown at Chiswick in* 1859.—A collection of fifteen sorts of Celery was cultivated for comparative trial at the garden in 1859; and various notes and memoranda concerning the peculiarities of the varieties, as well as their quality, were made; but the unusually severe and early autumnal frost injured the plants so much, that these memoranda could not be satisfactorily completed. It has accordingly been thought desirable to commit a more complete collection to a fuller examination during the present season. It may, however, be stated that, so far as the examination was carried, it was found that the variety sent as Ivery's Ne Plus Ultra, by which name it appears that Ivery's Non-plus was intended, and another called Hood's Dwarf Red, were the two best of the red kinds, both these being of very excellent quality; and that a dwarf variety, sent under the names of Superb Dwarf White and Incomparable Dwarf White, was the best of the white kinds. This latter closely resembles the Celeri Court Blanc of the French."—*Horticultural Society's Proceedings*. Per ounce, 1s.

HOOD'S IMPERIAL DWARF RED CELERY.

A stout-growing, very compact, solid and handy variety, of superior flavour and distinct habit. Recommended by the Horticultural Society as one of the best varieties in cultivation. Per ounce, 1s.

STRATHMORE HERO PEA.

This new wrinkled Pea was raised in the Vale of Strathmore in 1858, and has since been selected every season with great care. It grows 4 to 5 feet in height; yields an abundant crop, and may be gathered when it is stated that it produced at the rate of fifty-two bushels per acre this last season. Pods large and well filled; flavour excellent; and is well suited for general and late crops: for the latter especially it is invaluable, *very little liable to injury from mildew*. Price, per quart, 1s. 6d.

TOMATO DE LAYE.

A new variety, spoken of by Dr. Lindley in the '*Gardeners' Chronicle*' of November 24th, 1860, as follows:—

"A NEW UPRIGHT TOMATO, which requires no support. This plant is said to be entirely different from the kinds previously known. Its stem is 2 feet high or more, quite upright, and so remarkably strong and stiff as to be strictly self-supporting—a highly commendable quality. It branches less than the common red Tomato, is less leafy, and does not want so much pinching. The leaves are rather curled, much puckered, very fine, and closely placed on the sturdy branches. Their colour is a remarkably deep shining green. It does not bear so freely as the common Tomato; but its fruit, which is of the same colour, is larger and more regularly formed. In earliness it is intermediate between the Early Red (*rouge hâtive*) and the Great Red (*rouge grosse*). It was raised from seed by GRENIER, the gardener of M. DE FLEURIEUX, at a place called the Chateau de Laye, wherefore it is to be called the *Tomate de Laye*."

We have grown the above and can specially recommend it. Per packet, 6d.

KEMP'S INCOMPARABLE CABBAGE.

Very dwarf, early, and compact; delicate flavour. Price per packet, 1s.

BALDRY'S SCARLET DEFIANCE RHUBARB.

The earliest in cultivation, either for market-gardeners, private growers, or forcing. It was awarded a First Prize, May 25, 1860, by the Pomological Society of London, when eighteen varieties were exhibited; a portion of each kind was examined baked and also a portion examined green. The Society report that it is unquestionably a First-class variety, very stout in habit, medium in length; pulp very deliquescent, high-coloured, and richly subacid. Excellent for market as well as private growers. Price per root, 1s. 6d.

NEW FEATHER-STEM SAVOY.

A true Hybrid, possessing the growth and habit of Brussels Sprouts; a delicate and delicious vegetable, requiring the same treatment as Brussels Sprouts..... 1s. per packet.

NEW VARIETIES OF VEGETABLE SEEDS (*continued*).

MELVILLE'S VARIEGATED GARNISHING KAIL.

Described in the 'Cottage Gardener' of December 18th, 1860, as follows:

"These come true from seeds, and are highly ornamental, the colours being exceedingly brilliant, and of all shades, from magenta to pure white, some frilled, others veined, and some blotched. More beautiful-foliaged plants could not be found, and they might be advantageously made use of for the flower garden in winter."

Per packet 1*s*.

CARTER'S DWARF MAMMOTH CAULIFLOWER.

A very early hardy variety, of dwarf and compact habit, with a firm white head, larger than the Walcheren; stands dry weather, comes in before the ordinary early Cauliflower, and is fit to cut after the late variety; can be specially recommended as the best variety for forcing and general use. 1*s*. per packet.

NEW LETTUCES.

CARTER'S GIANT WHITE COS.

DUNNETT'S GIANT BLACK-SEEDED BROWN COS, for autumn sowing.

CARTER'S GIANT BROWN COS.

The above are three very large crisp and good-flavoured varieties of Lettuce, with fine broad leaves which turn in well, and require no tying; they are much later than the usual sorts of Lettuce, and if sown at the same time, will not commence to run for quite three weeks after the common sorts.

These Lettuces were specially noticed in the '*Gardener's Chronicle*' of September 28, 1861.

1 packet of each of the three varieties 2*s*. 6*d*.; each, per packet, 1*s*.

WHEELER'S TOM THUMB LETTUCE.

Very dwarf and compact, excellent flavour, crisp, and refreshing.

Price, per packet, 1*s*.

BECK'S NEW DWARF GREEN GEM BEANS.

1 foot high, dwarf-branching habit, very prolific; the Beans are a fine green colour, and look well on table.

Price, per quart, 2*s*.

CARTER'S ST. OSYTH BEET.

Medium size, good shape, short top, rich deep blood-red colour, fine flavour, decidedly the best Beet in cultivation (favourably spoken of in the Report of our Seed Farms, which appeared in the '*Gardener's Chronicle*,' September 28, 1861).

Price, per packet, 1*s*.

PERPETUAL SPINACH BEET.

Large leaves of a good colour, flavour superior to Spinach.

Come into use right through the Autumn.

Price, per packet, 6*d*.

JERSEY NAVET.

A Correspondent from Jersey writes to us as follows:—

"The Jersey Navet is a green-topped Turnip, growing in the shape of a Carrot: is the best for Autumn sowing, inasmuch as it is very hardy and self-protecting, by growing into the ground. You can strongly recommend it: the roots are as sweet as nuts."

Price, per ounce, 6*d*.

NEW PARSNIP CHERVIL.

A new vegetable, about the size of a Summer Carrot. Seed should be sown in the Autumn. Figured in the '*Gardener's Chronicle*' of Oct. 5, 1861. 6*d*. and 1*s*. per packet.

NEW VARIETIES OF VEGETABLE SEEDS (*continued*).

APPLEBY'S SEEDLING CUCUMBERS.

We have much pleasure in offering the following six varieties of Cucumbers, which we received last year from Mr. Appleby, the well-known writer on Horticultural subjects: we have grown them at our Nursery, and can fully endorse Mr. Appleby's description of them, which is as follows:—

Emperor, 24 to 26 inches long.

A handsome fruit, with black spines; hardy, a good setter. Well suited for Winter culture.

Queen, 28 to 30 inches long.

A fine well-shaped fruit, with black spines; a free bearer, good setter. Suitable for Exhibition.

Conqueror, 28 inches long.

Handsome in shape, with white spines; a good bearer. Fit for Exhibition, very excellent in quality.

Albion, 24 inches long.

A white-spined, well-shaped variety; extra bearer, a good forcer, and bears freely in winter. Qualities excellent, being crisp and well-flavoured.

Hailstone.

Blunt white spines in the form of hailstones; a free bearer; handsome and curious.

Hamilton's Improved Black Spine.

A well-known excellent variety.

The above Collection for 3*s.* 6*d.*

CARTER'S CHAMPION CUCUMBER.

The best winter variety ....1*s.* per packet.

LYNCH'S STAR OF THE WEST CUCUMBER.

The best variety for general use. .....1*s.* per packet.

NEW HARDY RIDGE MELON,

"Achapesnorricher."

A handsome green-fleshed variety from the Ionian Islands. Flavour quite equal to Melons grown in a pit. The seed now offered is saved from fruit grown on a ridge out of doors last year.

Price, per packet, 1*s.*

THE TWO BEST MELONS IN CULTIVATION.

CARTER'S EXCELSIOR MELON.

The best Green-fleshed variety. **Received first Prize at Crystal Palace** .....1*s.* per packet.

SCARLET GEM MELON.

The best Scarlet-fleshed variety ....1*s.* per packet.

CARTER'S CHAMPION BROCCOLI.

The following is an extract from the '*Gardener's Chronicle*' of May 28th, 1859:—

Messrs. Carter and Co. have sent us specimens of a new Broccoli with the following memorandum:—"This Broccoli has been proved side by side with the Wilcove late white, Ward's late white, Reading Giant late white, Dwarf Danish, and other approved late kinds, and has shown itself superior to all of them. The Wilcove late white are finished cutting more than a fortnight since; this variety is just coming in, and fine heads will be cut for the next ten days."

The heads forwarded to us were of the finest possible quality, very large, not in the least coarse, white rather than cream-coloured, and proved when cooked to be wholly free from the strong taste which spoils so many Broccolis.

Stock of seed very limited; price, per packet, 1*s.*

KITCHEN-GARDEN SEEDS, ETC.

In submitting (annexed) to the notice of our Customers and the Public generally our Twenty-seventh Annual List of Vegetable Seeds, we beg leave respectfully to announce that it has been subjected to a most careful revision; all sorts in any way questionable have been expunged, several novelties of merit have been added, and kinds most to be recommended are printed in **black letters**. As a heading to each kind of Vegetable, we have made a few general observations, which we trust may be found useful; for further information respecting cultivation, &c., reference may be made to the Calendar of Operations, commencing at page 73. The *quality* of our Seeds we are confident *cannot be surpassed*, as they are *genuine* and of the best growth. The harvest has been unusually good, and some articles are consequently cheaper than last year.

A ½ *lb.* may be had at the same rate as a *lb.*; ½ *an oz.* at the same rate as an *oz.*; a *pint* at the same rate as a *qt.*; and a ½ *bushel* at the same rate as a *bushel*.

ARTICHOKE.

Propagate by seed when plants are scarce; to be sown early in April: but the *quickest* method is by *plants* either in October or March (see page 69): the ground should be deeply trenched and well manured.

		s.	d.			s.	d.
Green	per oz.	1	0	Purple	per oz.	1	0

ASPARAGUS.

Sow the seed in drills by the end of March, and at one year old the roots will be fit to transplant into prepared beds, which should be liberally manured and *salted*. One-, two-, and three-year old *plants* may be had (see page 69).

		s.	d.			s.	d.
Giant	per lb.	2	0	**Large early Batavian**	per oz.		6

BEANS.

Plant Mazagan and Earliest Dwarf Fan in November in strong ground, commence again at the end of February, and in succession until the beginning of June.

		s.	d.			s.	d.
Earliest Dwarf Fan	per qt.		8	**Johnson's Wonderful**	per qt.		8
Early Mazagan	,,		6	**New Emperor**	,,		8
— long-pod	,,		6	Largest Windsor	,,	1	0
Green Nonpareil	,,		8	**Taylor's do.**	,,	1	0
Beck's new Dwarf Green Gem	,,	2	0	**Green do.**, *fine*	,,	1	0

BEET.

Sow Spinach Beets by the middle of April in good ground. Red Beets for the main crops the last week in April or the first in May: all the varieties will be much improved by the application of *saline* manure in a liquid state; trench the ground deeply; and if dung is added, let it be at the bottom of the trenches.

		s.	d.			s.	d.
Carter's St. Osyth	per pkt.	1	0	**Small selected blood-red**	per oz.		6
New Pine-Apple Short-top	per oz.		9	White	,,		4
New German	,,		6	Garnishing, in variety	per pkt.		3
Bailey's blood-red	,,	1	0	**Nutting's selected dwarf red**	,,	1	0
Silver or Spinach Beet	,,		6	**Perpetual Spinach**	,,		6

BORECOLE OR KAIL.

Sow in March for early, and in April for main crops.

		s.	d.			s.	d.
Dwarf green curled Scotch	per oz.		6	Jerusalem	per oz.		9
Tall do. do. do.	,,		6	Knoll	,,		6
Asparagus (true)	,,	1	0	**New feathered Scotch**	,,		6
Buda	,,	1	0	**New heading**	,,		9
Delaware	,,		6	Variegated	,,		6
Cottager's (true)	,,	1	0	**Melville's garnishing**	per pkt.	1	0

BROCCOLI.

Most of the sorts should be sown about the first week in April, for late Spring use; sow the late sorts in the middle of May; sow Walcheren in May and August, and transplant into richly-manured ground.

		s.	d.			s.	d.
Carter's Champion	per pkt.	1	0	Chappell's cream or sulphur	per oz.	1	0
Early Cape, purple	per oz.	1	6	**Conning's Perfection**	per pkt.	1	0
— Cape, white	per pkt.	1	0	**Dalmeny white**	,,	1	0
Dancer's late pink Cape	per oz.	1	6	**Dilcock's Bride**	per oz.	1	0
Early Grange's	per pkt.	1	0	Dwarf Russian or Siberian	,,	1	0
— Sprouting	per oz.	1	0	**Elletson's gigantic**	,,	1	6
Early Walcheren	,,	1	6	**Large Spring white or Cornish**	,,	1	0
— white Malta	,,	1	0	Late close-headed purple	,,	1	0
Adams's early white	,,	1	0	— white	,,	1	0

BROCCOLI (*Autumn*)

	s. d.
Miller's dwarf white ..... per oz.	1 0
New Giant white ..... „	1 6
New white Sprouting ..... per pkt.	1 0
[illegible] ..... per oz.	1 0
Victoria ..... „	1 0
Penzance ..... per pkt	1 0
Self-protecting ..... per oz.	1 0
1 oz. of each of 8 best sorts for succession	8 0
½ oz. „ 8 „ „	4 0

	s. d.
Snow's superb ..... per pkt.	1 0
Tamworth late white ..... per oz.	1 0
Very late Dwarf Danish ..... „	1 0
Waterloo, large late white ..... „	1 0
Wilcove late white ..... „	1 0
Winter Imperial ..... „	1 0
Dixon's Emperor ..... per pkt.	1 0
1 oz. of each of 4 best sorts for succession	4 0
½ oz. „ 4 „ „	2 0

BRUSSELS SPROUTS.

Sow early in March for first crops, and in April for succession; transplant carefully into good ground. Imported seed is found to be preferred to the English, which often sports.

English ..... per oz.	0 6
Imported from Holland ..... per oz.	1 0

Rosberry ..... per pkt. 1s.

CABBAGE.

Sow in succession, monthly, from February to August; the smallest from the last sowing to be pricked out into nursery beds for planting early in the Spring.

Kemp's Incomparable ..... per pkt.	1 0
Aitken's Matchless ..... per oz.	8
Barnes' Early ..... „	8
Carter's Early ..... „	1 0
Carter's Matchless ..... „	1 0
Early Battersea ..... „	8
— Champion true ..... „	8
— Dwarf Early ..... „	6
— Emperor ..... „	6
— Enfield Market ..... „	8
— London Market ..... „	6
— Nonpareil ..... „	6
— Parnham ..... „	6
— Paragon ..... „	8
— Sprotsboro' ..... „	6
— Sugar-loaf ..... „	6
1 oz. of each of 6 finest sorts for succession	3 0

Early Vanack ..... per oz.	6
—, Wheeler's Imperial ..... „	6
— York ..... „	6
King of the Cabbages ..... „	8
Large Imperial ..... „	8
— Drumhead ..... „	4
— — improved ..... „	6
— York ..... „	6
Mitchell's Prince Albert ..... „	6
Shilling's Queen ..... „	8
Red, for pickling ..... „	6
— Dutch, large improved ..... „	1 0
Chou de Milan, imported ..... „	6
Colewort (for greens) rosette ..... „	8
Couve Tronchuda, improved ..... „	9
Thousand-headed ..... „	6
½ oz. of each of 6 finest sorts for succession	1 6

CABBAGE (Savoy).

For early crops sow in February, and again in April for the main crops; some think it preferable to sow in November for very early purposes.

Dwarf Green ..... per oz.	6
Drumhead ..... „	6
Globe ..... „	6
New Feather-stemmed ..... per pkt.	1 0

New dwarf Ulm ..... per oz.	8
— Marcellan ..... „	6
Yellow ..... „	6

CARROT.

Sow Early Horn and Short French on a gentle hot-bed at the end of February, and again on a warm border in the middle of March, the main crops in the middle of April. A sowing should be made in August in very light soil with a dry bottom.

Early Horn ..... per lb. 6s., per oz.	6
— short French ..... „	6
James's Scarlet ..... per lb. 6s. „	6
Long Surrey ..... „ 6s. „	6

Long Orange ..... per lb. 6s., per oz.	6
Scarlet Altringham ..... „ 4s. „	4
—— selected ..... „	6
Intermediate ..... „	6

CAULIFLOWER.

Make a sowing in pans on a gentle heat in February and March, to be pricked out in April on a warm border; sow in April and May for succession, and a principal sowing in August to stand the *Winter* under protection.

Carter's dwarf Mammoth ..... per pkt.	1 0
Early ..... per oz.	1 6
Late ..... „	1 6
Large Asiatic ..... „	1 6
Frogmore, Forcing ..... per pkt.	1 0
1 oz. of each of 4 best sorts for succession	5 0

London Market ..... per oz.	1 6
New Giant ..... „	1 6
Standholder ..... „	1 6
Walcheren ..... „	1 6
[illegible] of each of 4 best sorts for succession	2 6

CARDOON.

Sow in May in trenches prepared as for Celery.

Spanish ..... per oz.	0 6
New Large purple ..... per oz.	1 0

CELERY.

For earliest crop sow in February on a moderate hot-bed to be pricked out on bottom heat when ready and transplanted to trenches in June; for main crop sow in March, and in April for late crops; the trenches should be filled with rich manure, and the plants abundantly watered; *Saline* manure is very beneficial.

	s.	d.		s.	d.
Giant red ..... per oz.		6	Read's Matchless red ..... per oz.		6
— white ..... „		6	Large-rooted Celeriac ..... „		6
Champion white ..... „		6	Laing's Mammoth red ..... „		6
Cole's solid red ..... „		6	Law's White Giant ..... „		6
— Crystal white ..... „		6	Manchester red ..... „		6
Hood's Imperial dwarf red ..... „	1	0	— white ..... „		6
Incomparable, dwarf white ..... „	1	0	Seymour's white ..... „		6
Ivery's Nonsuch ..... „	1	0	Solid red ..... „		6
Goodwin's solid white ..... „		6	— white ..... „		6

Superb Dwarf White ..... per oz. 1*s.*

CORN SALAD.

Sow for succession in February and March; in August and September for main crops.

English ..... per oz.		3	Italian ..... per oz.		6

CRESS.

Sow once a week all the Summer, out of doors; and through the Winter and early Spring, under cover: sow American Cress towards the end of August to stand through the Winter. Water-Cress may be very successfully grown by sowing on a shady border in Spring and keeping it well watered.

Common ..... per qt.	1	6	Normandy ..... per oz.		3
Triple curled ..... „	1	6	Perennial American ..... „		3
Golden ..... per oz.		3	Water ..... per pa.		6
New Australian Garden ..... „		6	Broad-leaved Garden ..... per oz.		6

CUCUMBER.

Information respecting the *Frame* varieties will be found in the Calendar of Operations (page 73). Sow the ridge varieties under hand-glasses on a gentle heat in May.

Hardy Ridge varieties.

Long prickly ..... per oz. 1*s.* 6*d.*, per pa.		3	Stockwood, extra fine ..... per pa.		6
— Ridge ..... „ 1*s.* 6*d.*, „		6	Short prickly ..... per oz. 1*s.*, „		3

Frame varieties.

Ayre's Perpetual black spine ..... per pa.	1	0	Rifleman ..... per pa.	1	0
Berkshire Champion ..... „	1	0	Dr. Livingstone ..... „	1	0
Carter's Champion ..... „	1	0	Ipswich Standard ..... „	1	0
Cuthill's black spine ..... „	1	0	Walker's Rambler ..... „	1	0
— Highland Mary ..... „	1	0	Lynch's Conqueror of the West ..... „	1	0
Lord Kenyon's Favourite ..... „	1	0	— Star of the West ..... „	1	0
Stilwell's Matchless ..... „	1	0	Mill's Jewess ..... „	1	0
Phenomenon ..... „	1	0	Sion House, improved ..... „	1	0

EGG PLANT (for garnishing).

White ..... per pa.		3	Purple ..... per pa.		3

ENDIVE.

Sow for early crops in the middle of May, and in succession to the beginning of August; transplant from the seed-bed in to warm situations, and give ample protection to the late crops for Spring use.

Batavian, green ..... per oz.		9	Green curled winter ..... per oz.		9
— white ..... „		9	New mossy green ..... „		9
Green curled, extra fine French ..... „		9	White curled ..... „		9

FRENCH BEANS.

Sow in April under hand-glasses, and in May and June in the open border; also in pots under glass from December to the end of March. Scarlet Runners from the beginning of May to the first week in June.

Dwarf Kidney Varieties.

Canterbury ..... per qt.	1	6	Light Dun ..... per qt.	1	6
China ..... „	1	6	Mohawk ..... „	2	0
Dark Dun ..... „	1	6	Negro, long-podded ..... „	1	6
Earliest Victoria ..... „	1	6	Newington Wonder ..... „	1	6
Early forcing ..... „	1	6	Royal Dwarf ..... „	1	6
— prolific ..... „	1	6	Sion House ..... „	1	6
Fulmer's forcing ..... „	2	0	Speckled ..... „	1	6

FRENCH BEANS (*continued*).

Tall or Running Varieties.

	s.	d.		s.	d.
[illegible] ..... per qt.	1	6	Painted Lady ..... per qt.	2	0
[illegible] ..... „	1	6	Scarlet Runners ..... „	2	0
Giant White Runners ..... „	2	0	Scarlet Runners, white-seeded ..... „	1	6

ICE PLANT.

Sow in heat in March and April, and pot off.

For [illegible] ..... per packet 3

INDIAN CORN.

Sow in heat in March, and pot off, to be finally transplanted into open ground the last week in May.

Forty-day (Quarantaine) ..... per packet 6

KOHL RABI.

Sow in May, and transplant the end of June.

Early white ..... per oz.		6	Large purple ..... per oz.		6

LEEK.

Sow in February, March, and April, and plant out in rich ground; when growing fast, give them some liquid manure.

Early Summer ..... per oz.		6	Musselburgh, large and fine ..... per oz.	1	0
London Flag ..... „		6	New Giant ..... „	1	0

LETTUCE.

Sow in pans on a gentle heat in February, and on a warm border through March for early crops, and from the beginning of April to the end of August for the general and late crops. Keep them well watered in dry weather.

Cos Varieties.

London White Cos ..... per oz.	1	0	Green ..... per oz.	1	0
Bath, white-seeded ..... „	1	6	Carter's New Giant white ..... per pa.	1	0
„ black-seeded ..... „	1	6	Dunnett's Giant Black-seeded Bath ... „	1	0
Berkshire brown ..... „	1	6	Carter's Giant Brown ..... „	1	0
Brighton, or Cove ..... „	1	0	New hardy green ..... per oz.	1	6
Brown ..... „	1	6	[illegible] white ..... „	1	6
Egyptian ..... „	1	0	Paris green ..... „	1	6
Florence ..... „	1	6	[illegible] white ..... „	1	6
1 oz. of each of 6 best sorts for succession	7	6	1 oz. of each of 6 best sorts for succession	4	0

Cabbage Varieties.

Asiatic ..... per oz.	1	0	Neapolitan ..... per oz.	1	0
Belle et Bonne ..... „	1	0	Nonsuch, very early ..... „	1	0
Brown Dutch ..... „	1	0	Silesian brown ..... „	1	0
Drumhead ..... „	1	0	Tom Thumb ..... „	1	0
Hardy Hammersmith ..... „	1	0	Victoria ..... „	1	0
Magnum Bonum ..... „	1	0	White ..... „	1	0
Matta ..... „	1	0	Wheeler's Tom Thumb ..... per pa.	1	0
1 oz. of each of 6 best sorts for succession	5	0	1 oz. of each of 6 best sorts for succession	2	6

LOVE APPLE (TOMATO).

Sow in heat in March, and pot off to harden and plant against walls in May.

Red ..... per oz. 1s.	per pa.	3	Yellow ..... per oz. 1s.	per pa.	3
— Cherry ..... „ 1s. 6d.	„	6	— Cherry ..... „ 1s. 6d.	„	6

Tomato de Laye, new upright variety ..... per packet 6*d*.

MALLOW.

Sow in March; it is quite hardy.

For [illegible] ..... per packet 3

MELON.

Carter's Excelsior ..... per pa.	1	0	Queen's Pocket ..... per pa.	1	0
Golden Perfection ..... „	1	0	Trentham Cocoa-Nut ..... „	1	0
Bousie's Incomparable ..... „	1	0	Turner's Gem ..... „	1	0

And many other choice varieties.

MUSTARD.

The same as the curled Cress.

		s.	d.			s.	d.
Brown	per pint	1	6	White	per qt.	1	6

ONION.

Sow the main crops in March and April, and about the second week in August to stand through the Winter.

Blood-red	per oz.	0	9	Reading	per oz.	0	9
Danver's Yellow	,,	1	0	Silver-skin	,,	0	9
Deptford	,,	0	6	**Spanish brown**	,,	0	9
Globe	,,	0	9	**— white**	,,	0	9
— new white	,,	0	9	Strasburg	,,	0	6
James's keeping	,,	0	9	**Tripoli, large flat**	,,	0	9
Lisbon	,,	0	6	—, round	,,	0	9
New Giant Madeira	,,	1	0	**Very early Nocera**	,,	1	0
Pickling	,,	0	9	Welsh	,,	0	6
Portugal, brown	,,	0	9	Pear-shaped	,,	0	6
— white	,,	0	9				
2 oz. of each of the 6 finest sorts		7	6	1 oz. of each of the 6 finest sorts		4	0

ORACH OR FRENCH SPINACH.

Sow for succession in March and April.

Red	per oz.	0	6	Yellow	per oz.	0	6

PARSLEY.

Sow in drills from the end of February to the end of May.

Dunnett's garnishing	per oz.	0	6	**Myatt's garnishing**	per oz.	0	6
Large-rooted Hamburg	,,	0	3	New matchless winter	,,	0	6
Extra curled	,,	0	3				

PARSNIP.

Sow early in March in deep rich soil, and thin early.

Best large	per oz.	0	4	Guernsey	per oz.	0	4
Fine selected	,,	0	6	Hollow-crowned	,,	0	4
Sutton's Student	per pkt.	1	0	**New Parsnip Chervil**	per pkt. 6*d.* &	1	0

PEAS.

Sow Carter's Earliest, Sangster's No. 1, and Dunnett's First Early in January. Emperor, Bishop's long pod, Glory and Perfection in February, and the later sorts twice a month to the end of May; two sowings in June of earlier sorts for a late crop, and two early sorts about the third week in November. Carter's Victoria, Ne Plus Ultra, and King of the Marrows are unrivalled for flavour and general excellence.

Earliest Varieties.

Carter's Earliest	3 ft.	per qt.	1	0	Dunnett's first Early	2½ ft.	per qt.	1	0
Daniel O'Rourke	2½ ft.	,,	1	0	Sangster's No. 1	2½ ft.	,,	1	0
Dillestone's Early	3 ft.	,,	1	6	Tom Thumb		,,	1	6

Early and Second Early Varieties.

Auvergne	1 ft.	per qt.	1	0	Early Frame	3 ft.	per qt.	0	9
Bishop's long-podded	1½ ft.	,,	0	9	**Harrison's Glory**	3 ft.	,,	1	0
Blue Eclipse	2 ft.	,,	0	9	**Harrison's Perfection**	3 ft.	,,	1	0
Denyer's Prolific	5 ft.	,,	1	0	Prince Albert	2½ ft.	,,	0	9
Dickson's Favourite	4 ft.	,,	1	0	**Warner's Emperor**	3 ft.	,,	0	9
Beck's Gem	1 ft.	,,	1	6	Excelsior Marrow	4 ft.	,,	1	0

Early Wrinkled Varieties.

Alliance or Eugenie	3 ft.	per qt.	1	6	**Champion of England**	4 ft.	per qt.	1	0
Climax or Napoleon	3 ft.	,,	1	6	**Fairbeard's Nonpareil**	3 ft.	,,	1	6

Sea-green, new ..... per qt. 2*s.* 6*d.*

Middle and Late Varieties.

Beck's Prize-taker	4 ft.	per qt.	1	0	Matchless green Marrow	5 ft.	per qt.	0	8
Bedman's Imperial	2½ ft.	,,	0	9	**Noble's green**	4 ft.	,,	1	0
Blue Prussian	3 ft.	,,	0	8	Royal Victoria	6 ft.	,,	0	9
Dwarf green Marrow	4 ft.	,,	0	8	Scimitar	3 ft.	,,	0	9
— white Marrow	4 ft.	,,	0	8	Sugar (eatable pods)	6 ft.	,,	1	6
Fairbeard's Surprise	4 ft.	,,	1	0	Flack's dwarf Victory	3 ft.	,,	0	9
Glory of England	6 ft.	,,	1	4	Woodford's green	2½ ft.	,,	1	0

PEAS (*continued*).

Late Wrinkled Varieties.

			s.	d.
Br[illegible] Q[illegible]	6 ft.	per qt.	1	6
Carter's Victoria	6 ft.	„	2	0
Hair's dwarf Mammoth	2½ ft.	„	2	0
King of the Marrows	6 ft.	„	2	0
Knight's dwarf green	3 ft.	„	1	6
Knight's dwarf white	3 ft.	„	1	6
2 qts. of each of 10 best sorts for succession			17	6
1 qt. do. 10 do. do.			9	0
1 pt. do. 10 do. do.			5	0

			s.	d.
Lord Raglan	3 ft.	per qt.	2	0
Ne Plus Ultra	6 ft.	„	1	6
Strathmore Hero		„	1	6
Ward's Incomparable	6 ft.	„	1	6
Veitch's Perfection	4 ft.	„	2	6
Champion of Scotland	6 ft.	„	1	6
2 qts. of each of 6 best dwarfs for succession			12	0
1 qt. do. 6 do. do.			6	6
1 pt. do. 6 do. do.			3	6

POMPKIN.

Sow in heat in April, and transplant in May.

Large yellow	per pa.	3	Mammoth	per pa. 3

POTATO SEED (for exportation).

Sow in pans in heat in April, and plant out in May.

Early	per oz.	1 6	Late	per oz. 1 6

RADISH.

Sow on a moderate hot-bed in January, February and March, and twice a month in the open borders; a sowing in a frame on a warm border in October is of great use. Watering through the summer should be done early in the morning, when the sun shines hotly upon them.

Black Spanish	per oz.	3	Early scarlet	per qt.	2 6
Early short-top	per qt.	2 6	Turnip, mixed	„	2 6
Long frame	„	2 6	—, red	„	2 6
— salmon	„	2 6	—, white	„	2 6
New China rose-coloured	per oz.	6	White Naples	„	3 0
Scarlet olive-shaped, fine	per qt.	3 0	Wood's new frame	„	2 6

RAMPION.

Sow in May and June.

Per packet 3

RHUBARB.

Sow in heat in March, and plant out in May in a deep rich soil.

New Emperor	per pa.	6	Royal Albert	per pa. 6
Myatt	„	6	Victoria	„ 6

SALSAFY.

Sow in April in deep rich soil, and thin early.

Per ounce 9

SCORZONERA.

The same treatment as Salsafy.

Per ounce		9	New Russian	per oz. 1 0

SEA KAIL.

Sow in beds, the end of March or beginning of April (for roots, see page 69).

Per ounce 6

SKIRRET.

Sow at the end of March, and thin out early the same as for Parsnips.

	s.	d.
Per ounce		6

SORREL.

Sow in March and April on a warm border.

Common	per oz.	3	Broad-leaved	per oz.	6

SPINACH.

Sow Round Spinach in succession from January to June, and the Prickly sort the first week in August to stand through the winter. Sow the New Zealand in March in heat, and transplant the end of May, three feet apart in good ground.

Broad Flanders	per qt.	1 0	Prickly	per qt.	1 0
New Zealand	per oz.	6	Round	„	1 0

SQUASH.

The remarks on the culture of Pompkin apply to Squash.

Finest mixed American, 8 vars.	per pa.	6

TURNIP.

Sow for early crop the first week in March on a south hot-bed under glass, and in a warm situation in the open border; for main crops in succession, sow every three weeks until the beginning of July; for winter use, sow in August.

American strap-leaved	per pt.	2s. 6d.,	per oz.	6	Yellow Dutch	per pt. 1s. 6d.,	per oz. 3
Early Dutch	„	1s. 6d.,	„	3	— Altringham	„ 1s. 6d.,	„ 3
— Mousetail	„	1s. 6d.,	„	3	— Maltese	„ 1s. 6d.,	„ 3
— Selected Stone	„	1s. 6d.,	„	3	— orange Jelly	„ 1s. 6d.,	„ 3
— Six-week	„	1s. 6d.,	„	3	— Stone	„ 1s. 6d.,	„ 3
— Snowball	„	1s. 6d.,	„	3	— Teltau (for stewing)		„ 4
Chirk Castle Black Stone			„	6	Jersey Navet		„ 6
Polley's Nonsuch	„	1s. 6d.,	„	3	Red American Stone		„ 3

VEGETABLE MARROW.

Sow in heat for transplanting in April, and in May under hand-glasses same as Ridge Cucumbers.

Large	per pa.	3	White egg-shaped	per pa.	3
New Custard	„	6	New Improved Custard	„	6
New Bush	„	6	Green-striped	„	3

HERBS.

May be sown at the end of March or beginning of April.

Angelica	per packet	3	Horehound	per packet	3
Anise	„	3	Hyssop	„	3
Balm	„	3	Lavender	„	3
Basil, *Bush*	„	3	Marigold, *pot*	„	3
— *Sweet*	„	3	Marjoram, *pot*	„	3
Borage	„	3	— *sweet*	„	3
Buglos	„	3	Pursain, *green*	„	3
Burnet	„	3	— *golden*	„	3
Capsicum, *6 vars.*	„	3	Rosemary	„	3
Chervil, *curled*	„	3	Rue	„	3
Chili	„	3	Sage	„	3
Clary	„	3	Savory, *Summer*	„	3
Dill	„	3	— *Winter*	„	3
Fennel	„	3	Thyme	„	3
— *Florence*	„	3	Tobacco, *for fumigating*	„	3
— *sweet*	„	3	Wormwood	„	3

*** All other Seeds and Plants for the Kitchen Garden not in this Catalogue can be supplied at the usual prices.

For New Vegetable Seeds, see pages 57 to 60.

For Collections of Vegetable Seeds, see page 72 and 56.

RUSSIAN MATS (large size).

		s.	d.
Extra large (very scarce)	per doz.	30	0
St. Petersburg, best quality	,,	18	0

TOBACCO PAPER.

Per lb.		1	6
TOBACCO for fumigating (rough Shag)	per lb.	3	6

CUBA BASS.

Best quality, per lb.		2	6

Brown's Floral Shading (in pieces of 20 yards).

No. 1 quality, 4*s*. No. 2 quality, 4*s*. 3*d*. No. 3 quality, 7*s*.

Garden Netting (in pieces 10 yards long, 55 inches wide).

No. 1, 4*s*. 2*d*. No. 2, 5*s*. No. 3, 6*s*. 8*d*.

Frigi Domo and Shaw's Tiffany.

TANNED NETTING.

Inch mesh, 2 yards wide, per yard run		0	2

This is a very cheap article.

GARDEN IMPLEMENTS.

Manufactured by Messrs. Saynor and Cooke, of Sheffield.

Bright Garden Hammers, each 1*s*. 6*d*. and 2*s*.
Warranted Garden Hedge Shears, each 4*s*., 4*s*. 6*d*., and 5*s*. 6*d*.
Cast Steel Blued Ladies' Trowels, each 2*s*. 3*d*.
Cast Steel Dutch Hoes, each 1*s*. 3*d*., 1*s*. 6*d*., and 1*s*. 9*d*.
Ladies' Garden Shears, with polished handles, 3*s*. 6*d*. and 4*s*. 6*d*.
Best Warranted Garden Rakes, per tooth 2*d*.
Warranted Patent Garden Scythes, solid steel points, each 4*s*., 4*s*. 6*d*., 5*s*., and 5*s*. 6*d*.
Grass Border Shears, handles 3 feet long, per pair 7*s*. 6*d*.
Stag Pruning Knives with steel caps, in great variety, with straight and crooked blades.
Ivory Budding Knives, in great variety, with straight and reverse points.

BEST GARDEN SYRINGES.

Ball Valve	each	18*s*.
Ladies' small size	,,	10*s*.
Knuckle-jointed	,,	26*s*.
Read's Patent	,,	21*s*. and 30*s*.

COMMON GARDEN SYRINGES.

Brass Valve with rose and jet	each	8*s*.
Ditto, smaller size	,,	6*s*. 6*d*.
Brass Syringe with two roses and jet	,,	7*s*. 6*d*.
Brass Ladies' with rose and jet	,,	4*s*. 6*d*.
Ditto, ditto, smaller size	,,	4*s*.

ROOTS AND PLANTS.

ARTICHOKES.

	s. d.		s. d.
Crown ..... per doz.	5 0	Jerusalem ..... per peck	2 0

ASPARAGUS.

2 years old ..... per 100	4 0	3 years old ..... per 100	6 0

Extra large, for forcing, per 100 8s.

CHIVES.

Per bundle 0 6

GARLIC.

Per lb. 1 0

MUSHROOM SPAWN.

Best quality ..... per bush. 5 0

UNDER-GROUND ONIONS.

Per 14 lbs.	6 0	Per lb.	0 6

POTATOES (selected stock, for planting).

Early Handsworth	per peck	4 0	Birmingham Prizetaker ...	per peck	3 0
Albion Ashleaf	per bush.	14 0	Flourball	per bush.	9 0
Ashleaf Kidney	,,	12 0	Forty-fold	,,	9 0
Fluke do.	,,	7 6	Early Frame	,,	10 0
Lapstone do.	,,	8 6	Soden's Early Oxford	,,	10 0
Walnut-leaf do.	,,	12 0	Skaw	,,	7 6
White-blossom do.	,,	14 0	York Regents	,,	8 6
Red Ashleaf do.	,,	14 0	**Pheasant's Eye**	per peck	2 6

Delmahoy, per bush. 8s.

POT MARJORAM.

Per bundle 0 6

RHUBARB ROOTS (extra strong).

Linnæus	each	0 8	Royal Albert	each	0 8
New Emperor	,,	0 8	Victoria	,,	0 8

Baldry's Scarlet Defiance, per root 1s. 6d.

SAGE.

Per bundle 0 6

SEA KAIL.

Large ..... per 100	8 0	Extra large, for forcing ..... per 100	12 0

Extra strong, per 100, 15s.

SHALLOTS.

Per lb. 1 0

TARRAGON.

Per bundle 0 6

THYME, LEMON.

Per bundle 0 6

WINTER SAVORY.

Per bundle 0 6

AGRICULTURAL SEEDS.

We respectfully invite the attention of our Customers and the Public generally to this Branch of our Business, to which we are devoting the most careful attention: all the seeds are unadulterated, and of the present season's harvest, and being our own growth, we can confidently recommend the stocks, both for purity and as being carefully selected. The Turnips and Mangels are saved from large transplanted Bulbs.

The Grass Seeds contain the best sorts only, carefully mixed by ourselves, and thoroughly cleansed.

The past Autumn has been particularly favourable for the harvesting of Farm seeds, and consequently the seeds are of superior quality, and the prices are much lower than usual.

Our roots of Turnips, Mangels, Carrots, &c., exhibited at the Smithfield Club Show in December last, were very favourably spoken of in the report of the Cattle Show in the various London Newspapers.

Special quotations of prices at a reduced rate will be given where large quantities are required, on application.

CARTER'S IMPROVED ORANGE GLOBE MANGEL-WURZEL.

Saved from large transplanted roots of good shape and a fine dark orange colour.

Can be recommended as the best Mangel in cultivation.

Price per lb. 8*d.*

CARTER'S LONDON SWEDE TURNIP.

An improvement on Skirving's Swede, the result of careful selection; more perfect in shape, and not so much inclined to run to neck. *Our roots exhibited at the Cattle Show were very much admired.*

Price per lb. 1*s.*

TURNIPS (3 *lbs. to the acre*).

White-fleshed Varieties.

		s.	d.			s.	d.
Hertfordshire White Round	lb.	0	9	Red Tankard	lb.	0	10
Green do.	,,	0	9	**Early Six-weeks**	,,	0	9
Lincolnshire Red Globe	,,	0	10	**Grey-Stone**, true	,,	1	0
Pomeranian White Globe	,,	0	9	Stone or Stubble	,,	0	9

Yellow-fleshed Varieties.

Yellow Tankard	lb.	0	10	Skirving's purple-top Swede	lb.	0	10
Green-top Scotch or Aberdeen	,,	0	10	**Chivas's Orange Jelly**	,,	0	10
Purple-top do. do.	,,	0	10	Waite's Eclipse	,,	1	0
Dale's hybrid	,,	0	10				

SWEDISH TURNIPS (3 *lbs. to the acre*).

Skirving's Liverpool	lb.	0	10	**Carter's London Swede**	lb.	1	0
Laing's purple-top	,,	0	10	Green-top Swede	,,	0	10
Purple-top	,,	0	10	Sutton's Champion	,,	1	0
Marshall's improved	,,	1	0	Improved Bronze-top, fine	,,	0	10
East Lothian purple-top	,,	0	10	**River's Stubble**	,,	0	10
Matson's purple-top	,,	0	10	Yellow Tankard	,,	0	10

MANGEL-WURZEL (4 *lbs. to* 6 *lbs. to the acre*).

Elvetham long red	lb.	0	8	**Carter's improved orange Globe**	lb.	0	8
Long red	,,	0	8	Globe red	,,	0	8
Long yellow	,,	0	8	Globe yellow	,,	0	8
Improved orange oval-shaped	,,	0	8	**Improved red oval-shaped**	,,	0	8

CARROT (6 *lbs. to* 8 *lbs. to the acre*).

Large white Belgian	lb.	1	3	**Improved red Altrincham, true, very scarce**	lb.	3	6
Large yellow Belgian	,,	2	0	New intermediate	,,	3	0
Long red	,,	2	6				

CABBAGE (*to transplant, per acre* 1 *lb.*).

Large Drumhead	lb.	2	6	Thousand-head	lb.	2	6
Large Brunswick	,,	2	6	**St. John's early Drumhead**	,,	4	0
Flat Dutch	,,	3	0	London Market	,,	6	0

Cottager's Kail.....per lb., 7*s.*

KOHL RABI (*to transplant, per acre* 1 *lb.*).

Large purple .....per lb. 2 6 | Large green .....per lb. 2 6

PARSNIP (6 *lbs. per acre*).

Large Cattle .....per lb. 1 6 | Large Jersey .....per lb. 1 6

PARSLEY.

Plain, for Sheep.....per lb. 1 3

AGRICULTURAL MUSTARD,

3 gallons to the acre .....per bushel 18 0

BEET (6 *lbs. to the acre*).

White Silesian sugar .....per lb. 1 0

FURZE (12 *lbs. to the acre*).

English .....per lb. 1 6 | French .....per lb. 1 6

The prices of the annexed will be forwarded on application.

LUCERNE (15 *lbs. to the acre*).

BUCKWHEAT (1 *bushel to the acre*).

TARES.

Spring. Winter.

GRASS SEEDS.

We had the pleasure of supplying the Royal Horticultural Society with Lawn Grass Seed, for laying down the New Gardens at Kensington, and the following is a copy of a letter lately received from Mr. Eyles, the Superintendent:—

"Royal Horticultural Society, South Kensington, W.
4th December, 1861.

"Gentlemen,

"The Grass and Clover Seed you supplied us with, for the gardens here, has answered the purpose well, *and the Lawn looks as green as the part that was turfed*, but, of course, not quite so solidly grown together.

"I am, Gentlemen, yours truly,
"GEO. EYLES."

"Messrs. Carter & Co."

GRASS SEEDS.

We devote special attention to our Grass Seeds, which are thoroughly cleansed and mixed by ourselves, and we are confident cannot be surpassed.

RYE GRASS (2½ *bush. to 3 bush. to the acre*).

Rye Grass may be purchased at a very low price per bushel; but the purchaser, in estimating its value, must take into consideration the *weight* per bushel. Our Rye Grasses are heavy seed and fine samples.

Italian, English seed	per bush.	Perennial	per bush.
Italian, Imported seed	,,	Pacey's Perennial	,,
Annual	,,	Dickenson's Perennial	,,

MIXED GRASS SEEDS FOR PERMANENT PASTURE.

We recommend a proportionate mixture of the undermentioned according to soil, averaging about 2 bushels light seed and 12 heavy seed (Clovers) to the acre. Price per acre..... 24*s.* to 32*s.*

Cocksfoot.	Festuca ovina.	Poa trivialis.	Trefoil.
Hard Fescue.	Meadow Foxtail.	Sweet Vernal.	White Clover.
Festuca elatior.	Tall Oat Grass.	Italian Rye Grass.	Cow Grass.
,, pratensis.	Poa nemoralis.	Perennial Rye Grass.	
,, rubra.	,, pratensis.		

SUNDRY MIXED GRASS SEEDS.

		s.	*d.*
Grass Seed for Park Lawns	per bush.	16	0
Grass Seed for renovating old Grass Lands	,,	10	0
Grass Seed for Chalky Uplands and Sheep Walks	,,	12	0
Grass Seed for Wet Lands	,,	10	0
Mixed Clovers for permanent pasture	per lb.	1	0

GRASS SEED FOR FINE LAWNS.

This is really a splendid mixture, containing proportionate quantities of the following:—

Crested Dog's-tail.	Meadow Fescue.	Poa pratensis.
Hard Fescue.	Festuca tenuifolia.	White Clover.
Sheep's Fescue.	Poa nemoralis.	Suckling.

Price per bushel, 18*s*. .....per lb. 1*s*.

SUNDRIES.

The prices of the annexed will be forwarded on application.

TRIFOLIUM INCARNATUM .....24 lbs. to the acre.

CLOVER.

White Dutch.	Perennial or Cow Grass.
Red do.	Alsike hybrid.
Suckling.	Trefoil.

SAINFOIN (4 bushels to 5 bushels the acre).

Common. | Giant.

CARTER'S COLLECTIONS OF GARDEN SEEDS FOR 1862.

Being complete assortments of Vegetable Seeds for one year's supply.

Containing only the most approved and choice sorts, in quantities to suit large and small gardens.

No. 1.	No. 2.	No. 3.	No. 4.	No. 5.
10*s*. 6*d*.	20*s*.	40*s*.	60*s*.	100*s*.

These Collections are always kept ready, and can be supplied at a moment's notice.

SEEDS FOR EXPORTATION.

J. C. & Co. being large Exporters to the East Indies, Australia, Canada, &c., their experience can be depended on to select seeds suitable for any climate, and to pack them so as to ensure a safe transit.

PART II.

CALENDAR OF OPERATIONS.

JANUARY.

Kitchen Garden.

The operations of this month will be much influenced by the prevailing weather. Should the ground be favourable for working, every opportunity should be taken advantage of to trench up all vacant plots of ground, throwing it up as roughly as possible, to allow the frosts to penetrate thoroughly: the action of severe frosts upon soils, particularly such as are strongly adhesive, is equal to a good manuring; and the diligent gardener, knowing that the success of his crops depends much upon the proper preparation of the soil, will never neglect this simple but very important operation. Seeds sown when the soil is in a sour, ungenial state, may germinate, but will rarely flourish; and this often causes the Seedsman to be unjustly blamed. The beds for Parsnips, Carrots, Early Peas, and Onions, if not already trenched up, as they ought to have been in November, should be done immediately, and should afterwards be lightly forked over on dry frosty mornings with a steel digging-fork; this constant moving of the soil tends to dissipate moisture, and brings it sooner into a fit state for the reception of seeds and plants. We call attention to these preliminary remarks, because they will be found useful in other months.

General Directions.

Towards the end of the month, get in, if possible, a sowing of *Early Peas*. *Carter's Earliest* and *Sangster's No.* 1 are suitable sorts; sow also *Dwarf Fan* and *Mazagan Beans*. If required thus early, sow *Wood's New Frame Radish* in a frame on a gentle bottom heat; see that a good supply of dung and leaves are in the course of preparation by frequent turnings for use next month. Look to the successional supplies of *Sea Kale* and *Rhubarb*: fresh patches may be covered in the open ground; but a less troublesome practice, when there is convenience, is to take up strong roots and place them in the Mushroom House, where also Endive and Chicory may be placed for blanching for salads: keep up a supply of Mustard and Cress for the same purpose, by sowing once a week in boxes to be placed in a vinery at work, or in a frame with a gentle heat. If the early Peas and Beans sown in November begin to peep through, cover them immediately with half-rotted leaves in a dry state from the sheds, where a store of such things should always be kept for emergencies. A few Early Frame or Ash-leaf Potatoes, for planting in pits and frames next month, may be laid out to sprout in any odd place where there is a gentle heat, as they require no mould, but only to be laid out on the floor, or in a shallow box, which is better than planting at once, as it saves trouble and ensures a good plant; wheel out manures and composts on dry frosty mornings, and give the beds of Asparagus a liberal dressing of rich well-rotted manure, which should be spread out evenly and left for a time. Give plenty of air to *Cauliflowers* in frames and under handlights, remove decayed leaves; and if slugs are troublesome, stir the surface and dress it with soot and lime.

Fruit Garden.

Pruning, dressing, and nailing of all the hardier fruits, such as Apricots, Pears, Plums and Cherries, must be carried on without delay in all favourable weather. Where birds are troublesome, the pruning of Currant and Gooseberry bushes may be deferred for a time; but the present is a good season for the removal of two or three inches of the soil around their stems, supplying its place with some fresh compost, previous to which, if some quicklime is thrown around the stems, it will very much assist the object in view, viz. to keep down the gooseberry caterpillar. See that newly-planted fruit trees are secured from the effects of high winds; and if not already mulched with rotten manure, let it be done immediately.

Flower Garden.

Where there is the convenience of a vinery at work, commence about the last week in the month to pot off from the store pots the plants intended for bedding out, beginning with Scarlet Geraniums and other free-rooting varieties, leaving Verbenas and other more tender bedders until next month. Plants reserved in the Autumn for the purpose of furnishing Spring cuttings, such as Heliotropes, Fuchsias, Lantanas, Cupheas, Verbenas, and Lobelias, should also be brought into heat to start; see also that a sufficient quantity of fresh dung and leaves are getting ready for a bed for striking these cuttings. Have some composts under cover ready for the earliest sowing of Annuals next month: in the out-door department attend to neatness in the grass and the borders along the principal walks; trench up all vacant beds, adding some nice decayed leaf mould where necessary; thin out shrubberies, and, weather permitting, commence digging the same: if the Hyacinths in beds are pushing through, it is a good plan to cover the beds with dry rotten leaves. Bear in mind, that after this month every week will bring an increase of necessary operations; it is well, therefore, to be in advance.

Conservatory.

The gay appearance usually required in this structure at this season will very much depend upon what conveniences there are for supplying it: the forcing-house, the stove and pits, will all be drawn upon; and, for the welfare of such plants as have been tenderly reared, the temperature must be kept at a range of from 45° to 50°, and, although air should be given daily, if possible, cold draughts of cutting winds must be avoided: water in the forenoon, and keep all percolating water wiped up so as to have the walks dry and comfortable. The different varieties of Dutch Bulbs will here form a grand feature for the next three months, and will keep up a very gay and attractive appearance: it is surprising that plants so readily procured and easily cultivated are not generally used. The first batch from the *forcing-house* will now be expanding, and should be removed here before the flowers open, as they will thus last longer and flower finer than when forced to expand in a higher temperature; Camellias, both in pots and borders, will be coming into bloom, and must not be allowed to want for water.

Forcing House.

This structure should now be in full action, and will be for some time the most useful one. If not already done, bring in a batch of American plants, Rhododendrons, Kalmias, Azaleas, Indian Azaleas, Roses, with many others; introduce a fresh batch of Dutch Bulbs for succession, also a few Tree and Neapolitan Violets: give air when possible, and keep the atmosphere moist and sweet; the temperature should not fall below 50° at night, and should rise 2° or 3° a week as the sun and light increase.

Stove.

Plants that have done blooming and require rest must have less water, and be removed to the coolest place; shift or top dress, and cut back, if necessary, all that are starting into growth; and do not give them much water at first; cut back creepers required to bloom early; put a part of the stock of Gesneria zebrina to work, also a few Achimenes, Gloxinias, and Gesneras, if not already done.

Orchid House.

As many of these will now be starting into growth, the temperature and the humidity of the atmosphere may be slightly increased, but not too rapidly, as many of the plants are still dormant, and must not be hastily excited: when growth commences, see to the necessary shifting or surfacing, as may be necessary, using the composts in a very rough state, with the addition of lumps of charcoal and sandstone.

Greenhouse.

Hardwooded plants are most of them still in a dormant state, and must neither be overwatered nor subjected to more fire heat than is necessary to exclude frost. Such plants as Acacias, Correas, Winter-flowering Heaths, &c. must be removed to the conservatory as they show for bloom, when they may have more water and a more growing atmosphere: watch the state of the roots towards the end of the month; and if they are on the move, make immediate preparation for a good shift early next month, or an examination of the drainage and surface-dressing where shifting is no longer desirable; for it is bad economy to continue shifting the generality of hard-wooded plants beyond a certain reasonable and moveable size; it is far better to bring forward a stock of nice young plants, as being more interesting and affording room for a greater variety in display. Continue the shifting of Pelargoniums as they become ready: the most forward will now be ready for their blooming-pots; thin the branches out, and keep them nicely trained, give them plenty of stage room, and let them be often turned about. A general shift of all the strongest Calceolarias will be necessary towards the end of the month: go over the whole of the stock, remove decayed leaves, stir the surface, and pay particular attention to fumigation; for if insects are not kept under, all other cares are useless, both for these and Cinerarias; and their attacks are often so insidious, that the mischief is done before it begins to show itself: fumigation, therefore, should be a part of the system, and be done about every three weeks. Cinerarias, if required large, should now have another shift; such as are throwing up for bloom may have a warmer temperature to encourage them to open freely; look over the stock for succession, shift such as require it, and pot off more seedlings; remove old plants of choice Fuchsias into heat to furnish cuttings for Autumn blooming.

Forcing Fruit Houses.—Pineries.

Examine well into the state of the bottom heat in which the fruiting plants are growing; this must range from 80° to 85°; therefore, if it is declining, let it be renewed with some fresh material, but do not disturb the pots; a moist atmosphere is indispensable, which may be increased or lessened according to external atmospheric conditions, more being required in bright sunny weather than in dull cloudy weather; give air whenever possible: in syringing and watering be very careful not to wet the embryo fruit, any moisture on which would be fatal: keep succession plants dormant at present; but towards the end of the month a slight increase of temperature may be ventured upon, to prepare some of the best for shifting next month.

Vineries.

When the vines that were started in November are well broken and advancing into bloom, syringing overhead must be discontinued, and atmospheric moisture liberally supplied by evaporation; stop the shoots at one joint from the fruit as soon as it can be perceived, and at the same time remove entirely all superfluous shoots: look to the state of the coverings on the outside borders; if fermenting materials are used, it will be all right; but if not, something must be done to throw off the cold rains and snow, and more particularly to exclude the frost about the part where the stems enter the house, as we have seen a crop ruined by the main stem being exposed to frost when the buds were started: previous to starting the house for succession, let the walls be well washed over with a mixture of lime and sulphur; the stems of the vines should also be dressed with a mixture of lime, sulphur, soft-soap, and soot, mixed with water to the consistency of paint, and applied warm.

Peach House.

Increase the heat to such as are in bloom or just setting, and commence disbudding; finish pruning and dressing the trees in the houses about to be started; commence the application of fire heat in a very gradual manner; be careful to syringe freely and often before the bloom expands, and let the roots have a good soaking with tepid water. Figs may now be started; give the roots plenty of water, and syringe the plants twice a day, shutting up early.

Pits and Frames.

Keep up a brisk bottom heat, at a range of 75°, to Cucumbers in fruit; maintain also a moist atmosphere, but admit air as often as possible; pot off seedling Cucumbers, and sow more seed; sow also seed of an early Melon (Carter's Excelsior) for first crop: start another batch of Strawberries in a gentle bottom heat, with plenty of air when possible; make up Mushroom beds, and spawn them when the heat decreases to 80°. Let us here add, as a general rule applicable to every month, and of great importance to be remembered, always in watering at the roots, or syringing overhead, let the water be applied at the same temperature as the average of that in which the plants are growing.

FEBRUARY.

Kitchen Garden.

Regard being paid to our previous directions for the preparation of the soil, let no time be lost, when the weather is favourable, in getting in crops. Early in the month make a sowing of *Round Spinach*, *Early Short Top*, and *Scarlet Radish*; also Bath Cos Lettuce on a warm border; let these beds be slightly covered with dry brake, fasten it down, and remove when the seeds are up: sow *Carter's Fine Selected* and *Hollow-crowned Parsnips*; and make the first sowing of *Brussels Sprouts*, also of *Carter's Early* and *Matchless Cabbage*, also of *Dwarf Ulm* and *Drumhead Savoy*, and a small sowing of improved *Red Dutch Cabbage*.

Peas may be sown twice this month—the first of early sorts, the second of second early sorts (*vide* the Kitchen part of the Catalogue, where all the best varieties will be found in **black type**, and may be safely taken as a guide); the *early wrinkled varieties* are very superior, as also are *Dickson's Favourite* and *Harrison's Perfection*: make a good sowing of *Early long-pod Beans*; sow in frames, on a gentle bottom heat, *Short French* and *Early Horn Carrot*, also *Wood's Early Frame Radish* for succession: towards the end of the month make a sowing in shallow pans of *Cauliflowers*, *Walcheren Broccoli*, and *Snow's Winter White Broccoli*, also *New Giant White Cos Lettuce* and *Celery*; plant out a good bed of Cabbages from the store beds, and also a bed of Red Dutch Cabbage; plant Potatoes in frames with the sets laid out last month to sprout, and lay out for sprouting as many sets as will be required for planting early out of doors; they will be ready for use a fortnight before those planted in the ordinary way: keep vacant plots of ground moved about in frosty weather.

Fruit Garden.

Proceed with the pruning, dressing, and nailing in of Wall-fruit trees of all sorts, leaving Peaches and Nectarines until the last; have the necessary means at hand to apply as protection to Apricots, Peaches, and Nectarines, as soon as the buds begin to swell out; fill up, prune, and tie Raspberries, and give them a liberal dressing of rotten manure; prune Filberts when the female bloom shows; afterwards manure and dig the ground, removing all suckers.

Flower Garden.

Preparations for summer display must have constant attention: sow some of the most showy Hardy Annuals in pots, and place them in a frame on gentle bottom heat; these will flower very early: a few may also be sown on a warm border, to transplant into the flower borders when they are dug up next month: dress the beds or patches of Annuals which have been standing through the winter with soot and ashes to keep away snails; make up a good dung bed early in the month, and commence striking the cuttings of bedding-plants as soon as they are ready. When the first-potted bedding-plants are well rooted, remove them to a cooler temperature and supply their places with freshly-potted ones from the stores; bring forward the dry roots of choice Dahlias into heat, to furnish cuttings: the tall varieties of Lobelias should be put into heat; and when started into growth, part and pot them singly into four-inch pots, and harden off when well rooted; shift Carnations and Picotees into their blooming-pots at the end of the month; protect choice Tulips and Hyacinths; fumigate Auriculas, and top-dress them; let them have plenty of air and protection from frost and damp: commence the pruning of hardy Roses, also of climbing Roses on walls and trellises; where crowded, remove exhausted wood and lay in young stuff. Dress over Scillas and choice Crocus with soot and ashes; also lay traps for mice, which are very destructive to Crocus roots. Sow some pots or pans of German Ten-week Stocks (*vide* page 4 in Catalogue) for early flowering, also a pan of Delphinium chinense and formosum to flower late in the Autumn. Commence digging up the borders in the rougher parts of the Mixed-Flower Garden; and where the background is formed of shrubs, let them be thinned out, re-arranged, and blanks filled up as may be found necessary; some nice rotten-leaf mould pricked in amongst the choicer sorts will be very beneficial.

Conservatory.

Every exertion will be necessary to keep up the interest and attraction of this structure, by a strict attention to neatness, and by a frequent re-arrangement of the plants to produce fresh combinations; if the borders are getting hard and stale, let them be pricked over, and a little fresh compost added where needful. Clean the leaves of Camellias, Oranges, and other coriaceous-leaved plants, with a soft sponge, and syringe with tepid water occasionally before the blooms expand. Apply clear liquid-manure water to the roots once a week; forced plants of Camellias and Indian Azaleas must be returned into heat to make their growth when their beauty is past. This house will require an occasional fumigation; but it should be a general rule to examine thoroughly all plants which are brought in from the other structures, and to smoke them well in a separate place if at all infested. Amateur Gardeners often do not attach sufficient importance to this simple operation, and consequently do not always meet with the success their industry merits. The admirers of Dutch Bulbs will now be able to appreciate their beauty and the gorgeous display they frequently produce.

Forcing House.

As the different varieties previously mentioned advance into bloom, let them be removed to the Conservatory, and another batch of all the necessary sorts introduced from the reserve pits: do not forget to take them out of the forcing-house before the blooms expand; they will then continue much longer and carry a finer colour. Such of the Amaryllids as are showing for bloom may be placed in this structure, also some large plants of Salvia splendens, which will make a gorgeous show if all the earliest flowers are picked off and the back buds forced to start: introduce also some Azalea sinensis; they force well and are very fine. Pot plenty of Tuberose roots, and place them on a shelf near the glass; and when well broken, thin out the stems and tie up as they advance.

Stove.

As the most of these will now be emerging from quiescence, both the temperature and the humidity of the atmosphere may be gradually increased; but do not raise too high; at present a range of 50° to 60° is sufficient. Start a few more Achimenes, Gloxinias, and Gesneras, also the new Tydias from Ghent; let water be very sparingly supplied until they have fairly started into growth: cuttings of such sorts as are required for keeping up the stock, but more particularly such as will be required for winter blooming, should be got in immediately and placed in a frame on a dung bed with a brisk heat.

Orchid House.

The principal care here will be to avoid all unnecessary excitement; a temperature ranging from 65° by day to 50° at night will be most suitable. Plants which are making growth, as advised last month, must have the best situations, where their wants can be duly attended to; water them when they require it, and, if possible, keep the atmosphere moister about them: the floors and walls may be sprinkled twice a day to keep up a fresh agreeable atmosphere; but do not at present produce a moist atmosphere by evaporation from a heated surface; hunt up and destroy insects.

Greenhouse.

Most of the hard-wooded plants are now moving, and will require a general attention to shifting: let the whole of the stock be thoroughly revised; such as are in bloom will at present only require top-dressing; the same will apply to all plants which are become large enough for decorative purposes; but all young plants of various stages, growing forward into specimens, must have a shift, large or small according to the state of the roots: this should be carefully looked to, as indiscriminate shifting to save after-trouble is not skilful gardening; endeavour to keep the plants close for a few days after this operation, and be very careful in watering, until the growth of the plant shows that the roots are active, when more may be given; but at all times extra care in watering is necessary for hard-wooded greenhouse plants: previous to shifting, see that the balls are well saturated; young plants growing into specimens should not be allowed to flower, but kept back. As soon as the Chinese Primroses and Cinerarias, which are now blooming, are removed to the Conservatory, let their places be supplied from the reserve pits, which will thus give room for the shifting and spreading out of the later stock. Calceolarias in particular will require constant shifting and plenty of room: get in cuttings from the Fuchsias put into heat as soon as they can be procured; they cannot be got to work too early. Select a few of the best plants of Scarlet Geraniums, Petunias, Tropæolums, and Verbenas, and give them a liberal shift to bring them forward as Conservatory plants. Continue the training of Pelargoniums, and shift the later stock; put in cuttings for Autumn blooming. Take care to have a frame with gentle bottom heat ready for a sowing of showy Annuals for the Conservatory early next month.

Forcing Fruit Houses.—Pineries.

Let the temperature be gradually increased as the days lengthen, both in the fruiting-house and also to succession plants; the bottom heat must also be carefully maintained, by whatever means it is produced: keep up a humid atmosphere, and give air whenever possible; water must be gradually withheld from such plants as have swelled their fruit and are beginning to ripen. Succession plants should now be shifted; bring all the largest and forwardest plants to the warmest end of the house or pit, to bring them forward to take the place of those from which the fruit is cut: in the fruiting-house, if the bottom heat is from tan, be very careful that the addition of fresh material, generally made at this shifting, does not increase it too much.

Vineries.

The berries in the earliest house will now be set, and are therefore ready for the very important operation of thinning, which is one that requires very great care in the manipulation. Be careful not to handle the bunches, nor touch them violently, because bruises, however slight, will disfigure the berries: but we would observe particularly that a very few minutes' draught of cold wind, when the berries are in this tender stage, will *rust* every bunch it blows upon; and a fortnight after, it will be wondered how it is that the grapes are rusted; never, therefore, at this stage of growth, give air at the front unless it can be thoroughly warmed, and not at the top when the wind is rough and cold. As the process of thinning goes on, let the shoots be carefully trained, and every superfluous one removed. Vines started last month will now be breaking fast; keep up a moist atmosphere, and syringe overhead frequently until the bloom begins to expand.

Peach House.

Thinning the fruit and disbudding are the principal operations in the earliest house; and this must be done in a very gradual manner, and at intervals: some little skill and practice will be required, as the mind must be carried on in advance of the present state of the tree, and the operation conducted with reference to what it should then be. Peaches are very impatient of the knife; and the great object of disbudding should be to obviate almost entirely the necessity of using it. Green fly is apt to appear at this stage, for which fumigation will be necessary; and if the red spider threaten, smear a little sulphur mixed with thin gum water on the pipes *when cool*; never introduce dry sulphur. Keep up a moist atmosphere both here and in the houses started last month, and syringe the latter freely until they are in bloom, when they should be kept dry for a short time to assist the formation and distribution of pollen: give the trees a smart rap now and then for the same purpose. Cherries may now be started; they succeed best when they can have a little bottom heat and a free circulation of air: keep Figs well watered at the roots, together with a moist atmosphere and frequent syringing. Strawberries which have well set their fruit may be removed to the shelves of a Vinery, near the top, where air is given, and another supply brought into the pits for succession.

Pits and Frames.

If there is a pit to spare, now is a good time to fill it with good fresh leaves; and plunge it full of Strawberries in pots: they may remain there to fruit, and will come in very useful. Sow more Fulmer's Early Forcing Beans in pots for succession. Continue a brisk heat to Melons and Cucumbers, with a moist but not stagnant atmosphere: keep the bottom heat about 75°; or else the fruit will not swell off: pot off seedling Melons and Cucumbers, and sow more seed of Carter's Champion Cucumber and Excelsior Melon; sow Tomatoes, Chilies, and Capsicum at the end of the month.

MARCH.

Kitchen Garden.

This is a busy month indeed; and every exertion will be necessary. Two sowings of Peas must again be made this month,—the first to consist of the middle and late varieties, and the last of the late wrinkled sorts: Carter's Victoria, Ne plus Ultra, and King of the Marrows are Peas of unrivalled excellence; the rows are best single; but if not, they must be six feet apart. Sow Johnson's Wonderful, and Taylor's Windsor Beans; get in the main sowing of Parsley, also a good bed of Early Horn and James's Scarlet Carrot. The main crop of Onions should be got in about the middle of the month; consolidate the ground with a wooden roller, and sow in drills seven inches apart for the convenience of thinning. Sow Celery for the main crops early this month, and prick out on a gentle heat those sown last month. Sow Brussels Sprouts, Chou de Milan, Savoy Cabbage, and Borecole for the main crops. Make a small sowing of Snow's Winter and Grange's Broccoli for use in early winter; prick out the Cauliflowers sown last month, and make another small sowing on a warm border.

The first week in the month sow Early Dutch Turnips in a frame on a gentle hot bed, and at the end of the month a good sowing in drills on a border; use plenty of seed, and scatter soot and ashes over the bed. Sow Spinach twice this month, and keep up successional sowings of Radishes and small Saladings; prick out early-sown Lettuce, and sow more seed. Plant beds of Globe Artichokes in soil well trenched and manured, also of Jerusalem Artichokes; they like freshly broken-up ground. Plant beds of Asparagus and Sea Kale, and sow seed for a supply of young plants; also plant Horse-radish in deeply trenched soil with manure at the bottom. Make fresh beds of Thyme, Mint, Tarragon, Sage, and other herbs; seeds of all kinds of herbs should be sown immediately. Sow Bush and Sweet Basil on a gentle heat. Begin early in the month the planting of early Potatoes, particularly the sprouted ones, and by the end of the month let all the main crops be got in; stir up the surface amongst all advancing crops. Plant out Cauliflowers and Cabbages from the Autumn beds, also beds of Tripoli Onion from the August sowing. Sow also a bed very thickly of Silver-skinned and Early Nocera Onion for picklers; the latter is for this purpose the best ever introduced. Trench up vacant ground. Earth up and stake Peas as they advance. Fork over very lightly the Asparagus beds; a few Radishes may be sown on the surface.

Fruit Garden.

Pruning and nailing should now be all finished off, and protection applied to Peaches, Nectarines, and Apricots. A few branches of Yew or Spruce Fir fastened over the blooms of choice Pears, if they should expand in sharp weather, will be of great service to them. By the end of the month the protection may be partially removed from Figs.

Flower Garden.

All the Autumn stores of bedding-plants must now be potted off without delay, and the stock continually increased by Spring-struck cuttings. Have some turf-pits in readiness for pricking out, at three inches apart, all the Spring-struck Verbenas: these pits must have a moveable waterproof covering; glass is best, but wooden shutters will do. See that Hardy Annuals sown in pots last month are getting hardened off for planting out. Sow Sweet Peas in pots in a gentle heat, to be hardened off quickly and planted out for early flowering; sow the same in the open border for succession. Prick out German Ten-week Stocks, and sow more seed. A general sowing of Hardy Annuals (*vide* Catalogue) may be made at the end of the month if the borders are ready. Sow also *Lawn grasses* in showery weather. Plant out seedling Pansies; top-dress Pinks and Carnations; stir the soil amongst the Tulip, Hyacinth, and Ranunculus beds, and protect them from snails. When digging the borders of herbaceous plants, reduce the size of all overgrown specimens, and fill up vacancies from the reserve garden. Finish pruning all Roses, manure them well, and replace rotten stakes. Keep grass and gravel well swept and rolled. Plant out bulbs of the beautiful varieties of Gladiolus. Throw up a dung bed the last week, for tender Annuals early next month.

Conservatory.

There will now be so many plants in bloom from other structures, that it will not be very difficult to make frequent changes in the arrangement of this house, which, besides increasing the interest and attraction, will be of benefit to many of the plants, particularly choice hard-wooded specimens, which ought not to remain long in houses of this description, being often built more for ornament than use. Soft-wooded plants may generally remain until they have passed their best; but at all times avoid overcrowding, and attend especially to keeping the foliage of all plants very clean and healthy. Camellias, Citrons, Oranges, and other permanent plants, being now in active growth, must have an abundant supply of water, and a dose of liquid manure occasionally; overgrown Camellias should be pruned in as soon as the bloom is over. If the wind is very cutting, and tender plants from the Stove or Orchid House are introduced, nail some canvas, Shaw's Tiffany, or Brown's Floral Shading over such of the ventilators as open on the plants.

Forcing House.

This structure will still be very largely drawn upon for the decoration of the Conservatory and Drawing-room. Bring forward a further supply of Azaleas, Roses, Rhododendrons, also Weigela rosea, Deutzia gracilis, Forsythia viridissima, and Diclytra spectabilis. Continue to bring in Amaryllids as they show for bloom, which they now do pretty freely, and are so ornamental that no place should be without a collection. A good supply of hardy Ferns should be kept in pots, and brought into this house early this month; they form very beautiful objects, and are useful both for the Conservatory and Drawing-room: introduce a few plants of Otaheite Orange for the same purpose.

Stove.

The temperature of this house should now range from 60° by night to 80° by day with solar heat, giving air liberally when it approaches the latter. Shut up early with solar heat, and give a liberal syringing; take care also to keep up a moist atmosphere. The first-started lot of Tydea, Achimenes, Gesneria, and Gloxinia should now be put into their blooming-pots and more started for succession. Pot off the cuttings of Stove plants struck last month; more may still be put in; young specimen plants must be shifted as the pots fill with roots. Keep all advancing stock growing briskly, and give the softer-wooded varieties an occasional dose of liquid manure. Sow Acacia coccinea and Ipomæa limbata elegantissima, both of which are very beautiful.

Orchid House.

Plants now starting into growth must have attention paid to the roots: such as are ready may be shifted; others will only require to be top-dressed with fresh lumps of peat. Blocks and baskets should be put in order, or renewed if necessary. Insects *must* be hunted out and extirpated. Shade during bright sun, and give air in order to avoid slackening the fire too much.

Greenhouse.

All the young specimen hard-wooded plants shifted last month should now be making active growth both at root and branch, and must be encouraged by a more liberal supply of water and gentle syringing: stop strong shoots, and train the plants into the desired shape at once; no after-care will do it, if neglected now. Large blooming plants must not be stopped, but encouraged with plenty of water, frequent changes of position, and an abundance of air; but still beware of cutting winds. Epacris which have now done flowering should be well cut back and placed in some rather close structure until they have started, when they may have a shift, if necessary, and the growth gradually hardened.

Soft-wooded Greenhouse plants must now be encouraged to make all the growth possible. Cinerarias will be advancing fast into bloom; do not let them want for water, and be sure to keep down *aphides*. Shift the stock for later blooming. Continue the shifting of Calceolarias as they advance; the surplus seedlings may be hardened off for planting on a shady border out of doors. Keep Cyclamen at the warmest end of the house. Let Tropæola have a free circulation of air about them. Do not allow the plants of Double Chinese Primrose to perfect too many trusses of flowers, as it weakens them very much, in fact sometimes *kills*; remember also that *drip* and a damp stagnant atmosphere inevitably kill them. Sow seed of Primula sinensis fimbriata to bloom in the Autumn, also of Greenhouse seeds generally. Shift any plants of Pelargonium which may have been left for late blooming; train out the forward specimens; let them have a dose of liquid manure occasionally, and a free circulation of air; but be careful of fire heat, which is apt to draw the blooms up too fast.

Forcing Fruit Houses.—Pineries.

The whole of the stock should now be growing, which must be maintained by keeping up a brisk temperature and moist atmosphere. Plants swelling their fruit may have manure water now and then; but when ripening off, give but little water. Continue to bring forward the best successions into the fruiting-house as fast as the fruit is cut; also apply diluted manure water to the whole of the successions in a growing state, and frequently syringe about the lower part of the stems and over the bed: watch the bottom heat, as strong sun often causes it to rise some degrees.

Vineries.

The progressive thinning of the branches, stopping the shoots and laterals, and training, will be the principal operations in the early houses; particular attention must be paid to the admission of air, avoiding cold draughts, and submitting to a few extra degrees of heat rather than admit cutting easterly winds, so prevalent at this season. Keep up a *moderately* moist atmosphere; be careful to retard the latest houses as long as possible: but when the buds begin to swell, discipline must commence; close the houses with solar heat, syringe well, and apply fire heat when necessary.

Peach House.

Persevere in thinning both fruit and branches in early houses: as the fruit advances towards the stoning point, be very careful of fire heat; do not overdo it. Maintain a moist atmosphere, and destroy insects; water liberally at the roots, and apply liquid manure once a week. Bring forward a good supply of British Queen Strawberries, also of other sorts for succession; syringe liberally, and give plenty of air. Give Figs and Cherries liquid manure sometimes, and stop the young shoots of Figs at about the fifth joint.

Pits and Frames.

Make a liberal sowing of Carter's Champion, Lynch's Star of the West, and Cuthill's Improved Cucumbers, also more Melons, of sorts; maintain a brisk growing heat, and change the internal atmosphere as often as possible. Ridge out both Melons and Cucumbers for succession, and keep plenty of dung often turned about for heating purposes.

APRIL.

Kitchen Garden.

Particular attention must be paid early in this month to the sowing of the different varieties of Broccoli, Cottager's Kail, Borecole, Cabbage, Brussels Sprouts, Cape Broccoli, and Cauliflower; those which may be safely depended on as the best sorts will be found in **antique** in the Catalogue. Let the beds have an open but sheltered situation, and be placed all together, so that netting may be stretched over to keep off birds. Sow Bath Cos, New Giant Cos, and Paris Cos Lettuces for transplanting, and the different varieties of Cabbage and Silesian Lettuce in drills to be thinned out and left at the proper distances. Sow Musselburg Leek, Salsafy, and Scorzonera, also Sion House, Newington Wonder, and Light Dun Dwarf French Beans on a warm border the last week; for earlier purposes sow on heat, and harden them off to transplant under hand-glasses. Make successional sowings of late Wrinkled Peas, and let the ground be well manured and deeply trenched. Sow more Broad Beans, also Turnip Radishes about every ten days, and small Salading twice a week. Sow more of Early Dutch Turnip; and when the soil is in good condition, get in the main sowing of Long Surrey, selected Altrincham, and Intermediate Carrot; sow in drills. Small selected and New Pine-apple Short-top Red Beet may be sown the last week in the month, at which time also the first sowing of Scarlet Runners should be got in. Plant out Cauliflowers, Cabbages, and Lettuces for succession, attend particularly to the pricking out of Celery from the early sowings, and sow more seed in the open ground for late crops. Prick out Bush and Sweet Basil, and sow more seed under a hand-glass on a warm border. Remove the hand-glasses from Cauliflowers, earth them up in a basin-like form, and give them plenty of water and liquid manure. Tie up Lettuces for blanching, and keep the hoe constantly at work amongst all advancing crops.

Fruit Garden.

The operations here will very much depend on the weather: if the season is early, the disbudding of Peaches and Apricots may be commenced late in the month; do not remove much at first, as sudden changes in the weather are frequent. Protective materials must be removed gradually, so as to inure the trees to full exposure early next month. Watch well for the appearance of aphides on Peaches, and syringe with Tobacco water immediately. The leaf-roller on Apricots is very destructive to the young fruit, and should be systematically picked out. Run a narrow hoe through Strawberry beds, to loosen the surface and disturb vermin. Cut down the canes of Autumn-bearing Raspberries, nearly to the ground.

Flower Garden.

Let the principal sowing of Hardy Annuals be made immediately, if it were not done last month. The dung bed recommended last month will now be ready, and may at once be filled with pots or pans sown with Tender Annuals, such as French and African Marigolds, Spanish and Indian Pinks, German and French Asters, Zinnias, Nolanas, Tropæola, Maurandyas, Lophospermums, and many others which will be found enumerated in the Catalogue, most of which will be required to be pricked out into nursery beds to be finally transplanted into the borders towards the end of next month. Plant out beds of German Stocks from the early sowings, keep them shaded until rooted; sow more seed for succession, and also of intermediate stock for Autumn blooming. The value of bulbous plants for Spring display will now be fully apparent; for with Hyacinths, Jonquils, Narcissus, Scillas, Van Thol, and other Early Tulips and Turban Ranunculus, an amount of beauty may be realized which those who have not tried cannot conceive. Plant out immediately the beds of Tigridia Pavonia and conchiflora. Sow Hollyhocks and other perennial herbaceous plants, also biennials for next year's blooming. Let bedding-plants in their various stages have due attention; any which are pot-bound may towards the end of the month be turned out under a temporary framework into light soil, and kept covered at night: attend particularly to keeping down insects; it very often constitutes the difference between success and failure. Look well to the watering of newly planted Trees, Shrubs, Roses, and Herbaceous plants, if the weather is at all dry and parching.

Conservatory.

Continue to pay particular attention to the removal of such plants as are likely to suffer from remaining too long in this structure. Forced Indian Azaleas must be taken back into heat to perfect their growth, previous to which examine them thoroughly for thrips or their eggs; and if infested, let them undergo a thorough fumigation in close quarters; at the same time take the opportunity to prune them into shape, if necessary. Regulate and train out the permanent Climbing Plants as soon as they make growth. Secure a good supply of Humea elegans, and sow seed now for next year's flowering. The following are a few of the most desirable Annuals to be brought forward in the other structures for Conservatory decorations:—Balsams, Brachycome, Browallia, Clintonia pulchella, Cockscomb, Phlox Drummondii in variety, Portulacas, Schizanthus, Salpiglossis, Globe Amaranths, Lobelia ramosa, Egg Plants, and others which will be found in the Catalogue; they should be sown in pans the first week in this month, and placed in a gentle hot bed, potted off when ready, and grown on for some time in a dung-bed frame, shifted whenever necessary, and removed into pits to flower previous to being placed in the Conservatory.

Forcing House.

So many of the permanent conservatory and greenhouse plants will now be blooming, that this house will not now be so largely drawn upon; it may therefore be used as an auxiliary to the stove and other houses, which are apt to be overcrowded at this season. Young plants of Indian Azaleas may be brought in here to make their growth; and the stove may be relieved of the earliest Gesneras, Gloxinias, and Achimenes, which will now require plenty of room.

Stove.

Ixoras will now be making nice growth, and should have the flowering shoots trained out equally. Young plants of Æschynanthus may have a good shift when well-rooted, and should be properly trained out to show their bloom. Fast-growing plants, such as Clerodendrons and Dipladenias, must have constant attention paid to shifting whenever they require it; maintain a brisk growing temperature with damp atmosphere.

Orchid House.

As most of these plants will now be advancing rapidly, the temperature may be increased to 65° by night, and 85° by day, with solar heat; at the same time every means must be used to keep up a complete humidity in the atmosphere, both by the use of water on the shelves and walks, and by evaporation. Be careful of syringing overhead until the growth is more developed. Shading must now be resorted to on hot, bright, sunny days.

Greenhouse.

Give air freely to Heaths in bloom or advancing thereto, and endeavour to keep the surrounding air rather moist, but not stagnant. Hard-wooded plants generally, such as Hoveas, Boronias, Chorozemas, Acacias, with many others of that section, will now make a grand display; attend well to the watering and aeration, as before directed. Shift some of the best Correas for early flowering next winter; also some nice plants of Mitraria coccinea should be growing on fast for flowering in June and July. Remove all the blooming Cinerarias to the conservatory, as that will afford room for the successions to be shifted and brought on. The general stock of Calceolarias will be throwing up the bloom spikes, and should be supported by neat stakes; persevere in fumigation. The varieties of Lilium japonicum and Alstrœmerias should now be more liberally watered, and placed in a pit near the glass. Attend to the stock of young Fuchsias; select some of the best to have a liberal shift for early flowering. Attend to previous directions with regard to Pelargoniums; keep them as near the glass as possible, let them have plenty of room and a free circulation of air; give also a due supply of manure water; pick off the blooms of such as are retarded for late blooming, and fumigate often.

Forcing Fruit Houses, Pineries.

Progress is here the order of the day; keep the fruit well supplied with the strongest plants from the successions, which, being now in a very active state of growth, will require plenty of room. Attend well to the use of clear liquid manure to the roots, and also to keeping up the moisture of the atmosphere by evaporation and pouring water on the walks, &c. Let the bottom heat range at or near 85°; in short, use all the means, as before directed, to keep the whole stock progressing.

Vineries.

The operations here will not materially differ from those of last month, being principally confined to thinning the fruit, removing superfluous shoots, and stopping the branches and laterals. As the fruit swells off and approaches the stoning point, avoid, as much as possible, extremes of temperature: 60° by night should be the lowest; and air may be given at 75° to 80° during the day. Attend to the state of the borders outside; and by whatever means they are protected from external influences, let it be effective, as a check at this stage would be very injurious: see also that inside borders are kept well supplied with water and liquid manure, always to be applied at a temperature of not less than 60°.

Peach House.

As these will now be swelling off the fruit, see that they are properly supplied with tepid water, and sometimes manure water, more or less according to the state of the drainage. As soon as the shoots are long enough, begin training them to the trellis: at the same time remove every shoot not actually required; but if the disbudding has been gradually carried on, as so often advised, there will not be many to remove. Give abundance of air early in the day, but close early, with solar heat, and syringe abundantly; the temperature should range from 55° to 60°; and a little top air left on at night will be beneficial. Remove superfluous shoots from Cherries, and stop luxuriant ones which are left on; lessen the quantity of water as the fruit ripens: the same remarks will apply to Figs. Let Strawberries ripening their fruit have abundance of heat, air, and light.

Pits and Frames.

Look well to the advancing crops of Melons and Cucumbers; thin out the vines, and keep them constantly stopped; encourage the swelling of early Melons by a good supply of tepid water, and a brisk bottom heat by frequent changes of linings; ridge out more for succession, and sow more seed: towards the end of the month throw up a ridge of dung and leaves; level the top, cover it with garden soil, and sow on it some Vegetable and Custard Marrow under hand-glasses: pot off Tomatoes, Capsicums, and Chilies; give Turnips and Carrots in the frames a good supply of water to assist the swelling of the roots.

MAY.

Kitchen Garden.

Considerable exertion will now be required to keep up with the work, which will increase every day: the hoe must be kept constantly at work among all advancing crops; and as soon as they can be well handled, thin out the beds of Onions, Carrots, Parsnips, Parsley, Red Beet and Turnips, to the proper distances; afterwards run a small hoe through the beds: sow Scarlet Runners, the first week for the main crop, and the last week for succession: make two more sowings of late Peas this month, and see that they get plenty of water if dry weather sets in: sow also more Dwarf French Beans and Broad Beans, also a small sowing of Carter's Matchless Cabbage. Keep up successional sowings of Spinach, Lettuce, Radish, and Salading as before advised. Chicory is a very useful plant for salads in winter, and should be sown this month in drills, and thinned out to about six inches apart. Sow Green Curled, Mossy Green, and Batavian Endive the third week for first crop. Kohl Rabi should be sown early this month, also large purple Cardoon in trenches prepared the same as for Celery. Make another good sowing of Turnips, such as Stone, Orange Jelly, and Polley's Nonsuch. Plant out the earliest Brussels Sprouts and Savoy Cabbage: all the Brassica tribe, to be grown tender and fine, should be planted in well-manured, deeply-trenched ground. Plant out more Cauliflowers and successions of Lettuce, also the earliest Celery as soon as it is ready, and see that it is liberally watered. Prick up the soil between the rows of Potatoes, with a steel digging fork, previous to earthing; it is far better than hoeing. Manure and trench up the ground intended for the main crops of Broccoli and Winter Greens.

Fruit Garden.

Disbudding wall-fruit trees will now be in full action, and is an operation so important that we would call particular attention to it; for, by following it up carefully and judiciously during this and next month, scarcely any winter pruning will be necessary, which is of great advantage, more particularly to stone fruits, which are in general so impatient of the knife: all over-luxuriant shoots should be timely and entirely removed, unless they are required for filling up blanks, in which case they must be kept stopped, so as to throw strength into the weaker branches; let this process of disbudding be followed at each manipulation by powerful syringings with the garden engine for the dislodgment of insects and cleansing the trees; clean soft water will answer for most purposes; but if aphides are numerous, a solution of tobacco water must be added. If the weather is dry, water and mulch newly planted fruit trees.

Flower Garden.

Early in this month commence planting the rooted runners of Neapolitan, Russian, and Tree Violets, in beds previously prepared by the addition of fresh compost, at from seven to nine inches apart, and take care during the season to give them abundance of water: propagate also Spring-flowering plants, such as Alyssum, Iberis, Arabis, Wallflowers, and Arenarias, to be planted in the reserve garden when rooted. Sow a bed of German Asters and some Hardy Annuals in pots plunged in a shady place, for the purpose of filling up vacancies later in the season. The last week in the month will be the proper time to commence planting out the bedding-plants: begin with the hardiest and well-hardened plants, particularly Verbenas and Calceolarias, leaving the tenderer sorts, such as Heliotropes, Petunias, Salvias, and others likely to suffer even from a slight frost, until early next month. Towards the end of the month, when the plants are large enough, commence planting in the mixed borders the Tender Annuals mentioned last month; choose dull days for the operation, and water through a fine rose to settle the earth about the roots. Roses should now have plenty of liquid manure and frequent syringings overhead. Rhododendrons, Azaleas, and other choice flowering shrubs, must be constantly watered in dry weather to secure a fine bloom. Keep Picotees and Carnations carefully tied to neat stakes, and protect choice Tulips from drenching rains.

Conservatory.

The great abundance of plants which will be in flower at this season will render this house very gay and attractive; great care should be used to keep everything very neat and clean, so that the enjoyment may be perfect. Insects at this season

must have incessant war waged against them, as this is their principal breeding time, and if they are allowed to accumulate, the consequences will be very serious. Examine the state of the borders in which the permanent plants are growing; and if it appear necessary, dig them over and remove some of the old soil, replacing it with fresh compost. Give Oranges and Camellias, as well as any other free-growing plants which require to be pushed on, an occasional dose of clear manure water. Guard against the ravages of the red spider by constantly syringing such plants as are liable to it, but be careful not to wet choice flowers.

Forcing House and Stove.

These two structures may now be merged into each other, as forcing flowers, properly so called, will be done with for some months, and the Forcing House will be called into requisition for relieving the Stove of numerous plants requiring more room. As growth is now very active, keep up a liberal supply of humidity in the atmosphere, with a brisk temperature, say 60° minimum at night and 80° maximum by day. Remove Gardenias in flower to the Conservatory. Shift Achimenes, Gesneras, and Gloxinias as they require it, and train out Achimenes to neat stakes as they make growth. See that Stephanotis, Allamanda, Mandevillea, Passiflora, Ipomæa, and other Stove climbers are properly trained out: cut out a portion of the wood if they get too crowded. Attend particularly to the welfare of young plants intended for Autumn and Winter blooming.

Orchid House.

Many of these are now in great beauty, and amply repay any amount of care that may be bestowed upon them. Shading during bright sunshine will now be imperative; persevere also in maintaining air moisture, particularly in the early part of the day; for if too much is used late in the afternoon, the coolness of the nights will cause it to condense rapidly, and if the drops fall on any of the choice flowers, they will become discoloured. Take down suspended baskets occasionally and dip them in water of the same temperature as the house; Dendrobiums, and other of the hardier sorts, may be placed in the Conservatory for some time: do not over-water plants with bulbs, approaching maturity.

Greenhouse.

Towards the end of the month, many of the New Holland and other hard-wooded Greenhouse plants that have done blooming may be removed to a sheltered situation out of doors; very choice specimens, however, particularly small-growing ones, must not be brought out at present, but kept growing on in pits, giving a free exposure in fine weather, but keeping on the lights when rainy, and shading from hot sun. Prick off seed-vessels from Azaleas as they go out of bloom; and if they require shifting, do it when they are making growth. Continue training out Pelargoniums, and give each plant as much room as possible; apply clear liquid manure at least once a week, and keep up a thorough ventilation. A good supply of Fuchsias must now be shifted, and grown on quickly for Autumn decoration. Place some lumps of fibrous loam around the base of the flower stems of the varieties of Lilium lancifolium, and give them a dose of liquid manure occasionally: the first week in the month get in cuttings of Chrysanthemums: the best plan is to take five or six cuttings of each sort and insert them around the edge of a three-inch pot in light sandy soil, placing the pots in a frame on a gentle heat and keeping them properly shaded until rooted.

Forcing Fruit Houses, Pineries.

As the Summer-fruiters will now be advancing fast, they must have no check for want of bottom heat and atmospheric moisture; to assist in swelling the root, let them have a moderate supply of liquid manure; keep the surface of the beds moist, and pour water about the floors, &c. several times a day; keep the bottom heat at about 85°, the top heat may range about 80°, with a good supply of air when it rises higher. Shift succession plants according to the room there is to devote to them; the most forward will be wanted for Autumn fruiting, and must be most encouraged: give due attention to the Black Jamaica and other sorts for Winter fruiting; keep up the stock by planting suckers as they come to hand.

Vineries.

As soon as the stoning process is over and the fruit begins to swell off for ripening, lessen the amount of air moisture and gradually inure the plants to a full current of air to assist the colouring process; and that this may be done more effectually, keep up good fires and leave a little air on at night. Finish thinning out the fruit of the general crops, and train out the branches to admit as much direct solar light as possible to the leaves; be careful to exclude sharp currents of cold air when the vines are in this state. Later houses must have a little fire heat to assist the development of perfectly-formed bunches and the setting of the fruit.

Peach House.

Whilst the fruit is swelling off, let there be no want of water at the roots, or air moisture, but withhold it gradually as the ripening begins; and as this is the stage in which the red spider finds a genial atmosphere, remember to smear sulphur on the pipes when cool by way of prevention: keep the young wood well trained in, and the fruit exposed to the light; give the later houses abundance of air with fire heat, and continue the necessary processes of disbudding, thinning the fruit, and training; shut up early, and syringe abundantly. Cherries in pots done bearing may be removed to a temporary protection and afterwards plunged in the open ground. Figs ripening fruit must have but little water at the roots, but do not let the atmosphere get too dry; persevere in stopping the young growth.

Pits and Frames.

Early in the month throw out the spaces intended for Ridge Cucumbers, fill them up with prepared dung and leaves, throw the soil back over it and sow the seed under hand-glasses,—the Stockwood and long Ridge for general purposes, and the short prickly for Girkins. Sow also more Vegetable Marrows. Keep the general crop of Melons and Cucumbers well thinned out at short intervals: if left too long, and then a grand thinning is made, a severe check frequently ensues. Shift Chilies and Capsicums and plant out Tomatoes at the end of the month.

JUNE.

Kitchen Garden.

Plant out now the main crop of Brussels Sprouts in very good ground; also Borecole, Chou de Milan, Broccoli, Cauliflowers, Cape and Walcheren Broccoli, Savoys a good breadth, Early Cabbage, and Cos Lettuce as fast as the ground becomes vacant and can be got ready for them: see that a good supply of manure is trenched in. Persevere in thinning out all advancing crops of Carrots, Turnips, Red Beet and Cabbage Lettuces, and do not neglect to keep the surface constantly stirred, not only to destroy weeds, but for the welfare of the crops: make again two sowings of Peas,—the first of Harrison's Glory, Perfection, and Auvergne; the last of Carter's Earliest and Dickson's Favourite: sow also more Turnips and French Beans; also Scarlet Runners and Long-Pod Beans for the latest crop; also more Spinach, Lettuces of sorts, Radish twice, a few Early Horn Carrots for drawing in the autumn, and a few Onions for drawing young if required: make also another sowing of Endive for the main crops. Plant out a good breadth of Celery for the principal crops; let the trenches be well manured, and give the plants an abundance of water. Finish earthing up all the main crops of Potatoes. Train up and stop Tomatoes as they advance in growth, and give them some manure water occasionally.

Fruit Garden.

In this department, this is one of the busiest months in the year. Cherries, Pears, Plums, Vines, Peaches, Nectarines, Apricots, and Figs will all be claiming attention at once. Disbudding must be continued, the fruit judiciously thinned out; in the case of stone fruits, a few more should be left than are quite necessary, in order to make up for those the tree will cast in stoning, which, however, will not be many if the above operations have been gradually carried on as recommended in previous months. Strawberry beds should be immediately mulched with some suitable material to keep the fruit clean; nice straight straw is undoubtedly the best, and short grass about the worst. Now is the time to apply to these beds some drenchings of stimulating liquid manure: attend also to the removal of runners; such as are required for the purpose of making new beds should be layered into four-inch pots and kept well watered; all other runners must be constantly removed. Thin out Gooseberries for bottling, and at the same time remove some of the strong luxuriant shoots from the interior of the trees; Currant trees also may be so treated with advantage; and let the ground under both be well mulched over with some of the cleanest of the long littery dung fresh from the stable, to keep the fruit on the lower branches clean. The old plan of spurring in the breast wood on the old Wall Pear trees ought to be exploded; we recommend, in preference, that it should all be completely broken out when in a young state, taking care, however, to train-in a few young shoots where there are vacancies, which will often produce abundance of fruit the second year. Persevere in following up with powerful syringing all disbudding and thinning operations.

Flower Garden.

As the season is now arrived in which it becomes an absolute necessity to get out the whole of the stock of bedding-plants, such things as Turban Ranunculus, Hyacinths, and other bulbs which have been occupying the beds must be taken up at any sacrifice; they must therefore be very carefully lifted without injuring the foliage, and plunged in sand for a time before being exposed to dry for storing; the next thing is to give the beds a little fresh compost, and proceed with the planting. When all the bedding-out is done, let the surface of the beds be neatly levelled, and such as require it have the plants pegged down. Continue the planting-out of Tender Annuals: these are very useful in the mixed borders to supply the vacancies which are always occurring through the plants going out of bloom; take care that there is a reserve bed of these things to supply future vacancies of the kind. Patches of Annuals sown last month must be well thinned out; and more may be sown for later blooming. Plant in the mixed borders a good number of Cuphea platycentra and strigulosa; they come in so cheerful-looking late in the autumn. The propagation of Spring-flowering Herbaceous Plants must be finished off immediately. Pinks also, and Pansies, must now be propagated. About the middle of the month, sow Brompton, Queen, and Emperor Stocks, to stand through the winter. Finish off the planting of Dahlias, and keep them well watered. Continue to give Roses thorough syringings, unless just when they are in full bloom, and also repeated doses of liquid manure. Attend particularly to the destruction of weeds and insects, to the neatness of the borders and tying up all plants requiring support, to the finished appearance of edgings of all sorts, to the pruning away any luxuriant overgrowth in shrub or flower, to keeping grass well mown and gravel well rolled,—all of which, simple and obvious as they are, yet constitute the minutiæ of enjoyable gardening.

Plant Houses, Conservatory.

Now will be seen the advantage of starting varieties of Achimenes early, as they will be highly conspicuous ornaments amongst the many beautiful objects which will now be concentrated in this structure, for the good of which, and also of the permanent plants, remove any large plants in pots or tubs to a sheltered place out of doors; this will allow a greater liberty in changing the arrangement of the flowering plants, as well as affording room for the concentration of all the best and gayest flowering plants in a situation where, as a whole, they are much more likely to be admired than when scattered here and there. Orange trees in tubs are at this season very liable to the attacks of insects of various kinds, which must be guarded against by constant syringing and occasional fumigation.

Stove.

Achimènes picta, started now in well-drained pots or shallow pans, will be found a very useful plant for winter flowering; other varieties of Achimenes, started late, may now be shifted, and grown on freely for the Autumn. If the heat of the bark bed is declining, freshen it up by the addition of some well-sweetened new material. Give a good supply of liquid manure to all fast-growing plants, such as Allamanda, Alpinia, Aristolochia, Clerodendrons, Hidychium, and Stephanotis.

Guard well against insects, such as Thrips, Red Spider, and Aphides; keep them down by the perseveriug use of fumigation and syringing. Choice Gloxinias and Gesneras may now be readily propagated, the former from leaves, the latter from cuttings; the brisk heat of a dung-bed frame is the best medium for the purpose. Pot-off seedling Gloxinias, and encourage a liberal growth by heat and atmospheric moisture; be sure that this house is not overcrowded; there will now be plenty of room in other structures to take superfluous plants into; keep up a gentle fire-heat, more or less according to the state of the weather.

Orchid House.

But little can be added to previous directions: the temperature must be regulated by external conditions; fire-heat will generally only be necessary at night and on dull cold days. Shading must be applied duriug bright days, particularly after a series of dull cloudy days, as the plants are then much more susceptible of injury. Give water at the roots freely to all plants in an active state of growth, but gradually withhold it from such as are approaching maturity: this will be the case with some of the Dendrobiums; and they should be removed to a cooler place; such as are placed in the Conservatory for a short time will require less water.

Greenhouse.

The early forced Azaleæ indicæ will now have made their growth, and should be removed to a cold pit; let them have a free circulation of air night and day, but shade from hot sun. Large specimens of most kinds of hard-wooded greenhouse plants will be better placed in a sheltered spot out of doors, but tilt them on one side during heavy rains. The young growing stock, on the contrary, of such things as Boronias, Croweas, Chorozemas, &c., must be retained in pits or cold frames, and encouraged to grow by an occasional gentle syringing and a partial closing of the lights. Attend to the young growing stock of Heaths, and give them another shift towards the end of the month. Stop all luxuriant growth in time. Give abundance of air to winter-flowering Heaths and Epacris, which should now be making good growth, and gradually inure them to a full exposure. Chinese Primroses, for winter and spring decoration, must now receive particular attention; the young seedlings should now be potted into three-inch pots; place them in a cold pit near the glass, and give them a free circulation of air, with shade from powerful sun. The double varieties are more tender in their constitution; they should now be starting into a fresh growth, and may be shifted according to their strength; but they will not bear overpotting; place them in a cold pit, and give abundance of air to dispel damp, and equalize the temperature by shading from hot sun; damp and drip are very injurious. Continue previous directions for Calceolarias, also the training-out of Pelargoniums, and supply both with liquid manure when in full growth. The remaining stock of Fuchsias for this season's bloom should now have their final shift. Give the Annuals for the Conservatory their final shift, and grow them on as fast as possible. The Chrysanthemum cuttings will now be well rooted, and must be potted off immediately and placed in a frame with gentle bottom heat until they have rooted out; let them have a free circulation of air; and at the slightest appearance of mildew, dust the leaves with sulphur. Lachenalias may be dried off; and the quantity of water must be lessened to Tropæolum grandiflorum and brachyceras. Tie up the flowering stems of Lilium lancifolium, and place them in a sheltered situation out of doors; some lumps of nice fibry loam, laid around the base of the stems, will be beneficial.

Forcing Fruit Houses, Pineries.

Plants ripening fruit will require a high temperature, with a free circulation of air and full admission of light; let the swelling fruit be assisted with occasional supplies of liquid manure. The state of the plants intended for Autumn fruiting must now claim attention; if the necessary shiftings have been attended to, as so often directed, they should now be showing fruit; and if not, keep them rather drier at the root for a time, which will generally prove effectual: give to such as require it a larger pot, and place them in their final fruiting place: look to the stock intended for late Winter and Spring supply; shift such as require it, and keep them in a free-growing state by the liberal application of air and root-moisture. Pay constant attention to the state of the young successions, and shift them as they require it: also keep up the stock of young suckers.

Vineries.

The fruit in the early house will now be ripe and in use; see that abundance of air is supplied, and keep all laterals well stopped; fermenting materials may be partially removed from the outside—do not take them all away at once. The later houses will now require constant attention. Muscats will require fire-heat during the time they are in bloom, as they will not set well under a temperature of 70°; indeed fire-heat will be of use to all the late crops during their blooming stage, particularly if the weather is dull and cold; do not neglect the thinning in time—it is more necessary than ever for late grapes, as they have to hang so long on the trees, and must be considerably more thinned than is necessary for early ones: persevere in keeping up a growing atmosphere, and attend to training and stopping.

Peach House.

Continue to pay attention to training-in the shoots; and as the fruit will now be ripe, or nearly so, water at the roots must be discontinued, and the atmosphere be kept moderately dry, yet not so much as to increase the development of the red spider—for the prevention of which, use sulphur as before directed. Continue the application of moisture both to the atmosphere and the roots in the later houses, and follow up perseveringly all the former directions with regard to disbudding and thinning, and the extirpation of insects. The first crop of fruit on the Figs will now be ripe; and as soon as it is gathered, the second crop will claim attention; prick up the borders, add a little fresh compost if necessary, and apply a good soaking of water; top-dress the pot-plants, and give liquid manure; syringe the whole abundantly, and give abundance of air in the morning—but shut up early and syringe; thin the fruit if too thick, and attend to stopping young shoots.

Pits and Frames.

Still continue to keep up a brisk growing heat by the addition of fresh linings to Melons and Cucumbers. In every stage a nice bottom heat is essential; the top can always be regulated by shading and giving air. Continue to earth up advancing crops. Ridge out more for succession; and if Melons are required very late, and there is a hot-water pit, more seed may be sown; they will ripen in October. Make up Mushroom beds.

JULY.

Kitchen Garden.

Let there be now no delay in getting in the main crops of Broccoli, Winter Greens and Celery, if not done as recommended last month: plant out also a good bed of June-sown Cabbage: strew some salt over Asparagus and Sea Kale beds in moist weather; the former will also benefit by the application of guano water: keep up successional sowings of Lettuce, Radish, Spinach, and Turnip; also another sowing of Endive for the main crops: examine the state of growing crops generally; apply water wherever necessary, particularly to Celery; keep the earth constantly stirred about, and weeds destroyed: nail up Tomatoes: sow a little more Cabbage for succession; this plan is far better than that of letting the old beds stand for a second crop of "Sprouts" as they are called,—it weakens the ground too much: one more sowing of Peas may be made for the chance of a crop, but they must have good ground, be kept well watered, and when well up, the ground should be mulched on each side of the rows.

Fruit Garden.

Follow out previous directions with regard to the removal of superfluous wood, nailing and syringing powerfully Wall-fruit Trees of all sorts. Protect Cherries from birds: half-inch mesh netting is the cheapest in the end; pay particular attention to the stopping of Figs. Thin-out the fruit of choice kinds of Pears when they have set too thickly, taking care to remove all deformed fruit. Thin-out the young canes of Raspberries, and secure them from winds. Fruit trees now swelling their fruit, such as Plums, Apricots, Peaches and Nectarines, and newly planted ones in particular, will be all the better for copious waterings, if the weather is dry. Do not forget last month's directions with regard to Strawberries, whether for forcing or beds.

Flower Garden.

Bedded-out plants will now be started off into full growth, and will require to be trained out and nicely pegged down as they advance. The borders in the mixed-flower garden will require to be kept up to the extreme of neatness, by staking and tying the plants as they require it, hoeing and raking the borders at short intervals, particularly after heavy rains, and clearing away all old flower stems and decaying leaves. As Roses will now be objects of great attraction, they must have corresponding attention paid to them: nothing tends more to prolong the Summer bloom than a constant supply of water and liquid manure; dead flowers and insects must be constantly removed by handpicking; and when the bloom is over, use the syringe thoroughly. Lose no time in getting a good stock of Cloves, Picotees, and Carnations layered. Prick out Brompton and Queen Stocks into Nursery beds; see that beds of Violets do not want for water. Towards the end of the month put in a few hand lights of choice Verbena cuttings on a south border, which will make fine plants to pot in September, and supply any number of cuttings in the Spring. The propagation of any choice kinds of bedding plants when the stock is short may be commenced at once and followed up as fast as cuttings can be procured. Stake Hollyhocks and Dahlias in time, also Salvias, Phloxes, Asters, and other autumnal-blooming plants. Pick off the seed-vessels from Rhododendrons and Azaleas; and if the weather is dry, let them have copious supplies of water. Clip box edgings, also Yew, Thorn, and Laurel hedges; go over the Shrubberies and reduce any over-luxuriant growth.

Plant Houses, Conservatory.

The plants in this structure which are not in bloom will be benefited by copious syringing every evening. The floors, the borders, and other vacant parts of the house should be saturated with water daily during very hot weather. Continue to apply liquid manure to strong growing plants, and train out Mandevillea, Passiflora, Lapageria, and other climbing plants as they advance. Shade from powerful sun, ventilate very freely during the day, and also leave on a little air all night. Assist the display by continuing to bring forward the main stock of Achimenes, Gloxinias, and the earliest Balsams; see that the other Annuals in pots are in a forward state of preparation, as they will soon be in requisition.

Stove.

This house should now be gay with Ixora, Echites, Allamanda, Stephanotis, Dipladenia, and Clerodendrons, all of which will at present require only the usual routine of watering and keeping down insects; maintain a moist atmosphere, and syringe often where practicable, but beware of spotting the flowers; soft-wooded and free-growing sorts may have diluted liquid manure twice a week. Give the plants intended for winter blooming a shift if they require it; as most of them will be getting too large to remain in the dung-bed frame, they should now be removed here; and any old plants of the same sorts now starting into a fresh growth may be pruned into shape and shifted according to their requirements.

Greenhouse.

Hard-wooded plants of most sorts still requiring a shift must be attended to immediately; those which, having been shifted some time back, have made thin growth, should now be exposed to all but the most powerful sun in order to harden the tissues and induce a free-flowering habit; most of the large plants of Chinese and Indian Azaleas may have nearly free exposure to the sun, but should be protected from heavy rains. This is a good time, when water requires to be given so often and abundantly, to ascertain the state of the drainage, and if defective to remedy it; for no plant with a defective drainage can ever be safely wintered. Look to the state of young specimen plants in cold pits, keep them more shaded than older plants, at the same time let them be sufficiently exposed to harden the growth and prevent drawing; most of the foregoing remarks will apply to Heaths, young plants of which growing into specimens should have their final shift for the season; and see that they are well trained down and luxuriant growth stopped; observe that most kinds of hard-wooded plants are now advancing towards a state of rest, and the tendency of all operations conducted with them should be to ripen the wood and produce maturity of growth.

Pelargoniums which are past flowering should be placed out of doors in a situation exposed to the full sun and very little water given; this will thoroughly ripen the wood and throw them into a dormant state, when they may be closely headed back. Encourage the growth of the later stock for Autumn blooming, expose them to the influence of the sun, but give them plenty of water and liquid manure. Give the seedling plants of Chinese Primroses another shift and plenty of room in a cold pit, shade from hot sun, and be sure that the drainage is perfect. Cinerarias which are past blooming should have the tops cut off and be placed out of doors on coal ashes to form another crop of suckers. The best-impregnated Calceolaria seed may now be sown in shallow pans and kept in a very cool place in a pit; this plan of sowing early and getting good plants established in pots before Winter, is very preferable to keeping old plants; seedlings are invariably more healthy and robust in habit, and if carefully impregnated they will produce very effective plants for decorative purposes, although perhaps not up to the Florist's mark of perfection. The present is a good time to go over the stock of Pot Camellias; give a shift to such as require it, but never a large one, as they are better with the roots rather cramped than otherwise: it is very important that the drainage should be perfect.

Forcing Fruit Houses, Pineries.

Every advantage should now be taken of the lengths of the days and nights, to induce a robust, healthy, and hardy habit of growth, to ensure which ventilate freely, but shut up early. Continue the application of liquid manure to the swelling fruiters, also to successions, and observe that the chances of good fruit for another season will depend upon the attention paid to succession plants now; keep them growing freely in a liberal bottom heat and a moist atmosphere, and attend to shifting such as require it; observe also that with regard to ripening off the fruit, it is not well to push it too fast, for the slower the process the better the flavour; and any attempt to hasten it by keeping up a very high temperature and too much dryness at the root, will not only lessen the weight of the fruit, but the saccharine secretions will be partly acidified, and the flavour very much deteriorated.

Vineries.

This will generally be the best month for ripening off the wood in early houses, from which the fruit is cut, or nearly so; remove gradually all the late growths, and give air with freedom both day and night: it will very much assist this process if some means can be adopted to throw off heavy rains from the borders (if outside) by the use of tarpaulin. Continue stopping the laterals and superfluous wood in the later houses, and give the berries a final thinning; do not be afraid of a little fire-heat at this stage, as they will keep all the better by-and-by; apply liquid manure to the borders.

Peach House.

As soon as the fruit is all gathered, which will be towards the end of the month, let a little extra attention be given to get the wood thoroughly ripened; give the trees a good syringing after the fruit is off, and repeat it as often as is necessary to keep down the red spider, but do not water at the roots, as that would probably induce a fresh growth, which is by no means desirable; let them have thorough ventilation day and night. The second crop of Figs should now be swelling fast; let them have plenty of water at the roots, shut up early and syringe freely, continue stopping the young growth. Strawberries for next year's forcing will now require great attention; if they were layered into pots as advised for beds last month, the strongest should be selected and potted at once into six-inch pots; place them in an open situation fully exposed to the sun, but on a cool bottom; give them frequent applications of soap-suds alternately with water, and occasionally liquid manure: continue to lay more runners into small pots as they become ready.

Pits and Frames.

Pay attention to the bottom heat; for late Melons and Cucumbers should be kept at about 75°; keep them well thinned out, stop constantly and shade during hot sun; observe Melons ripening fruit must *not* be shaded: look to the state of young plants required to take the place of such as are past bearing, and give them a shift into a larger pot if the places are not immediately vacant. Tilt up the glasses over Ridge Cucumbers, and begin to train the shoots outside; let them ramble without stopping: both these and Vegetable Marrow must be abundantly watered.

AUGUST.

Kitchen Garden.

The first week in this month is the proper time to sow a good bed of Prickly Spinach for Winter supply; also towards the end of the month sow American Cress for Winter and Spring salading. Sow Cauliflower for hand-glasses and Winter storing within a few days of the 25th of the month; the best sorts are Carter's dwarf Mammoth, New Giant, and Walcheren: sow also Bath Cos and Hardy Cabbage Lettuce to stand the Winter, also large Tripoli Onion for early Spring supply. Keep up successional sowings of Radishes and small salading, according to the demand; also make another sowing of Endive for succession. As the crops of Peas are cleared from the ground, room will be found for planting successions of Celery. Plant out a good stock of Bath Cos and other sorts of Lettuce. As soon as the first sown Endive is large enough, plant out a good bed. The ground from which Early Potatoes have been cleared should be planted with late Savoys, Colewarts, and Asparagus Kale; a portion of it should also be sown with Turnips for late crops. Remove the flower stems from Artichokes as fast as they are cut, in order to strengthen the roots. Continue to earth up Celery, and see that it does not want for water and liquid manure; a little salt mixed with the water is a good thing, both for the plants and to drive away worms and snails.

Fruit Garden.

Continue nailing in the young wood of Wall-fruit trees in general; the strong shoots of Peaches and Nectarines, which at this time throw out a great many laterals, may be stopped with great advantage at the lowest lateral, which should then be trained on as a leader: this is also a good time to complete the removal of all superfluous wood not likely to be wanted another season; be careful of the foliage, as upon its retention and healthy growth the maturation of the fruit bud depends. Protect Morello Cherries, Warrington Gooseberries, and Red and White Currants from birds; the elastic hexagon netting is

the best medium, as it also excludes wasps and admits air and light: the best method of securing it to the wall is to use the broad Irish tape all round the outside, through which to pass the nails, which will preserve the net from tearing; it is also an excellent covering for Peaches and Nectarines, and indeed of all fruits where wasps are troublesome. Mice and small birds, which are now getting very destructive to choice Pears and Figs, should be trapped. Beds of Strawberries should now be planted without delay from those which were layered in pots for the purpose; keep the crowns well up above the surface of the soil, so that they may have full exposure to the sun, which is the principal means of inducing the formation of strong fruit buds.

Flower Garden.

Operations in this department for this month are principally routinal, such as watering, staking, tying, and in fact all the operations which have a thorough neatness in view: bedding plants of all sorts should now be in very great beauty, and it is the proper time to determine on any different arrangement of colour which may be thought desirable for another season. The tall varieties of Lobelias will be very much benefited by frequent and copious applications of liquid manure, so also will the beds of Cannas. Give plants of Pampas Grass frequent doses of liquid manure, and water alternately if the weather is dry. Propagation for the wants of another season must now be commenced, particularly of such sorts as do not root freely; for unless they get pretty well rooted before Winter, they are often difficult to preserve. Attend strictly to the routine of mowing, sweeping, and rolling, and to keeping the edges of all well defined; indeed perfect order and a finished appearance are quite as essential to the enjoyment of a garden as beautiful flowers and superior cultivation.

Plant Houses, Conservatory.

As it is generally desirable to keep up a display of bloom in this house, even at this season when the out-door display is at its height, we shall find the advantage of having a good supply of well-grown Annuals in pots to fall back upon, for in a Conservatory of any pretensions, however largely we may draw upon the Stove and Orchid House, there will be many places to be filled up for which such plants are very suitable, and as their value is practically known, we have all along advised a proper attention being paid to them. Ferns in pots in the shady parts of the house are another very useful tribe of plants, and are invariably objects of great attraction. The Fuchsias, if treated as before directed, will now be advancing fast into a good bloom, and must be drafted into this house as they become ready. Oxalis Bowei, grown in pots, is a very fine object just now in the Conservatory. Tea-scented Roses form another additional attraction. Continue the routine of training out climbing plants, but do not now cut them in, as a rambling growth is favourable to blooming. Air, water, and syringe, as before advised.

Stove.

Examine frequently the state of the roots of the plants intended for Winter flowering, and if necessary give them a shift into blooming pots, and keep them growing on freely; fire heat must be regulated by the state of the weather, but it is best not to be too chary in its application, as plenty of air can be given in sudden changes of temperature, and this is calculated to do good rather than harm. Plants which are advancing towards maturity should be assisted into a dormant state by a gradual lessening of the quantity of water, a free circulation of air to harden the growth, and a drier atmosphere. Attend constantly to the destruction of insects, or they will be very troublesome in the Winter. Keep Passifloras and other climbing plants neatly tied in, so as not to obstruct the light too much.

Orchid House.

Many of these, such as Dendrobiums and Epidendrums, will have matured their growth, and must be removed to a cooler temperature and drier atmosphere, in order to induce a state of rest. Continue to dip the baskets and more portable of the blocks in tepid water every week, as formerly advised, and use the syringe liberally to such as are not so easily moved, and indeed to growing plants generally, such as Lælias, Huntleyas, Barkerias, &c., which should be kept growing liberally by a high temperature and moist atmosphere; but at the same time air liberally when possible, and keep the houses well saturated with water.

Greenhouse.

Some of the early forced Indian Azaleas will have set their bloom buds, and the wood will also be ripened, if they have been pretty well exposed; and therefore they may be removed into the Greenhouse towards the end of the month, taking care that the foliage is quite dry when they are housed; the same remarks will apply to the early forced Camellias, which should be housed at once; the later stock of both sorts must still be exposed out of doors, as before directed. Heaths in all stages of growth should now be standing in cold pits; such as have been recently cut in after flowering should be kept rather closer, and shaded when necessary; but when growth commences, let them have free exposure in favourable weather in common with the general stock; hard-wooded greenhouse plants, in general, will require all the exposure which a due regard to their several habits will allow during this month, in order to harden the growth, and induce a flowering habit. Pelargoniums which have been headed back, as advised last month, will now have broken again pretty freely, and should be shaken out of the soil and re-potted into pots of such size as will just contain the roots conveniently; place them in a frame or pit, keeping them shaded for a short time, but not watering too freely. Observe that this batch will be required to make a strong healthy growth before the winter season of rest, therefore regulate their treatment accordingly. As soon as the Cinerarias have formed their suckers, and begun a new growth, shake them out, and divide the roots; pot the best into four-inch pots, and place them in a cold frame near the glass; shade them as required; sow the seed of choice varieties: observe, this sowing will be a very useful one. Chrysanthemums must now be immediately shifted into blooming pots, and as soon as they are rooted through let them be liberally supplied with diluted liquid manure; give them plenty of room, and still apply sulphur for mildew. This is the time to look to the state of Hardy Plants for forcing purposes: Deutzias, Weigelas, Persian Lilacs, and Forsythia must have full and free exposure to the sun to ripen the flower-buds. Lilium

lancifolium will now be expanding beautifully, and should be immediately transferred to the Conservatory. The compost heaps of all sorts should be sometimes turned about to get sun-baked, and brought into good condition for Autumn and Winter potting; also now is the time to cart in a fresh supply: scrub and wash dirty pots, and store them away for future use.

Forcing Fruit House, Pineries.

If it is not already done, it is now quite time to give a final shift into fruiting pots of all the best successions for early fruiting next season; be sure that the drainage is perfect, and make a liberal use of rough lumps of charcoal, both amongst the drainage and also amongst the compost; the bed will require to be renovated by the addition of fresh material and thoroughly turning over; be careful to watch how the bottom heat works, as it sometimes gets too high after this operation; a range of 80° as a medium will be quite enough. Keep up a good supply of atmospheric moisture, and abundance of air when the weather is right. Use great caution in syringing where plants are fruiting, so as not to wet the young fruit just setting. Remove all suckers from fruiting plants, with the exception of such as will be required for keeping up the stock.

Vineries.

Assist the late vines with a little fire heat, to perfect the fruit and ripen the wood; stop all superfluous growth, and give them plenty of ventilation; see that the roots do not want for water up to the colouring-point; after that keep the border dry. Continue to cut out mouldy berries, and if wasps are now troublesome, nail the elastic hexagon netting over all the ventilators, using broad tape round the edges, as before advised.

Peach Houses.

The principal operations here will be confined to such as tend toward ripening the wood, which must be secured by a constant and free ventilation; be sure that the borders are kept dry, so as not to induce a second growth. Continue the application of water and liquid manure to Figs, now swelling the fruit, but only up to the ripening point, when, to secure flavour, they must be kept dry.

Pits and Frames.

Keep a large supply of good fermenting materials in a constant course of preparation, for the formation of new beds and for keeping up the heat of the linings to late Cucumber and Melon frames. Prepare also materials for successional beds of Mushrooms; spawn such as are ready: this should be done at a temperature of 80°. See that the beds do not want for water, and, when necessary, give a good soaking, but do not be always dribbling a little at a time, as it only rots off the young Mushrooms.

SEPTEMBER.

Kitchen Garden.

The harvesting of the general crops of Onions will now claim attention as soon as they are ready to pull up, which may be ascertained by trying a few: let them be carefully lifted and laid out to harvest under cover of a shed, if it is in a wet time. When the ground is cleared, let it be well manured and trenched in preparatory to planting with Cabbages, to stand through the winter. Thin out the Spinach sown last month, leaving the plants six inches apart, and stirring the surface after thinning. Earth up all advancing crops of Broccoli, Winter Greens, and Cabbages; also continue the earthing of Celery when the foliage is quite dry. Tie up Endive and Lettuce to blanch, and transplant Endive twice this month—in the beginning for the principal supply, and at the end for late crops. Prick out Cauliflowers into nursery beds to strengthen them for the hand-glasses; keep up the sowing of Radish and small salading.

Fruit Garden.

Next month is the proper time to make new plantations of Fruit Trees, and it will conduce very much to their well-doing if the stations can be prepared this month, so that the ground may settle a little before planting: the first great essential is thorough drainage, the next to have the necessary composts in good condition, that is, well aërated and incorporated; throw up a good-sized mound, as the trees should be planted generally above the level. Trees which have a rampant, luxuriant, and unfruitful growth, may be root-pruned by the end of the month; this root-pruning is a very useful help to the fruit-cultivator, and is applicable to all strong growing Fruit Trees. When the fruit is all taken from the Peach and Nectarine trees, give them a good syringing, and if at all mildewed, dust them with sulphur while moist. Remove runners and weeds from Strawberry beds, but do not cut off the old foliage; prick up the spaces between the plants lightly with a fork: keep down weeds, and stir the soil amongst the newly-planted beds. Put in cutting of Currants and Gooseberries as soon as the leaves turn colour.

Flower Garden.

Towards the end of this month or the beginning of next, sow Hardy Annuals to stand through the winter; the following may be safely recommended:—Nemophila discoidalis, insignis, and maculata; Gilia achilliæfolia and tricolor; Clarkia pulchella and alba; Platystemon californicus; Erysimum Perowskianum; Godetia tenella, Lindleyana, and rubicunda; Collinsia verna, tricolor, multicolor, and bartsiæfolia; Limnanthes Douglasii; Bartonia aurea; Callichroa platyglossa; Silene compacta; Virginian Stock; Lupinus nanus; Cyanus; Eucharidium grandiflorum; Sanvitalia procumbens; Eschscholtzia crocea and californica, and Leptosiphon androsaceus: with the above a great display may be made in the Spring. Autumn-flowering Roses must be supplied with liquid manure. Commence the planting of Narcissus, Crocus, Anemones and Aconites as soon as the places are vacant. Stake and fasten securely Salvias, Dahlias, Asters and other Autumn-flowering plants. Get in a good stock of cuttings of free-rooting bedding plants in store pots to stand through the Winter. Prepare beds for Pansies. Plant out Pinks: pot off rooted layers of Picotee and Carnation, and plant the rest in nursery beds. Pick off dead seed-vessels from Scarlet Geraniums and Verbenas, and indeed try and make the most of all the late bloom by the constant removal of unsightly refuse, and attention to neatness.

Plant House, Conservatory.

The operations of this month in this department will not materially differ from the last. Every exertion must be

made to keep this house interesting and gay by concentrating all the blooming plants from the other structures. Air must be given very freely in order to harden and ripen the wood of the permanent plants; the application of liquid manure to the plants in the borders should be discontinued as soon as the growth is made, and water generally not so liberally given. Let the house be thoroughly cleared, and the whole of the plants gone over and placed in first-rate condition previous to bringing in the plants which were turned out in June. See that the hot-water apparatus in every department is in good working order; get the flues cleaned out, all defects remedied, and in readiness for the Winter's work.

Forcing House.

As this will very soon be required again for forcing flowers, it will be as well to take an early opportunity to get it thoroughly repaired and cleaned, and otherwise got in readiness.

Stove.

Ixoras past flowering should now be cut in without loss of time, and started again in a brisk bottom heat and growing atmosphere; a dung bed is the best if it can be had. Achimenes, as they go out of flower, should be removed into an empty Vinery and water entirely withheld, so as to induce entire rest to the plant and to mature the roots; when thoroughly dry and ripe, store them away in any dry place where frost cannot penetrate. Achimenes picta, Gesnera zebrina and elongata must be grown on in a brisk heat, and they will continue to bloom for a long time. Regulate the climbing plants, which as they go out of flower should be greatly reduced and neatly tied in, so as to offer no obstruction to the light.

Orchid House.

The temperature in this structure should now be reduced a little, to inure the plants gradually to a lower temperature: such as are past flower and are going to rest must be kept moderately dry and in a cooler temperature; but growing plants must still have a warm and moist atmosphere, and attention paid to watering, syringing, and dipping as before directed: shading will not be necessary, unless on very bright days; but air should be liberally supplied in fine weather, particularly to the dormant portion of the stock. Remove Cypripedium insigne and barbatum to the Conservatory, where they will bloom for a long time.

Greenhouse.

Continue to pay strict attention to following up all the necessary means required for maturing the wood of all hard-wooded plants approaching the dormant state, and indeed, as Winter is now approaching, even the growing stock must have more air and exposure, to harden the tissues and induce a hardy, stocky growth; if any appear to require it, they may still be shifted, but be careful in the after-treatment, particularly as to watering. Calceolarias and Cinerarias, also Chinese Primroses, will now be coming into full action and must have their wants especially attended to, by a constant shifting of the earliest plants as they become ready; and a large supply of successional plants in different stages of growth kept steadily progressing. Pay particular attention to fumigation. Continue to head down the later stock of Pelargoniums as the wood becomes ripened; and if not already done, shake out and re-pot those headed back last month: now is a time to get in a good stock of cuttings of choice roots. Chrysanthemums may still be shifted into larger pots if required, and continue the application of liquid manure to such as have the pots full of roots; they will still require to be staked and tied out neatly. Mignonette for pots should be sown immediately, and placed in a cold frame or pit; when up, give plenty of light and air. Pot the tuberous-rooted Tropæolums in blooming-pots according to their size, as they will not bear shifting. Pot a large supply of the strongest plants of Violets from the beds made in May. As the Japan Lilies go out of flower, let the pots be laid on one side out of doors. The stock of Amaryllis being now dormant, it is a good time to shake them out of the soil and re-pot at once; but if they have only been potted one year, surface-dressing is enough, as they only require shaking out every two years. Look now to the timely purchase of your Dutch Bulbs; the earliest customers get the freshest roots, and, as a frequent consequence, have finer blooms. Divide your stock into two lots; put one by in a place not likely to start them, and pot the other immediately, one bulb in a six-inch pot or three bulbs in an eight-inch pot for Hyacinths, Narcissus, &c., and for Tulips, four in a six-inch pot; these latter may be planted below the surface, but Hyacinths and Narcissus should have half the bulb above the surface. Place the pots on a leveled surface of coal ashes, and then cover them six inches above the bulbs with nice, sweet-leaf mould or very old tan, and throw a temporary covering over them in wet weather.

Forcing Fruit Houses, Pineries.

As the season is now advanced, all plants requiring it should be forwarded a stage by shifting for the last time this season, and, with the other successions, be kept growing freely by a liberal temperature both at bottom and at top; but at the same time give plenty of air at every favourable opportunity early in the morning, and shut up early with solar heat to save fire-heat. As it is desirable to harden the growth as much as possible, endeavour to imitate natural conditions by a lower temperature at night, so that whatever growth is made may be formed under those conditions of light and shade so essential to perfect development. Stir and water the surface of the beds, and keep up a growing temperature for the Autumn fruiters; give liquid manure to such as are swelling off: bottom heat for fruiters should still range about 85°.

Vineries.

These in their various stages will require constant care; the very earliest, to be started in November, ought to be pruned at once and a thorough circulation of air allowed. Those which are to be started in January will at this time make great efforts to throw out an Autumn growth, which must be constantly checked by stopping; at the same time all the side laterals may be entirely removed, to throw more light upon the main leaves; the greatest enemy to the late houses carrying fruit is a damp atmosphere, so that in dull wet weather, fires must be lighted to dispel it, taking care to give plenty of air with it, or else the berries will shrivel: keep the mouldy berries constantly removed.

Peach Houses.

Trees in the earliest house which have matured their wood should be divested of their foliage and loosened from the

trellis, and an early opportunity taken to dress them over with the mixture formerly recommended. The trees in the later houses will most likely be still green and perhaps making some attempts at late growth, which must be timely checked by stopping and keeping them dry at the roots. Cherries in pots for early forcing now standing plunged in the open quarters must be attended to at this season. Turn them out of the pots and shake off a good part of the old soil, and repot in sound fresh loam and re-plunge for a time; but before they are required for forcing, let them have a few weeks in a pit, that the buds may swell gradually. Now is a good time to take up and pot any promising young trees, full of buds, from the open quarters; such trees will often produce a better crop than those specially prepared for forcing. Figs now ripening their second crop must have no more water, both for the flavour of the fruit and that the trees may be encouraged to ripen off their wood.

Pits and Frames.

Great care must be used to maintain a brisk bottom heat to Cucumbers in bearing and growing on for winter supply: if dependent on fermenting materials, keep a good supply always in a state of preparation, and never use it until well sweetened: keep also a good heat to late Melons, but let the atmosphere be dry, or the flavour will be poor: make new beds on the shelves of the Mushroom house, and spawn the beds made out of doors; prepare materials for future beds. Throw up a bed in readiness for Asparagus next month, if required thus early.

OCTOBER.

Kitchen Garden.

It will be as well to observe that the earliest Endive already tied up for blanching will not bear much frost, or a long continuance of wet weather; therefore when quite dry, let them be taken up and planted thickly in a frame or cold pit, and keep the lights always on in wet weather, but let them have abundance of air and free exposure on fine days: the same remarks will apply to late Autumn Lettuce, the season for which will be very much prolonged by the above routine. Plant out a good breadth of Lettuce in a warm and sheltered situation to stand through the winter; a row planted within a foot of the base of a south wall, will in ordinary seasons be ready for use a week or so before the others: the ground hitherto occupied by the main crops of Scarlet Runners will afford a suitable piece of ground on which to plant Cauliflowers under handlights; let the ground be thoroughly trenched two spits deep, and as the operation proceeds, incorporate a liberal dressing of good rotten manure: level the surface and mark out beds of three feet wide for the glasses, and spaces of two feet wide to walk upon, for the purpose of giving air, dressing, &c.; from centre to centre of each glass four feet; put five plants to each glass, and look out for snails, which must be kept down by a mixture of soot, lime and ashes, strewed over dry. Take up and store Carrots and Red Beet; clear off and clean Asparagus beds: remove a part of the top soil and supply its place with well-rotted, rich manure. Persevere in trenching up all vacant ground to subject it to atmospheric influences.

Fruit Garden.

The gathering in of Apples and Pears must now have daily attention; let the greatest care be taken in gathering all the choice sorts; as soon as they part from the stems freely, they are ready; if gathered before, they will shrivel: use them as carefully as eggs, and do not heap too many together, for the weight of the upper portion will bruise the lower, particularly in carrying along to the fruit-room, and all bruises, however slight, cause incipient decay. Finish the gathering of Cob Nuts, and store them in a dry, cool place. Also gather Walnuts as soon as they leave the husks pretty freely; if taken too soon, they often get discoloured in cleaning out. This is the best month to make new plantations of fruit-trees of all sorts; as soon as the leaves come off freely from the trees, they are ready to be lifted and transplanted immediately, and where previous directions have been attended to, the stations will all be ready and the operations may be performed without delay —to defer it until next month is to lose a *season*; trees carefully planted in October do not require to be headed back; but may be pruned precisely as though they had been planted twelve months.

Flower Garden.

As the season of beauty is now over for most of the bedding plants, towards the middle of the month begin to take up Scarlet Geraniums, Heliotropes, and such like plants which are required for storing; take up as many as there can possibly be found room for, as old plants will always be found to flower earlier and more abundantly than young cutting plants; and if you can begin early enough, you will be able to head them down close, and after potting them in pots just large enough to hold the roots, and in light soil rather sandy than otherwise, put them into a large pit near the glass and give them for a short time a gentle heat to start them afresh, and then gradually expose them to harden, when they may be placed on shelves and other vacant places in the greenhouse. When all the principal beds are cleared, let them be immediately prepared for the reception of bulbous plants, such as Narcissus, Hyacinths, Turban Ranunculus and Tulips, and let the whole of them be edged with Crocus of various colours; some may also be filled with Spring-flowering herbaceous plants, such as Viola arborea, Primroses, Polyanthus, Alyssum, Iberis, Aubrietia, and Arabis, all of which will help to keep up a gay appearance in early Spring, and will mostly be over before the beds will be again required for bedding plants: some of the larger beds may be filled with nice dwarf plants of the hardier Evergreens; common Rhododendrons, which may be moved any day in the year, are very suitable for the purpose. Many kinds of herbaceous plants may now be taken up, divided, and replanted; it is far better than doing it in the Spring; amongst them do not forget those useful plants, the Double Rockets, both purple and white: they should be lifted annually about the first week in the month and replanted in fresh situations. Alterations which involve planting Trees and Shrubs should be set about vigorously: every Tree and Shrub planted this month will stand in a far better position as to its well-doing than those planted during any other month in the year, however carefully they may be tended.

Plant Houses, Conservatory.

Previous to bringing in the plants which were turned out of this house in June, let the whole of the permanent plants have a thorough revision, some pruned and trained, some cut back, all thoroughly cleaned and put into first-rate condition, then fork over the borders, top-dress where necessary; then after top-dressing and cleaning the pots out of doors, place them in their allotted positions. Look to the state of the glass both of roof and sides, and let it be well cleaned: of course such things as painting and glazing have been properly attended to; for be assured, if houses drip to any extent, no choice plants can be preserved in them. Chrysanthemums will form the chief attraction in this structure for some time to come; the early varieties will now be sufficiently in flower and may be brought in at once, and the main stock should be removed under glass—an empty Vinery for example, and the best selected as they expand, may be brought into this house.

Forcing House.

This will now be brought into requisition for many purposes, and will require to have a tolerably brisk heat kept up; some of the winter-blooming Stove plants will most likely require rather more heat and atmospheric moisture than may be wanted in the Stove; they may therefore be brought into bloom here, and then removed to the Stove or Conservatory as they may be required. Introduce a plant or two of the early forced Camellias, also of Salvia splendens and gesneriflora. The first batch of Hyacinths, Narcissus, and Tulips, as soon as the pots are filled with roots and the bulbs are started, may be placed on shelves near the glass in this structure.

Stove.

The Spring-struck cuttings of Eranthemum, Justicia, Manettia, Lueulia, Begonia, Euphorbia, and other winter-flowering plants recommended in previous directions to be grown on freely, will now be advancing towards bloom, and must be carefully tended, as they will be very useful; bring forward also the late-started Gesnera zebrina; and Achimenes picta, Epiphyllum truncatum and Russellianum will flower in this structure. Plants of all sorts which have matured their growth must be induced to go into a dormant state by a gradual withholding of water and placing them in the coolest part of the house. Poinsettias advancing into bloom will require a good supply of water, and Eranthemums may have a little liquid manure. Give air when possible, and keep the temperature by fire heat when necessary at about 70° by day, 50° to 60° by night.

Orchid House.

Growing plants generally will still require to be supplied with water, in quantities proportioned to their state of growth; such as have attained maturity may be placed in the coolest situations, where they should have no water for some time; maintain a temperature of 70° by day and 60° by night—not more, or else it may induce some which ought to be dormant to hoot out again.

Greenhouse.

Hard-wooded plants of all sorts must now be housed at once, taking care to put them in thorough good order before bringing them in. Give the winter-flowering Heaths all the encouragement possible to throw up a strong bloom, but be sure that they have a free circulation of air; such as have just past blooming should be well cut back and placed in the coolest part of the house, or in a pit so as to prevent them from making growth until the Spring. The different varieties of Epacris are just showing flower, and before they are too far advanced should be nicely trained out and top-dressed if necessary; as they are in full growth, they will require a free supply of water. Continue to pot-off the earliest sown seedling Calceolarias; those first potted should be rooted out and may be removed to a cold pit. Look over the old stock; such as are well rooted may have a shift, at the same time prune them into shape, and the pieces may be put in as cuttings if desirable: see that the drainage is perfect, as they will require a free supply of water now that their season of growth has come. See that the Autumn-struck cuttings of Pelargoniums are all potted off, and give them a slight bottom heat on a dung-bed to assist the rooting process; this young stock had better be grown for the present so as to come in for late blooming; older plants, which were headed back some time ago, should have made a good growth, and should be thrown into a comparatively dormant state by a partial withholding of water and a free circulation of air; those intended for very early forcing ought to be quite dormant, and should have only just water enough to prevent them from shriveling. Let the earliest Cinerarias have plenty of room to develope themselves and a free circulation of air; shift some more for successional blooming. Shake out, divide, and pot any old plants which have been kept back for late purposes, and pot-off early sown seedlings, and sow more seed both of Cinerarias and Calceolarias for late blooming. Mignonette for Conservatory purposes must be kept thin in the pots and abundantly supplied with air, as a close stagnant atmosphere will in a very short time render it worth no further trouble.

Forcing Fruit Houses, Pineries.

Previous directions with regard to the necessary shiftings, watering, and the regulation of the bottom heat, will still be applicable, observing that both bottom and top heat must be gradually lowered as the days shorten and the external temperature becomes permanently lowered. Fruiting plants may be safely allowed six or eight degrees more than will be necessary for successions, say for fruiters 75° maximum, 64° minimum; and for successions 68° maximum and 57° minimum by night. Air must be freely admitted whenever the weather will permit; and in very cold weather put on a little extra fire heat so as to be able to give air; shut up as much solar heat as possible in the afternoons of bright days.

Vineries.

Early vines intended to be started next month must be pruned immediately, and afterwards the stems painted over with the composition, as before advised; let the glass be thoroughly repaired and cleaned, and the walls done over with a wash of quick-lime and sulphur. If the borders are outside, see that there is a good supply of fermenting material in readiness towards the end of the month to be put on the border a week or two before the fires are started: the pruning of all the general crops of Vines, from which the fruit is cut, should be done this month, and even those on which the late fruit is hanging may be cut back to the fruit when the leaves turn colour and fall, and afterwards make it a rule to prune in every

shoot as the fruit is cut: the interior air of these houses in which the fruit is hanging must be kept very dry and cool, and when fire heat is necessary to ensure dryness, it must be accompanied with an abundance of air; go over the bunches twice a week and take out all berries showing signs of decay.

Peach Houses.

If any of the trees are getting worn out or decayed, now is a good time to replace them with healthy young trees from the open walls; such as have been about five years in training are the best; and if very carefully lifted and replanted in fresh compost, a tolerable crop may be taken the first year. If Peaches are required to be started next month, let them be immediately pruned, dressed, and fastened to the trellis; the house also should be partially closed; let the walls be well washed with quick-lime and sulphur, the borders forked up and dressed with some fresh and rather rich compost; if they are very dry, give them a good soaking of water about the last week in the month. Remember that Peaches will not at any time submit to hard forcing, but much more so at this early season, therefore let the vital principle be very gradually excited. Strawberries in pots for forcing must now be placed in a situation where they can be protected from inclement weather. Continue to make fresh beds for Mushrooms, and spawn such as are ready; destroy wood-lice by pouring boiling water in the cracks; the temperature should range about 60° with a moist atmosphere.

Pits and Frames.

Cucumbers for winter bearing must have a steady heat kept up both at bottom and top; keep the glass thoroughly clean, as they cannot afford to lose a ray of light now; the temperature may range from 65° by night to 85° by day; give them air when safe, but keep a canvas flap over the openings. Beds should now be thrown up, composed of mixed dung and tree leaves, for forcing Asparagus: be very sure not to put the roots in until the fierce heat has subsided: many a good frame of roots have been spoiled by being in too great a hurry. Sea Kale and Rhubarb may be taken up and forced, if required, and beds may also be covered, but it is quite early enough at present.

NOVEMBER.

Kitchen Garden.

About the 20th of this month is a good time to sow Peas—Carter's earliest and Sangster's No. 1; sow also Mazagan and long pod Beans; small Salading must now be sown under cover; and protection in sharp weather must be given to all late-sown Radish in order to prolong their season. Continue to take up and store in frames or sheds the later crops of Endive and Lettuce, also watch Cauliflower, Crange's and Snow's Winter Broccoli, and take them up and store in a shed as soon as they have formed heads fit for use. Cauliflower in frames and under hand-glasses must have abundance of air, and the surface occasionally stirred, and dress with soot and lime to keep down slugs. Lay down the heads of long-stalked Spring Broccoli facing the north. Dwarf varieties do not require laying, but they are much benefited by having partly decayed leaves laid about them. Protect the roots of Globe Artichokes with a good coating of half-rotten dung. Continue to earth-up Celery on every dry day. Keep the surface-soil stirred amongst the beds of Spinach, Lettuce, and Cabbage, and dress for slugs. Pot a few strong roots of Parsley for forcing, also plant some in a spare frame for use in bad weather. Keep up the successional coverings and forcing of Sea Kale and Rhubarb. Trench up all vacant plots of ground, leaving it as rough as possible.

Fruit Garden.

The planting of Fruit Trees, if left thus long, should be finished off without delay, and the trees well-mulched; such as are planted against walls must be very loosely fastened, so that they may sink with the soil. The pruning of Pears, Plums, and Cherries should be commenced immediately that they are divested of their leaves. Now is also a good time to thin out overcrowded branches in the Orchard trees; scrape the moss from the stems and wash them over with quick-lime. Regulate the plantations of Raspberries, and plant new ones in well-manured ground.

Flower Garden.

The bulbs of Tigridia Pavonia and conchiflora may now be lifted, and after being dried, stored away in sand secure from mice. Let the stems be cut off from the beds or patches of Japan Lilies, and then cover them with about 4 inches of decayed leaves: a similar covering should be put over the beds of Alstrœmerias. Dahlia roots will now be matured and may be carefully lifted, taking care to secure the labels to the roots with wire; lay them out to dry previous to storing them away for the winter. Plant Tulips, and finish off the planting of Turban Ranunculus, Hyacinths, Narcissus, Crocus, Jonquil, and Scilla; choose the warmest and most sheltered situations for the Hyacinths, and they will well repay any extra care. Put a little heap of finely sifted coal-ashes over plants of doubtful hardiness, such as Salvia patens, Tagetes lucida, and Fuchsias. Bedding plants in store pots will require constant attention paid to the removal of decayed foliage, and a free circulation of air: a shelf near the glass in a heated pit or Greenhouse is about the best place for them: great care must be exercised in watering, as they must neither be allowed to get dry, nor yet be saturated; when water is necessary, if the drainage is good, give them enough to wet the soil, and then wait till they require it again; never water at this season unless absolutely necessary. Continue to plant Roses of all the hardy sorts, and let them be well mulched with rotten manure after planting. Alterations in Pleasure-grounds must be vigorously followed up in favourable weather.

Plant Houses, Conservatory.

Now that the cold and dull season out of doors has arrived, a gay and attractive appearance in this structure will be doubly appreciated, and should call for a corresponding exertion on the gardener's part to keep up as gay an appearance as the means at his command will accomplish; at present Chrysanthemums are the principal attraction: these will be succeeded by Chinese Primroses, Violets, Tea-scented Roses, Tree Carnations, and early Cinerarias, together with winter-flowering plants from

the Stove, such as Poinsettia pulcherrima, Lucalia gratissima, Euphorbia jacquiniflora, Gesnera zebrina and oblongata, with many others. Towards the commencement of the new year, however, the great dependence will be on forced flowers; and where extreme gaiety is required, the great utility of the early forced Dutch Bulbs will be more apparent. Forced Camellias also are objects of great attraction; and a few plants from the early hybrids from Rhododendron arboreum, which will expand at Christmas with very little forcing indeed, will be truly gorgeous.

Forcing House.

This indispensable adjunct to a gay Conservatory should now be pretty well filled with the different varieties of plants mentioned last month and the successional stock which will now require to be brought in; these will include Dutch Bulbs, Dielytra spectabilis, Forsythia viridissima, Weigela rosea, Deutzia gracilis, Rhododendrons, Azaleas, Camellias and Roses: let the forcing-process be very gradual indeed; remember, if you push too hard and fast, the flowering will be weak and the flowers pale: let the bottom heat range about 70°.

Stove.

Keep all the winter-flowering plants before specified in the most prominent and warmest situations; on the contrary, those which are dormant, or nearly so, must be kept as cool and dry as their safety will permit. Admit air freely when the weather is fine; and to enable you to give a portion every day, be the weather anything short of severe frost, light up the fires early in the morning and open the ventilators about ten, and close again at two, regulating the amount of air by external conditions.

Orchid House.

The temperature in this structure must now be considerably lowered and a drier atmosphere maintained, to induce that state of rest in the plants which is necessary for the next two months at least. The temperature by day without sun-heat should be kept at about 60°; with sun-heat it may be allowed to rise to 70°, but not more; night temperature 55°. Blocks and baskets will not need to be dipped; but as they must not be allowed to get too dry, they may be slightly syringed once a week.

Greenhouse.

The general stock of hard-wooded plants will now be comfortably housed and in a comparatively dormant state; and the principal attention they will require will be to give an abundant circulation of air and to be extremely particular as to the watering: more hard-wooded greenhouse plants die from injudicious watering than from any other cause; when the plant requires it, give enough to soak the ball and have done with it; but at the same time ascertain that the water percolates away freely. Winter-flowering Heaths, Epacris, some Acacias, and Correas will of course require a more liberal treatment and the best situations; Pelargoniums will now require a considerable degree of care: guard well against damp and spot, remove all decaying foliage; and if the branches are too thick, thin them out to admit air. Look out for worms in the pots; if you cannot catch them without disturbing the balls, give some lime-water, which will move the worms and do the plants no harm: shifting must be attended to; but that will depend upon the purpose for which the plants are grown: if for early forcing, they should now have a final shift; but for later purposes endeavour at present to keep them dormant. Cinerarias should have every encouragement to promote free growth, as they are now in full action, and a check would be injurious to the flowering. Mildew is often prevalent during the sluggish atmosphere of this month, and must be kept under by frequent dustings with flour of sulphur; remove decayed leaves, and let the plants have a free circulation of air whenever possible. Calceolarias in their several stages will require attention; old plants shifted last month will require plenty of room and a free circulation of air; young seedling plants potted off from the earliest sowings must have a good shift when the pots are full of roots; later successions should be potted off from the store-pans, and a good supply pricked out from the seedling pots for Spring purposes. Persevere in fumigation; the destruction of noxious insects in plant-growing is absolutely necessary for success. The roots of Lilium lancifolium album, rubrum, punctatum, macranthum, and eximium, all of which are among the finest Conservatory ornaments we possess, should now be purchased and potted: make use of good-sized pots, say eleven-inch pots for four roots, and larger in proportion if necessary. Let them be covered with four inches of soil; and for the present the surface of the soil should be at least three inches below the rim of the pot: see that the drainage is all right, and place them in a cold pit and give them no water until the growth of the flower-stems pushes through the soil. Lachenalias which are started should be kept near the glass. Cyclamens, which are worthy every attention, are now making growth, and should have a light and airy situation on the front stage; be careful in watering, and avoid a damp sluggish atmosphere. The Cactus tribe and Kalosanths must now be kept perfectly dry.

Forcing Fruit Houses, Pineries.

Make use of every possible means to mature the late growth of Pines intended for next year's fruiting; to further this process, let them have a drier atmosphere, and a free circulation of air when the weather will permit; the range of temperature must be lowered to about the standard for the next two months. Winter-fruiting plants now swelling must of course have a more liberal treatment by affording a higher temperature with a moister atmosphere, and occasional supplies of tepid manure water.

Vineries.

Continue to make fires occasionally for the preservation of the late grapes, give air freely at the same time, and keep all the mouldy berries cut out. In the early Vineries just started, it is a good thing to introduce a body of fermenting materials, if possible, which should be watered and frequently turned about; this will produce a genial moisture in the atmosphere, which is very grateful to the vines, and will assist them to break very regularly: let fire heat be applied with caution, as, until they have well broken, the night temperature ought not to exceed 50°: the day temperature will be much influenced by external conditions; at present, in the absence of sun, 55° is a safe range.

Peach House.

The earliest house may now be closed and brought under the routine of operations as directed in the early months of

the year; tying them to the trellis need not be commenced until the house is closed, at which time retouch any places not covered with the composition: let them be very gradually excited; 40° by night is the best at present. See that Cherries, Peaches, Figs, and other fruit-trees in pots are well protected from frost, and the tops secured from breakage by high winds.

Pits and Frames.

It will be necessary to keep up the bottom heat to Cucumbers at a range of 80°, two or three degrees higher rather than lower; and if the heat is produced by dung, see that the linings are kept well topped up; and should the top heat rise above 70°, leave a little air on at night. Start another bed of Asparagus for succession, also bring forward another supply of Sea Kale and Rhubarb, either by taking up the roots and placing them in the Mushroom-house, or else by covering the beds out of doors with dung and leaves; in the latter case do not lay it on too thickly, or there will be danger of burning the crowns or drawing it up very weakly. Let there be a good supply of fermenting materials always kept in readiness for contingences.

DECEMBER.

Kitchen Garden.

Take advantage of frosty weather to wheel out manure to all parts of the garden where it is likely to be wanted; make good-sized heaps in places where it will be at hand to spread out when the crops are cleared off; but on vacant ground it may, of course, be spread out and trenched in at once. Select the plots of ground you intend for Parsnips, Onions, and Carrots next year, and trench them up at once in as rough a state as possible, that the frost may penetrate. Continue to store Endive and Lettuce, and protect Celery in severe weather. If the weather is mild, you may still look out for Cauliflowers and Grange's and Snow's Broccoli, and store them away as they become ready. Mulch over the beds of Rhubarb, also of Globe Artichokes; stir the surface of the ground amongst advancing crops whenever the weather will admit; sow small salading under cover twice a week: take up Chicory roots from the May sowing and put them in a corner of the Mushroom House, and the leaves will make a very wholesome addition to the salads at this season.

Fruit Garden.

It is presumed that the planting of fruit trees of all sorts is now entirely finished off, and the trees properly secured and mulched for protection during the Winter, and that the pruning and nailing of all the hardier sorts of fruit trees is being proceeded with whenever the weather is fine enough: do not attempt to prune fruit trees in frosty weather; it is often very injurious to the shoots, causing them to die back; we would most strongly recommend that the *stems* of standard Peaches, Nectarines, and Apricots against the walls should be well bound round with stout hay-bands before the ascending sap is on the move. When Gooseberry and Currant Trees have been pruned, choose a wet day, and dust the trees well over with quick-lime; the ground may then be manured and forked over, unless it is desirable, on account of the Gooseberry caterpillar, to remove the top soil completely away as before recommended, which operation is best performed when there is frost sufficient to cake the surface, say two inches; the tender sorts of Strawberries, particularly the British Queen, will be benefited by a light covering of brake during the prevalence of very severe weather: do not forget former directions with regard to the Orchard Trees; for if they are not done at this season, they will most probably be forgotten altogether.

Flower Garden.

Beds of Roses, both Standards and Dwarfs, should be well dressed with good decomposed stable manure; tenderer varieties in open beds, particularly Tea-scented, may with great advantage be carefully lifted and planted very thickly in trenches in a sheltered place, where they can be well protected in hard weather. See that beds of Ixias, Gladioli and Lilia are well protected by a covering of half-decayed leaves. Dust over the beds and patches of Hardy Annuals with quick-lime, soot, and wood-ashes in a dry state; slugs are apt to be very destructive to them in mild weather. Most of the deciduous trees will now have shed their leaves; and therefore the whole of the lawns should be thoroughly swept, the borders well raked over, and the grass and gravel kept constantly well rolled; trench up all vacant beds, and leave them rough, to become well frosted; choice and tender herbaceous plants should also be protected from severe frost by a mulching of half-decayed leaves: now is a good time to see if the drainage of the garden is perfect; if not, let it be seen to at once, for the frost will always have more effect upon plants where the drainage is imperfect. Do not neglect former directions with regard to the store-pots of bedding-plants: the next six weeks is a critical time for them; after that time, potting off will again commence.

Plant Houses, Conservatory.

As this structure will probably be very much visited at this dull season of the year, extra care should be taken to keep the interior in a comfortable state, both as regards temperature and the absence of any dampness about the floors and pathways; watering should, at this season, be all completed before noon, and the water which percolates through the pots wiped away early. In order to make the enjoyment of these houses more perfect, pay constant attention to those little things which constitute the perfection of neatness, such as picking off decayed foliage, pulling small weeds from the surface of the pots, and, by carefully stirring, give those surfaces a fresh and neat appearance, and occasionally rake over the borders with a sharp-toothed iron rake. Camellias in pots from the Forcing-House may have a little tepid manure water; but do not overdo it: the permanent plants in the borders may be so assisted as soon as the buds begin to swell off fast. Cut back and put in fresh plants of all the late-flowering Climbers, such as Passiflora, Lapageria rosea, and Plumbago capensis. Fuchsia dominicana will now be a conspicuous plant at this house. Train out Kennedya's and keep them very clean, also Tropæolums, and let them have a free circulation of air; be careful not to over-water them.

Forcing House.

Upon the good management of this structure very much of the gay apppearance of the Conservatory for the next two months

at least will depend. As the earliest introduced plants are now in an advanced state, another batch should be brought in for succession, and amongst them the most forward plants of the Indian Azaleas may be more liberally introduced; a more useful plant for forcing than the Indian Azalea cannot be, as it not only makes a very fine display, but also remains in bloom a long time. Introduce more pots of Deutzia gracilis and scabra, also Weigela rosea, Dielytra spectabilis, Lilies of the Valley, Roses, Pinks and Sweet Williams; if required, also Lilacs, another good batch of Dutch Bulbs, and more Rhododendrons.

Stove.

If these are cultivated to any extent and a good supply of bloom is generally looked for, it will be necessary to look to such plants as will be required for early blooming; those started early last year will now be showing signs of a renewed growth after their season of rest, such for example as the Gloxinias and Gesneras, which may be shaken out and re-potted; give them very little water until they have made a good start, when they may have warmer places and the needful supply. A few Achimenes may also be started if desired, but it is quite early enough at present. A few of the most likely-looking bulbs of Amaryllis may be re-potted or top-dressed as occasion requires, and plunged in a moderate bottom heat. Begonias should be shaken out and re-potted and brought forward slowly; a few Gardenias may be started; and if any of the Franciscеas are showing signs of growth, they may be encouraged by a warmer situation; and when growth is making progress, shake out a part of the old soil and re-pot them, water moderately at first, and increase the temperature with the growth.

Orchid House.

As most of these should still be in a dormant state, the operations connected with them will not differ much from the former routine; a few, however, will no doubt be showing signs of renewed activity, and this must not be checked; let such plants have the warmest situations, and gradually increase the quantity of water. Use every exertion to destroy insects; it will save much trouble and vexation by-and-by. Cock-roaches are often brought in with imported plants; they are very destructive and should be exterminated.

Greenhouse.

Omit no opportunity to keep up a free circulation of air amongst Heaths and hard-wooded plants generally; apply sulphur to Heaths as soon as mildew appears, and continue as before to pay great attention to watering; do not let them get dry, but yet, in severe weather, lean rather to the dry side than over-water. Gardoquia Hookeri and Crowia saligna should be removed into a higher temperature about this time: give them a shift into a larger pot when well started. Now is a good time to shift the varieties of Kalosanths, for if left until late in Spring, the general result is a fine growth, but no bloom: keep them very short of water for some time. Pelargoniums must be kept near the glass, but avoid draughts of cold wind; the stock required for forcing, and also very large specimens, will of course be in a more excited state of growth, and must have more water and a closer and warmer atmosphere. Plants for forcing may be top-dressed, but not shifted any more; on the contrary, growing specimen plants should be shifted as often as they require it, until they have reached their blooming pots. Forward Cinerarias should now be put into their blooming pots, successional plants shifted, and more potted from seedlings; the same may be said of the Calceolarias, which are now in very active growth: attend well to fumigation, picking off decayed foliage, and admitting air when the weather is favourable. As the Chrysanthemums go out of flower, let them have the shelter of a cold pit or other temporary protection, but harden them as much as possible, so as to get good cuttings.

Forcing Fruit Houses, Pineries.

The temperature and general management of the whole stock will be much the same as directed last month; let them be kept as dry as is consistent with safety, and neglect no opportunity when the weather is favourable of giving them a supply of fresh air.

Vineries.

The temperature may take a range of 55° by night, with a slight increase towards the end of the month; but do not push too hard until after the sun begins to increase in strength; change the internal air as often as the weather will permit.

Peach House.

Maintain a healthy moist atmosphere in the early house, but admit air freely when possible, and do not exceed 45° at night. Prepare later houses for starting next month. See that frost is excluded from Figs in houses and pots, or the embryo figs will be very much checked and the chance of an early crop very much reduced. Pot plants should be shifted, if necessary, whilst dormant. The first batch of Strawberries, Keene's Seedling and Black Prince, may be put into the Vineries or Peach House a week or so before they are started, so that they may be gradually excited. A portion may also be started in a frame on a mild bottom heat.

Pits and Frames.

The present is about the time to follow up the old practice of making up a good bed of well-fermented dung for a single light box, in which to rear the seedling Cucumbers for early purposes. Carter's Champion is the best: take care that there is no lack of prepared fermenting materials for topping up the linings of Cucumbers in bearing, for succession in Pine Pits, and all the purposes for which it is required. Lay out some Early Frame Potatoes in a gentle heat to sprout, for planting early next month, which is a superior plan to planting them without sprouting, saving time and trouble. Bring forward successional beds of Asparagus, also Sea Kale and Rhubarb; sow Radishes, Wood's frame, in a frame on a gentle heat.

PART III.

CALENDAR OF FARM OPERATIONS.

JANUARY.

The *horse-labour* in this month consists for the most part of carrying corn to market and hauling manure to the fields where it is next Spring to be applied. There is also the carriage of cattle food and of purchased manures for market, of lime and marl to the fields to be clayed or limed, of tiles to the fields being drained, and of road material where necessary. The land may occasionally be fit for tillage operations, and then ploughing proceeds, in the case of grass and clover leas, for wheat or oats, in the case of stubble land if any yet remains unturned, for root crops or for beans.

The *hand-labour* of the month includes the thrashing and preparation of grain for market, the loading and unloading of all kinds of material carried, the attendance upon live stock, road and fence making and mending, land drainage, and the preparation of composts for application later in the season. Many of these operations are continued on from the commencement of the winter until its close. Some of them are taken up from previous months of the last year; and to these we refer for further discussion of them.

Compost Manure.—The preparation of manure for use during the season of vegetable growth is one great business of the winter season. This includes the purchase of fertilizers, both soluble salts, such as those of ammonia and the nitrates of potash and soda, for application as top dressing to the growing crops in April and May, and the less soluble fertilizers, as guano, superphosphate and bone-dust, which may be applied early in the season with less risk of waste and more probability of being used by the plants as soon as ready for absorption. It also includes the manufacture of heaps of fertilizing matter on the farm, whether of farmyard dung exclusively, or of dung and the various vegetable and mineral auxiliary manures which the farm affords.

First, of those which are properly the compost heaps of the farm:—What a number of things may be turned to good account is plain from the mere list of the animal, vegetable, and mineral substances existing on the farm, of some use as manures. There are thus, roots, hedge-clippings, fallen leaves, weeds, couch-grass, fern-leaves, moss, river- and sea-weeds, sods and turf from ditches, lanes and hedge-rows, sawdust, spent bark and peats when properly decomposed, among vegetable substances. Many of them contain their nitrogenous part in a higher proportion than the straw of grain, and several of them are equally rich in the mineral constituents of plants. Besides these vegetable substances there is the animal waste, sometimes accessible on a farm, such as carcases, blood, bones, fat, blubber, waste fish, sprats, mussels, and other shell-fish, which are in some places and sometimes to be had. They all contain a large proportion of nitrogen, much more, indeed, than ordinary farmyard dung. Mineral substances are also available, such as earth from hedges, scourings of ditches, banks, ponds, road-scrapings, and various marls, chalk, and sometimes beds containing a considerable proportion of phosphate of lime. Refuse substances of trade are also sometimes available, and equal in their fertilizing effects to any known manure; such are woollen rags, shoddy, soapers' waste, glue refuse, refuse of starch- and sugar-works, of provision-curers, slaughter-houses, curriers, &c.

Any of these substances which contain the food of plants are of course applicable with good effect as a manure; but besides their direct contribution of matter to be built up in the growing crop, their influence on the texture of the soil to which they are to be applied has to be considered; and hence, when applying mineral matter we improve light soils by the use of clayey composts, and still soils by the use of light and organic composts. It is, however, the advantage of the compost form of manure, that the effect produced by its application is greater than the sum of the effects which would have been produced by the separate use of its several ingredients. And hence, in making our composts we use such ingredients as will improve and act on one another in the heap. Many of the ingredients named require a complete disintegration, in order to their fertilizing character, and hence lime, which facilitates their decomposition, is a very important ingredient in most composts. Peat, for instance, is a substance which can be brought into use by the aid of lime, and composts of peat thus prepared, with the addition of farm dung, are often a most successful method of eking out and increasing the fertilizing resources of the farm. In practice, a half-charred mass of rough vegetable matter if it had been originally woody, or a half-rotten heap of lime, or even mere mould, with such matter, if it have been originally succulent, may well be made the foundation and the top layer of heaps containing rotten flesh or blubber, or mere dung, to be ultimately well mixed up together and used, as the dung-heap usually is, for the green crops of the farm. If the land be light or spongy it is well to mix as large a proportion of clay or marly earth as possible, for the sake of its influence on the texture of the land.

It must, however, be added, that it is not to be recommended that much time be devoted to compost-making on the farm. Such manures are bulky, and involve great labour of cartage, and the system now is to spend money rather on the direct purchase of cattle food or portable manure, than on the labour of developing the less immediate home resources of the farm. The use of many of these ingredients, as peat, first well dried and broken, sawdust, and even spent bark (which is best half charred before use), is best confined to their employment as litter or in the yards, where they may suck up liquid fertilizers, otherwise liable to waste. If laid up in heaps they should be soaked with gas-water liquid manure, or other easily fermentable substances by which they are reduced into a more soluble condition. If lime be mixed with them, its caustic effect will be increased by the addition of a certain proportion of common salt.

2. Of Farmyard dung:—This, as it consists specially of what has already grown out of the soil, acts as a fertilizer by restoring to the land ingredients taken thence, together with matters drawn also from the air, which shall thus feed another crop of plants. It is well, in order to check waste of manure on the farm, to have a distinct impression of the quantitative nature of the fertility of the soil. Given a suitable climate and suitable plants, it depends entirely on the presence in sufficient quantity of those particular atoms which the plants invigorated by that climate need for the erection of their structures. It is often declared that the rain washes the valuable *quality* out of the dung, and that exposure to air induces the loss of its valuable *qualities*. Now, the quality of a manure depends altogether on that of its constituent particles. It is because ammonia contains nitrogen in a form in which plants can use it, that it is a useful element of the dung-heap, and to speak of exposure as rendering dung liable to the loss of much of its valuable qualities, just means that it is liable to the loss of its ammonia. So with the phosphates and other soluble salts. Dung never loses quality except by losing quantity. They are actual material particles, possessing weight, which

fly from it or which flow from it; and the distinct and definite idea that so much matter has gone by mismanagement, which if built into the plants would have added to their weight, is one which it is well to have fixed in the mind. The loss of so-called quality might be borne under the idea that by skilful management its lost character might be restored: the loss of so much quantity is absolute and irreparable; as entire as if the money value of the quantity in question had been thrown into the sea. The waste to which farmyard dung is liable arises chiefly out of the mode of its manufacture. For the sake of obtaining the dung in a condition in which it contains ready-made the food of plants, and in which it may be easily mixed with the soil, it is fermented in large heaps, and these are generally open to the air and rain. The consequence is, that the products of the fermentation which ensues escape into the air or are washed out into the ditch, and in either case are lost to the farmer. The remedy is either to plough the manure under as soon as made, *i. e.* as soon as the litter is used and soiled, or to gather it in heaps from day to day as made, placing it on a layer of absorbent earth, and covering it with a layer of earth in a ridge-form, which shall shed the rain and suck up all exhalations. Dr. Voelcker tells us indeed that it is much more by the washing of rain-water than by the escape of the gaseous products of fermentation that manure suffers loss, and that no better plan exists of applying dung to the land than spreading it over the surface as soon as made, whether it be ploughed under at once or not. When freshly made it contains but little matter capable of loss by exposure, or by washing, but this loss becomes possible and actual as it rots in heaps together. The inference as to top-dressing of recent manure during the winter months, to be ploughed under as the weather permits, before spring time, is one which ought to be fully tested in the field.

The use of an absorbent and disinfectant substance which shall fix the volatile products of fermentation and at the same time hinder the fouling of the air of our stables and feeding-houses, would be almost done away with, if the practice should prevail of ploughing in or applying dung as soon as made; nevertheless for a long time to come, indeed always as regards a considerable portion of the manure of the farm, dung will be rotted in heaps, and the means of retaining and fixing the products of its fermentation will be used. Earth covering the heap is an efficient strong box for the vapour of a rotting dung-heap. Charcoal, which has been highly spoken of for this use, is a good disinfectant; but this is by oxidizing, which means burning up the emanations which we wish to retain. To cover the dung-heap with charcoal would indeed remove all smell, but this it would do by destroying or converting into substances unavailable for plants the things we wish to use. Gypsum is good as a manure in itself, but comparatively inefficient as a fixer of ammonia, owing to its comparative insolubility. Chloride of zinc (Sir W. Burnett's disinfectant) is costly and poisonous. Sulphate of iron would be a good fixer of ammonia, owing to the sulphuric acid it supplies, but its iron would convert the phosphates into an insoluble and useless salt. Common salt has some powers as a fixer of ammonia, but these depend upon affinities so nearly balanced as to render them neither permanent nor long-lived. Sulphuric acid would indeed be a good fixer of ammonia, but it is entirely unfitted, by its corrosive properties, for use near animals. Mr. M'Dougall of Manchester suggests the alkaline or lime salts of carbolic acid, a product of the distillation of coal, as an efficient and harmless fixer of ammonia, and disinfectant, and there exist testimonials in its favour. As to the quantity of farm manure possible on a farm, the following data may assist an estimate. On Whitfield farm, Gloucestershire (150 acres of grain crop, 30 acres of clover, and 60 acres of green crop), upwards of 2000 cubic yards of manure were made annually, or probably about 1200 or 1300 tons, and this would represent 1 ton of straw as making about 4 tons of dung. This was when large quantities of green crops were grown, probably 1000 to 1200 tons of roots each year. Again, as so many separate facts bearing on this question, it may be added (1) that an ox fed on green food and hay and straw will yield about one cwt. of excrement, liquid and solid, daily. Mr. Haxton, in the 'Cyclopædia of Agriculture,' calculates that a stall-fed ox will yield of solid dung during—

	tons	cwt.	qrs.	lbs.
210 days 55 lbs. a day	5	3	0	24
155 days 41 lbs. a day	2	17	1	20
Add litter 14 lbs. a day	2	5	2	14
Urine absorbed by litter 22½ lbs.	3	13	1	8
In all, per annum	13	19	2	10

But besides this a lot of urine runs to waste, making altogether probably about 20 tons per ox, stall-fed, throughout the year. If the ox be stall-fed rather more litter is needed, and all the urine is absorbed by it, so that the quantity is not only greater, but its quality is better. On this point Dr. Voelcker's figures may be quoted. He found box manure to contain 71 per cent. of water, and nitrogen equal to 2·37 per cent. of ammonia, when yard manure contained 1·4 per cent. of nitrogen, equal to 1·7 of ammonia. Box manure contained also ·3 per cent., one half more, of phosphoric acid and 2 per cent. of potash and soda—more than twice as much as farmyard dung.

(2) The horse voids about 30 lbs. weight of dung daily. It loses more by perspiration, and is generally fed on drier food than the ox, so that there is less urine and the dung is drier. Mr. Haxton calculates its annual yield at about 11 tons:—Much however of it is wasted on the roads when it is out at work. (3) Of pigs and sheep it may be estimated that eight or ten make as much manure as a full-grown ox, consuming as they do about the same quantity of food. (4) If 600 acres be cultivated on a six-field system, it may be supposed to yield per annum 600 tons of dry fodder and litter, and 2500 tons of green and succulent food; and the produce of manure may be estimated thus:—The winter food will keep 120 beasts or 1000 sheep, yielding 1600 tons of farm dung during the winter months. The summer stall feeding and the stable may be expected to yield other 400 tons, or 2000 tons in all. How much this may be reduced in quantity and how much in quality by mismanagement, Dr. Voelcker has shown in his illustration of the superiority of winter top dressings and the application of fresh-made manure or of box feeding, and manure-making under cover, over the ordinary method of treating straw down in yards, and afterwards "making" the dung in exposed and rapidly fermenting heaps.

3. Of Artificial Manures:—The use of these as auxiliaries even in the case of farms, where the yard and box dung is well managed and enriched by the consumption of large quantities of purchased cattle food, is now an almost universal practice. Guano, 2 or 3 cwt. per acre, applied to grain crops, root crops, and grass lands. Bones and sulphuric acid or superphosphate of lime, applied to Turnips, Swedes, Mangold Wurzel, at the rate of 3 or 4 cwt. per acre, and in smaller proportion with good effect to late-sown barley. Sulphate of ammonia and nitrate of soda, 1½ or 2 cwts. per acre, applied to grain crops and grasses. Common salt 2 or 3 cwt. per acre, applied to grain crops on straw-growing soils, also to Mangold Wurzel: these are among the most important and generally used. As to the period of applying them, the rule would be to put the very soluble salts to the land when the plants are actually growing, and therefore ready at once to take them up; thus ammoniacal and soda salts should be put on in wet weather, during April, on the growing wheat. Bone-dust may be applied in Autumn on pastures, and any time before seed-time for turnips. Superphosphate or Guano may be well mixed with the soil just at the time of sowing the seed.

It is now the fashion to look upon ammonia and phosphoric acid as the essential elements of manure. Their special importance, however, arises out of their being the elements generally present in the least quantity in the

soil, in proportion to the demand made on them by a large crop, but they are not more essential than the other elements of the growing plants also present in most manures. The fact is, that the element present in the smallest quantity (in minimo) rules the growth of the crops, and the supply of *it*, whatever it may be, is therefore the most needed and most efficient on the growth of the crop; and as phosphoric acid and ammonia are practically, in general, the bodies present in minimo in the soil, their addition in the manure is most generally sought after. And so guano, superphosphate, &c., are estimated according to the quantity of these ingredients which they contain. The ammonia present in them is generally valued at £50 to £60 a ton, the natural phosphate at £7 or £8 a ton, the soluble phosphate at £25 to £30 a ton; and so their value comes out at £13 to £14 a ton for good guano, and £6 to £8 for good superphosphate.

Guano is used for all sorts of crops; chiefly grain crops, however, in England, where superphosphate is chiefly used for Turnips, its weight per bushel is a fair test of its purity. If it exceeds 70 lbs a bushel, it is generally adulterated, the things used for this purpose, loam, &c., being heavier than the natural manure. But for the tests of purity of the several fertilizers of the market, we must refer the reader to the agricultural chemist. His safety is to be secured (1) by dealing with men of established reputation as manure merchants, (2) by retaining a sealed and authenticated sample of the article bought, for analysis, if the result of its application be suspicious, and (3) by sending this sample for analysis to some chemist, whose report would lead a jury to justify a claim for damages in case the crop has failed, because the manure was not what it was declared to be.

FEBRUARY.

The *horse-labour* of this month includes the conclusion of wheat-sowing (see October), and preparation of land for Beans and Peas, and putting in the seed. Parsnip may be sown now on land properly tilled, deeply cultivated, and manured in Autumn. Land may be ploughed for the earlier-sown green-crops, if it was not prepared for them in Autumn. The carting of grain to market, and of food, and seeds, and manure for market, also of manure to fields, continues at times when field cultivation cannot proceed.

The *hand-labour* of the month includes seed operations and preparations for the sowing of the crops already named; work in moving manures, barn-work, attendance on the live stock of the farm.

Purchase of Seeds.—All spring-sown seeds may as well be purchased now. Turnips, about 3 lbs. per acre; Mangold Wurzel, about 4 to 6 lbs. per acre; Carrots, Parsnip, about 7 lbs. per acre each; Kohl Rabi, 4 lbs. per acre, if at once drilled in rows, or 1 lb. an acre if sown in a bed and transplanted; Cabbages about the same, to be sown in a bed and transplanted; Clover, 12 to 18 lbs. per acre; Grasses, 2 to 3 bushels per acre, are the usual quantities. If special care is deemed desirable, procure small samples and sow them in flower-pots, and so judge of the vitality of what you purchase. When seeds are dear, the result is caused through the total or partial failure of the past season's seed crops, and in consequence the germinating powers are not on the average so good as may be expected in favourable seasons, BUT STILL, IF UNADULTERATED, THEY ARE MORE THAN SUFFICIENT TO ENSURE A GOOD CROP.

The purchaser cannot be too careful where he deals, because it is well known that when the supply is scarcely sufficient to meet the demand, dishonest dealers will be found who will adulterate the seeds for the purpose of being able to undersell those of the Trade who do not resort to these practices.

Therefore it specially behoves the purchaser to give a fair value for the seeds he requires, and to deal with a Seedsman of established reputation.

The Culture of the Parsnip.—Parsnips grow best on deep loamy soils. This crop should come after a Grain crop,—the stubble being well cleaned in Autumn, and deeply ploughed, and well manured then. In February, harrow down the land, and sow the seed 7 lbs. per acre, mixed with two bushels of sand, and sown by the Suffolk drill, in rows about 15 inches apart. The large Jersey Parsnip is the best variety of Cattle Parsnip, and there is no better food to steam and mingle with hay-chaff for a winter cow or for pigs. Eight to twelve tons are obtainable per acre; they are forked up in November, and may be pitted like potatoes. They should be singled out and kept clean by the hand-hoe during Summer, being left at intervals of about 6 inches to the row. If the land is full of small weeds it may be well to sow a few Turnip-seeds or Barley-seeds with the Parsnip-seed, which, springing first, will show the position of the future row, and so enable an earlier hoeing of the land. Carrots are, however, in general preferable as a farm crop to Parsnips, involving less labour and annoyance, and yielding a crop, which, if it be not quite so good a food per ton, is a better crop per acre.

Cultivation of the Bean.—It grows best on what may be still called Wheat soils. Though Wheat is now grown everywhere, Wheat and Bean soils are the stiffer class of soils; though, as Wheat is now grown on light land, so Beans, also, and Winter Beans especially, are cultivable on sandy land. Among the sorts are the common Scotch—hardy, prolific, long-strawed, and weighing about 600 to the lb.; the Common Tick, shorter strawed, and not so large, about 900 grains per lb.; the Heligoland, hardy, earlier than the Scotch, a small round seed, 1200 per lb.; the Winter Field Bean, the hardiest of any, as small as the last, but not so round, earliest at harvest time, and so, least liable to be attacked by the black plant-louse, of very short straw, and heavier per bushel than any other sort, sometimes, indeed, weighing 70 lbs. per bushel. There are many long-podded Beans which are adapted for field as well as garden, and have larger grains, but are less hardy. Winter Beans may be sown in October, on a Wheat stubble, pared and cleaned, grubbed or scarified, manured with 20 or 30 cubic yards of dung per acre, spread and ploughed in; and the land, being well harrowed, receives the seed, 2 bushels per acre, by means of the Suffolk drill, sown in rows 18 or 24 inches apart, so as to allow of horse-hoeing in the Spring. The levers of the drill should be heavily weighted, so as to bury the seed thoroughly. The plants come up before Winter, stand the frost well, are horse- and hand-hoed in Spring, come to flower in May, and to maturity generally by the end of July, in time to enable a tolerably efficient cultivation of the land before Wheat is sown upon it,

The cultivation of Spring-sown Beans may be the same as this, allowing for the different seed-time; or they may be sown above the manure, in drills 2 feet wide, very much as Potatoes are planted, being afterwards horse-hoed and cultivated like the Winter sort; or they may be ploughed in, being sown by the Bean harrow in every second or third furrow, as the manure is being ploughed under. The quantity of seed may be from 2 to 3 bushels per acre, according to the size of the seed and the width of the rows. The best seed-time is the earliest Spring-time, when the land is fit for cultivation; the crop may be from 30 to 40 bushels per acre. The harvesting is by means of a heavy hook or

the reaping machine. The crop is tied in sheaves with straw bands, and carried to rick after exposure enough to dry it.

Culture of the Pea.—The Pea prefers a lighter soil than the Bean. The sorts commonly grown are the Common Grey, a late, long-podded, prolific, strawy sort; the Early Grey Warwick, early, small, short-strawed; Early Charlton, also grown in gardens, and much cultivated for the supply of the London market. It is sown in January, on a well-cultivated and manured stubble which has received thorough Autumn culture. After being thus prepared, the land is ribbed in shallow drills, at intervals of 2 feet; and 3 bushels per acre are sown in the drills, and covered by the harrow or the hand-hoe. The intervals enable horse-hoeing.

In common practice, Peas are sown by the Suffolk drill, on the flat with heavily-loaded coulters, in rows about 15 to 18 inches apart. They are hand-hoed and horse-hoed, and ultimately partly covered on one side by plough or hand-hoe, with earth-land over the lower part of their stem, so as to throw the rows all one way. The common seed-time is the end of February. When ripe, in July, they are cut with hook and crook, or with scythe, being gathered into bundles by the mode of cutting. These are turned once or twice, and carried to rick. The produce may be from 24 to 36 bushels per acre.

MARCH.

The operations of this month include the sowing of Spring Wheat, of Oats and Barley, of Parsnips (if that is not already done), of Grass and Clover-seeds, of Spring Vetches, of Peas and Beans (if not already finished); also the planting of Potatoes.

The *horse-labour* accordingly includes the ploughings, harrowings, and carriage involved in all these operations; also rolling of Wheats, Old Clovers, and Grass-lands.

Hand-labour is directed to all these seed-operations, to the gathering of weeds and stones, to the management of the manure (filling it into carts, &c.), and, as before, to barn-work and attendance on live stock.

The Culture of the Oat.—Oats occupy one-quarter of the arable land of Scotland, and about one-tenth of the arable-land of England. This crop is of greater importance than even Wheat in the northern part of the island, in the proportion in which 32,000,000 bushels of Oats are worth more than 7,000,000 bushels of Wheat.

This crop is grown on all sorts of soils, from clay to peat. It generally succeeds Grass and Clover in Scotland; in England it is taken after Grass, and green crops of all kinds. In Scotland the ploughing for Oats is often Winter's work, and the seed is sown broadcast in March or even earlier,—4 to even 6 or 7 bushels of seed being used per acre. It should be sown with the Suffolk drill if the land be not so ploughed as to leave well-defined furrows into which the seed will fall, and so come up in rows. Oats should be cut before being thoroughly ripe, or they will be apt to shed their seed with the wind. Oat-straw, by itself, is good fodder,—Barley-straw being preferred to it only for the Clover which the latter generally contains.

There is a great number of sorts of Oats in cultivation, some of which we may just name:—

Potato Oat, of good quality, rather short-strawed, productive, but more liable to disease than other kinds; Sandy Oats, a free grower, tall and stiff, not of such good quality as the Potato sort, but hardier and rather earlier; Hopetown Oats are a productive, bulky, strawy, large-seeded kind; Early Angus Oat, short-strawed, productive, and adapted for rich land; Poland, the earliest and shortest-strawed of our sorts of Oat, fairly productive, well adapted for rich land; Tartarian (black and white), a coarse, strong-strawed, extremely productive kind, not apt to lodge, yielding many bushels of a large light grain.

Oats are generally chosen for sandy soils and cold late climates, where Wheat-harvest would be thrown too late, and good samples of Barley could not be expected.

The Cultivation of Barley.—It is generally taken as the crop succeeding the Sheep-fold, whether the crop eaten off has been Turnips, Rape, or Mangold Wurzel. The land is ploughed in March or later, and it is sown with 3 bushels, or thereabout, of Grain per acre, with the Suffolk drill, in rows about 8 or 9 inches apart. It prefers the looser and lighter soils; and it is an old saying that "Barley may be sown in the dust, and Wheat in the mud."

When sown, as it generally is, after Turnips, the land should be ploughed shallow, immediately after the full length of a furrow has been cleared by the sheep; and if it lies thus some weeks before seed-time, it is better, in order to weather the soil, and so obtain the loosened condition of land to which reference has been made. The Barley crop, on well cultivated land, may be expected to reach at least 5 quarters per acre; it occupies about one-twentieth part of the arable-land of Scotland, and nearly one-sixth of the arable-land of England, according to the imperfect statistics which have been published.

Amongst the sorts may be named the Common English Barley, early, tolerably productive, short-strawed; the Chevalier, somewhat later, larger and longer-strawed, of first-rate quality, and very productive; the Annat Barley, even more strawy than the Chevalier, but not so liable to be lodged; Common Bere, a four- or six-rowed Barley, of coarser quality, hardier, and adapted to poorer soils and harder climates.

The harvesting of Barley is conducted as that of the other cereal grains,—the crop being, however, suffered to become more thoroughly ripe than any other before it is cut; and in England it is laid in swathe by scythe or machine, and not generally tied in sheaves.

Potato Culture.—The field-culture of this crop may best be copied from the Scottish farmer, who cultivates it to as large an extent as he does even Wheat; and notwithstanding the great risk which has, of late years, attended the growth of this crop, it is still undoubtedly one of the most profitable that is cultivated. It is generally planted in drills or furrows 26 to 28 inches wide, made by the plough, in land which has been well cultivated before winter, and dunged either broadcast in Autumn, as liberally as the farmer can afford, or in the drills, along with the sets in Spring. In the latter case, the carting out of the dung and spreading it in the drills, and setting the Potatoes, and ploughing the drills back so as to cover the sets, all go on together; and the operation is conducted in March and early April. The plough opens the drills on one side of the working party, who are spreading the dung and planting the sets, and covers them up on the other side of them, travelling round and round perhaps a dozen or twenty open drills, where the dunging, spreading, and planting are proceeding. A dressing of guano and salt may be sown broadcast over the work before the last splitting of the drill which covers the sets. The drills are, by-and-by, lightly harrowed down, the sets come through, and, if there be liability to frost, may be covered up by the double-mould board-plough. The intervals between the rows are horse-hoed, and those between the plants in the rows are hand-hoed, and the last operation is the earthing up the rows by the double-mould board-plough. When the leaves are withered, the Potatoes are ploughed out, every other drill being first opened by the same double-boarded plough, the tubers are gathered, then the alternate drills, in like manner, are ploughed out,

and the whole affair finishes with a harrowing and gathering of the left tubers, the Potatoes are pitted and covered with straw and earth, and left until ready for sale. The only remedy for the Potato disease seems to be to plant early sorts in early season and in early soils, so as to obtain a ripe crop before the disease attacks it. The crop is taken after any Corn crop, and, being well manured and cultivated, occupies the place of a fallow crop, though it can hardly be called a restorative crop, in the rotation.

The most commonly grown sort is the Regent, a white round Potato, of which there are many varieties; the Dalmahoy is a very prolific second early variety largely grown in Scotland, and considered superior to, and rather earlier than the Regent.

The Flourball and Fortyfold are two well-known varieties that are largely in demand, and are profitable sorts to plant; the Early Oxford is a white, round, early Potato, of abundant yield; the Fluke, is a flat Kidney of large produce, and good quality, and many other sorts might be named—the list extending to many hundreds in number. The sets for next year's crop should be well dried and slightly greened in the sun or day-light before being laid aside or pitted; and they are the better, too, for not being cut, and for being planted before the first growth of sprout is so long as to necessitate its being broken off.

The crop is to be lifted as soon as ripe, which it does not now so fully become as they used to do before the haulm was liable to be cut down by the disease.

The crop is grown after Corn, or after Clover, or after Turnips; and the latter is now a common place for it in the rotation, and the land is then in good heart for the crop, which it ought to be for what is really one of the most hungry crops of the rotation. The yield may be from 4 to 8 tons per acre; but the latter, formerly common enough, is now but rarely seen.

Cultivation of Grasses and Clover.—March and April are the most common seed-times for them. Italian Rye-grass is perhaps better sown in early Autumn, and *Trifolium incarnatum* is commonly sown after a Corn-stubble, as early as possible in Autumn; and these will be found referred to in the month of September. The other seeds, both Clover and Grasses, are generally sown down with the Barley-crop, and more rarely with the Wheat, or even Oat-crop.

The perennial Rye-grass yields a more leafy and succulent growth in the cooler and moister districts of the country; on the dry hot side of the island it is common to sow Clover-seed alone: 20 lbs. of mixed Clover-seeds (10 lbs. of Red Clover, 5 lbs. of White Clover, and 5 lbs. of yellow) make an abundant seeding per acre. The bulk of the first cut is the Red Clover, with a little of the yellow; the bulk of the second cut is then White Clover, with a mixture of the other two. The Yellow Clover, or Trefoil, has a good deal of astringency in its character, of use in succulent fodder. When cut for hay, as it may be twice a year, it is mown in swathes, which are turned two days afterwards, and again after a similar interval, and then lifted into cocks, and carried next day, care being taken not to move the crop abruptly, or shake it much when nearly dry, as it will lose its leafy part, and be proportionally poorer in the rick.

Common or Italian Rye-grass is sown along with Clover; 12 lbs., or thereabouts, of the mixed Clover-seeds are sown along with two bushels of the Grass-seeds per acre. If the pasture is to lie down for two years, 2 or 3 lbs. of the Cock's-foot grass may well be added to the mixture, and 1 or 2 lbs. of the Cat's-tail may be added too, if the land be stiff.

To our common Clover (*Trifolium pratense* and *repens*), the common Red and White, there is added now a variety of the Red Clover, called Cow-grass, somewhat more permanent in its duration, and on that account to be preferred, and the *Trifolium hybridum*, or Alsike Clover, imported originally from Sweden, bearing an appearance midway between the Red and White, of growth as large as the former, but perennial like the latter. These plants—four species of *Trifolium* (*pratense*, *repens*, *hybridum*, and *procumbens*); the Red, White, Alsike and Yellow Clover; two species of *Lolium* (viz. *perenne* and *Italicum*, the common and the Italian Rye-grass); one species each of *Phleum* and *Dactylis* (viz. the Cat's-tail and Cock's-foot grasses)—constitute the material of the Grass-crops of our arable land, intended to remain down not more than three years.

For permanent pastures, a mixture, including other sorts, *Festuca*, *Poa*, and other Grasses, is sown generally without a crop of Grain, in suitable weather and early summer, rolled, manured, and afterwards, for several years, depastured, until a good sward has been obtained. The seeds chosen vary, of course, with the character of the soil, amounting in all to some 2 bushels light seeds, and 12 lbs. heavy seeds (Clovers) per acre, made up of seeds which vary from 5 to 8 lbs. per bushel, as in the case of Fox-tail (*Alopecurus*), up to 12 or 14 lbs., as in the case of *Fescues*, and 16 or 18, as in the Italian and other Rye-grasses. 8 to 10 lbs. of the Rye-grasses (common and Italian), 2 or 3 lbs. of each of 3 or 4 of the Fescues, 2 or 3 lbs. of the coarser Fox-tail grass, 2 or 3 lbs. of the two Poas, smooth and rough-stalked meadow-grasses, 2 or 3 lbs. of Cock's-foot grass, and 12 lbs. of mixed Clover-seeds, form a sufficient seeding per acre. These proportions, of course, vary according to the nature of the soil. Perhaps, however, one of the best plans to secure quickly a permanent pasture is to cut up an acre of good Grass to and fro with a tool of the roller kind, having on it a number of sharp circular disks, separated by 3-inch "washers" strung upon an axle; then plough or pare the whole surface of the land about 2 inches deep, gather the whole of the surface, which will turn up in scraps of 2 inches square, into carts, and spread them out over 10 acres of a properly-prepared well-manured field, and tread them in, right side up, one to every square foot. There will be 600,000 such bits off the acre, so that it will suffice for the extent; a roller follows, and then some compost may be spread, and a light seeding of good Grass-seeds sown and brushed in afterwards.

It is proper to add that Grass-seeds are very easily buried. Mr. Stirling, of Glenbirvie, published in the Highland Society's 'Transactions' of 1844 an account of experiments which proved that the lighter the covering of the seed (so that it was left just under the moist earth) the better. All the living seed came up which was not covered ½ an inch deep with earth; any deeper covering than this killed more or less of the seed, and if placed under 1½ inch depth of soil, even though it was friable and well softened, all the seed perished. It is plain from this, that the proper way to sow Grasses is to place them equidistantly and evenly over the surface of a soil in perfect tilth, and then cover it or mix it with the top layer, by either the lightest possible harrowing, or a mere brushing in with the bush-harrow.

When sown not *with* the Barley, but over the young crop, after the seed has brairded, it may be well to cover it by hand-hoeing the intervals between the rows, thus killing the young weeds, at the same time as you cover the Clover and Grasses.

APRIL.

During this busy month of the year, Oat and Barley sowing should be finished. All Clovers and Grasses too should be put in, unless, indeed, their seed-time be postponed until the autumn. April wheat is even yet sown, in late seasons.

Carrots should now be sown. Mangold Wurzel too should be got in towards the end of the month. Kohl Rabi may be sown in drill, or in a seed-bed for transplanting towards the end of May. A bed of Cabbage seed should also be put in. Land may be got ready for Swedish Turnips, which are sown by the end of next month; and Flax may be sown during April: Lucern and Sainfoin may also be put in.

The *horse-labour* of the month, therefore, includes all field work connected with these several crops, and the hauling of manure out to the fields where they are severally to be sown; also the horse-hoeing of the young Wheats and Beans, and Peas, with Garrett's or other similar horse-hoe.

The *hand-labour* includes hoeing of corn crops, gathering weeds and stones, spreading manure, dibbling and sowing various seeds. Potato-planting should be finished. Paring and trimming of turf may be carried on. Attendance on live stock is, of course, continued.

Culture of the Carrot.—The principal sorts in which Agriculture is interested are the large White Belgian, large Yellow Belgian, and long Red Altringham. Of these the White Belgian may be considered the most productive, and being nearly equal in nutrition to the Altringham, is the one that is in the greatest demand for cattle food.

The Yellow Belgian is considered to contain more saccharine matter than the white.

The Intermediate Carrot is a useful sort for shallow soils. There is no difficulty in obtaining 15 to 18 tons per acre of the White Belgian Carrot, and enormously greater crops are sometimes grown. Thus, in the last number of the Agricultural Society's Journal, a crop exceeding 30 tons per acre is reported, which was sown so late as the month of May. The end of April is the best seed-time for the Carrot. If sown earlier, the land, still cold, does not start the seed, and it germinates so slowly that weeds get up and almost choke the plant. To hinder this, in the case of tardy germination, it is well to sow a few Turnip-seeds, or a few grains of Barley, along with the carrots in the rows, so that the position of them may be more early apparent, and then the hoe be set to work early enough to kill down the weeds. Carrots are grown on all sorts of soils, but of course, like almost all other crops, grow best in deep loams. The land should receive deep autumn culture, and the dung should be ploughed in then. The land, if clean, will only need a harrowing down some time in April, and after a dressing of guano, 2 or 3 cwt. per acre, it should be rolled down as hard as possible: seven lbs. of seed is then sown in rows 15 inches or 18 inches apart; and it may be well to mix the seed some days before with 2 or 3 bushels of damp sand, so as to hasten germination in the soil. The Suffolk drill, without weights on its coulter, is then set to drill 2 or 3 bushels per acre in rows of the required distance apart, and the mixed sand and seed is thus placed in rows as shallow as possible in the land, and brushed or rolled in the intervals, and hoed repeatedly during the growth of the crop, and the plants are singled to 6 or 8 inches apart. They are dug up in October and November by the fork, costing for digging, topping, and tailing and filling into carts, from 18*s.* to 24*s.* per acre, according to the crop. They are especially useful for Winter cows, and for use in the stable.

Culture of the Mangold Wurzel.—This is still almost exclusively an English-grown crop. The climate which it likes is hotter and drier than that of the northern half of the island, and during the past year accordingly, which has been neither dry nor warm, it has not produced anything like so good a yield as it generally does. Its cultivation is nevertheless rapidly increasing here: and its large productiveness, its comparative freedom from the risks attending turnip-culture, and its fitness as food *for all kinds of stock at all seasons of the year*, have become now widely known. There has been a long-continued prejudice against Mangold Wurzel as being fit food for horses, sheep, or cows, in farrow, lamb, and calf, under the impression that they caused premature labour and abortion; and secondly, against the use of Mangolds for any kind of stock, on the plea that early in the season they are rather physic than food. Both of these assertions have been disproved now by ample experience. When pulped and mixed with chaff of straw or hay, in proportion determined by experience, they can be given to feeding stock without any undue relaxation of the bowels: the dung shall be as firm as it is desired, notwithstanding a very considerable admixture of this succulent food, if only well mixed with the dry fodder; and even without actual mixture, sheep, and ewes in lamb, have been folded early in winter upon Mangolds in the field, being well supplied with hay-chaff in troughs, with every proof of their being in excellent health and condition. Swine, too, have been fed in yards all the winter on very little else than the half-rotten roots thrown to them from the heap, and no instance of abortion, and no instance of injury of any kind, has followed. The sharp weather of October 1859, by which such large quantities of Mangolds were spoiled on the ground, so that the farmer was induced at once to turn his stock on to them, that they might not be utterly wasted, gave a capital illustration of the fitness of the root for food early in the season: and though it will still remain the distinction of the Mangold Wurzel that it is available as food all through the summer of the following year, keeping sweet and juicy long after common turnips and Swedes have become dry and leathery and tasteless, yet the doubts of its fitness for food as early as any other root crop have long since been dissipated, and it would no doubt be possible (with the aid of a little fodder, to be consumed in larger proportions when the roots are first grown) to keep cattle well all through the year on Mangold Wurzel only. The sorts grown are very many: the globe-shaped varieties are better than the long ones, because the latter straggle over the ground above, while their roots are generally found to be more forked and ranging beneath its surface, so that they are more laborious to lift; and the globes are better also because of the smaller quantity of surface which is thus exposed to drought, and they remain juicy for a longer time next summer.

The Orange and Red Globes grown from well-selected roots transplanted on to ground well but not too richly cultivated, will yield the best crop; and when this selection has gone on from year to year for several seasons, the habit of good and productive growth becomes confirmed. Every seedsman thus gives his own name to seed grown in this way. The Elvetham, and other long red varieties, are preferred by many cultivators, and unquestionably, like all other well-selected seed of whatever sort, yield large crops.

The cultivation of the Mangold Wurzel is like that of Turnips; and as the stiffer class of soils may well be devoted to this crop, it is well to do as much of the cultivation of the land in autumn as possible. If possible, then, a corn stubble should be pared and burned, and ploughed and harrowed, and grubbed and harrowed and cleaned during October or early in November, and the manure, as heavy a dressing as possible, should then be spread broadcast and ploughed in. In March or early in April, this should be harrowed and grubbed and reduced to tilth without the use of the plough. A dressing of 2 or 3 cwt. each of guano, super-phosphate, and common salt may then be sown broad-cast over the land, and the plough is then used to rib the land in drills at least 30 inches wide; the seed, 6 or 7 lbs. per acre, is then drilled on the top of the ridgelets thus formed, and rolled down. It should be placed not more than half an inch deep in the land. Each capsule contains 2 or 3 seeds; and 4 or 5 lbs. per acre is therefore enough, though the larger quantity is generally considered safer.

Or the land may be ribbed in autumn after the preliminary clearing, the dung being placed in the drills and covered by splitting the intervening ridgelets. The spring dressing of hand manures is sown broad-cast over them, the intervals between the ridgelets are horse-hoed, and the double mould board plough sent down just to earth the

ridgelets up again, and the seed is sown as before. This is the best plan in the case of very stiff soils; or, if only one autumn ploughing be given, then the spring cultivation must be more elaborate, and one or two ploughings must be given in order to the thorough cultivation and cleansing of the land before, as in the former case, it receives the manure and the seed. This spring cultivation should be confined to the lighter class of soils.

The seed may be dibbled instead of being drilled; and this is a very common practice: in this case, women or boys are furnished with a bag of seed and a blunt dibble; each stands on one side of the drill with the right foot upon it and the right hand over it; a small hole is made, and 2 or 3 capsules or seeds are dropped from the left hand into it, and covered by a sliding movement of the right foot, which half stands upon the place, while the next hole is made 15 or 18 inches farther on. This plan diminishes the labour of singling the plants, as they come up in small bunches at the distance required.

By and bye, as in May and June, when the plants are tolerably well up, the horse-hoe is sent down the intervals between the rows, and women following with hoe in hand, singling out the rows or bunches, and the ridge is hoed clean of small weeds. The horse-hoeing is repeated at fortnightly intervals during July and August; in fact as long as the growing leaves permit, and a second hand-hoeing clears the ground left by the horse-drawn tool. The crop must be harvested before frost. It is drawn and thrown in rows, and the leaves are cut off, and the roots are thrown into carts and drawn to heaps, covered with straw, and after lying a week to somewhat dry and hinder fermentation, it is covered up, and is safe till wanted up till late in the following summer; though, as already stated, it may be safely used at once. The crop may be from 20 tons (a fair crop) up to 40 tons, and even more per acre. There is no crop, unless it be the Italian Rye-grass, which is so gross a feeder as the Mangold. Almost any quantity of farm-dung and ground and salt and superphosphate with it may be usefully applied, with the certainty of its producing a corresponding crop.

Flax Culture is diminishing in this country, notwithstanding every attempt to bolster it up. On rich loamy soils, after no matter what crop, if only the land be clean and in good heart, Linseed is sown broad-cast, 10 pecks per acre, early in April, and hand-weeded in May, and pulled as soon as the seed-bolls are brown in July. If the seed is allowed to become thoroughly ripe, the fibre is coarse. The largest sum of money, as a general rule, is made per acre when the plant is pulled at the earliest indication of ripeness of seed. The seed is got out by rippling as it is called, that is, drawing the plant in handfulls through an upright comb of teeth. The plant is steeped either for weeks in the dew, or for days in a tank of hot water; and, as soon as fermentation has released the fibres from one another, it is taken out, squeezed, dried, and scutched, to remove the bark and tow. The use of Linseed in cattle food is well known, and from this and the value of the fibre obtained, the profit of its cultivation is derived. The crop yielded may be 40 or 50 stones of flax and 16 or 20 bushels of seed.

Lucern.—It must suffice to say that 15 lbs. of seed sown about the middle of April in shallow drills 12 to 14 inches apart, on very deep loamy well-manured soil, especially if it contain calcareous matter, will produce a most valuable forage crop; which in a mild climate will yield during the summer and autumn of the first year a good deal of capital food for cows and horses; which it will continue to do during the following six or seven years, if kept clean and occasionally tilled between the rows and manured.

Sainfoin is a forage crop of calcareous districts. On the oolite and chalk it is the best forage crop we have. Four, or some sow five, bushels of the rough seed is sown per acre with barley or oats taken after a fallow crop which has thoroughly cleared the land. The crop may remain good for several years, and is ultimately ploughed up for wheat. Any patches of root weeds, being dug out first; or if very foul, as it often becomes, it is sometimes pared and burnt and sown with turnips to be fed off, and followed by barley and spring wheat.

MAY.

In this month we finish Mangold Wurzel sowing, and we prepare the land for the Turnip crop. This, with continued hoeing of all growing crops, and possibly folding or mowing a too luxuriant growth of wheat, is almost the entire occupation of the month. In Scotland May is the seed-time of the Swedish Turnip, and in England it may be sown in the latter part of the month. It is, however, better to delay the seed-time till June, as too early sowing results often in our hotter climate in premature ripeness, and consequent mildew.

The *Horse-labour* in May accordingly includes all field operations in the Turnip fields, horse-hoeing Beans, Corn, Potatoes, Carrots, and the earlier Mangold Wurzel.

The *Hand-labour* includes singling Carrots and Mangold Wurzel, Carrots and Parsnips, transplanting Cabbages and Kohl Rabi, and hand-weeding Flax, mowing Trifolium, Rye, &c., as fodder, and attendance on live stock.

Mowing Luxuriant Wheat.—Our best crops at this time of the year completely hide the ground, owing to the luxuriance of their growth. This does no harm in dry weather, but the leaf hides not only the ground, but the stem of the plant, so that it is liable to become blanched, and to be weak and over-succulent. After a shower at this time of the year, when every leaf is bowing under the weight of rain-water, on looking towards the sun at a promising field of wheat you will see its light reflected towards you in an unbroken sheet, none of it finds access to the lower parts of the plants,—the leaves get it all to themselves, and, as a consequence, they grow luxuriantly, increasing in length, and breadth, and weight, until with the load of water which the weather sometimes lays upon them, they ultimately become too heavy for the weak herbaceous stalks below them, and the plants are laid flat on the ground, to the great injury of the farmer. It is a common practice to sow salt over too rich land in Wheat, or at seed-time, under the idea that its soda will enable the extraction of the silicates of the soil, and consequently induce the deposit of a large quantity of silica in the straw of the ripened crop, which will thus be better able to stand. It is however certain that this process is effected, if at all, towards the harvest time, and that salt does little or nothing to remedy this liability to being laid early in the season. The only remedy, then, is to induce the hardening and wood-making process in the stems of plants. Now the deposit of carbon, in which this essentially consists, takes place only in the sunshine. The carbonic acid of the air is absorbed by leaves and decomposed in the sunlight, its carbon being deposited wherever the sunlight falls, and the oxygen being given back to the air. Any growth in the shade is more or less blanched; and while one immediate advantage of mowing off the heavy flag of Wheat at this time of the year, or earlier, consists in the plant being at once relieved of a heavy overhanging weight which bears it down, the chief advantage is, that the light has leave to play upon the soft and succulent stem of the growing plant, which thus becomes carbonized and hardened, and enabled better to withstand the weather. It is

easy, by examining a plant very early in the season, to ascertain the position of the young ear, and the flagging may be easily done without injury to it, either by hook brandished horizontally to right and left, or, even when the plant is very thick and very succulent, by the scythe. The necessity of a hardened stem, and of letting sunlight play upon it, is an argument for their sowing at wide intervals.

Green Manuring.—It is not generally at this season of the year that plants are sown to be ploughed in, because thus early you can sow seeds whose produce shall deserve a better fate; nevertheless we may refer to the practice here as oftentimes furnishing a cheap and efficient method of fertilizing the ground. If the ground is poor after a corn-crop which has been early harvested, you can often get, before winter, a luxuriant growth of vegetable matter which, then ploughed in, shall be a useful contribution of fertilizing matter towards a green crop in the following year. The practice of ploughing under a growing crop to rot in the land and supply organic matter by its decomposition there, is chiefly adopted on very sandy soils, which are either deficient in organic matter, or in which (hungry soils as they are called) it rapidly rots and disappears. For this purpose the succulent White Mustard, the Cameline, another cruciferous plant, or Rye itself, may be sometimes used. The ordinary plan is to sow it broadcast, and plough it under by the aid of skim coulter and heavy chain dragging from the beam of the plough, by which the whole growth, though it may be two feet high, is buried perfectly; and it should be done before the plant comes into bloom. The practice of green manuring is of the same fertilizing kind as the ploughing under of Clover-root or old sward, which everybody knows to be the richest kind of dressing that can be. But for special green manuring special crops are grown, such as Italian Rye-grass, Clover, Buckwheat, Lupine, Rye, Spurry, Rape, Mustard, Vetches, which have all been used for this purpose; many of them, as the two first, and Rye, Rape, and Vetches, are better used as food for sheep folded on the land; and the Lupine, too, has latterly been warmly recommended for this purpose on all very light sandy soils. Sometimes, however, it is not convenient to procure stock for the consumption of a green crop, and then the cheapest way of making use of it, and adding to the upper soil, where it will be immediately available, a store of valuable matter, which has been taken from the air and from the subsoil, is to plough it under.

The Lupine has been recommended to be sown about one bushel per acre, rather in June, however, than in May, in rows twelve inches or more apart, on light sandy soils. The horse-hoe will keep it clean, and sometimes a large produce of valuable seed is obtained, of great value as food for stock, while the green plant, if fed down, is a capital forage for sheep folding, or for any other kind of stock. Mr. Crisp, of Butley Abbey, states in a recent number of the 'English Agricultural Society's Journal,' that he obtained fifty waggon loads of sheaves off eighteen acres sown with eighteen bushels, and that the quantity of grain was estimated at forty to fifty bushels per acre.

Kohl Rabi.—This has latterly become a more favourite crop, owing to the failure of Turnips, and the large produce which some growers have obtained. Mr. Lawson, in the 'Agricultural Society's Journal,' calls it the root of dry summers; but it seems during the past year to have been less injured by the excessive wet and cold than many other sorts. When Mangolds and other roots have been universally small, the Kohl Rabi does not seem to have suffered in the least. It is either sown in seed-beds in March, April, and May, to be transplanted respectively in May, June, and August, or it may be drilled in rows where it is finally to stand. If sown in seed-beds for transplanting, a pound of seed, or thereabouts, sown in a well-prepared bed, will furnish plants for an acre. If drilled on the land, four pounds per acre will be needed.

Kohl Rabi prefers the heavier class of soils, which should be reduced to thorough tilth, and richly manured during autumn. The plant will benefit by dressings of superphosphate. Seed sown early in March will furnish plants ready to transplant early in May. When drilled in the field, they may be sown in rows twenty-six or twenty-seven inches wide, and singled out to fifteen or sixteen inches, as for Mangold Wurzel. The produce is large and good for cows; and, so far as analysis can determine, it is more nutritive. It is hardy, and withstands any frost; and while past experience proves it well adapted for dry summers, that of the past has proved that it flourishes in watery weather also.

The Cabbage is a useful field plant, grown largely for this purpose in North Lincolnshire and elsewhere, on clayey soils. The land is ploughed and manured in autumn in raised drills, into which the plants are dibbled about midsummer, the work being generally contracted for, labour, plants and all, at about 25s. per acre. If Drumhead Cabbage-seed be sown in beds late in August and pricked out into other beds in November, and again planted out in the field in February and March, they will be ripe and fit for use in early autumn.

If sown in April and May, and transplanted as soon as big enough, which is the practice on the clay soils of North Lincolnshire, they furnish ample store of winter food. The Cabbage likes a stiff soil, and all the cultivation for it should be done before winter. A very large produce, sometimes exceeding forty tons per acre, is obtained. The rows may be three feet wide, and the plants two feet apart in the richest land; but other and smaller intervals may be adopted if the land is not in such good condition. The Drumhead is the best sort, producing a substantial and firm mass of food. The Thousand-headed, also a field Cabbage, has an open growth, and must be folded on the ground or cut as forage, as it cannot be stored.

Buckwheat is sown one bushel per acre in rows twelve inches apart, in the middle of the month of May, on any light free soil. It is not a desirable crop, except for poor sands, and as a produce worth growing for poultry and for game, unless indeed, as already said, it be grown as a green crop to be ploughed in.

JUNE.

Turnip Cultivation is the great business of this month in England. In Scotland, the latter part of May, or indeed as early in the month as possible, is the best seed-time for the Swedish Turnip, and then the Hybrids, Hard Yellow Turnip, and Soft White Turnip, follow in succession. Rape, too, may be sown this month; Mangold Wurzel, Carrots, and Parsnips may be horse-hoed and singled. Cabbages and Kohl Rabi continue to be transplanted. Clover is mown for forage; Vetches, too, are mown and carried to the feeding-stalls and stables, care being taken, when they are still very young, to let them wither for a day in swathe before being given to horses.

The *Horse-labour* in June accordingly consists of ploughing and cultivation in the Turnip-field, and carrying of manure and green food.

The *Hand-labour* includes hoeing, weeding, &c., of the growing crop, and dung-filling, &c., connected with Turnip culture. Sheep are washed and shorn in May and June; and Dairy operations are at their height.

Turnip Culture.—By the introduction of the Turnip into cultivation, the relations of agriculture has been entirely altered; and though the Mangold Wurzel, Kohl Rabi, Carrot, &c. are now to some extent taking its place, yet

the credit of an entirely altered system of arable management is due, in the first place, to the Turnip. We now make more meat on plough-land during the winter months than during the summer; a thing which is certainly very different from the agricultural experience of half a century ago. Formerly men lived on salted meat in winter time, and summer was the only period of the year during which cattle fattened. Now winter is, on arable farms, the great feeding and manure-making period of the year, and the growth of grain crops consequent upon the improved management of our arable land has enormously increased. The more cattle the more corn is a true adage, which has been wonderfully illustrated during the past century in our own country; and it is now also being gradually illustrated in France by the gradual extension of the means of feeding a greater herd of live stock.

The Swedish Turnip and the Common Turnip are two distinct species of the genus *Brassica*, characterized, the one by its smooth, and the other by its rough leaves when fully grown. Of the Swedish Turnip there are ten or twelve sorts, and new ones are every day coming into fashion. Among these are Skirving's large and somewhat coarse variety, solid, succulent, productive, but running rather too much to neck and leaf; Laing's neater, not so large, with leaf entire, and feathered down to its junction with the bulb; producing fewer tons per acre of a softer-fleshed root; Carter's Improved London, a smaller root; hard, crisp, juicy, hardy, in every respect first-rate, running less to seed, which is indeed another of its merits, can be recommended as the best Swede in cultivation; the Common Green and Purple Swedes, both good old-fashioned sorts; and many others introduced by the different seedsmen, and improved by constant selection, until the produce is believed to deserve their name, and thus add to the reputation of the farmer who had introduced it. Of the Common Turnip, again, there is an even greater number of varieties, Globe, Flat, and Tankard-shaped, Green, Red, and White, hard almost as a Swede, and so soft, in some few cases, as to disappear under almost the earliest frost. Among these we may name Dale's Hybrid, the Aberdeen Green-top and Purple-top Yellow, the Green-top White Globe, the Lincolnshire Red-topped Globe, the Green and Red Tankards, the large White Globe, or Norfolk Turnip, often reaching 20 lbs. apiece, and the Common Stone and Stubble Turnips, are rapid growers, and therefore fit for sowing later than any other. Of these, we sow the Swedes first, not earlier, however, than the last week in May in England; the hybrids next, the Yellow Turnip, all of good solid flesh, often the hybrids and the Soft White Rounds, and Tankards last, even so late as September, on a properly prepared corn stubble. And these roots are consumed in the reverse order of succession, the soft Whites being consumed first, the harder Turnip next, and the Swedes last. In Scotland, the Common Yellow Turnips are kept on, and remain good till much later in the year than in England, and all these sorts are more nutritive there than in the South. There is no such thing here as fattening cattle on Turnips and straw alone, which is practicable there

A great deal hinges not only on the selection of a good sort of seed, but on choosing it when it is perfectly grown. When the seed is gathered from a late-sown crop left to seed, which had been intended to be consumed upon the ground, and is thus taken from the ordinary run of roots, it is not so good as when grown from selected roots transplanted into fresh ground, and thus taken out of the natural and wild style of reproduction, which tends rather to permit the plant going back to the original wild type. The principle that plants bring forth "of their kind" should be acted upon, in order that the best kind only may be reproduced, and this can only be effected by choosing the best-formed roots, whether they be Turnips, Mangold, Carrots, or Parsnips, for seeding.

The cultivation of the crop is in this wise:—For the stiffer class of soils as much is done in Autumn as possible; and whether the crop is to be grown on raised drills or in rows upon the flat, as much as possible is done to clean the land and manure it in the Autumn. If the former plan be adopted, as soon as the Wheat or Oat crop is removed the land is scarified, and harrowed, and raked together and burned; and if foul, it is ploughed, and harrowed, and rolled, and grubbed and weeded repeatedly, until cleaned. If already clean, the use of the scarifier and harrow is alone needed until the land is ribbed up by the plough for the reception of the manure. This is then carted out of the yards and stalls on to the land, spread in the drills, and covered by splitting the intervening ridgelets, and left till April. Whatever artificial manure it may be intended to apply is sown broadcast, then, over all, and the land may then be slightly harrowed down, the horse-hoe put through the intervals between the drills, and the land then ridged again by the plough, and the Turnip-seed sown towards June, with a greater chance of success than it would have had if the whole cultivation had been left till Spring, or if the land had been ploughed again after Winter, thus turning up clay soil unaffected by the frost, which would have to be reduced by the harrow and the roller, with small chance of so fine a tilth resulting as is produced by the action of a Winter's weather.

On the ordinary Turnip (*i.e.* lighter) soils the stubble is first ploughed after harvest, and the land in Spring is harrowed down and cross-ploughed, and soon brought to tilth and cleanness, and then it is ribbed up for the manure; the guano and the superphosphate is sown broadcast over the open drills, with the manure in them, and the whole covered up as before by the double-mould board plough, so that the artificial manure, while partly spread throughout the soil, is brought for the most part pretty much into the centre of the future ridge on which, as in the other cases, the seed is sown in May and June. From two to four pounds of seed are sown per acre by the double Turnip drill; and if there be any chance of drought, it is at once rolled down by a light wooden roller immediately after sowing. And in a couple of weeks or so the crop is into rough leaf, and the plant is comparatively safe from the Turnip-fly. The attacks of the fly are most severe during the existence of the sweet first leaf of the plant, and very often the crop is then destroyed by it. Various expedients have been devised and acted on with more or less success for evading this pest. The period of danger should, by using forcing manure, and by thicker sowing, and also by sowing by the water-drill, be shortened. The flies themselves, too, are often directly attacked by contrivances, such as drawing a painted board over the rows, to which the insects adhere, as they jump on being disturbed.

Mr. Rowley, too, has devised a dusting drill, by which lime-dust and soot may be thrown down upon the rows over which it is drawn in the dewy morning, when all this dust will adhere to the leaf. Major Munn has contrived a set of revolving brushes, by which the insects are gathered up and carried away. It is, however, we believe, an almost hopeless task to attack a great plague of Turnip-fly directly in this way. And the only hope to which any probability attaches, is that by hastening the growth of the plant it may be hurried out of danger's way. Mr. Poppy, indeed, has asserted that the fly is much fonder of Common Turnips than of Swedes; and he alleges that by sowing an occasional row of the former in the midst of the latter, he has confined the attack of the fly to this decoy plant until the main crop of Swedes has grown out of reach of injury. After this, however, the Turnip-crop is still liable to destruction by various caterpillars. This, however, is generally after the plant has grown a good way on to maturity, and before then the crop has to be singled. The distance to which the plants should be separated in the rows is a point on which local experience can alone be a guide. They are generally singled out from 10 to 12 inches apart, and it is evident that if, by giving them greater room, you can in that proportion in-

crease their diameter, you by so doing obtain a much greater increase of weight per acre than if by leaving them nearer one mother, you merely increase their number. A crop twice as thick on the ground of the same size would be only twice as heavy, but a crop the same in number, but twice as thick individually, *i. e.* of twice the diameter, would be eight times as heavy; the bulk and weight increasing of course as the cube of the diameter, while it only increases simply in proportion to the number, so that the room given them ought always to be such as shall afford full scope for the largest growth to which the other circumstances of the crop may lead. About 12 inches apart is a good distance. The intervals between the drills are first horse-hoed, or pared with a one-horse plough, leaving abrupt ridge-lines on which the row of young plants is growing; and the hand-hoe, by alternate push and pull, bevels this abrupt ridge down, and leaves solitary plants along the ridge-line at intervals of about a foot. This is done by women or boys, at the cost of about 3*s.* or 4*s.* an acre. The plants are left till the surface of the land again cakes over by the weather, or again exhibits weeds, and then it again requires a horse-hoeing or hand-hoeing. A deeper stirring than the former horse-hoeing is then given, and in a few weeks repeated, when the leaves should meet in the drills. This they will do early in August in Scotland, and perhaps not till September in the South. And it may before this have exhibited signs of mildew, which is generally prevented by avoiding too early sowing, and adopting everything, whether of the nature of tillage or manure, which shall conduce to the persistent vigour of the growth. Even then the crop is liable to result in worthless produce, owing to the disease called finger and toe, generally the result of the absence of lime from the soil. It consists in a forked stunted growth, covered with warty excrescences, in which ultimately grubs and rottenness appear. To diminish the frequency of the crop on the land, to apply lime, and to use every other means of securing rapid and luxuriant growth, is the way to reduce the chance of attack by this disease to a minimum.

The liability to this disease, or at least to that degenerate form of the root, which is one feature of it, is increased by the use of carelessly grown seed. If, as has been already said, Swedes are sown late in the year, and left a small and ill-formed growth over Winter where they grew, and the seed be reaped next year and sown for the following crop, it is more likely to yield a forked stunted crop than if the seed-crop had been sown in May, attained its full growth, been pulled and pitted, and afterwards selected and transplanted and perfectly cultivated, yielding seed which carries in it a tendency to reproduce the well-formed roots from which it sprung.

When the crop is ripe, it is left there and folded over with sheep, or it is half carried home to the yards, the remainder only being consumed upon the ground, or it is wholly pitted on the ground and consumed there by sheep folded later in the season; or it may be wholly carried home to pits for consumption by cattle in boxes, and stalls, and yards. The cost of pulling Swedes and Mangold Wurzel varies from 6*s.* to 10*s.* per acre, including for that sum the labour of cutting off the tops and filling the roots into the carts. They are either pitted in long ridge-like heaps on the ground, and covered over with straw and earth, or they may be placed between parallel rows of hurdles, eight or nine feet apart, and thatched over; another double row of hurdles being placed about a foot from the first, and treated in like manner, and the intervals stuffed with straw, and the heaps roughly thatched over, the bushy eaves of the thatching interlocking over the intervals. The three great requisites of ventilation, warmth, and dryness are thus sufficiently secured.

There are many other methods of Turnip culture besides the one described. It is more common in England to sow the seed in drills 18 inches apart on the flat, the land having been first cultivated and manured either in Autumn, or partly in Autumn and Spring. This is a sufficient width for a less perfect horse-hoeing, and in dry seasons it is perhaps preferable as being a less exposure of the soil to drought. And it is becoming more and more common to put in the seed with the water-drill, which deposits both manure and seed in a manner calculated to induce immediate and rapid growth—an apparatus for throwing liquid manure at a constant rate, or mere water containing superphosphate, or guano half dissolved and half suspended, though it is conjoined to a common Turnip drill, so that the mixture is thrown down in rows upon the land as the drill is drawn over it. It is also more and more common in England to depend on superphosphate and lime-dust alone, or with ashes, for a crop of Turnips, applying almost all the farm manure on the Clover-stubbles for the Wheat-crop.

In Scotland, on the other hand, it is preferred not only to apply farm-yard dung, in itself a nitrogenous manure, almost exclusively to green crops, but they even prefer guano, a still more nitrogenous manure, as an adjunct, instead of the superphosphate. It is also common in England to sow Turnips broadcast on the land, which, at best, is a careless method of Turnip culture, and only defensible in the case of Stubble Turnips, where a crop, partly of bulbs and partly of greens, is available in Spring for Ewes and Lambs. The different sorts of Turnips vary a good deal in the proportion of water which they severally contain, and still more, therefore, in the residual proportion of dry matter in their substance, on which almost alone, of course, their relative nutritiveness depends. This variety hinges not only on sort, but still more on weather, and the other circumstances of growth. And the proper manuring of the Turnip-crop, in order to obtain a healthy growth, is therefore of importance.

Mr. Nesbit declared before the London Farmers' Club that he had ridden through a crop, his horse stumbling over hard and firm roots, during one-half the field, and going smash through, almost constantly rotten bulbs over the rest of the field; and the line separating the two was where the superphosphate made from bones used in one-half the field was separated from the superphosphate made from coprolites used on the rest of the field. The former contained all the other ingredients needed by the growing plant, the latter resulted indeed in a rapid and stimulated, but unhealthy, because imperfect growth. And it is very possible that a lopsided manuring, as it may be called, one in which all the elements wanted are not evenly supplied, may be productive of that unhealthy growth to which Mr. Nesbit referred. The influence of climate on the crop is a more obvious thing still. The slower and more continuous growth of the crops in Scotland results in the production of something very different from an English Turnip. The latter is useless as food soon after the beginning of the New Year, while the later remain good till late in Spring.

JULY.

The work this month, excepting the continuance of turnip culture and the horse-hoeing of root crops, is more on the pastures and clovers than on the arable land. Haymaking, with perhaps the earliest of the corn harvest, in the shape of pea and bean cutting, occupy the hands.

The *Horse-labour* is thus lighter in July than in any other month of the year. It includes repeated horse-hoeing of the different green crops. Sowing of wheat may be called "stolen" crops, *i. e.* after Vetches, Rye, Italian Rye-grass, and other

early forage crops. Carting of hay, and of various other materials, lime, drain tiles, wood materials, which, as horses are at leisure, may be more easily done now than at any other time of the year. Any work of the nature of bare fallow is carried on during July.

Hand-labour is almost exclusively confined to hay-making and various hoeings, with the earliest of the harvest and Flax pulling, Bean and Pea cutting, and perhaps Rye cutting, if any is left to seed.

Rape Culture.—This is sown to some extent on most kinds of soil, but it is especially the green crops of our fen districts, yielding a thick juicy succulent stem and leaf, much more nourishing than any turnip that can be grown in such circumstances. 4 lbs. or thereabouts are sown per acre, in rows 15 inches apart, on the flat. It receives a very imperfect hand-hoeing and singling, and except horse-hoeing, very little other cultivation during its growth; and it yields a very large bulk of succulent food of much greater value for sheep feeding per acre than the Turnip or the Mangold Wurzel, growing sometimes so high that even the tall upstanding Lincoln sheep is hidden in it. A good crop will keep 16 to 20 sheep from October till February per acre.

"Stolen" Crops.—Rape may be considered one of them; but the term is generally applied to those crops, as Rye, Vetches, Trifolium incarnatum, &c., which are sometimes taken on a corn stubble, and fed or cut before a late turnip sowing. It is proposed to refer to them here, notwithstanding that it is generally later in the year that they are sown.

(1) Rye is sown as a stolen crop on any corn stubble, which should be ploughed under and harrowed, and if possible manured. Three bushels are sown broadcast—a thick plant is wanted—and being sown early in October it covers the ground before winter, and produces our earliest spring fodder. Mr. Tauntou some years ago advocated a variety called St. John's Day Rye from its being capable of being sown so early as St. John's Day, and forming a bulky growth above the ground without starting the ears before winter. It is cut in March and April for forage, and carried to the stalls, or it is folded over with sheep. It is adapted to light soils, and will yield on our poorest soils a heavier crop of grain than any other of our cereal grasses would produce. The land is cleared in ample time in May for sufficiently thorough cultivation, to ensure an early enough seed-time for common turnips, or even for summer vetches.

(2) Vetches are sown in October, drilled in by the Suffolk drill, in rows 6 inches apart, 3 or 4 bushels per acre. If the Winter Vetch is sown, the seed-time is as early as possible after harvest on any corn stubble, properly manured and ploughed, and the yield in April and May, cut while in blossom, is capital food for all kinds of stock. It is, when cut young, extremely succulent—too much so for use in the stable, unless allowed partly to wither before being given to horses. It is best grown on the stiffer class of soils. On light soils, although it yields well even there, yet its fibrous root so looseus the land as to injure it for the succeeding wheat crop. The Winter Vetch is mown off the land in time enough for a later-sown crop of Turnips, which should be folded on the land, and then followed by barley. Spring-sown Vetches are sown just in the same way, 3 bushels or thereabouts per acre; only they cannot be called a stolen crop, being taken as the main produce of the season. They may be seeded, and will yield from 3 to 4 quarters of seed per acre. Mr. Shirreff, of Haddington, introduced a white-flowering Vetch of great luxuriance of growth, which is superior as a forage crop to the common kinds. It may be mentioned here that the use of the water drill is especially adapted to secure a crop of Turnips after stolen crops. Such crops leave the ground of coarse hard and dry, compared with the land which has been fallowed during Autumn and Spring; and the drought of the later season, when alone Turnips can be sown after them, added to the natural dryness of the soil, often spoils the prospect of a turnip crop altogether. If properly ploughed up, however, and manured, and reduced by cultivator, clod-crusher, and harrow to a certain degree of tilth, the water drill will moisten the land enough to ensure the germination of the seed, and a crop is generally obtained.

(3) Trifolium incarnatum.—This, a hardy coarse crimson flowered clover, may be sown as early as possible after the Wheat or Oats is off. 24 lbs. of seed are sown broadcast over the stubble, and if rain has fallen, the harrow will scrape earth enough up to cover the seed, which seems to find in the hard land a more congenial seed-bed than when pains have been taken to manure and cultivate the soil. It sprouts and covers the ground before Winter, and forms a bulky coarse produce in April and May next year, which must be consumed during the time it is in flower, or it will become so hard and woody that it is indigestible and distasteful. It is only during a short time, about a fortnight, that it is fit for food; and a small portion only on any farm is all that is necessary. But Messrs. Vilmorin, of Paris, have introduced two other sorts of this Trifolium, one a white-flowered variety, and both of them much later than the common T. incarnatum, and thus three times the extent of land may be usefully devoted to this crop. Sown the same day, they will come to maturity at intervals of a fortnight from one another; and when the common sort is just going out of bloom, and the last of it therefore is being cut, the second sort will be in full succulence and at the height of its value, while the third, ready to succeed it, is hardly yet in bloom. All these sorts, like Rye and Vetches, may be followed by late-sown Turnips; they make very coarse hay, and are best consumed as forage, and so long as it is succulent, sheep and all other stock will eat it greedily: 12 to 20 tons of green food per acre may thus easily be grown. If consumed by sheep, they should be folded on the field. The plough follows as soon as a furrow from end to end of the field is possible, and its consumption leaves such a dressing of dung upon the land that 2 or 3 cwt. of superphosphate, sown in the water drill with the Turnip seed, will secure an ample crop.

Haymaking.—If every blade of grass could be exposed as soon as cut to a temperature somewhat under that of boiling water until perfectly dry, and then packed away under a water-proof roof, the hay would be as good as such grass could yield; the whole nutriment which the grass contained would be present in the hay, undiminished by washing or by fermentation. For the best hay there is needed the best grass, cut when containing the greatest quantity of nutriment, and dried rapidly and perfectly. To this end the grass fields of Herts, Middlesex, and Surrey, where the best hay is made, are cut soon after they are in flower and perpetually tedded and shaken out, no two blades being allowed to stick together while drying. The hay, with certainly a little loss of colour, is thus simply dry green grass. It heats hardly at all when put together, and so far as the food is concerned that was in the field, it is all and undiminished in the rick. Just in proportion as it resembles this, is hay-making good. Mr. Baldwin's, of Glasnevin, essay on this subject was published in the Spring by the Royal Dublin Society, and may be consulted with advantage. It recommends Italian Rye-grass to be cut on the appearance of the flower, as a second and third cutting is obtained if not allowed to seed. Common Rye-grass should be allowed to form its bloom. Clover should be cut when in full bloom; mixed meadows when the earliest grasses, as Anthoxanthum, have formed their seed, the bulk of the grasses being then in bloom. Grass is cut cheaper and better by the horse-drawn mowing machine than by the scythe. There is great loss of the nutritive part of grasses by long exposure in field. As soon as it is made, hay should be carried to the rick: leaving it out in wind-cocks for weeks before being finally carried home, results in the formation of a lot of comparatively worthless

washed outsides. Mr. Baldwin estimates the loss as follows:—Within the last three or four years we have made agricultural tours through 25 of the 32 counties of Ireland; and from careful consideration of the subject, and having in some instances used a tape-line and weighing-machine to assist our judgment, we have come to the conclusion that one-twentieth of the hay crop of Ireland is permitted to rot in field cocks. The portion on the ground, as well as that on the outside of the cocks, is too often only fit for manure. And the loss of aftermath, and of the subsequent year's crop (if hay or pasture), suffers to the extent of from 6*d*. to 1*s*. per acre. If we unite all these sources, the loss sustained annually in this country is something serious to contemplate. On an average for all Ireland, it is not under 20 per cent., or a fifth of the actual value of the crop. We have about 1,500,000 acres under meadow in Ireland, the average produce of which, last year, was 2 tons per acre. The total produce of hay was 3,000,000 tons, the value of which, at the current rate, would be, at least, £12,000,000; one-fifth of which (£2,400,000) is, as we have shown, lost by mismanagement to the Irish farmer.

Bean and Pea and Flax Harvest are referred to in the months of February and April, where their cultivation is discussed.

AUGUST.

This is the harvest month. Wheat, Oats, Barley and Beans are being cut by hand and horse, and carried home as soon as ripe.

The *Horse-labour* accordingly, excluding such horse-hoeings of green crops as still continue, is almost entirely confined to harvest operations. The reaping machine is being drawn or pushed, and the harvest cart or waggon is at work. The plough, too, is set to work as soon as the stubble is cleared, in preparation for Winter Beans and Rye and Vetches; and the ploughing of clover leas, either with or without a previous dressing of manure, goes on when possible for Wheat.

Hand-labour reaches in this month its greatest agricultural activity and intensity throughout the year, and accordingly wages are at their highest.

The Cereal Grains and Harvest Operations.—There are some particulars in the management of our cereal grains in which they are alike, and of which therefore a statement common to all of them may be made. All our White corn crops come generally in our rotations after green crops or manured fallow crops of some kind or other. Wheat succeeds Fallow, Clover, Beans, Turnips, Mangold Wurzel, or Potatoes. Oats come after Turnips or Potatoes or Mangolds, or newly broken up land or Clover. Barley generally comes after Turnips. The four-field rotation, Wheat, Turnips, Barley, Clover, is the general rule in England.—(1) Wheat or Barley; (2) Clover and Grass seeds; (3) Oats; (4) Turnips—or (1) Turnips; (2) Wheat or Barley; (3) Grass; (4) Oats; (5) Beans or Peas; (6) Wheat—are common rotations in Scotland. The cereal crops are generally considered the exhausting crops of the rotation; but it is evident that this depends on the cultivation to which the land is subjected during their growth, and on the use that is made of their produce. This idea nevertheless rules our rotations, these crops being taken when the land is, by previous treatment, at its best, and being followed by crops whose management restores the richness of the land. There are exceptions to this rule, but they obtain only where the land has acquired too great richness and needs depletion, or where it is in the hands of its enemies, *i. e.* of those who, having the power, are disposed to beggar it. In the fen districts of England Cole seed or Turnips are followed by Oats, and that by Wheat; the extra tendency to straw being taken off by the less valuable crop of grain, and so a possibility of a standing Wheat crop being obtained: and thus again, in the best managed land under the four-field rotation, that system is being modified by Wheat being taken after Turnips and followed by Barley. After folded Turnips, Wheat is found to be the best standing crop, and the Barley finds after it quite enough food to yield a crop without its being of so luxuriant a growth as to spoil the sample. Apart from these exceptions, however, the place of all these crops in the rotation is, and ought to be, after a manured crop, such as Turnips, Mangold Wurzel, or a crop which by its growth feeds the land, as Clover does; the clover root being in effect a liberal dressing of the soil.

The next general aspect of these crops is that presented by the question which has latterly excited a good deal of discussion, namely, thick or thin seeding; but it is not worth while discussing this question on general principles; it must suffice to refer to the data furnished by experience, with reference to each particular crop of the series, and this is done in the paragraph descriptive of each.

The cultivation proper to these crops is much alike, excepting the seed-time. The seed is generally sown in rows from 6 to 12 inches apart; the fields are harrowed or hoed when the crop is up, and they may be rolled or not, according to the condition of the soil. The crop is hand-weeded, if necessary, before coming into ear, and even after, if much weeds or the wild oat exist among it, which can be distinguished only after earing: and the harvest operations are pretty much alike for all.

Harvest-work in the corn-field is done either by contract or at days' wages; and the price per acre varies from 8*s*. to 12*s*., and even more per acre, according to the bulk of the crop. The corn is either mown, or reaped, or bagged. If mown to tie, it is best mown up against the standing corn, as otherwise the scythe is apt to cut the ears from the straw, as each new stroke is driven up against the swathe. A strong lad follows each scythe and gathers the corn in sheaves, laying them upon ties which have been pulled and placed by a child preceding him; another lad or woman ties: a man, two strong lads and a child thus make a party.

In "bagging," as it is called, a heavy hook is used: a wisp of straw is cut first and doubled up, or a stick is used instead, held in the left hand, and with the right the heavy hook is driven against the corn close to the ground, and so, by successive strokes, the corn is cut, perhaps a foot deep, up against the standing crop; the wisp or stick in the left hand serving to guide it to a standing place as it leans against the crop. A dozen such strokes will clear 3 or 4 yards in length, and the workman returning backwards upon his work, gathers what he has cut against his leg into a sheaf, and places it on a tie that has been pulled for him, and laid convenient.

In reaping, each man is of course more independent, pulling his own tie and making his own sheaf; though here also it is usual to have a bandster, who ties after several men or women. The sheaves should be about 10 inches in diameter, and as nearly as possible the full length of the straw. They are set up six of a side in shocks or stooks, with two head sheaves, butt to butt, over them, as a roof: or they are sometimes set up only two of a side, with two small sheaves overhead, hanging, ears down, and tied together by a band, as is the practice in some parts of the midland counties. It is the general practice in England to mow the barley and leave it in swathe; but where the crop is tall and bulky, it is better tied in sheaves, whether it be oats, barley, or wheat.

The whole practice of harvest work is, however, being altered by the use of the reaper; which, as in the case of

Bell's or Burgess's, leaves the corn in swathes upon the land, and in that of Dray, Cuthbert, Gardner, Wood, and many others, leaves it in rather roughish bundles, to be gathered up and tied in sheaves. In all cases the corn should be cut and tied when dry; and this, in the case of most of those machines which have no side delivery, or one not far enough to move the corn out of the way of the horses on their next bout round the crop, needs to be done at once. Two horses (or a changed pair) may thus cut from 8 to 12 acres a day, and save the labour of 8 to 12 men.

The cost does not exceed from 5*s.* to 7*s.* an acre; instead of from 8*s.* to 12*s.* or 14*s.*, which is the more common experience in the case of hand labour; and in every case a portion at any rate of the work should be done by contract, so as to make it the interest of the men to hurry on as fast as possible. The work of carrying away should in any case be done by contract. One man pitching to cart or waggon in the field, one lad building there, and one man pitching from the carriage to the rick, may form a party, and *their* share of the whole work may be let for from 10*d.* to 1*s.* per acre. Three carts, and two boys to lead them, and one man and a boy on the rick to build; the day labourers paid in addition by the farmer, who, with these three contract men, form a complete harvest party for the carriage and building of the corn; and a portion of the whole being thus let by the piece, drives the whole along with the force of self-interest.

The thrashing of the several crops is another operation, alike for all. Thrashing by machine may cost from 1½*d.* to 2*d.* per bushel, and by the flail from 2*d.* to 4*d.* per bushel, according to the sort and its yield. The cost of grain cultivation is considerably reduced by the improved means of realizing the produce which reaping machines and thrashing machines have furnished; but the chief value of the latter is in their enabling an immediate turning of the crops into the market according to the prices which may obtain from week to week.

One more aspect in which these crops are related to one another exists in the diseases to which they are severally liable. Wheat almost alone, however, of them, is washed and pickled, as they call it, before seed-time; but they are all liable to injury from the disease against which this pickling is directed.

Smut or blacks more especially is common to all alike; it is the result of a fungus named Uredo segetum, which results in the conversion of the whole floret into a mass of sooty dust, which is dissipated generally before the harvest by the wind, so that the sample is not injured by it. Bunt, on the other hand, produced by another Uredo, results in a swollen discoloured seed, which is not necessarily broken by the thrashing, and so, sometimes, finds a flaw in the sample. On the kernel being broken, it is found to be full of a black stinking powder, which, if it gets between the mill-stones, spoils the flour, and so its appearance in the corn is more injurious than that of smut. It can be perfectly prevented by carefully washing the seed, so as to detach or destroy the germs of the fungus, which, adhering to the grain and sown along with it, become absorbed during its growth, bearing their mischievous fruit at harvest time. It is better, for this washing, to use a material of a somewhat caustic character, which shall thus more easily and completely detach and destroy these spores and germs without the labour of washing. A solution of blue vitriol, ¼ lb. to a gallon of water, thrown on a sack of wheat on the floor, will, on properly mixing the grain, wet the surface of every separate corn, and thus completely prevent all chance of the crop being affected by the bunt. This is the simplest pickle that is used. To float the grain in salt and water, and afterwards dry it with quick-lime, is not so easy nor so effectual, though it is still a common mode of treatment.

SEPTEMBER.

Harvest work continues, and is generally completed in Southern England, only commencing however, very often, in some parts of the North. The grain is thatched as soon as it is in the rick. When harvest is over early, stubbles may be pared and burned, lime hauled on to Clover or stubbles to be ploughed in, fallow operations pursued, dung hauled out for spring green crops; Rye and Winter Vetches and Trifolium may be sown. This too is the best month for sowing Italian Rye Grass, and Wheat sowing may be commenced.

The *Horse-labour*, therefore, includes plenty of ploughing and cartage; and no month is more laborious in good seasons, when autumn cultivation is possible.

The *Hand-labour*, too, is laborious enough in harvest work, and in the fallow operations connected with the clearing of stubbles.

Italian Rye-grass.—Though it may be grown as a stolen crop to be mown once and its stubble then ploughed up for Turnips, or even as a green crop to be ploughed under for manure, or as a part of the ordinary seeding of grass land in rotation, or as a part of the seed to be used in laying down permanent pasture, it deserves description, as being a crop fit for cultivation by itself, yielding, after an autumnal sowing, as many as four or five cuttings in the following year of forage, which, if the land be rich and abundantly manured between the dressings, is of unequalled quality as food for stock. The land should be well tilled and manured, and three or four bushels of seed may be sown broadcast in September; and if three or four pounds of Trifolium incarnatum or White Clover are sown along with it, the crop is better worth cutting next year. There is no crop which will make such full use of whatever manure you may choose to apply. It covers the ground before winter, and comes to early maturity next spring. If kept well mown down as it attains sufficient head, it may be kept another year upon the land, yielding three or four cuttings. The rapid extension of its growth during the past few years is evidenced by the quantity of seed imported, which reaches now upwards of 40,000 bushels annually, whereas in 1830 only 160 bushels were introduced. The price then was 42*s.* a bushel, and now it is about 5*s.* or 6*s.*, varying of course from year to year.

Italian Rye-grass prefers the adhesive class of soils, loams and clays. When sown alone, three to four bushels per acre of seed are used; in mixtures for permanent pasture, six or eight lbs. per acre are enough. When sown with clovers, one bushel per acre and twelve lbs. of mixed clover seeds suffice. The seed varies in weight, from fifteen lbs. up to as much as twenty-eight to thirty lbs. per bushel. The produce varies from six or seven up to sixteen or seventeen tons per acre for each cutting, according to the liberality of its treatment; and from two to five cuttings may be had a year, according to weather, dressings, irrigation, &c. When liquid manure is washed over the land after each cutting, or three or four cwt. of guano or sulphate of ammonia are spread broadcast and then washed in, the largest produce is obtained; and in Ayrshire several farms exist where this method has been adopted with the most extraordinary results as to yield, though with what results as to profit is doubtful.

The following is the history of an acre of such land so treated:—Four bushels of the Rye-grass seed are sown in September and brushed in and watered and left till spring. Its first cutting may be in May, when ten or twelve tons of green fodder are obtained from it, and the land is immediately dressed with three or four cwt. of mixed guano and sulphate of ammonia, and washed in with (one inch deep) 100 tons of water from the tank into which the

water of the cow-house flows. This flooding follows the cutting immediately; the Italian Rye-grass uses the ammoniacal mixture during the rapid growth which immediately ensues, and it soon covers the land, and hinders the growth of anything else. In five weeks the land will be again covered three feet high with a thick luxuriant growth, weighing at least sixteen to twenty tons per acre. This is cut and followed by another manuring in a similar manner, and a third cut of sixteen to eighteen tons may be expected towards the end of August, and a further manuring gives ten or twelve tons per acre in October. In spring another dressing with water and manure gives a cutting towards the end of April, and a second and third cutting may be had in like manner, producing forty-five to fifty tons per acre, by the end of August. The land may then be broken up. During the two years that acre will have yielded between 80 and 100 tons of green food per acre, in seven or eight cuttings. By the use of a ton of guano, sulphate of ammonia, gas-water, &c., washed-in well, 700 tons of water and liquid manure, Mr. Telfer stated that his seven Scotch acres yielded 270 tons per annum.

When Italian Rye-grass is not liberally treated as to manure, it is liable to run to seed stems and straw, and to disappoint its cultivator.

OCTOBER.

This is the seed-time for Wheat and winter Beans (*see* February), for various winter-sown spring forage crops, as Rye and Vetches, and the time for autumn cultivation, so that it is necessarily full of labour. There is a great deal also done this month in preparation of land for the Beans, Oats, Carrots, Mangold Wurzels, &c., sown next spring.

The *Horse-labour*, therefore, includes preparation of land for sowing Wheat and winter Beans, ploughing and cultivation of stubbles for the fallow crop of next year, and hauling out manure to the lands, to which, for these crops, it is to be at once applied.

The *Hand-labour* includes Potato digging, and all the labour of autumnal culture.

Wheat Culture is carried on successfully in every county in the United Kingdom. The fitness of climate for it is not so much a question of latitude as of elevation. There are districts in Devonshire quite as unfitted for Wheat culture, on account of climatal difficulties, as any in Scotland. During the past year the climate of most of the country has been on the very edge of that beyond which Wheat will not ripen, and accordingly the Wheat harvest has been almost unprecedentedly late.

The choice of a variety of seed is determined as much by the soil as by the climate. As a general rule, Red Wheats are hardier than White; and, both on poor land and on fenny soils, especially in England, Red Wheats are preferred; they are less liable to mildews and to blights, and some of the sorts are more productive. The White sorts, on suitable soils, are of course more valuable per acre; for a sample of Fenton White Wheat, shown along with one of Browick Red, or perhaps along with one of the so-called Cone Wheats, presents as good an ordinary contrast as can be desired to illustrate the influence of quality upon sale. Several years ago, reports were obtained by the Highland Society of the relative merits of the Wheats then in cultivation, and the so-called Hunter's White Wheat proved in every case the most valuable, taking bushels and quality both into account. Since then many new sorts have been grown, and Browick, and Spalding, and Nursery, and Shiriff's new Red Wheat, and the April Wheat, also a red sort, are all first-class varieties of that class, while Fenton, Hopetoun, Velvet Ear or Rough Chaff, Red Straw, White, and many others are first-class White Wheats. For rich and straw-growing soils, the Fenton and the Velvet-eared White Wheats, and the Piper's Thickset, and the Spalding Red, all naturally short-strawed sorts, are to be preferred.

The land to bear Wheat may be after Turnips, Mangold Wurzel, Beans, or Clover. The Mangolds are pulled and carried home in October and November; their leaves may be either carried off or scattered evenly and ploughed under. If carried off, the land may be simply cultivated with the scarifier, and at once sown with the Suffolk drill. If the land be in good order and well drained, and the seed be sown early in October, one bushel of grain per acre (which contains 600,000 seeds, or about fifteen seeds for every square foot) is sufficient seeding. If sown later, it may be well to sow six pecks per acre. When Turnips are the preceding crop, a part is often fed upon the land by sheep, and the seed-time may be put off till January or February. After Beans, which have been manured in the drills, the land may be cross-ploughed if the ground be well drained, and the seed sown or drilled after a harrowing, and left without water-furrows; or it is ploughed so as partly to cross the drills, still retaining the direction up and down the slope in ridges, one perch wide, which are harrowed, and sown, and water-furrowed; or, as is generally the case in the English culture of the Bean crop, which is sown either in nearer drills or even broadcast, leaving a stubble not so clean as may be desired; these stubbles are scarified, and pared, and harrowed, and burned, and then ploughed in ridges as aforesaid.

In ordinary management in England, however, Wheat comes after Clover. Patches of couch or other root-weeds are forked out after the haymaking, and the land is manured and ploughed in ridges about 5½ yards wide, a skim coulter being used, by which the grassy side of the furrow slice is completely buried. In light soils the drill presser, following every other plough, presses home the furrow, and seed may be sown broadcast with the certainty of its falling into these drills and coming up in rows; but, commonly, the land lies a month or six weeks, and is then harrowed down, and the Suffolk drill is used to sow the seed. The condition as to wetness in which the soil may be for Wheat, is not of any particular importance when sown in Autumn. It may, indeed, be so far wet as to cause some poaching by the treading of the horses without any harm coming of it. As to the proper seed-time, the object should be to have the young plant so far forward that in Spring it shall be in a condition to make the full use of the circumstances of Spring-time. Whenever Spring comes in the guise of Summer (as in some other countries), it is best to have a grassy full-grown plant fit to use all favouring circumstances of temperature and soil. When Springs are cold and backward, it is not of such importance to have an early plant. In the former case, Spring-sown Wheat will not produce a harvest; in the latter, Spring-sown Wheat is often as productive as any other.

The seed is to be pickled as already described (August), as a preservative against bunt, and when properly prepared it is sown by the Suffolk drill in rows, which may be a foot apart. An experiment by Mr. Morton, of Whitfield farm, in Gloucestershire, in which intervals at 6, 9, 12, 15, 18, and 24 inches were used, led to the conclusion that the interval of 15 inches was the best. In Spring-time the land is harrowed, or hoed, and rolled, and if very luxuriant, it is fed down by sheep, or flagged with a hook, or mown with a scythe (*see* May). The crop is ready to cut as soon as the grain will no longer yield a milky juice on being squeezed between the fingers. It has been proved abundantly that the last process of ripening is to form a

coating of woody fibre at the expense of the flour of the seed; and this, though possibly conducive to the fecundity of the grain, as seed, is injurious to it as food. It is best, therefore, to cut the Wheat crop before the green colour has entirely left the straw; that is better fodder, and the grain is a better sample for this early cutting. The work of harvesting has been already described. The crop may be 20 bushels, or it may be 50; a good crop is 5 quarters per acre. There are more acres growing Wheat now than there used to be, and its progress probably extends with every extension of good agriculture. Thus, during the three years of the Scottish Agricultural Statistical Inquiry, it measured from 4¾ per cent. of the arable land in 1854, up to 7½ per cent. in 1857, the average in these three years being 168, 191, and 202 thousands of acres respectively.

The application of manure to Wheat may be so far referred to, as simply to declare that it is the general experience that in wet seasons 1 cwt. of sulphate of ammonia, or 1½ cwt. of nitrate of soda, or 2 cwt. of Peruvian guano, applied broadcast before or after Spring harrowing, are, on lands needing manure, amply repaid in the crop.

NOVEMBER.

Wheat-sowing before winter should be finished in November. It is the harvest month for all kinds of roots. Potatoes should be all up and in safety early in November. Mangold Wurzel should be pulled and pitted. Last year a great destruction by frost took place in the last week of October. All Swedes which it is intended to harvest should be pitted as soon as possible. Carrots and Parsnips should be dug.

The *Horse-labour* includes, therefore, a great deal of cartage, and besides this, there is the ploughing and cultivation still pursuing of the stubbles, and of leas for Oats.

The *Hand-labour* of this month is very laborious wherever a great deal of the root crop is pulled and carried home. It includes too a good deal of work connected with the thrashing of grain, which now proceeds, if only for the provision of straw for cattle, which are now brought into their winter quarters.

Tillage.—We place a short account of this subject here, notwithstanding that it is earlier in the year when it is most available. The powers of a soil, both as a laboratory in which food for plants is prepared, and as a warehouse in which it is stored, depend on the quantity of internal superficies which it contains. All surfaces have great attractive power, by which they retain the particles which touch them. It is this surface attraction which causes water to rise in the sponge; and when the quantity of internal surface is very great in a given quantity of any porous body, it exerts enormous power of retaining and absorbing that which it holds. A clay holds firmer than a sand what it contains, just because of the enormously greater surface in a given quantity of it, which, owing to its much finer particles, it possesses. And it was Jethro Tull who first attributed the fertilizing effects of tillage operations simply to their influence in breaking down the soil, and so increasing the extent of inner surface which a given quantity of soil would then contain. This greater surface both attracted and collected a greater quantity of the fertilizing particles of the air, and gave greater scope for the rain-water to dissolve out the fertilizing particles of the soil, and it afforded a greater pasturage, so to speak, from which the roots of plants could gather the greater abundance of food which was thus provided for them. And after all that has been said and written since Tull's time, this is as nearly as possible all that can be said of the way in which fertility depends on tillage.

Tillage includes those field operations of the farm whose object is the production of tilth,—a state in which land, neither hardened by drought nor saturated with water, is so far reduced to powder that air and moisture have free access throughout it.

Some years ago, in a lecture before the Highland Society, Dr. Madden, now of Brighton, exhibited diagrams in which he represented soil in the state to which ploughing, harrowing, and rolling bring it, as actually observed under the microscope. His figures represented it as a collection of particles full of pores and cavities, the channels between the particles being filled with air, while the particles themselves were saturated with water. It is probable that, to some extent at any rate, these diagrams were speculative—not strictly pictures of what the microscope really exhibited; but it is certain that they tally in some very important points with the known results of tillage operations on the soil. Thus, in the first place, well-stirred soil holds more air than it previously did. This will be plain to any one who shall dig a hole in the hardened ground, and then attempt to restore the earth he has taken out: the heap remaining over, which he cannot replace without pressure, thus obviously indicating the bulk of additional air which has been introduced into the land by disturbing it. And that by tillage the quantity of moisture retained by the soil is greatly increased, is plain to any witness of the effect of horse-hoeing between the rows in a turnip field previous to and during a drought. That both air and moisture should be more largely held in a soil after tillage might be expected from the fact that all tillage operations, by reducing clods and breaking up fragments in the soil, and so multiplying the number of particles in a given quantity, increase the quantity of surface within the soil—that *internal superficies*, as Jethro Tull called it, on which, as *he* saw, the quantity of food for plants which the soil provides so materially depends, and on which, as we now know, not only does the extent of pasturage for roots depend, but the quantity of that absorptive power as well, which enables the soil to gather from the air ammoniacal and other matters fit for use by plants.

If we still use the language of theory, then it appears that tillage promotes fertility by increasing the *quantity of surface* within the soil off which rain-water can wash the food of plants already there, *on* which, by direct attraction, atmospheric food for plants will gather, and *by means of* which the vegetable and other matters capable of supplying food for plants are spread out for more easy treatment by the chemicals of the air, the water, and the land. As to the influence of air and of rain-water upon the mineral matter in the soil, the actual manufacture of the soil from the parent rock is a sufficient illustration; and their influence on the vegetable matter in the soils is proved by the disappearance of the manure which we apply, and by the fact, of which the chemist tells us, that while there are only four parts of carbonic acid gas in 10,000 parts of common air, that taken from a soil manured seven months before contained twenty times as much, while the air of a recently manured soil holds 200 times the quantity of carbonic acid, the product of the chemical decomposition of vegetable fibre.

The real extent, therefore, of any farm, is not merely that which meets the eye, or is exhibited on the map; it is the quantity of inner surface on which the roots can feed, as well as the quantity of outer surface on which the crop can ripen, that ought to be taken into account, and that *is* taken into account when anybody goes on the land to value it.

The truth, in short, may be represented thus:—The increase of our crops, in so far as it depends upon the soil, depends on that which water can extract from it, for it is

only what is soluble in water that is useful to the growing plants; and thus fertility bears a very important relation to the quantity of the land—the quantity not merely considered as so many cubic yards, but rather as furnishing so much internal surface on which water operates as it passes by. Drainage increases fertility by inducing this passage of the water, and tillage increases fertility by facilitating this passage, and by multiplying the surface by which it passes.

And this is true, notwithstanding that some tillage processes seem to act in other ways than by loosening the ground. Ploughing, harrowing, and scarifying the land act apparently as dividers and loosenersof the soil, while rolling and pressing, also important tillage operations, seem to harden it. It must be remembered, however, that the object of cultivation is not merely, in general terms, to provide constant and liberal supplies of food for vegetable growth; the object of the cultivator is to procure a crop of a certain plant; the particular habit of growth which nature has conferred upon that plant has therefore to be consulted, as well as the laws affecting vegetable growth in general; and hardening of the soil may be required in particular cases, as that of wheat, while a looseness of the soil, as in that of turnips, &c., may be desirable in others. We must accommodate ourselves in this to those wants of the plants we cultivate, which must be taken as ultimate facts resulting from the character they have inherited.

Rolling nevertheless has this in common with the strictly tillage operations, that it reduces clods and masses into particles and powder: it breaks old contacts and effects new ones within the soil, and so, like ploughing, harrowing, and stirring, multiplies the active surface within the soil. And thus it does in fact stimulate that chemical action within the soil on which fertility depends, just as much as that is done by stirring it with plough and harrow.

But let us leave the definitions and explanations of the theorist, and hear the purposes of his tillage operations from the practical man. He says, "I plough to cut off from the general mass of matter a definite layer on which I can afterwards operate more efficiently; and the purpose of these subsequent operations is to remove the natural growth of the land, and so far to reduce the soil in which it grew to powder, as that rain shall easily permeate the whole without clogging it together. I plough to bury the manure which I lay upon the surface so prepared. I plough to lay up the land for exposure to that most efficient of all tillage processes, the alternate rain and drought, warmth and frost of weather. I harrow in order that the clods may be broken which previous operations may have failed to break, and in order that the weeds and filth may be dragged to the surface which previous operations may have failed to remove. I roll, too, in order to break surface-clods, in order to keep-in moisture, in order to level the surface for the even action of other implements, the cultivator, the reaping-machine, or scythe; in order to confer that hardening of the land which some plants require. The object of my tillage operations is to remove all weeds, to bury manure, to prepare a seed-bed, to have a softened soil in which my plants can swell with unrestricted growth. The seeds I sow need to be in contact with air and moisture in order to their permeation, and they must therefore be covered with particles of moistened earth smaller than themselves; and thus the smaller seeds, as those of Grass, of Clover, of the Turnip, need a finer tilth than the larger seeds, as those of Barley. And as after germination the young plants need scope for the ready extension of their roots and stems, so tillage operations are needed deeper before seed-time than the mere act of germination would demand; and they are needed after germination, especially in the case of large-stemmed plants, as the Turnip, the Potato, or the Mangold Wurzel, in order to permit the easy enlargement of those parts whose growth I want. But, from the beginning to the end of the annual tillage of my land, one object of all my tilling operations is the destruction of weeds."

A writer on Bare Fallow some years ago, evidently taking his cue from the report of the mere labourer as much as of the intelligent practical farmer, enumerates all the supposed objects and effects which the chemistry of those days suggested, as the aim and end of the results of cultivation which the process involves, only to exclaim, in derision of them all, "The sole purpose of fallowing is to destroy weeds!" The destruction of weeds is an object of tillage operations certainly, and if they cannot be destroyed year by year under good farm management, the gradually increasing accumulation requires this periodical bare fallow to effect their destruction, and so far the Reviewer was right in his assertion; nevertheless the main object of tillage operations is not to destroy, but to produce, to increase the quantity of food within the land in order to its conversion into food for man and beast by plants upon its surface.

It is plain that the practical and the theoretical accounts of the matter are perfectly consistent, and tillage operations have at once the effect of forming the seed-bed, of loosening land to enable unrestricted growth within it and upon it, and of destroying any plants but those we wish to grow; at the same time that the soil, by the reduction of its substance, is thus enabled to present within a given bulk a greater quantity of surface, so as to act as feeding-ground for plants and as a warehouse of their food. Both farmer and philosopher will thus agree in the effects of deep and thorough tillage of the soil.

As to the practical methods to be adopted in order to attain the condition which we call tilth, it is only necessary to refer to the fact that in the course of half-a-dozen years arable land generally receives a dozen ploughings, twenty to thirty harrowings, besides sundry scarifyings and horse-hoeings, and repeated uses of the roller both in drought and directly as a tillage implement, in order to prove how cumbrous a process tillage generally is. The increased use of the scarifier as compared with the plough, and the extension of Autumnal culture, seem to be the principal moves towards simplifying the process of late years. Add to this, the adoption and extension of steam culture, and the improved drainage of the land as facilitating all these operations, and it will be admitted that progress hitherto has not been small. Great economy is obtained by properly timing the uses of all these operations. Besides the need of fitting what is done in the field to the actual weather of the day, there is the need, especially on clay soils, of fitting the great tillage operations of the year to the average weather of the season. There seems an advantage on clay soils in the deep and thorough tillage of the stubble when dry in Autumn, which is so remarkably greater than the advantage of the same processes at any other time, that some special explanation seems almost to be needed. The explanation probably, however, is no other than that which ordinary tillage operations receive, the greater effect arising from its being done in the dry, and followed by the frost. Whatever the explanation may be, the fact is unquestionable, and any means of cheapening Autumn tillage, or of increasing our power at that season of the year, will be welcome to all clay-land farmers. These means exist in the application of steam power to cultivation. Whether by Fowler's or the Woolston apparatus, it may now be generally believed that by steam power land can be better ploughed and better cultivated, more cheaply ploughed and more cheaply cultivated than by horses.

DECEMBER.

The winter's work has now fairly set in, and carriage of materials, of grain, of dung, of marl, and clay, and lime, with occasional ploughings of the stubbles when the weather permits, occupy the horses.

The *Hand-labour* is confined to attendance on stock, to thrashing grain, to mending roads and fences, and to land drainage.

Land Draining.—This, on all soils where there is no natural drainage for the rain-fall, is now universally considered an essential to good agriculture. A short reference to the theory and the practice of it therefore must be permitted in our Calendar.

It is properly Winter's work; the ground is softer and more easily dug; the land is wetter and betrays more plainly the need of the operation: water gathers, and there is no levelling needed to show the "fall."

(1) Let us first refer to the theory of the operation. Rain-water is needed to feed the plants, for it contains oxygen, carbonic acid, ammonia, and nitric acid, so that it not only acts chemically on ingredients in the soil which it thus prepares as food for plants, but it is itself, in respect of some of these ingredients, the food of plants.

Water gets into the soil as rain-fall on its surface, as spring-water rising from below, and by capillary attraction drawn up from below. Water leaves the soil by running over its surface, in which case it leaves its work, as the feeder of the plants, altogether undone; by evaporation from the surface, in which case it reduces the temperature of the land; and by percolation through its substance, warming the soil in its passage, introducing its own ingredients as well as the air which follows it, and feeding the plants with the substances it has dissolved from the land as it passes by their roots. Notwithstanding that on its escape, after percolating through the soil, it contains, dissolved in it, a considerable quantity of fertilizing matter, yet this is not nearly so much as would be expected by a person ignorant of those absorptive properties of soils, which Professor Way has investigated, and by which the ammonia, both of rain-water and of manure, is retained in a comparatively insoluble state, so that the percolation of water through the land is not so wasteful a process as it otherwise would be. It is this absorptive property of soils that explains that great agricultural paradox which meets the student on the very threshold of his readings on the chemistry of agriculture. He is told that agriculture is simply a food manufacture; that the produce of its processes is made of materials existing in the air and soil; that only substances soluble in water are available for this purpose; and yet, of the whole mass of mineral matter concerned in this manufacture, not only does he find that it is thinly spread as a soil some 6 or 8 inches thick in a layer over an enormous surface, and then washed annually by 4 or 5 times its own bulk of rain-water—one of the most powerful natural solvents—but that positively this manufacture is most productive, its produce largest where this solvent is permitted to run through the land in its escape downwards to the sea. Fresh from the manipulations of the laboratory, acquainted with the processes by which precipitates are deprived of any soluble mixtures which they may contain, having himself patiently superintended the washing of earthy deposits on his filter in order to remove any soluble matter which they contain, how is he to reconcile the assertion of science, that fertility depends on the preservation of soluble matter in the soil, with that of practice, that fertility depends very materially upon your enabling the water which falls upon the surface of the land to pass through its whole thickness and escape through channels in the subsoil? Mr. Way has satisfactorily removed the difficulty. Not only does rain-water, when allowed to traverse this layer out of which our food is made, improve the underground climate, on which, as we know, the luxuriant growth of plants materially depends; not only does it by its passage act as waiter at the repast, carrying food to the roots of the growing plants; not only does it bring to the soil the riches of the air, and so add to its wealth as a well-filled store-room; not only does it, by the addition which it thus supplies and the activity which drainage gives it, and its own solvent powers, make the whole an entire laboratory in which food for plants is being prepared for use; but its liability to waste the contents of this store-room and the products of this laboratory, by the access and egress which it possesses, is held in check; so that a fertile well-drained soil is really not only one of the pleasantest sights on which the eye can rest, but one of the most beautiful specimens of ingenious and conservative contrivance on which the mind can dwell.

(2) In practice, this percolation of rain-water through the soil on which it alights, is obtained by digging drains 4 feet deep and from 18 to 20 feet apart, placing in them 2-inch pipes, having first provided an unchecked outfall for them at the lower end of the field. The results of this expedient are, that we have greater facility and economy of cultivation; tillage is made both easier and more efficient; and we have a changed climate—one which, if it be not changed to the feelings of animals, is wonderfully changed as regards its influence on plants. The difference of a few degrees in the underground climate of the soil causes a most material difference in the regions of vegetation and the fitness of the land for potato crops. The mean temperature of the soil round Edinburgh is stated to be 52° during the summer months. It is on the authority of Dr. Lindley that we learn, if it were to fall to only 47°, it is doubtful if wheat would ripen well, or indeed at all. And the earliness of harvest, which is due to drainage, is owing not only to an improved underground climate, but also to the constant feeding of the plants which we thus obtain. In undrained land we have occasional starvation of the plants; and comparing growth to an erection, and ripening to its completion, the process is the sooner finished, and more complete when done, for its continuous prosecution. These are the three great results of artificial land-drainage when no natural drainage exists—cheaper cultivation, better underground climate, and continuous and abundant plant-feeding. They produce amongst them an earlier and more productive harvest, and justify us in describing the drainage of wet and drying soils as a fundamental agricultural necessity.

PARMENTER'S PATENT PREPARATION.

We wish to direct your attention to the above Preparation we are now selling for the destruction of *Mealy Bug*, *Red Spider*, *Thrips*, *Scale*, *Aphis*, and all kinds of Insects, also *Mildew* on Vines, Fruit Trees and Plants of all descriptions, of which we are the Sole Proprietors; it has been proved to be the most effectual application ever offered for the destruction of Insects.

LIST OF PRICES.

Small Stone Bottle with Brush, 2*s*. Middle ditto, 3*s*. 6*d*. Large ditto, 10*s*. 6*d*.

The following is the report of a series of careful and elaborate experiments by the eminent Nursery Firm of Messrs. E. G. Henderson and Son :—

Parmenter's Preparation.—We find this Compound effectual for the destruction of *White Bug* and *Scale* on leaves of a laurel-like texture, such as *Daphne*, *Nerium*, *Jasmin*, *Enkianthus*, *Rhododendrons*, *Thibaudias*, &c., in the greenhouse, and such as *Ixora*, *Croton*, *Franciscea*, *Gardenia*, *Jasmin*, *Magnolia*, *Portlandia*, *Stephanotis*, &c., in the hothouse, when dipped in a thin paste-like liquid, and applied with a brush into the inward axillary joints: after thus remaining on the plant 48 hours, it is thoroughly cleansed off by a vigorous syringing. When applied to plants within a cool genial greenhouse temperature, *it emits no offensive odour* (as in the Gishurst Compound), and is efficacious without injury to the plants. On plants of *Jasminum grandiflorum* recently imported from the Continent, and completely covered with *Scale*, and on *Ardisia crenulata*, much infested with the *White Bug*, the Preparation as described was very satisfactory. It also appears effectual in destroying and checking the *Red Spider* and *Thrips*, by immersing the branches once or twice in a thinner solution of the Preparation.

On plants with leaves of a less leathery and more porous texture and thin and pulpless, the Preparation cannot be applied sufficiently strong *at one immersion* to destroy the White Bug or Scale (the most difficult of all plant insects to destroy) without injury to the plants; therefore it should be made in a weaker solution, and applied with a soft brush or sponge to the infected parts, remaining on 24 or 48 hours as before. For the continual cleanliness of the plants, a solution of the Preparation in pure water for occasional syringing will be found very beneficial and act as a *check and preventative*. In the destruction of the *White Bug* and *Brown Scale* upon the class of plants referred to, *Parmenter's Preparation* was found *more effectual* than the *Gishurst Compound*. In its application the following directions may be deemed safe:—

1st. The strength of the application, without injury, will be in proportion to the thick coriaceous or leathery texture of the leaves, their dormant condition or rest from growth, and *vice versâ*.

2nd. The injury arising from its undue application will be in proportion to its action on the soft and delicate cellular tissue of the plants, whether in a growing condition or not, but most injurious in the former.

3rd. As a general rule, plants of the strongest and most robust growth will require it to be applied of the consistency of thin paste-like liquid.

4th. Plants of the soft-stemmed class, whether heavy or soft, will require its application by immersion in a mixture proportionately diluted to suit the texture of the plants.

Extract from a letter received from Mr. Thomas Rivers, *Author of 'The Orchard House,' the Nurseries, Sawbridgeworth, Herts*:—

"One Application of the Composition undiluted to some Orange Trees infested with the Brown Scale effectually destroyed it; *a small painters' brush was used in applying it.*"

Extract from a letter received from Mr. Summers, *Gardener to A. Mongredien, Esq., Sydenham, "the raiser of* Spergula pilifera:"—

"With respect to the destruction of insect life, especially of the species and varieties of Coccus, we think it far superior to the Gishurst Compound, and it lacks the very disagreeable smell of the latter."

PATENT APHIS PASTILLES.

The only Cheap means of Smoking a Greenhouse. Half the price of Tobacco—infinitely more effective—destroy all Insects, and cannot injure the foliage. These Pastilles light with a candle—need no further attention. Price 2*s*. per packet.

DUNN'S PATENT SOLID MARKING-INK PENCILS.

Directions for Use.—Slightly damp the surface of the Tally or Label, whether of Wood, Parchment, Zinc, Galvanized Iron, or unglazed Porcelain, with the wet finger, and write thereon whilst damp; expose the writing to light in a dry place (Sunlight if possible), and it will become fixed and permanent. N.B.—Do not screw the Pencil Point out too far when in use. Price 1*s*. 6*d*. each.

FINIS.

Taylor and Francis, Printers, Red Lion Court, Fleet Street.

ILLUSTRATION No. I.

ZINNIA ELEGANS FLORE PLENO (Carter's variety), per packet 6d. and 1s.

NEW SPECIES AND VARIETIES OF FLOWER SEEDS.

The subjoined Seeds we have selected for recommendation from their being either desirable new varieties or old-established favourites *highly improved* by careful cultivation. We regret to mention that, in consequence of insufficiency of space, we are unable fully to describe the particular merits of each kind, and can only state that *all* the undermentioned deserve unqualified praise.

ILLUSTRATION No. I.

Zinnia elegans fl. pl.

Received a First-class Certificate

From the Horticultural Society of London, who described them as follows:—"These were varieties of the well-known Zinnia elegans, in which the yellow centre or disc was transformed into florets, like those of the ray, so as to form rosettes of from 2 to 3 inches in diameter, and of various shades of colour, embracing *purple, deep rose, light rose, mottled rose, red, orange,* and *buff.* They were for the most part full double, and perfectly regular in form, a good deal resembling in their outline a fine double French Marigold, but larger in size." This magnificent novelty was first introduced by us into England, and our stock is undoubtedly the finest in existence; all single flowers have been removed, and the seed is saved from fine double flowers only. *Price per packet, 6d. and 1s.*

ILLUSTRATION No. II.

Clarkia pulchella flore pleno.

Received a First-class Certificate

From the Royal Horticultural Society of London, and described in the Society's Report of July, 1861, as follows:—"This was a handsome variety of the *deep rosy colour* of the better forms of this well-known species, but having three or four whorls of petals, developed so as to form a tolerably full double flower; it was a very showy plant, and was awarded a First-class Certificate."

This is but the 3rd Annual which has received a First-class Certificate; it is thus spoken of in the *Gardeners' Chronicle,* p. 869:—"The double variety of Clarkia pulchella, a new and desirable plant for ornamental purposes of all kinds, the flowers being *very double,* and the colour a *rich Magenta.*" *Price per packet,* 1s.

ILLUSTRATION No. III.

Œnothera Lamarckiana.

"Commended"

By the Royal Horticultural Society. Hardy biennial, flowering the first year, height 3 feet, good shrubby habit; blossoms more than 3 inches in diameter, colour bright *golden yellow*; each plant will produce from 200 to 600 flowers, and continue in bloom from June to November. Dr. Lindley speaks of it in the *Gardeners' Chronicle* of 28th of Sept. 1861, p. 869, as follows:—"Among dwarf Œnotheras, macrocarpa still stood in the front rank, and among tall kinds Œ. Lamarckiana occupies a similar position; it blooms the first year from June to October in great profusion; individually the blossoms are of immense size, averaging 4 inches in diameter; on one plant alone of this variety we counted no fewer than 23 blossoms, *all open at the same time.*" *Price per packet,* 1s.

Grammanthes gentianoides cinnabarina.

A handsome variety of the much admired Rock and Pot Plants, Grammanthes gentianoides, deserving of universal ltivation; colour *crimson-scarlet. Price per packet,* 6d.

Tropæolum "Crystal Palace Gem."

Thus described in the Report of the Royal Horticultural Society of London:—"This was one of the Dwarf or Tom Thumb varieties, and was stated to have been obtained from T. Schuermannianum. It was of dwarf habit, with large *sulphur*-coloured flowers, with a *dark red spot* at the base of each petal."

It is very pretty and effective as a bedding plant, the flowers being well thrown up above the foliage, and it continues in bloom until the frost. It is thus spoken of in the *Gardeners' Chronicle,* p. 869:—"Then came 'Crystal Palace Gem,' a new bright *sulphur*-coloured Tropæolum, blotched with *maroon*; the habit is excellent, and the leaves much smaller than those of the common Nasturtiou, over which they have the advantage of throwing their blossoms well up above the foliage;" *seed scarce. Price per packet,* 6d.

Senecio elegans flore pleno. "Magenta."

This is a very double variety of the well-known Jacobæa; colour a bright rich *Magenta,* contrasting admirably with the foliage; will be found a very useful and ornamental bedding plant. It is described in the *Gardeners' Chronicle,* p. 869, as follows:—"Attention was then directed to some charming beds of Senecio, the most striking of which was one of a *brilliant Magenta colour,* literally one mass of bloom." *Price per packet,* 6d.

Alyssum saxatile compactum.

Described in the *Gardeners' Chronicle,* p. 869, as follows:—"A fine early-blooming hardy perennial, which will form a good companion to the early white Arabis alpina, and the pink Saponaria ocymoides."

We can especially recommend this desirable hardy perennial as being particularly useful for early Spring bedding, also for Rock-work; it is dwarf, and very compact in habit, with ornamental glaucous evergreen foliage, profusely covered with rich *golden yellow* blossoms, continuing in bloom from March to May, a period of the year when outdoor flowers of a showy character are very scarce: this variety is entirely distinct in habit and colour from the Alyssum saxatile. *Price per packet,* 6d.

Nemesia compacta insignis, Nemesia compacta La Superbe.

These are two new varieties of that charming Annual Nemesia elegans compacta; their graceful and compact habit, like Thuja compacta, and their profusion of blossom render them valuable adjuncts to the flower garden; they also form excellent pot plants.

N. insignis, *bright blue*
N. La Superbe, *delicate rose* } height 1 foot.

Price per packet, 6d.

Aquilegia caryophylloides fl. pl.

"Commended"

By the Horticultural Society of London, and described by them thus:—"This was a very pretty double-flowered variety of the common Columbine; the flowers were *white,* variously striped with *reddish crimson,* and here and there with *reddish purple,* producing an effective variegation. It was stated to have been selected out of a bed of mixed colours, and to have been proved to come true from seed. It was also stated to be quite distinct in the seed, which is of a light green, instead of being black, as is usually the case. The variety was considered distinct and handsome, and was commended." *Price per packet,* 6d.

ILLUSTRATION No. II.

CLARKIA PULCHELLA FLORE PLENO ..... per packet 1s.

NEW SPECIES AND VARIETIES OF FLOWER SEEDS (*continued from page* 114).

Trifolium arvense.

This is a remarkably elegant Arabian Ornamental Grass; very dwarf and compact, silvery foliage and flower-stalks, with a profusion of minute heads of blossom, similar to Lagurus ovatus, but more slender. *Price per packet*, 6*d*.

Œnothera campylocarpa grandiflora.

This is a marked improvement on the old Œnothera campylocarpa, and the colour, which is *crimson-orange*, is a striking novelty among Œnotheras; the blooms are 2 inches in diameter. *Price per packet*, 6*d*.

Nemophila maculata folio variegata.

This is a very useful Annual for Spring gardening, the leaves being ornamentally variegated before the plant comes into bloom; seed scarce. *Price per packet*, 6*d*.

Covent Garden Intermediate Stock.

Of these we have two splendid varieties, the same as those so much approved of at Covent Garden Market, one *scarlet*, the other *pure white*. *Price per packet, each* 1*s*.

Hunnemannia fumariæfolia.

This is a most desirable re-introduction: it has the foliage of the well-known Eschscholtzia, but is of an *erect* habit and has numerous blossoms of bright yellow; similar in shape to *Tulipa sylvestris*. *Price per packet*, 6*d*.

Linaria bipartita splendida.

"Commended"

By the Horticultural Society of London, and described by them as "a very fine and richly coloured Annual, flowering profusely and continuing for a considerable time in bloom; the habit was erect, like that of the older forms, and the flowers were large, of a very rich *deep purple* colour. Messrs. Carter & Co. stated that they had full confidence in its being fixed in character, as it had been carefully selected for the last 7 years: this received a commendation." *Price per packet*, 6*d*.

Convolvulus tricolor subcæruleus.

A very pretty *dove*-coloured variety, having about half the depth of colour of Convolvulus minor, blue. *Price per packet*, 3*d*.

Convolvulus tricolor monstrosus.

Described in the Horticultural Society's Report as "Very robust, with large and exceedingly rich deep-*purple* flowers." It is also mentioned in the *Gardeners' Chronicle* of July 28th, 1860, as follows:—"A handsome Convolvulus, named tricolor monstrosus, was shown by Messrs. Carter & Co., of Holborn." *Price per packet*, 6*d*.

Erianthus Ravennæ.

This is a splendid Ornamental Grass, similar to the Pampas Grass, but with a broader leaf, with a white rib down the centre of each blade: for centres of lawns and corners of large beds it is specially adapted, and is very graceful. *Price per packet*, 1*s*.

Erysimum Arkansanum.

This Annual has been much overlooked, and will in future rank among the finest of yellow flowers: height about 1½ ft.; colour rich golden yellow: blooms in bunches, like the Perennial Phlox. *Price per packet*, 6*d*.

Gilia achilleæfolia alba.

"Commended"

By the Horticultural Society of London, and described by them as "A pretty variety of this useful species, having the flowers pure white: it was commended on account of the purity of its *white* flowers, which will render it useful for beds where Annuals are employed." This is an early profuse and long-blooming variety. *Price per packet*, 6*d*.

Eucharidium grandiflorum album.

Described by the Horticultural Society of London as "A neat dwarf-growing *blush-white* variety, which may probably be useful where light colours are in request." This variety is dwarf and compact in habit, and a long and profuse bloomer. *Price per packet*, 6*d*.

Eucharidium grandiflorum roseum.

Described by the Horticultural Society of London as "A *blush*-coloured variety, apparently rather larger than the foregoing, but more finished with *rose*-colour." A plant of each was sent to Dr. Lindley, who speaks of them in the *Gardeners' Chronicle* of September 22nd, 1860, as follows: —"One of them is *white*, or nearly so, the other is stained with *pale rose*; they are pretty and distinct." *Price per packet*, 6*d*.

Cuphea zimpani.

This is one of the best of the bedding Cupheas, and, from its profuseness of blossom and duration of bloom, will be much admired: colour fine dark purple. *Price per packet*, 6*d*.

Celosia aurea pyramidalis
AND
Celosia, new crimson feathered.

These are really magnificent plants for Greenhouse or Conservatory decoration, and have been universally admired at the various Exhibitions where they have been shown. The one has a *rich golden-yellow*, and the other a *rich crimson* plume of blossom. *Price per packet, each* 1*s*.

Clianthus Dampieri.

This magnificent plant is too well known to require comment, as it is admitted to be one of the very finest greenhouse plants ever introduced. *Price per packet*, 2*s*. 6*d*.

Lapageria rosea.

This superb Climber is one of the few plants that are indispensable to every greenhouse, its rich rosy-marbled tubular bell-shaped blossoms continuing in fine condition for six weeks, and altogether it is the finest Greenhouse Climber in cultivation. *Price per packet*, 2*s*. 6*d*.

Delphinium grandiflorum cœlestinum.

A new variety of this handsome hardy perennial with long spikes of clear celestial-blue flowers. A very desirable variety for borders and shrubberies. *Price per packet*, 6*d*.

Camellia japonica.

The seeds now offered were saved in one of the Royal Gardens in Italy, and probably from the finest collection of varieties in that country. The produce from the seed cannot fail to give many valuable and interesting novelties. *Price per packet*, 1*s*.

ILLUSTRATION No. III.

ŒNOTHERA LAMARCKIANA ..... per packet 1s.

NEW SPECIES AND VARIETIES OF FLOWER SEEDS (*continued from page* 116).

Erythrina, varieties.

These magnificent Shrubs, commonly called "*Coral Trees*," are usually grown in the greenhouse; but in favourable seasons they may with safety be placed out of doors in summer, where their dense foliage and splendid racemes of brilliant crimson blossoms will show superbly. See Nos. 943 to 946. *Each, per packet*, 1*s*.

Gynerium argenteum.

This is the Pampas Grass, the merits of which are too well known to need recapitulation. The seed offered, being imported from the district of the River Plate, will be found to germinate freely. *Price per packet*, 1*s*.

Linum luteum corymbiflorum.

A handsome half-hardy variety of Flax, with hundreds of bright straw flowers on each plant. This is quite as handsome a variety, *of its colour*, though different in habit, as the well-known scarlet Linum, to which it would form an excellent contrast. *Price per packet*, 6*d*.

Pentstemon Murrayanus.

This is by far the most handsome species of this much-admired genus, having numerous long tube-shaped flowers of a bright vermilion. *Price per packet*, 1*s*.

SPERGULA PILIFERA.

This admirable substitute for Lawn Grass has stood the severest tests, and is now rapidly rising in public estimation. We annex an Extract from an Article upon it, written by Mr. Shirley Hibberd, in the 'Gardeners' Weekly Magazine.'

LAWNS WITHOUT GRASS.

In making our remarks last week on the causes of the wretched appearance too often presented by grass lawns, and the proper remedies for certain of their defects, we said nothing about substitutes for grass, because the subject is too important to be dealt with in a casual way. The time is fast approaching, however, when we shall have to say, in our descriptions of gardens, what sort of turf is used—the word "turf" having already several different significations. The reader perceives already that we are on the tract of *Spergula pilifera*, and, mayhap, has already a feeling of repugnance to any so-called substitute for grass; certainly there is repugnance in many quarters, and we may as well own at once that, for general purposes, a grass turf cannot be superseded by turf of any other kind. But among the large number of gardeners who speak of *Spergula* as "humbug," how many have really seen it? Of those who have seen it, how many have seen it as it should be seen, and as it may be seen under proper management, well established, and in the best possible condition for a fair judgment of its merits? Very few we imagine. Now seeing is believing, and no one who has visited the garden of Mr. Mongredien, at Forest Hill, has been disposed thereafter to say a word against the *Spergula*, for it is the most remarkable innovation of the present century in the matter of garden furniture. For the information of those who have had no opportunity of making acquaintance with good samples of *Spergula*, we may state that, as brought to perfection in Mr. Mongredien's garden, it forms a thick, moss-like felt, close as piled velvet, vivid in its greenness of tint, soft and elastic to the foot, dense in growth, and as even on the surface as the smoothest lawn newly mown, but without any mowing at all. This is a land of freedom, and let every man hold and express his opinions freely; but opinions founded in ignorance of facts are worth nothing; but all that has been said against *Spergula* has been so said, and comes to nothing.

But the great question is, will it supersede grass? For certain purposes it will not only supersede grass, but allow of the accomplishment of what, with grass, it would be impossible. It forms a close evergreen mossy felt; its habit is procumbent; it endures drought with patience when well established; is improved by being rolled and trodden on, and is more uniform in character than any other turf, because formed of one species instead of many. Hence for small lawns laid out for geometric gardens, for broad terrace verges, and for every kind of fancy work, where the most perfect specimens of turfs are essential features, *Spergula* is as much better than grass, as real grass is better than a turf of crowfoot and camomiles. But it will probably never supersede grass for large extents of lawns, because its culture is a nicer undertaking. In less than three years we believe it to be impossible to form a dense turf on a large scale, and during that period it would require frequent attention. The original announcement that it needed no mowing, though truthful—for it neither needs mowing, nor would mowing be possible—has nevertheless proved injurious to it. People supposed that as it would not need mowing, it would occasion less trouble than grass, whereas there must be more trouble expended on it to do it justice, and therein lies the secret of success. Being of humble growth and spreading laterally, weeds have their own way amongst it, until it has completely covered the ground and secured full possession. Grass, plantain, and groundsel are the first enemies that assail it, and with these come the various other weeds peculiar to the district. There is no more important detail in management after planting *Spergula* than keeping it sedulously weeded, but *that* task need not alarm intending cultivators; it is a question of labour, and no more than is required in the formation of a turf; the time required will depend a good deal upon the thickness of the original planting. Very small turfs put close together will meet and close sooner than large turfs at greater distances, and some of the recorded objections to it may be traced directly to the fact that large turfs were laid down at greater distances apart, and the plant was a long time extending its procumbent stems between them. Yet reason ought to have dictated to those planters that it is only on the circumference that any such plant can spread, and minute divisions even to pieces of an inch in diameter would be preferable to the laying down of the largest turfs. As the edge of every separate turf will advance two inches in one season, turfs at four inches apart will form a close turf in one year, whereas the same quantity in large pieces a foot or so apart would be three or four years meeting, meanwhile the bare spaces between and the successive crops of weeds would bring upon the *Spergula* an obloquy which ought to be cast upon the planters for having dealt with it so injudiciously.

Plants to transplant 2 inches apart, for one acre, £10. **Ditto, for one rod, 7s. 6d.**

Seed mixed with sand, sufficient to sow one acre, £2. **Ditto, for one rod, 1s. 6d.**

CARTER'S FLORAL ILLUSTRATIONS.

James Carter and Co. beg leave respectfully to announce that, under the above designation, they commenced issuing in the Spring of 1857 a series of Coloured Drawings (by Andrews), which will be continued with each *annual* publication of their Catalogues. It is their intention that each Plate shall contain the most *desirable novelties* of the season, together with any remarkable improvement in the varieties already in cultivation. One of the chief reasons for the publication of these Illustrations is, that they may serve as a guide to Amateurs and others in the selection of *good* new Flowers from among the great number sent out annually, many of which are often inferior to the older varieties.

The price of each Plate is affixed, and forwarded post-free on receipt of Postage Stamps to the amount; but should any Customers wish to become permanent Subscribers, if they will kindly write to that effect, the requisition shall be registered, and the Plates forwarded as issued.

PLATE No. 1, published January 1857, price 1*s.* 6*d.*,

Contains—Godetia roseo-alba, *pure white*, Lupinus pubescens elegans, Calliopsis coronata, Leptosiphon densiflorus albus, Obeliscaria pulcherrima, Alonsoa Warsewiczii, Linum grandiflorum verum kermesinum, Salpiglossis, *new dark scarlet*, Acroclinium roseum, and Violet Truffaut Aster.

PLATE No. 2, published January 1858, price 1*s.* 6*d.*,

Contains—Nasturtion, *new dwarf crimson*, Lupinus hybridus insignis, Lupinus Menziesii, Clarkia pulchella marginata, Indian Pink, *white marbled*, Delphinium formosum, Œnothera Drummondi nana, *Dwarf* French Marigold, and *New white* Rose Campion.

PLATE No. 3, published February 1858, price 1*s.* 6*d.*,

Contains—Tropæolum Lobbii, *Caroline Schmidt*, Carnations, *perpetual* or *Tree*, Carnations, *prize varieties*, Tacsonia ignea, and Ipomæa hederacea superba.

PLATE No. 4, published September 1858, price 1*s.* 6*d.*,

Contains—Hyacinths: Panorama, *double red*, Blocksberg, *double blue*, Prince of Waterloo, *double white*, Fireball, *single red*, Charles Dickens, *single blue*, and Voltaire, *single white*.

PLATE No. 5, published January 1859, price 1*s.* 6*d.*,

Contains—Gaillardia hybrida grandiflora, Œnothera bistorta Veitchi, *New miniature striped* Gourd, Lupinus Hartwegi cœlestinus, Nolana paradoxa violacea, *Dwarf spotted* Nasturtions, *Carter's Tom Thumb* Nasturtions, and Fenzlia dianthiflora.

PLATE No. 6, published February 1859, price 1*s.* 6*d.*,

Contains—Dwarf German Stock, *Finest double* Balsams, Marigold, *orange French*, Lupinus nanus albus, Cosmidium Burridgi, Lobelia formosa, Viscaria cœli-rosa alba, and Viscaria Dunnetti.

PLATE No. 7, published September 1859, price 1*s.* 6*d.*,

Contains—Babiana villosa, Ixia crateroides, Gloxinia erecta, *Helen of Orleans*, Ixia maculata sulphurea, Ixia viridiflora, Ixia, *var. Dolphin*, Tydea, *var. Auber*, Achimenes, *var. Leighii*, Gloxinia, *var. Madame Thibaut*, and Iris pavonia.

PLATE No. 8, published January 1860, price 1*s.* 6*d.*,

Contains—Dianthus chinensis Heddewigi, Dianthus chinensis laciniatus, New Hybrid blue-edged Sweet Pea, Lobelia gracilis rosea, Callirhoë digitata, Nigella hispanica alba, Nigella hispanica atropurpurea, Clarkia pulchella var. integripetala.

PLATE No. 9, published February 1860, price 1*s.* 6*d.*,

Contains—Aster, *La Superbe*, Œnothera biennis var. hirsutissima, Datura chlorantha fl. pl., New scarlet Scabious, Larkspur tricolor elegans, Lychnis Haageana, Sprague umbellata, and Ipomæa limbata elegantissima.

DOUBLE-SIZED PLATE.

PLATE No. 10, just published, price 3*s.*

This Plate, which is double the size of the previous Numbers, contains drawings of some of the splendid varieties of French Seedling Gladiolus from Gandavensis: the specimens drawn are selected without reference to price, and may be taken as a fair average of these most beautiful flowers, which may be planted any time from November to April. The following are the names of the Gladioli figured:—

Brenchleyensis.	Rebecca.
Pégase.	Achille.
Osiris.	Madame Loeble.

PLATE No. 11, published March 1861, price 1*s.* 6*d.*,

Contains—Zinnia elegans, *double-flowered*, Linum grandiflorum, *purple*, Vernonia noveboracensis, Aquilegia caryophylloides fl. pl., Convolvulus tricolor monstrosus, Hunnemannia fumariæfolia, Gilia achilleæfolia alba, and Linaria bipartita speudida.

PLATE No. 12, published December 1861, price 1*s.* 6*d.*,

Contains—Œnothera Lamarckiana and Clarkia pulchella flore pleno.

Report, in the 'Gardeners' Chronicle' of September 28th, 1861, of James Carter and Co.'s Seed Farms.

Garden Memoranda.

Messrs. Carter & Co.'s Annual Grounds, Dedham and St. Osyth, Essex.—Some account of what we saw on a recent visit to these interesting seed-producing establishments may perhaps not be unacceptable to our readers. Mr. Dunnett, one of the firm, who for many years has devoted the whole of his attention to the production and selection of flower and vegetable seeds on these grounds, showed us many of our most striking and favourite annuals, both old and new, not grown in small patches, but by the acre; and seen in masses of that extent, the different colours, arranged as they were in parallel beds, separated by broad belts of vegetables, were most effective. First came beds of very fine double Stocks in separate colours; then a collection of Marigolds, which exhibited ample evidence of the improvement effected in this description of flower by means of years of careful selection; the dwarf and yellow miniature French varieties were very double, and so compact in growth that they made excellent beds; African kinds were also beautiful, and nearly as large and double as ordinary-sized Dahlias. Attention was next directed to some charming beds of Senecio, among which the most striking was one of brilliant Magenta colour, literally one mass of bloom; others were bright crimson, rose, purple, copper, and white, and the profusion of flowers which each of them produced made them very effective, especially when viewed from a distance. Near these was a magnificent display of the various kinds of Coreopsis, the most striking among which were C. nigra speciosa, rich deep crimson; grandiflora, gold with crimson centre; and Burridgii, the finest of all the tall kinds, brilliant golden yellow with large centre of rich maroon crimson. The dwarf sorts were also remarkably beautiful. Than Mesembryanthemum tricolor and album nothing could be handsomer; of these we noticed large beds, which, when the sun shone on them, were most effective. Of Linum grandiflorum (rubrum) there was a quarter at least half an acre in extent, and thus seen *en masse* nothing could be more dazzling, its masses of rich crimson blossoms being most abundant. No difficulty is experienced here in getting it to grow; the seeds receive no artificial preparation previous to sowing, which takes place in the open ground; and every one of them vegetates. Tom Thumb Clarkia also made a good bed, rich in colour, dwarf and compact. Among dwarf Œnotheras, macrocarpa still stood in the first rank; and among tall kinds Œ. Lamarckii occupies a similar position, it blooms the first year most profusely from June to October; individually the blossoms are of large size, averaging 4 inches in diameter. On one plant alone of this variety we counted no fewer than twenty-three flowers, all open at one time. Saponaria calabrica, a plantation two acres in extent, was in full bloom, and literally covered the ground with a dense carpet of rich rosy flowers. The finest sight, however, of all was the magnificent masses of Tropæolum Tom Thumb, "scarlet," of which alone there was about an acre as red as a soldier's coat, and equally brilliant; next came one-third of an acre of "dark crimson," a fine kind of Tropæolum, rich and beautiful in colour; also "Beauty," a yellow variety streaked and blotched with scarlet. Then came "Crystal Palace Gem," a new bright sulphur Tropæolum, blotched with maroon; the habit of these is excellent, and the leaves much smaller than those of common Nasturtium, over which they have the advantage of throwing their blossoms well up above the foliage. Less striking perhaps, but not less interesting, was Convolvulus tricolor splendens, a great improvement, especially in point of colour, on the purplish blue Convolvulus minor. Of Tropæolum Lobbianum "Lillie Schmidt," a trailing variety resembling the Crystal Palace Scarlet, there was a fine mass profusely in bloom. For conservatory or greenhouse decoration, or for festooning over the sides of vases or hanging baskets, nothing could be more useful than this plant.

In the single Chrysanthemum Burridgeanum we have also a perfect gem; its large white blossoms, ornamented with concentric rings of various colours, are extremely handsome, and should secure it a place in every garden; the blooms also keep long in perfection placed in water in a cut state. Eschscholtzia tenuifolia, a charming miniature variety, with erect rush-like foliage, seemed admirably adapted for edgings; its colour is clear sulphur yellow, and its height not more than 4 inches. Leptosiphon aureus is another admirable edging plant, covered as it is for many weeks in succession with small stellate golden blossoms. Associated with these was a large bed of Lobelia formosa, an upright growing variety with rich purplish blue blossoms, somewhat resembling those of L. speciosa but larger. Contiguous to this was a bed of Tropæolum "Brilliant," a fine trailing variety with showy scarlet blossoms and dark green leaves, very distinct from those of other kinds. Passing large breadths of the showy Delphinium formosum and other varieties, Gilia achilleæfolia alba next attracted attention; it has large heads of pure white bloom, and is a very pretty addition to our hardy annuals. Among Lupines, hybridus insignis, purplish rose; L. venustus, mazarine blue; L. tricolor elegans, purple, white, and violet; and L. Dunnetti superbus, red, blue, and yellow, are all about the same height, viz. 2 feet, and have long and beautiful spikes of bloom. Among Statices, plants of S. texana, a useful pink kind, measured from 1 to 2 feet in diameter. A large bed of Convolvulus tricolor monstrosus, with rich deep purplish blossoms 3 inches in diameter, was very conspicuous, as was also the double variety of Clarkia pulchella, a new and desirable plant for ornamental purposes of all kinds, the flowers being very double and the colour a rich Magenta; this received a First-class Certificate at a committee meeting of the Royal Agricultural Society. Among Malvaceous plants, one of the most showy was the Red Lavatera, a well-known and showy annual. Petunias were remarkably showy, and among them were one or two fac-similes of Mrs. Ferguson, the beautiful purple-striped white sort lately figured in the *Florist*. Other kinds were crimson, purple, rose, violet striped and white—all the best in their respective classes; and there was also a useful assortment of mixed varieties. Lobelia gracilis erecta, an extremely neat and pretty kind, well suited for edging, pots, or vases, was in fine condition; Nemesia versicolor compacta, one of the most charming annuals in cultivation, formed compact little bushes about one foot high, profusely covered with variously coloured blossoms.

Some very large beds of Pæony Poppies in twelve distinct colours were very showy; their blossoms, being large and brilliant in colour, produced a striking effect. A fine piece of purplish blue Convolvulus minor was likewise most beautiful, as was also a bed of Everlastings, consisting of Helichrysum compositum, maximum, macranthum nanum, bracteatum album, Acroclinium roseum and album. Associated with these was a mass of starry Scabious, the blooms of which form an admirable addition to winter bouquets. Venus's Navelwort, on account of its silvery foliage, bids fair to make a good white edging. Erysimum or Barbarea variegata, with golden striped foliage, likewise makes a useful ornamental edging and riband plant. Near Mr. Dunnett's residence were some fine beds of mixed Sweet William, Indian Pinks, and the variety of Dianthus called Dunnetti,

Report, in the 'Gardeners' Chronicle' of September 28th, 1861, *of James Carter and Co.'s Seed Farms* (continued).

the darkest-coloured Sweet William known; also Alyssum saxatile compactum, a fine early blooming hardy perennial, which will form a good companion to the early white Arabis alpina and the pink Saponaria ocymoides. Among Nigellas or Love in a Mist, as they are sometimes called, was one pure white and another dark purple, both comparatively new kinds.

At St. Osyth, which is 13 miles from Dedham, were ten large beds of the new Stock-flowered Larkspur, in distinct colours, which made an effective display, all of them being very double, resembling in that respect, as well as in the size and beauty of their spikes, Brompton Stocks. Dwarf Rocket Larkspurs were also very pretty, as were likewise the branching and other sorts. Antirrhinums are grown here in quantity, and among them were at least twenty or thirty distinct varieties—some charmingly spotted, and others beautifully striped. To the raising of Pansies attention is also directed, and there were likewise immense breadths of Virginian Stock. Of Dunnett's selected dwarf crimson Candytuft, a very handsome sort, there were at least two acres, also large beds of Lobelia speciosa, the fine blue variety so universally employed for bedding-purposes. In addition to the above was a bed of Rhodanthe Manglesi, beautifully in bloom, and about an acre of the dwarf spotted Tom Thumb Nasturtium, golden yellow in colour, richly spotted with chocolate. Dianthus Heddewigii, a large bed of extra double Indian Pinks, a collection of eight varieties of Marvel of Peru, and a fine piece of mixed Phlox Drummondi, in every shade of colour, were very attractive. We likewise noticed here a bed of Leptosiphon hybridus, a charming dwarf annual with a habit like that of L. aureus, but with colours more varied and beautiful; also a small bed of double Zinnia producing a fine display of flowers, some of which were remarkably handsome and as double as those of a miniature Dahlia, a description of plant now coming into fashion.

As has been already stated, large breadths of the finer varieties of vegetables separated the different kinds of flowers from one another; and among these a few are worthy of notice. First may be named Manchester Red, Ivery's Nonsuch, and Turner's Incomparable Celery; the last occupied about 4 acres, and is an excellent solid white variety, now generally grown, more especially for early crops. Not less than an acre was filled with Australian Cress, a good salad plant, and Veitch's Perfection Pea was also largely cultivated. This, as was remarked last week, endures drought better than most kinds. Of Oxheart Cabbage, an excellent sort, there were about 4 acres, and we also noticed a large quarter of Carter's Early Cabbage, a small, compact, and useful kind, which does not readily run to seed. Of Mammoth Late White Broccoli we observed about 2 acres; and of Lettuces there were some large and improved New Cos sorts, which when better known may become favourites. Of Beets Messrs. Carter have also an excellent medium-sized blood-red kind. Other vegetables are also grown extensively for seed; but these are among the most important. We may add that the utmost care appeared to be taken to keep everything true to name, and that neatness, order, and skilful management were everywhere observable.

COLLECTIONS OF SEEDS.

MIXTURE OF FLOWER SEEDS FOR WOODLAND WALKS, SHRUBBERIES, &c.

Price per oz. 9*d.*, per lb. 5*s.* 6*d.*

Sow in March, April, May and June.

It has often been a matter of remark that, until very recently, no endeavour has been made to impart an air of cheerfulness and gaiety to shrubberies, woodland walks, hedgebanks, railway embankments, natural rockeries, wildernesses, &c., by sowing a mixture of various flowering annuals to bloom at successive periods of the year; and a source of great enjoyment has been thereby neglected; we have therefore much pleasure in informing our correspondents that we now offer a first-rate, well-selected mixture of hardy flowers of every shade of colour for the above purpose, at the very reasonable price of 9*d. per oz.*, *or* 5*s.* 6*d. per lb.*, which we doubt not will induce many to avail themselves of the opportunity of greatly improving the appearance of their pleasure-grounds at a very trifling expense. The months of March and April may be considered the best for sowing; which may be done by simply scattering the seed broadcast without covering, at the rate of about 6 lbs. per acre: if it be desirable that the seeds should be sown later, the operation should be performed in showery weather

1862.

JAMES CARTER AND CO.'S

GARDENER'S AND FARMER'S VADE-MECUM.

CONTENTS.

PART I.

(Page 1 to 72)

COMPRISES

Flower Seeds, Bulbs, and Plants.

Kitchen Garden Seeds, Agricultural Seeds, and Culinary Roots and Plants.

PART II.

(Page 73 to 94)

CONSISTS OF

A complete Calendar of general Garden Operations for each month in the year.

PART III.

(Page 95 to 120)

IS

A comprehensive and practical Guide for Farm Operations of every description.

ALSO